



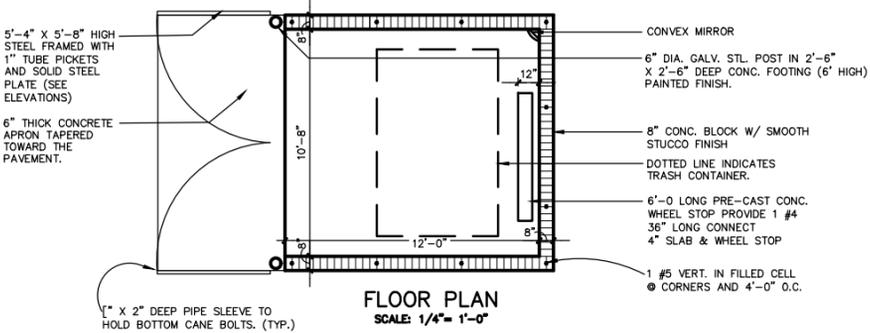


VILLAGE AT BLUESTEN PARK  
215 SE 5TH STREET  
HALLANDALE BEACH, FLORIDA

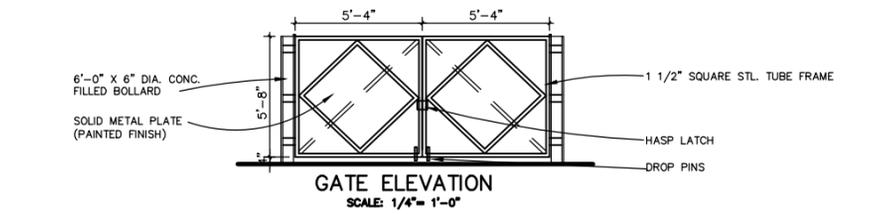






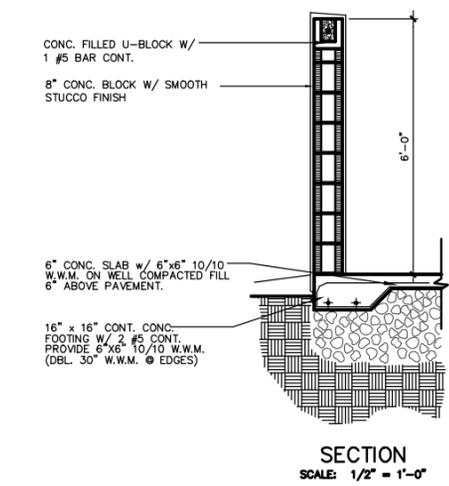


**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**GATE ELEVATION**  
SCALE: 1/4" = 1'-0"

**3 DUMPSTER DETAIL - FLOOR PLAN / ELEVATION**  
SCALE: 1/4" = 1'-0"



**SECTION**  
SCALE: 1/2" = 1'-0"

**4 DUMPSTER DETAIL - SECTION**  
SCALE: 1/2" = 1'-0"

**SITE INFORMATION:**  
CURRENT ZONING: TRANSIT CORE SUBDISTRICT  
PROPOSED USE: RESIDENTIAL  
UTILITIES:  
ELECTRIC - FP & L  
WATER AND SEWER - CITY OF HALLANDALE BEACH

**SITE CALCULATIONS:**

TOTAL SITE AREA:	(1.41 ACRES)	61,500 SQ. FT.
15' & 5' R.O.W. DEDICATION AREA:	6,825 SQ. FT.	11.10 %
TOTAL LANDSCAPE AREA:	10,584 SQ. FT.	17.21 %
TOTAL IMPERVIOUS AREA:	44,091 SQ. FT.	71.69 %

**LANDSCAPE AREA:**

TOTAL PROVIDED:	10,584 SQ. FT.	17.21 %
SITE LANDSCAPE AREA:	10,584 SQ. FT.	17.21 %

**IMPERVIOUS AREA:**

TOTAL PROVIDED:	44,091 SQ. FT.	71.69 %
BLDG. FOOTPRINT:	15,305 SQ. FT.	24.89 %
WALKS:	3,112 SQ. FT.	5.06 %
VEHICULAR USE AREA (V. U. A.):	25,674 SQ. FT.	41.74 %

**BUILDING DATA / PARKING CALCULATION:**

15 UNITS PER FLOOR x 3 FLOORS = 45 UNITS:

4 (1 BED.) x 3 = 12 UNITS	9 (2 BED.) x 3 = 27 UNITS	2 (3 BED.) x 3 = 6 UNITS
---------------------------	---------------------------	--------------------------

GROSS FLOOR AREA PER FLOOR = 15,305 S.F. x 3 FLOORS = 45,915 S.F.:

4 (1 BED.) x 699 S.F./UNIT = 2,796 S.F. x 3 = 8,388 S.F.	9 (2 BED.) x 901 S.F./UNIT = 8,109 S.F. x 3 = 24,327 S.F.	2 (3 BED.) x 1,202 S.F./UNIT = 2,404 S.F. x 3 = 7,212 S.F.
SUB-TOTAL RESIDENTIAL UNITS = 12,949 S.F. x 3 = 38,847 S.F.		
COMMON AREA = 2,356 S.F. x 3 = 7,068 S.F.		
TOTAL AREA = 15,305 S.F. x 3 = 45,915 S.F.		

**PARKING CALCULATIONS:**

4x3 = 12 (1 BED.) x 1.25 = 15.00 SPACES	9x3 = 27 (2 BED.) x 1.75 = 47.25 SPACES	2x3 = 6 (3 BED.) x 1.75 = 10.50 SPACES
GUEST (20 UNITS) x 0.5 = 10.00 SPACES		
GUEST (25 UNITS) x 0.3 = 7.50 SPACES		
TOTAL REQUIRED = 91 SPACES		
TOTAL PROVIDED = 81 SPACES (*)		

**NOTE:**  
PROPOSED R.A.M. FOR REDUCTION OF 10 SPACES OF TOTAL REQUIRED PARKING.

**2 ARCHITECTURAL SITE PLAN**  
SCALE: 1" = 20'

**TRANSIT CORE / DESIGN SUBDISTRICT REQUIREMENTS**  
TABLE 32-196(a)

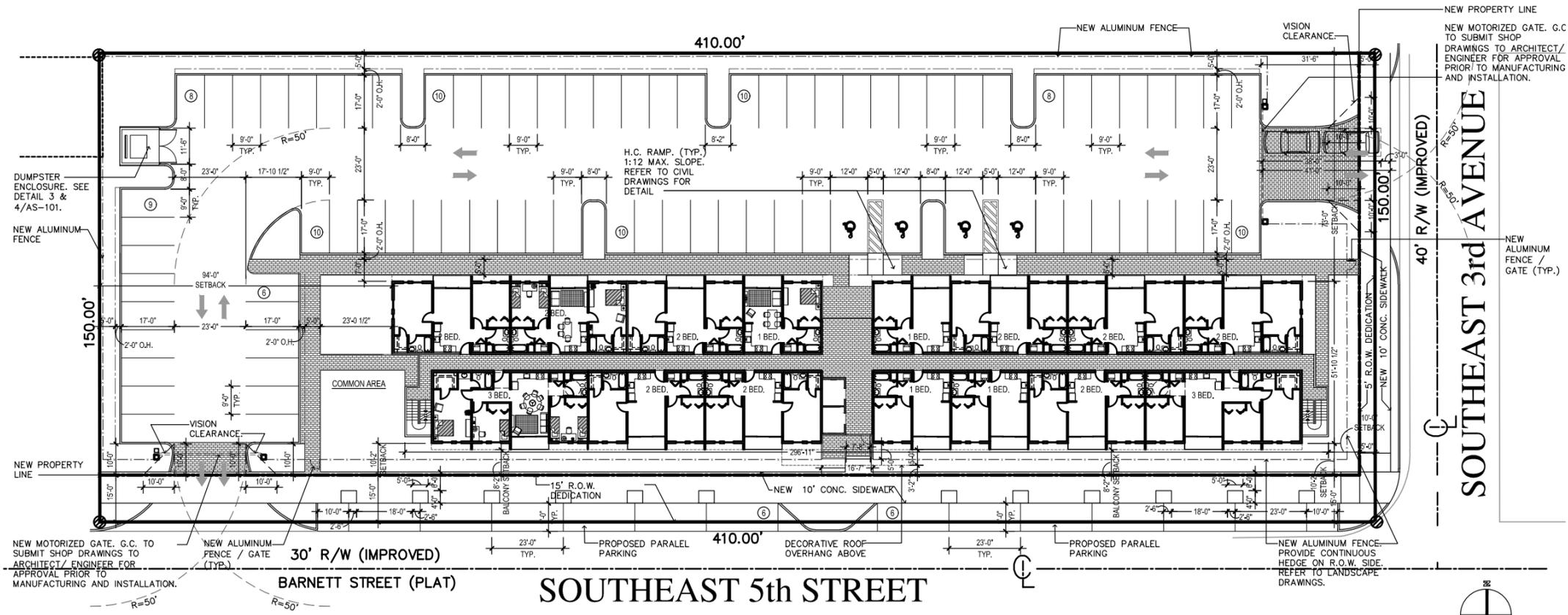
	REQUIRED	PROVIDED
LOT WIDTH	50' MIN.	410'-0" (AFTER DEDICATION)
LOT AREA	5,000 S.F. MIN./ 100,000 S.F. MAX.	61,500 S.F. / 54,675 S.F. (AFTER DEDICATION)
LOT COVERAGE	95% MAX.	80.64 %
LANDSCAPE AREA	5% MIN.	19.36 %
PRIMARY STREET SETBACK	10' MIN. / 15' MAX.	SE. 5TH ST. - 8'-2" (R.A.M.) / SE. 3RD AVE. - 10'-0"
SECONDARY STREET SETBACK	10' MIN.	N/A
INTERIOR SIDE SETBACK	0' MIN.	94'-0"
REAR SETBACK	10' MIN.	73'-0"
BUILDING FRONTAGE ON PRIMARY STREETS	75% MIN. / 100% MAX.	SE. 5TH ST. - 74.32% / SE. 3RD AVE. - 41.36% (R.A.M.)
MIN. HEIGHT PRIMARY STREETS	2 STORIES, OR 1 STORY 20 FT. HIGH	3 STORIES
MAX. DENSITY	50 DU/AC	36 DU/AC
CIVIC OPEN SPACE: SITES EXCEEDING BASE DENSITY	7.5%	0% (PROPOSED R.A.M.)

**DIMENSIONAL REQUIREMENTS FOR STOOPS**  
TABLE 32-201 (c)

	REQUIRED	PROVIDED
BUILDING SETBACK	VARIES BY SUBDISTRICT	SEE ADJACENT TABLE 32-196(a)
DEPTH	5' MIN. / 8' MAX.	5'-0"
WIDTH	4' MIN. / NO MAX.	16'-7"
FLOOR ELEVATION	1' MIN. / 4' MAX.	1'-0"
MAXIMUM SETBACK ENCROACHMENT	- MIN. / 5' MAX.	4'-10"

**LEGAL DESCRIPTION:**  
LOT 23-25-26-27-29-30-31-32-33-34-35-AND 36- BLOCK 3-HALLANDALE PARK NO. 3-A S-BDIVISION IN THE SW 1/4 OF SECTION 27-TOWNSHIP 51 SOUTH-RANGE 42 EAST-BEING A RE-SUBDIVISION OF ALL BLOCK 1-AND PORTIONS OF BLOCK 2 AND 3 OF THE NORTH AMERICAN FRONT COMPAN S-BDIVISION ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 6-PAGE 7-OF THE PUBLIC RECORDS OF BROWARD COUNTY-FLORIDA.

**LOCATION MAP:**



**1 ARCHITECTURAL SITE PLAN**  
SCALE: 1" = 20'

**SRS**  
SYNALOVSKI ROMANK SAYE  
Architects - Planning - Interior Design

1800 Eller Drive, Suite 500  
Fort Lauderdale, FL 33316  
T 954.961.8806  
F 954.961.8807  
www.srsync.com

Marek Sygalowski, AIA  
AR 0011695  
SEAL

LICENSE NO. AA26001863

**VILLAGE AT BLUESTEN PARK**  
NW CORNER OF SE 5TH ST AND SE 3RD AVE  
HALLANDALE BEACH, FL.

CLIENT: BLUESTEN DEVELOPERS LLC.

REV	DATE	DESCRIPTION
1	11/08/17	DRG COMMENTS
2	12/07/17	DRG COMMENTS

DESIGN DELIVERABLE: DRC SUBMITTAL  
ISSUE DATE: 04/13/2017

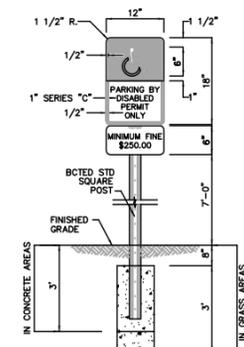
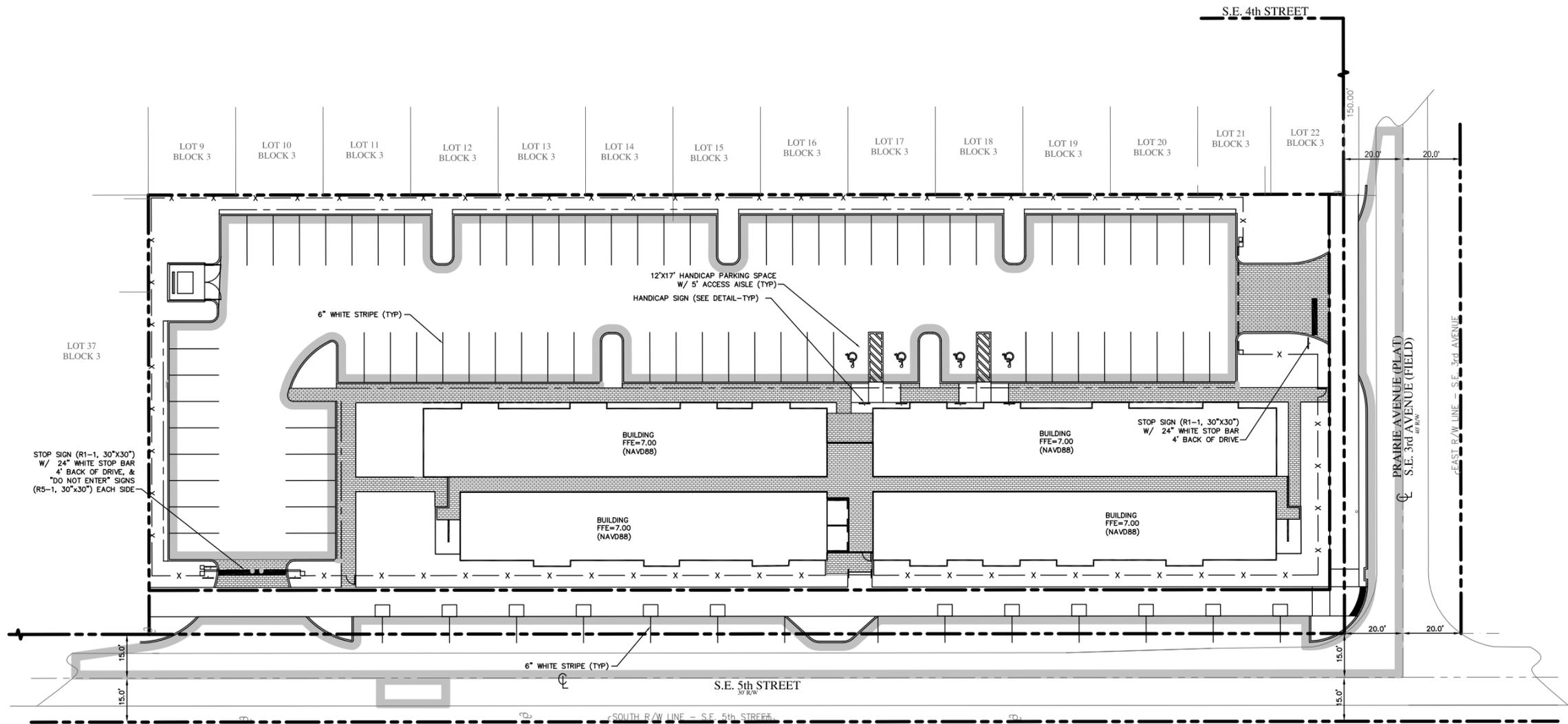
PROJECT NUMBER: 1445-160926  
DRAWN BY: JS  
CHECKED BY: JS

Copyright (c) by SYNALOVSKI ROMANK SAYE, LLC  
All Rights Reserved.

**ARCHITECTURAL SITE PLAN**

**AS-101**

E:\1\0926\1445-Village at Bluesten Park\Drawings\AS-101.dwg 12/06/2017 1:33:58 PM



NOTES:  
1) SIGN MUST BE POSTED AND THE BOTTOM OF THE SIGN MUST BE AT LEAST 7'-0" ABOVE FINISHED GRADE  
2) LOCATE SIGN @ CENTERLINE AND HEAD OF EACH HANDICAP STALL WHERE APPLICABLE  
3) SIGNS IN CONCRETE AREAS ARE TO BE EMBEDDED FOR A DEPTH OF 3"

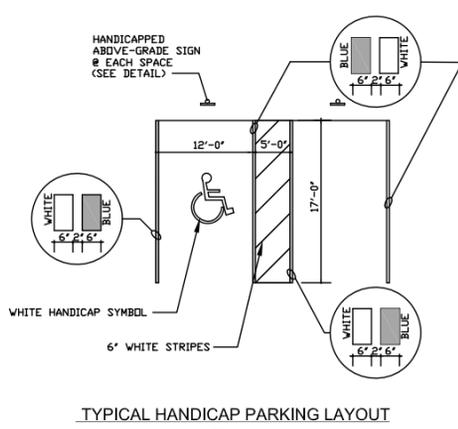
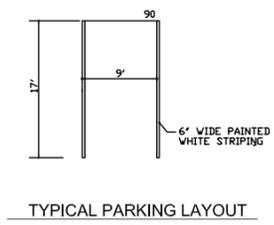
**HANDICAPPED PARKING SIGN**  
FTP-25 W/ SUPPLEMENTAL 12"x6"  
"MINIMUM FINE \$250.00" SIGN  
N.T.S.

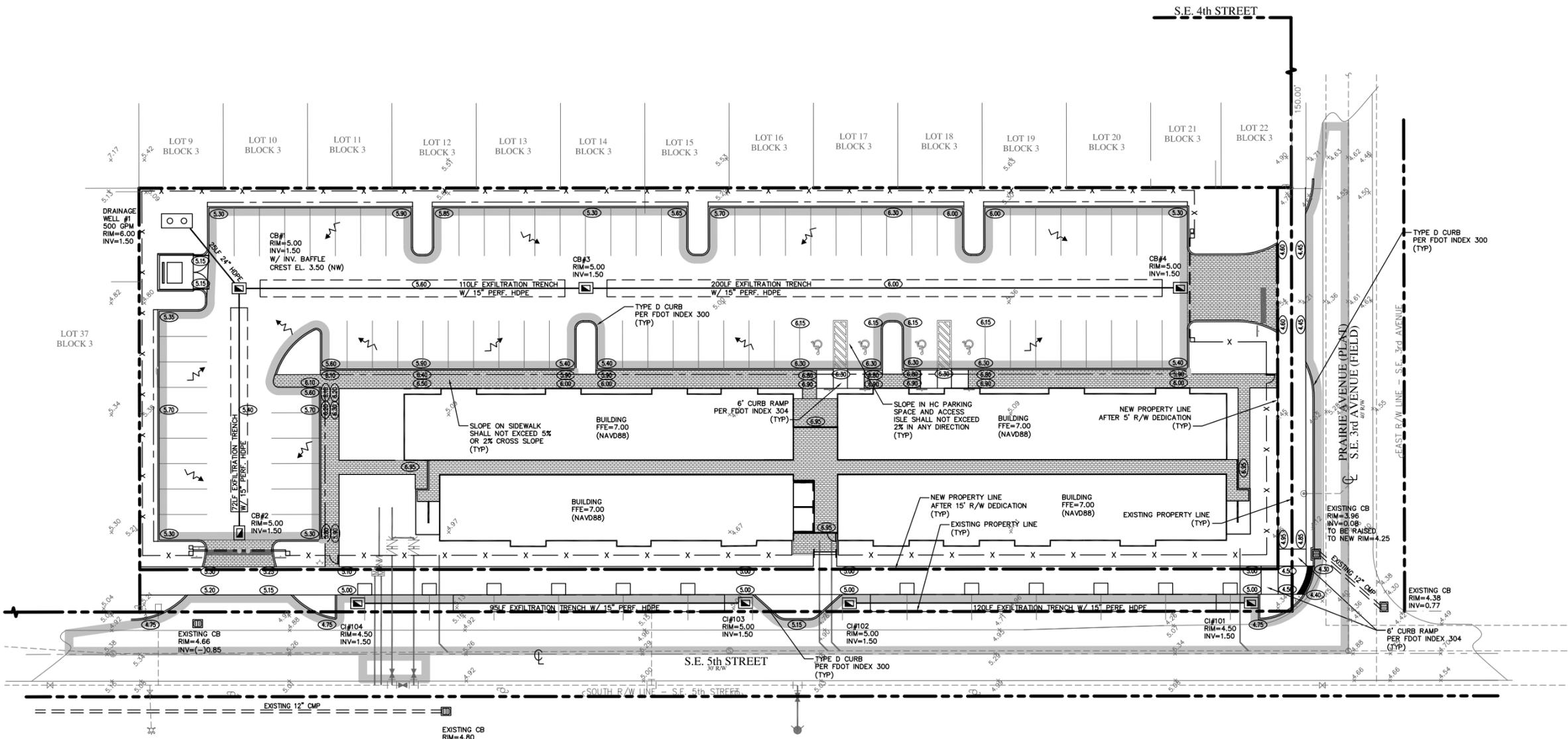
**PAVEMENT MARKING & SIGNAGE NOTES:**

- ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, EXCEPT FOR PARKING STALL STRIPING.
- R1-1 SIGNS SHALL BE HIGH INTENSITY DIAMOND GRADE.
- ALL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD).
- BLUE RPW'S REQUIRED IN THE CENTER OF THE NEAREST DRIVE ISLE ADJACENT TO FIRE HYDRANTS.
- SIGNS SHALL BE MOUNTED ON BCTD STANDARD SQUARE POSTS.

**LEGEND:**

	PROPOSED ELEVATION
	EXISTING ELEVATION
	PROPOSED CATCH BASIN
	PROPOSED PLUG
	TEE
	WATER METER
	DOUBLE DETECTOR CHECK W/ WAFER CHECK VALVE ON DOWNSTREAM SIDE
	REDUCED PRESSURE BACKFLOW PREVENTOR
	DIRECTIONAL FLOW ARROW AND GRAVITY SEWER
	PROPOSED MANHOLE
	WATER MAIN
	SANITARY FORCE MAIN
	VALVE
	FIRE HYDRANT
	SIAMESE CONNECTION
	CLEANOUT
	EDGE OF PROPOSED PAVEMENT (ASPHALT)
	DIRECTION OF SURFACE DRAINAGE
	SAMPLE POINT
	EXIST. UTILITY LINE TO BE REMOVED





CALL 48 HOURS BEFORE YOU DIG IN FLORIDA

IT'S THE LAW!  
811  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

**VERTICAL DATUM CONVERSION**  
GRADING SHOWN UTILIZES N.A.V.D. 88  
N.G.V.D. 29  
N.A.V.D. 88  
N.G.V.D. 88 = N.G.V.D. 29 - 1.5'  
N.G.V.D. 29 = N.A.V.D. 88 + 1.5'

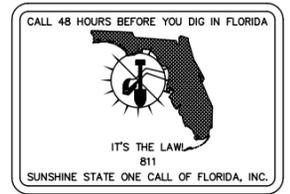
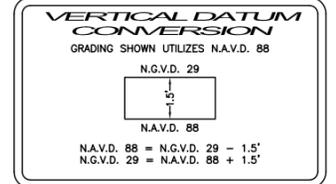
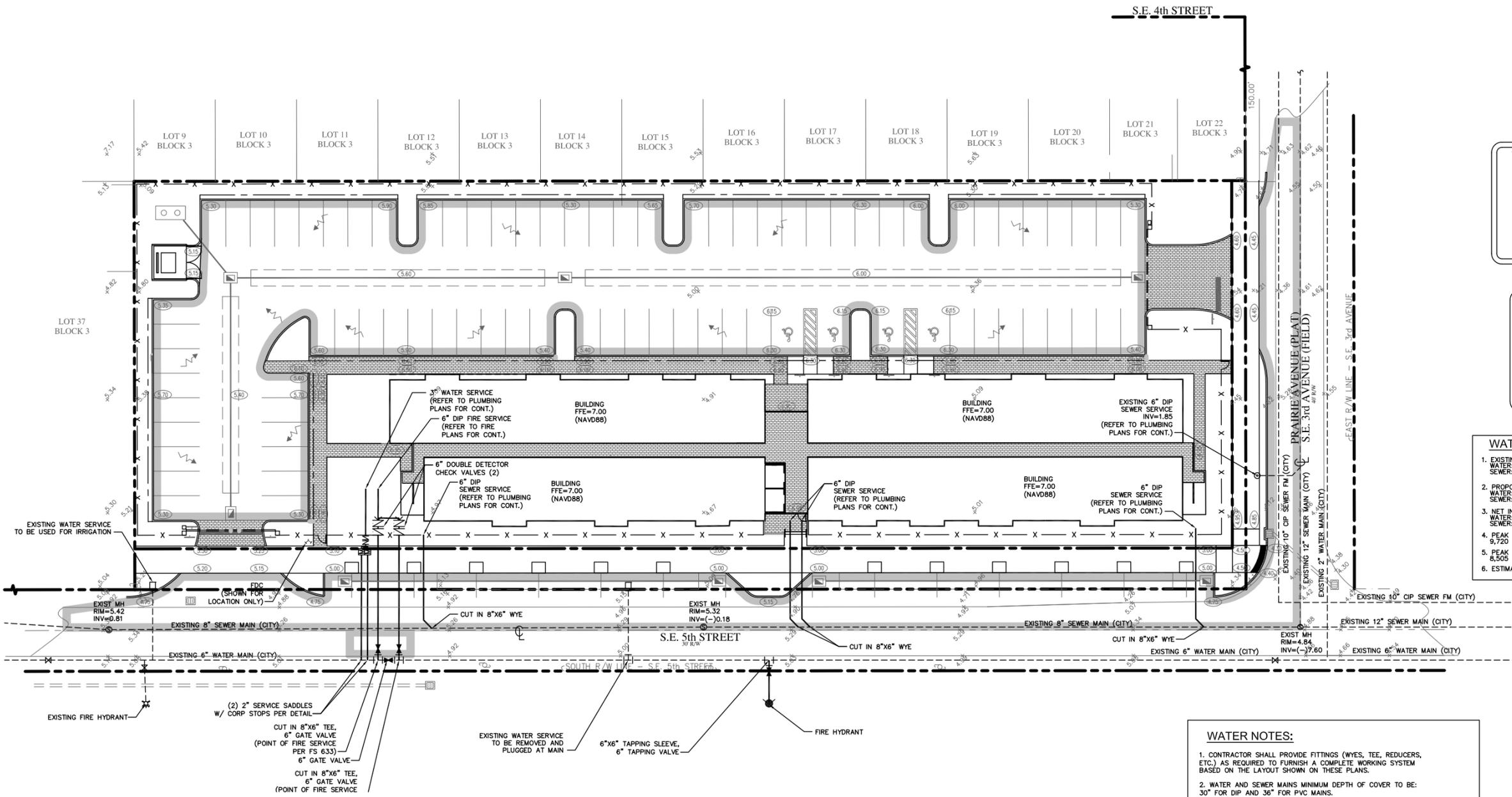
**NPDES**  
ALL PROJECTS THAT WILL RESULT IN THE DISTURBANCE OF 1 OR MORE ACRES OF LAND, CONTRACTORS ARE REQUIRED TO SUBMIT A STORM WATER NOTICE OF INTENT (DEP FORM 62-621.300(4)(b)) 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, NPDES STORMWATER PROGRAM, 2600 BLAIR STONE ROAD, MAIL STATION 2510, TALLAHASSEE, FL 32399-2400. ADDITIONAL DETAILS ARE AVAILABLE AT WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES

- PAVING AND DRAINAGE NOTES:**
- ALL STORM DRAINAGE LINE FROM THE BLDG SHALL BE LAID @ 1.0% MINIMUM SLOPE UNLESS NOTED OTHERWISE ON PLANS.
  - CLEANOUTS ON STORM DRAINAGE LINES ARE TO BE ADJUSTED TO BE FLUSH W/FINISHED GRADE.
  - CONTRACTOR SHALL PROVIDE FITTINGS (WYES, TEE, REDUCERS, ETC.) AS REQUIRED TO FURNISH A COMPLETE WORKING SYSTEM BASED ON THE LAYOUT SHOWN ON THESE PLANS.
  - LANDSCAPED AREAS SHALL BE GRADED TO DRAIN TO THE CATCH BASIN INLETS. FIELD ADJUST GRADING AS REQUIRED.
  - SITE UTILITY CONTRACTOR SHALL COORDINATE WITH THE BUILDING PLUMBING CONTRACTOR FOR EXACT LOCATION OF CONNECTION POINTS BETWEEN THE BUILDING AND SITE WATER, SEWER AND DRAINAGE LINES (VERTICALLY AND HORIZONTALLY).
  - RECTANGULAR CATCH BASIN AND YARD DRAIN GRATES SHALL BE INSTALLED SUCH THAT THE LONG AXIS OF GRATE PARALLELS THE CLOSEST ADJACENT WALK, BLDG.DRIVE WAY, PROPERTY LINE, OR ROADWAY.
  - COORDINATE LOCATION IN FIELD OF ALL CATCH BASINS & YARD DRAINS WITH LANDSCAPE CONTRACTOR TO AVOID CONFLICTS
  - CENTERLINE OF YARD DRAINS @ BASE OF DOWN SPOUTS MUST ALIGN WITH CENTERLINE OF DOWN SPOUT PRIOR TO FINAL ACCEPTANCE BY OWNER. REFERENCE ARCH. PLANS FOR EXACT LOCATION OF DOWN SPOUTS.
  - CONTRACTOR SHALL COORDINATE WITH THE ENGINEER & LANDSCAPE ARCHITECT TO FIELD ADJUST GRADING & UNDERGROUND PIPING AS REQUIRED TO PRESERVE EXISTING TREES TO REMAIN.
  - CATCH BASINS LOCATED IN SWALES IN PARKING LOT SHALL BE CENTERED IN SWALE. UNLESS NOTED OTHERWISE.
  - EXISTING BROKEN SIDEWALKS ADJACENT TO THIS SITE TO BE REPAIRED.
  - SIDEWALK CONNECTIONS TO THE FDOT RIGHT-OF-WAY OF FEDERAL HIGHWAY (SR 5). REQUIRES A CONSTRUCTION JOINT AT THE ULTIMATE RIGHT-OF-WAY LINE AT EACH CONNECTION.
  - THIS PROPERTY LIES IN BOTH FLOOD ZONE AE, ELEV=6 NAVD & FLOOD ZONE X ON FIRM PANEL 12011C0732H, DATED 08/18/14.  
BROWARD COUNTY 100 YR. FLOOD CONTOUR = ELEV. 5.00 NAVD.  
BROWARD COUNTY 10 YR. FLOOD CONTOUR = ELEV. 3.50 NAVD.  
AVERAGE WET SEASON WATER LEVEL = ELEV. 1.5 NAVD.

**LEGEND:**

- (6.00) PROPOSED ELEVATION
- 1.50' EXISTING ELEVATION
- PROPOSED CATCH BASIN
- PROPOSED PLUG
- TEE
- WATER METER
- DOUBLE DETECTOR CHECK W/ WAFER CHECK VALVE ON DOWNSTREAM SIDE
- REDUCED PRESSURE BACKFLOW PREVENTOR
- DIRECTIONAL FLOW ARROW AND GRAVITY SEWER
- PROPOSED MANHOLE
- W- WATER MAIN
- FM- SANITARY FORCE MAIN
- VALVE
- FIRE HYDRANT
- SIAMESE CONNECTION
- CLEANOUT
- EDGE OF PROPOSED PAVEMENT (ASPHALT)
- DIRECTION OF SURFACE DRAINAGE
- SAMPLE POINT
- EXIST. UTILITY LINE TO BE REMOVED





**WATER AND SEWER FLOW:**

- EXISTING WATER AND SEWER FLOW FROM THE SITE:  
WATER: 22 TRAILER PARK UNITS @ 169.2 GPD/EA = 3,722.4 GPD  
SEWER: 22 TRAILER PARK UNITS @ 148.1 GPD/EA = 3,258.2 GPD
- PROPOSED WATER AND SEWER FLOW FROM THE SITE:  
WATER: 45 MULTI-FAMILY RESIDENTIAL UNITS @ 216 GPD/EA = 9,720 GPD  
SEWER: 45 MULTI-FAMILY RESIDENTIAL UNITS @ 189 GPD/EA = 8,505 GPD
- NET INCREASE IN WATER AND SEWER FLOW FROM THE SITE:  
WATER: 9,720 GPD PROPOSED - 3,722 GPD EXISTING = 5,998 GPD  
SEWER: 8,505 GPD PROPOSED - 3,258 GPD EXISTING = 5,247 GPD
- PEAK WATER DEMAND FOR THE SITE:  
9,720 GPD X 2.5 PEAK FACTOR = 24,300 GPD
- PEAK SEWER FLOW FROM THE SITE:  
8,505 GPD X 3.0 PEAK FACTOR = 25,515 GPD
- ESTIMATED IRRIGATION USE FOR THE SITE = 360 GPD

**WATER NOTES:**

- CONTRACTOR SHALL PROVIDE FITTINGS (WYES, TEE, REDUCERS, ETC.) AS REQUIRED TO FURNISH A COMPLETE WORKING SYSTEM BASED ON THE LAYOUT SHOWN ON THESE PLANS.
- WATER AND SEWER MAINS MINIMUM DEPTH OF COVER TO BE: 30" FOR DIP AND 36" FOR PVC MAINS.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE CITY UTILITY DEPT. ANY WATER MAIN CONNECTIONS, UTILITY CONNECTIONS AND SCHEDULE MUST BE APPROVED BY THE CITY PRIOR TO IMPLEMENTATION. THE CONTRACTOR IS REQUIRED TO PAY FOR ALL COSTS ASSOCIATED WITH THIS WORK REGARDLESS OF WHETHER OR NOT THE UTILITY OR THE CONTRACTOR PERFORMS THE WORK.
- W.M./S.S. MAINS TO BE LOCATED 5' CLEAR OF ALL OBSTRUCTIONS, POLES, BOXES, CULVERTS, ETC. W.M./S.S. MAINS MUST BE LOCATED 5' FROM TREES. F.H.'S MUST HAVE A 7.5' CLEAR RADIUS.
- PRESSURE TESTING AND CERTIFICATION SHALL FOLLOW THE BROWARD COUNTY HEALTH DEPARTMENT STANDARDS.
- ALL UNDERGROUND UTILITIES TO BE REMOVED SHALL BE CAPPED OFF AT THE POINT NEAREST TO THE UTILITIES OR DRAINAGE LINES THAT WILL REMAIN IN SERVICE. NOTIFY THE ENGINEER OF RECORD BEFORE REMOVING ANY UTILITIES THAT ARE CURRENTLY IN SERVICE. THE CONTRACTOR SHALL NOT REMOVE ANY UTILITY SERVICE TO ANY EXISTING BUILDING THAT WILL REMAIN AND SHALL DIG UP AND COMPLETELY REMOVE AND/OR ABANDON ANY UTILITY SERVICE THAT IS NO LONGER REQUIRED. THE CONTRACTOR SHALL INFORM AND CONSULT THE ENGINEER OF RECORD PRIOR TO REMOVING ANY LINES.
- CONTRACTOR SHALL VERIFY EXISTING WATER/SEWER MAIN LOCATION AND ELEVATION AND NOTIFY THE ENGINEER OF ANY DIFFERENCE FROM THE DESIGN PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
- MINIMUM FIRE FLOW REQUIRED PER NFPA TABLE 18.4.5.1.2 BASED ON 45,915SF TYPE V(000) CONSTRUCTION REQUIRES 5,750 GPM BUT CAN BE REDUCED 75% WITH SPRINKLERS FOR 1437.5 GPM SO THE 1,500 GPM MINIMUM IS REQUIRED FOR THIS PROJECT.

**LEGEND:**

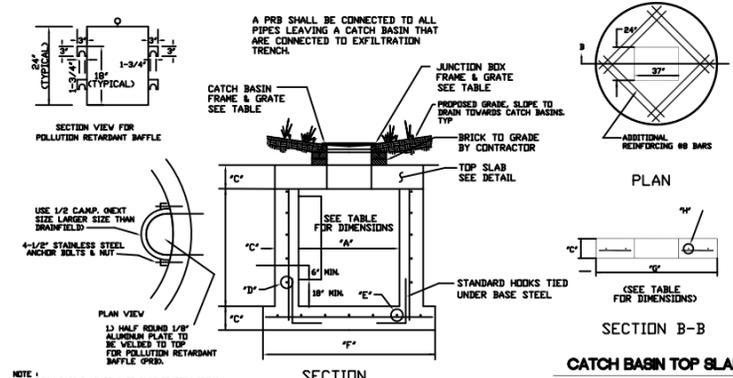
- (0.00) PROPOSED ELEVATION
- 1.50' EXISTING ELEVATION
- [ ] PROPOSED CATCH BASIN
- [ ] PROPOSED PLUG
- +— TEE
- WATER METER
- DOUBLE DETECTOR CHECK W/ WAFER CHECK VALVE ON DOWNSTREAM SIDE
- REDUCED PRESSURE BACKFLOW PREVENTOR
- DIRECTIONAL FLOW ARROW AND GRAVITY SEWER
- PROPOSED MANHOLE
- w - WATER MAIN
- FM - SANITARY FORCE MAIN
- VALVE
- FIRE HYDRANT
- SIAMESE CONNECTION
- CLEANOUT
- EDGE OF PROPOSED PAVEMENT (ASPHALT)
- DIRECTION OF SURFACE DRAINAGE
- SAMPLE POINT
- w- EXIST. WATER MAIN
- XXXX EXIST. UTILITY LINE TO BE REMOVED



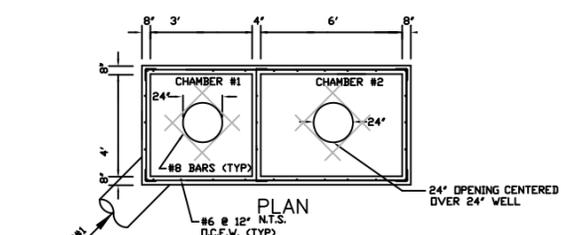
**SUMMARY OF DRAINAGE STRUCTURES**

STRUCTURE #	TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	U.S.F. # OR EQUAL FRAME	U.S.F. # OR EQUAL GRATE
CB# 2,3,4	"J"	4'-0"	8'	8'	#4 @ 12" CCEV	#4 @ 12" CCEV	6'-4"	5'-4"	#4 @ 6" CCEV	4155	6209 CAST IRON
CB#	"C"	24"	37"							4155	6209 CAST IRON
CH#	"J"	5'-0"	8'	8'	#5 @ 12" CCEV	#5 @ 12" CCEV	7'-4"	6'-4"	#5 @ 8" CCEV	420	TYPE "C"
CB# 1	"D"	6'-0"	8'	8'	#5 @ 12" CCEV	#5 @ 6" CCEV	8'-4"	7'-4"	#5 @ 6" CCEV	4615	6210 CAST IRON
CH#	"J"	4'-0"	8'	8'	#4 @ 12" CCEV	#4 @ 12" CCEV	6'-4"	5'-4"	#4 @ 6" CCEV	5115	6220 CAST IRON

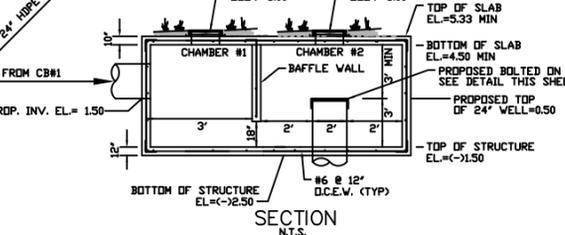
NOTE: ALL DRAINAGE STRUCTURES SHALL HAVE A 2" SUMP



**MANHOLE/CATCH BASIN TYPE "J"**  
N.T.S.

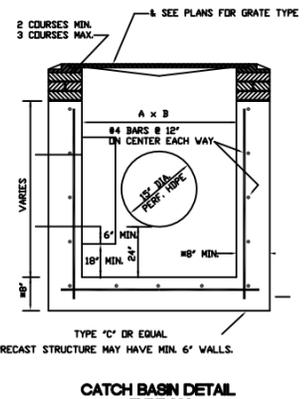


**CONTROL STRUCTURE AND DRAINAGE WELL #1 CAGE DETAIL**  
N.T.S.



**DRAINAGE WELL GRATE DETAIL**  
N.T.S.

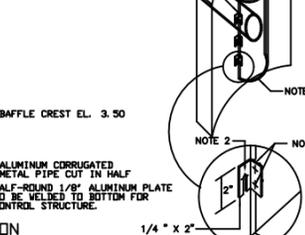
- NOTES**
1. TOP SLAB REINFORCEMENT TO BE #7 BARS @ 6" D.C.E.W. WITH ADDITIONAL #8 BARS AROUND OPENINGS.
  2. PLACEMENT OF RING AND COVER ACCESSING EACH CHAMBER SHALL BE AS SHOWN ABOVE. EACH CHAMBER SHALL HAVE U.S.F. RING AND COVER #360.
  3. TOP SLAB OPENINGS SHALL BE AS REQUIRED BASED UPON INSTALLATION OF RING AND COVER.



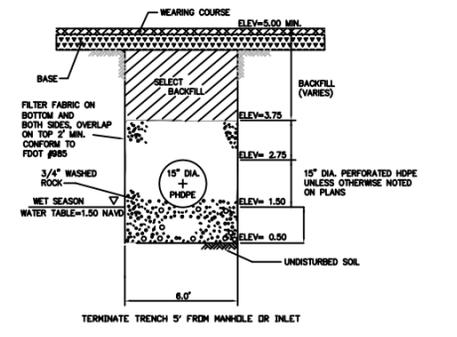
**INVERTED BAFFLE DETAIL IN STRUCTURES PRIOR TO DRAINAGE WELLS (CB#1)**  
N.T.S.



**CURB RAMP DETECTABLE WARNING**  
NOTE: FOR PUBLIC CURB RAMP DETAILS REFERENCE F.D.O.T. INDEX NO. 0304, SHEETS 6 TO 6, 2010 INTERIM DESIGN STANDARDS REVISED 01-01-11.



**WHEEL STOP DETAIL**  
N.T.S.



**CONCRETE PAVEMENT & SIDEWALK JOINTS**

**TABLE OF SIDEWALK JOINTS**

LOCATION	CONCRETE TO BE CLASS-1 3000 P.S.I.
P.C. AND P.T. CURVES	
JUNCTION OF EXISTING AND NEW SIDEWALKS	
5'-0" CENTER TO CENTER ON SIDEWALKS	
15' CENTER TO CENTER MAX. FOR CONCRETE PAVEMENT UNLESS OTHERWISE INDICATED	

**CONCRETE PAVEMENT & SIDEWALK DETAIL**  
N.T.S.

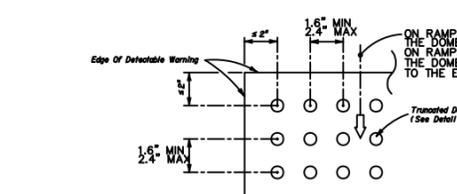
**SPACING OF REQUIRED ROADWAY, PARKING AREA AND UTILITY TRENCH TESTS**

F.S.V.	DENSITY	L.B.R.	THICKNESS
MAX. SPACING	MAX. SPACING	MAX. SPACING	MAX. SPACING
LN. FEET	LN. FEET	LN. FEET	LN. FEET
200	200	200	200
10,000	10,000	10,000	10,000
300	300	300	300
10,000	10,000	10,000	10,000
PER. SPEC.	PER. SPEC.	PER. SPEC.	PER. SPEC.
PER. SPEC.	PER. SPEC.	PER. SPEC.	PER. SPEC.

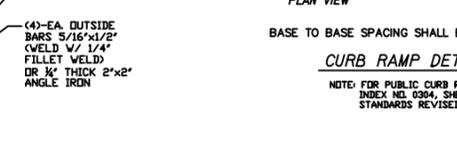
**COMPACTION TEST SCHEDULE**



**CONCRETE TYPE "F" CURB AND GUTTER**  
N.T.S.



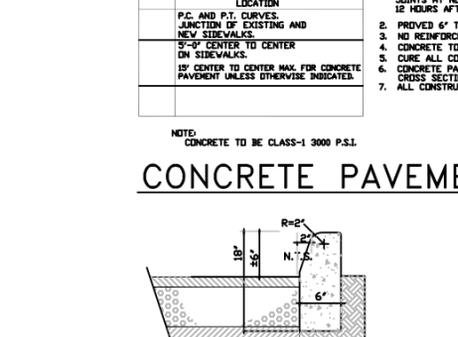
**PAVEMENT DETAIL (TO BE USED ON-SITE)**  
N.T.S.



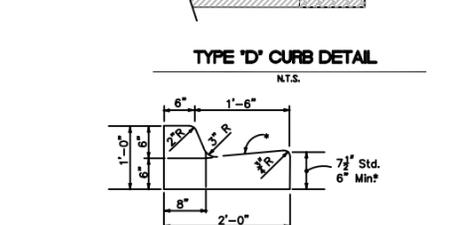
**PAVEMENT DETAIL (TO BE USED IN CITY R/W)**  
N.T.S.



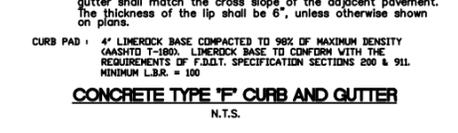
**F.D.O.T. PAVEMENT CONNECTION DETAIL**  
N.T.S.



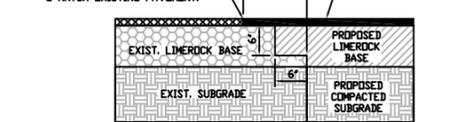
**TYPE "D" CURB DETAIL**  
N.T.S.



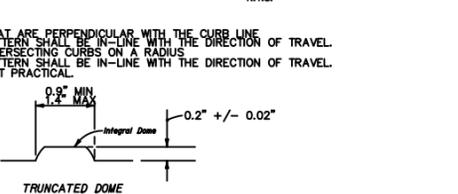
**TYPE "F" CURB AND GUTTER**  
N.T.S.



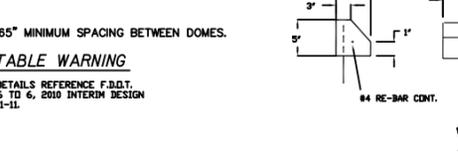
**PAVEMENT DETAIL (TO BE USED ON-SITE)**  
N.T.S.



**PAVEMENT DETAIL (TO BE USED IN CITY R/W)**  
N.T.S.



**F.D.O.T. PAVEMENT CONNECTION DETAIL**  
N.T.S.



**CURB RAMP DETECTABLE WARNING**  
NOTE: FOR PUBLIC CURB RAMP DETAILS REFERENCE F.D.O.T. INDEX NO. 0304, SHEETS 6 TO 6, 2010 INTERIM DESIGN STANDARDS REVISED 01-01-11.



**WHEEL STOP DETAIL**  
N.T.S.

ELEVATIONS SHOWN ON THIS PLAN ARE IN NAVD 88 DATUM





241 COMMERCIAL BLVD.  
LAUDERDALE-OF-THE-SEA, FL 33308  
PHONE: (954) 522-1004  
FAX: (954) 522-7830  
www.flynnengineering.com  
EB# 6578

GENERAL NOTES & SPECIFICATIONS

Sheet Title

VILLAGE AT BLUESTEN PARK  
215-227 SE 5TH STREET  
CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA 33009

Phase:  
DRG  
PLANS

Revisions

Scale:	Date
NTS	04/10/17
Job No.	Plot Date
17-1362.00	04/11/17
Drawn by	Sheet No.
DRS	C6
Proj. Engr.	
DRS	
Appr. by	6 of 6
DRS	

### BROWARD COUNTY TRAFFIC ENGINEERING COMMUNICATION NOTES:

ALL PARTIES SHALL BE AWARE THAT DIRECTIONAL BORES, UTILITY CONNECTIONS, THE PLACEMENT OF NOT AND ADVANCE SIGNAGE MAY, BY THEIR PLACEMENT, DAMAGE/DESTROY THE COMMUNICATIONS CABLE/CONDUIT LOCATED INSIDE/OUTSIDE THE PROJECT AREA. ADDITIONALLY, CURB/GUTTER/SIDEWALK REMOVAL/PLACEMENT, RELOCATION OF TREES, LANDSCAPING ACTIVITIES AND IRRIGATION ACTIVITIES ARE POTENTIAL CAUSES FOR DAMAGE TO BCTED'S COMMUNICATIONS CABLE/CONDUIT. ALL PARTIES SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN PROXIMITY TO THE COMMUNICATIONS CABLE/CONDUIT. ANY WORK INCIDENTAL TO THE PROJECT WHICH DAMAGES OR IMPACTS THE COMMUNICATIONS CABLE/CONDUIT SHALL BE SUBJECT TO THE TERMS AND CONDITIONS AS SPECIFIED WITHIN THE PLAN SET UNDER "COMMUNICATION NOTES" AND BCTED'S "STANDARDS AND SPECIFICATIONS - COMMUNICATION INFRASTRUCTURE" DOCUMENT.

THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNALS AND RELATED EQUIPMENT IS BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED). ALL SYSTEM COMMUNICATIONS EQUIPMENT, CABLING AND RELATED MATERIAL SHALL COMPLY WITH BROWARD COUNTY'S LATEST EDITION OF MINIMUM STANDARDS AS EXPRESSED IN THE "STANDARDS AND SPECIFICATIONS - COMMUNICATION INFRASTRUCTURE" DOCUMENT. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION WILL NOT ACCEPT ANY PROJECTS THAT DO NOT MEET THESE STANDARDS AND SPECIFICATIONS. FOR A COPY OF THESE STANDARDS REFER TO THE BROWARD COUNTY WEB SITE AT WWW.BROWARD.ORG OR CONTACT ROBERT BLOUNT, COMMUNICATIONS MANAGER AT RBLOUNT@BROWARD.ORG.

THE CONTRACTOR SHALL MAINTAIN ONLINE COMMUNICATIONS OF EXISTING OR TEMPORARY SIGNALIZATION VIA INTERCONNECTED COMMUNICATIONS CABLE OR TELCO PHONE LINES DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY LINES AND CONNECTIONS AS NECESSARY. A TIME-BASED-COORDINATION (TBC) SYSTEM TO BE UTILIZED ONLY IF PROVISION OF THE TEMPORARY LINES IS NOT FEASIBLE. THE DEVELOPMENT AND IMPLEMENTATION OF THE TBC PROGRAM IS TO BE PERFORMED BY THE CONTRACTOR WITH OVERSIGHT BY A TRAFFIC ENGINEER REGISTERED IN THE STATES OF FLORIDA. COST OF MAINTAINING COMMUNICATIONS WITH THE CENTRAL SITE, INCLUDING TEMPORARY LINES AND CONNECTIONS, SHALL BE PAID FOR UNDER THE MAINTENANCE OF TRAFFIC ACT OR REPORTS AND RECORDS OF THE COMMUNICATIONS SYSTEM SHALL BE RESPONDED TO BY THE CONTRACTOR WITHIN TWO HOURS AND SHALL BE REPAIRED WITHIN TWENTY-FOUR HOURS.

THE CONTRACTOR SHALL BE AWARE THAT BELLSOUTH TELEPHONE DROPS AND SYSTEM COMMUNICATIONS INTERCONNECT MAY EXTEND THROUGHOUT THE PROJECT. CABLE RUNS AND/OR CONDUIT, TELEPHONE INTERFACE EQUIPMENT, PULL/JUNCTION BOXES AND ANY OTHER SIGNAL OR OTHER SYSTEMS EQUIPMENT DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. DAMAGED COMMUNICATIONS CABLE SHALL BE REPLACED AS AN ENTIRE RUN, FROM JUNCTION POINT TO JUNCTION POINT AND SHALL BE TERMINATED IN JUNCTION BOXES. THE CONTRACTOR SHALL OBTAIN SYSTEMS COMMUNICATIONS INFORMATION FROM THE APPLICABLE MAINTAINING AGENCY.

ANY MATERIAL FURNISHED FOR THE PURPOSES OF: NEW INSTALLATION, REPLACEMENT OR REPAIR OF THE EXISTING COMMUNICATIONS INFRASTRUCTURE SHALL MEET THE STANDARDS AND SPECIFICATIONS OF BCTED; ANY SUPPLIED CONTROLLER CABINET, CONTROLLER, TELEMETRY UNIT, COMMUNICATIONS CABLE, PULL BOX, CONDUIT, TERMINATION DEVICE, JUNCTION BOX AND COMMUNICATIONS INTERFACE PANEL SHALL COMPLY WITH THE LATEST REQUIREMENTS AS STATED BY BCTED AND SHALL PROVIDE FOR FULL FUNCTIONALITY WITH THE EXISTING BCTED'S UTCS OPERATION.

### PROCEDURE FOR NOTIFICATION OF COMMUNICATION DISRUPTION:

WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE AN ADVANCE TWO-DAY NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THIS NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (EMAIL) TO THE COMMUNICATIONS MANAGER AT RBLOUNT@BROWARD.ORG. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE, THE DISRUPTION SHALL BE AT OFF PEAK HOURS BEGINNING AT 9:00AM AND ENDING AT 3:00PM.

ALL BCTED COMMUNICATIONS CABLE/CONDUIT SHALL BE LOCATED A MINIMUM OF 48 HOURS IN ADVANCE.

### 18. TESTING

- ALL PIPE SHALL BE TESTED UNDER A CONSTANT PRESSURE OF 150 PSI FOR 200 FEET FOR THE MAIN LINE. TEST PERIOD OF 2 HOURS AND SHALL NOT EXCEED THE LEAKAGE REQUIREMENTS AS PER ANSI/AWWA SPECIFICATIONS OF C-600-05 LEAKAGE FORMULA.
  - L =  $330 \times D \times L$
  - L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
  - S = TOTAL LENGTH OF PIPE TESTED, FEET. (2000 MAX. PER TEST)
  - D = DIAMETER OF PIPE TESTED, INCHES.
  - P = AVERAGE TEST PRESSURE, PSI.
- DISINFECTION OF ALL WATER LINES SHALL COMPLY WITH ANSI/AWWA C-651-05. BACTERIOLOGICAL SAMPLING POINTS ARE SHOWN ON THE WATER AND SEWER PLAN. A GALLONS RESIDUAL OF 3 TO 1.5 PPM SHALL BE MAINTAINED. ALL STERILIZATION SHALL BE AT THE FULL EXPENSE OF THE CONTRACTOR. BACTERIOLOGICAL SAMPLES MUST BE APPROVED BY THE COUNTY PUBLIC HEALTH UNIT AND THE CITY PRIOR TO OPERATION OF THE SYSTEM.

- ALL PVC PIPE SHALL BE INSTALLED WITH METALLIC COLOR TAPE 18" ABOVE THE TOP OF PIPE.
- BACK FLOW PREVENTERS MUST BE APPROVED BY THE CITY AS TO TYPE AND LOCATION PRIOR TO INSTALLATION.

- ALL WATER MAIN PIPE, INCLUDING FITTINGS, INSTALLED ON OR AFTER AUGUST 28, 2003, EXCEPT PIPED INSTALLED UNDER A CONSTRUCTION PERMIT FOR WHICH HEALTH DEPARTMENT RECEIVED A COMPLETE APPLICATION BEFORE AUGUST 28, 2003, SHALL BE COLOR CODED FOR STREET LOCATING PURPOSES. MARKINGS SHALL BE DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. PLASTIC PIPE SHALL BE SOLIDWALL BLUE PIPE. SHALL HAVE A CO-EXTRUDED BLUE STRIPES INTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES EXTERIORATED INTO, OR APPLIED TO, THE PIPE. ALL WATER AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO WALL PIPE. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE. THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PERIPHERY OF THE PIPE. FITTINGS SHALL BE INSTALLED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND METAL OR CONCRETE WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED IN ACCORDANCE WITH SUBSECTION 6.1.1.1. ALL OTHER ABOVEGROUND WATER TREATMENT PLANTS SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE. SUBSECTION 6.1.1.1.1. ALL ABOVEGROUND DRINKING WATER SHALL BE COLOR CODED BY PIPES AT DRINKING WATER TREATMENT PLANTS. ALL NEW OR ALTERED ABOVEGROUND DRINKING WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED AS RECOMMENDED IN SECTION 2.1.4 OF RECOMMENDED STANDARDS FOR WATER WORKS AS INCORPORATED INTO RULE 6B-295.000, F.A.C. IN ALL UNDERGROUND WATER MAIN PIPE THAT IS INSTALLED AT DRINKING WATER TREATMENT PLANTS OR AFTER AUGUST 28, 2003, AND THAT IS CONVEYING FINISHED DRINKING WATER SHALL BE COLOR CODED AS REQUIRED UNDER SUBPARAGRAPH 6B-295.300(2)(b)3, F.A.C. THE DISRUPTION DOES NOT APPLY TO DRINKING WATER TREATMENT PLANT PIPING INSTALLED OR ALTERED UNDER A CONSTRUCTION PERMIT FOR WHICH THE DEPARTMENT RECEIVED A COMPLETE APPLICATION BEFORE AUGUST 28, 2003.

### III. SPECIFIC SITE NOTES

- GENERAL
- "CITY" IN THESE NOTES REFERS TO THE CITY OF HALLANDALE BEACH.
- "COUNTY" IN THESE NOTES REFERS TO BROWARD COUNTY.
- "STATE" IN THESE NOTES REFERS TO THE STATE OF FLORIDA.

### III.1. INTENT OF DRAWINGS & SPECIFICATIONS

- INTENT OF SPECIFICATIONS AND DRAWINGS IS TO COVER AN INSTALLATION COMPLETE IN EVERY ASPECT. IT IS NOT INTENDED TO GIVE EVERY DETAIL ON DRAWINGS AND SPECIFICATIONS. OWNER WILL NOT BE RESPONSIBLE FOR THE ABSENCE OF ANY DETAIL WHICH CONTRACTOR MAY REQUIRE. NOR FOR ANY SPECIAL CONSTRUCTION WHICH MAY BE FOUND NECESSARY AS WORK PROGRESSES. IF AN ITEM IS EITHER INDICATED OR SPECIFIED, IT SHALL BE CONSIDERED SUFFICIENT FOR INCLUSION OF SAID ITEM IN CONTRACT. CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS AND EQUIPMENT USUALLY FURNISHED WITH SUCH SYSTEMS, AND AS NECESSARY TO COMPLETE AN OPERATING INSTALLATION, WHETHER MENTIONED OR NOT, WHICH ARE CUSTOMARY TO ITS TRADE.
- INCIDENTAL ACCESSORIES NOT USUALLY SHOWN OR SPECIFIED BUT WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION SHALL BE INCLUDED IN WORK WITHOUT ADDITIONAL COST TO THE OWNER, THE SAME AS IF ITEM SPECIFIED.
- ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN BUT MENTIONED IN THE SPECIFICATIONS, OR VICE-VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND READY FOR OPERATION, SHALL BE FURNISHED, PROVIDED, AND INSTALLED BY THE CONTRACTOR, WITHOUT ADDITIONAL COST TO THE OWNER.
- DRAWINGS ARE DIAGNOSTIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INDICATED (DO NOT SCALE THE DRAWINGS). CONSULT THE ENGINEER FOR EXACT LOCATIONS OF ITEMS WHICH ARE NOT DEFINITELY LOCATED ON THE DRAWINGS.
- ENGINEER'S INTERPRETATION OF DRAWINGS AND SPECIFICATIONS SHALL BE FINAL AND BINDING UPON CONTRACTOR.
- CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID, AND THOROUGHLY INVESTIGATE AND VERIFY ALL CONDITIONS UNDER WHICH WORK SHALL BE PERFORMED.
- IF A DISCREPANCY OCCURS BETWEEN A DETAIL, PLAN OR SPECIFICATIONS, THE MOST RESTRICTIVE DETAIL TAKES PRECEDENCE & SHALL BE IMPLEMENTED IN THE CONSTRUCTED PROJECT.

### F. SIGNAGE AND PAVEMENT MARKINGS

- THE ROADS AND PARKING AREAS SHALL BE STRIPED IN ACCORDANCE WITH THE PLANS. NO STRIPING SHALL BE LESS THAN THE SPECIFIED WIDTH. FOR STRIPING IT EXCEEDS THE SPECIFIED WIDTH BY MORE THAN 1/2" INCH STRIPING SHALL BE IN ACCORDANCE WITH SECTIONS 710 AND 871 OF THE STANDARD SPECIFICATIONS. ALL STRIPING WITHIN THE PUBLIC RIGHT-OF-WAY AND AT DRIVEWAY ACCESS POINTS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN ADEQUATE TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS FOR THE PURPOSE OF PROTECTING THE TRAFFIC PUBLIC, HIS WORKMEN AND THE WORK AREA IN GENERAL. SUCH TRAFFIC CONTROL SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT PERIOD, INCLUDING ANY TEMPORARY SUSPENSIONS OF THE WORK. MAINTENANCE TRAFFIC SHALL BE IN ACCORDANCE WITH SECTION 106 OF THE STANDARD SPECIFICATIONS AND THE STATE OF FLORIDA. MAINTENANCE TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS.
- ALL PAVEMENT MARKINGS ON-SITE SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- ALL SIGNING AND MARKINGS SHALL CONFORM TO MUTCD AND BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS (LATEST EDITION).

### G. SEWER SYSTEM NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LOCAL UTILITY DEPARTMENT MINIMUM STANDARDS AND APPLICABLE CODES.
- THE CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF EXISTING SEWER LINES, MANHOLES, AND STUBOUTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THE FIELD INFORMATION DIFFERS FROM THAT SHOWN ON THE PLAN.
- ALL GRAVITY SEWER PIPE 4" & LARGER SHALL BE POLYVINYL CHLORIDE (PVC) ASTM 3034, SDR 35 FOR THE DN-SITE SANITARY AWWA C-900 PVC OFF-SITE SHALL BE USED IN THE CITY R.D.V.
- MINIMUM SLOPE SHALL BE 0.4% FOR 8" PIPE AND 1% FOR 6" SERVICE LATERALS.
- DUCTILE IRON SEWER PIPE FOR GRAVITY MAINS SHALL BE CLASS 350 UNLESS OTHERWISE NOTED. ALL 18" AND LARGER SHALL HAVE A REPAIR-NEED BOOT WITH STAINLESS STEEL ACCESSORIES.
- CONNECTIONS TO EXISTING MAINS SHALL BE MADE UNDER THE DIRECTION OF THE CITY UTILITY DEPARTMENT.
- CLEANOUTS SHALL BE INSTALLED AT ALL SEWER SERVICES EXCEEDING 75' IN LENGTH (EVERY 75' WITH A CLEANOUT AT THE PROPERTY LINE, EASEMENT LINE, OR 5' FROM A BUILDING. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE BUILDING CLEANOUT WITH THE BUILDING AND UTILITY DEPARTMENT OF THE END OF THE SEWER SERVICE WITH THE BUILDING PLUMBING CONTRACTOR.
- LIMITS OF INFILTRATION OR EXFILTRATION OR LEAKAGE FOR THE ENTIRE SYSTEM, INCLUDING SERVICE LINES, SHALL NOT EXCEED A RATE OF 0.1 GALLONS PER HOUR PER LINEAL FOOT FOR ALL SIZES OF PIPE THROUGHOUT THE SYSTEM. THE ALLOWABLE LIMITS OF INFILTRATION OR EXFILTRATION OF LINES SHALL NOT EXCEED A RATE OF 4 GALLONS PER HOUR.
- ALL SEWER MAINS AND SERVICES, UP TO AND INCLUDING THE END OF THE SERVICE, SHALL BE CONSTRUCTED WITHIN A MINIMUM OF A 19' UTILITY EASEMENT, UNLESS OTHERWISE SHOWN.
- THE ENTIRE SYSTEM SHALL BE CLEANED PRIOR TO LAMPING OF THE LINES. 12" SANITARY SEWER SERVICE SHALL BE CLEANED PER TABLE III, F.D.D.T., SECTION 941.
- PROVIDE GRADE RPH & CENTERLINE OF ROAD OF NEAREST DRIVING LANE FOR MANHOLES LOCATED IN GREEN AREAS.
- FORCE MAIN TESTING
- ALL PIPE SHALL BE TESTED UNDER A CONSTANT PRESSURE OF 150 PSI FOR A MINIMUM TEST PERIOD OF 2 HOURS AND SHALL NOT EXCEED THE LEAKAGE REQUIREMENTS AS PER ANSI/AWWA SPECIFICATIONS OF C-600-05 LEAKAGE FORMULA.
  - L =  $330 \times D \times L$
  - L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
  - S = TOTAL LENGTH OF PIPE TESTED, FEET. (2000 MAX. PER TEST)
  - D = DIAMETER OF PIPE TESTED, INCHES.
  - P = AVERAGE TEST PRESSURE, PSI.

- PORTABLE WATER PIPE 4" & LARGER SHALL BE POLYVINYL CHLORIDE (PVC) PRESSURE PIPE CONFORMING TO AWWA C-900-97 PVC-1120, SDR-18 OR DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C-104/A21.4-03. 4" DIP SHALL BE CLASS 300, 6" AND 8" DIP SHALL BE CLASS 350, AND 10" DIP SHALL BE CLASS 400. MINIMUM PRESSURE RATING. FITTINGS 4" AND LARGER SHALL BE DUCTILE IRON MEETING ANSI/AWWA C-110/A21.10-03. FITTINGS 6" AND LARGER SHALL BE CONCRETE LINED AND SEAL COATED PER C-104/A21.4-03 PRESSURE RATING OF ALL FITTINGS SHALL BE 350 PSI. ALL FITTINGS SHALL BE INSTALLED WITHIN THE CITY'S RIGHT-OF-WAY OR EASEMENT SHALL BE DUCTILE IRON PIPE CLASS 350. ALL FIRE MAINS SHALL BE 30" OR PVC C-900 (SDR-14) AND PRESSURE RATED 8 HRS.
- ALL WATER PIPE SMALLER THAN 4" INCHES SHALL BE PVC MINIMUM SCHEDULE 80 WITH A MINIMUM WORKING PRESSURE OF 160 PSI. FITTINGS FOR PIPE SMALLER THAN 4" SHALL BE MINIMUM SCHEDULE 80. SOLVENT WELD SOCKET WITH D-2464 OR MINIMUM SCHEDULE 80 THREADED TYPE ASTM D-2464.
- THERE SHALL BE NO CONNECTION TO AN EXISTING WATER MAIN UNTIL PRESSURE AND BACTERIOLOGICAL TESTS HAVE BEEN RUN AND THE SYSTEM ACCEPTED BY THE CITY AND THE COUNTY HEALTH DEPARTMENT.
- ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE UNDER THE DIRECTION OF THE CITY UTILITY DEPARTMENT.
- WATER METERS 2" OR SMALLER SHALL BE INSTALLED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE CITY UTILITY DEPARTMENT AND PROVIDE THE PROPER FITTINGS NECESSARY TO INSTALL THE METERS. ALL COSTS ASSOCIATED WITH THE METER INSTALLATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- GATE VALVES, 4" OR LARGER, SHALL MEET AWWA C-509-01 STANDARD. BUTTERFLY VALVES 4" OR LARGER, SHALL MEET AWWA C-504-00, CLASS 150B STANDARDS.
- FIRE HYDRANTS SHALL BE TRAFFIC BREAK ANY TYPE CONFORMING TO AWWA C-502-94 STANDARDS. FIRE HYDRANTS SHALL BE MULLER MODEL A-429 OR CLM MODEL A-429.
- ALL TRENCHING, PIPE LAYING, BACKFILLING, PRESSURE TESTING, AND DISINFECTING MUST COMPLY WITH AWWA C-500-99 AND C-651-99 STANDARDS.
- DEFLECT WATER MAINS AS NECESSARY TO AVOID ANY CONFLICTS WITH OTHER UTILITIES. ALLOWABLE DEFLECTION SHALL NOT EXCEED AWWA STANDARDS.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION AND ELEVATION OF THE ENDS OF THE WATER SERVICES WITH THE BUILDING PLUMBING CONTRACTOR.
- CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING WATER MAINS AND PROPOSED CONDUIT LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THE FIELD INFORMATION DIFFERS FROM THAT SHOWN ON THE PLANS.
- ALL WATER MAINS TO BE FLUSHED VIA POLY PIG.
- THE CONTRACTOR MUST ARRANGE AND PAY FOR ANY TEMPORARY WATER REQUIRED FOR CONSTRUCTION, CLEANING, TESTING, ETC.

### B. EARTHWORK

- ALL AREAS WITHIN THE LIMITS OF WORK SHALL BE CLEARED AND GROUND/GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS REMAINING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ITEMS DESIGNATED TO REMAIN OR TO BE RELOCATED OR TO BE ADJUSTED SHALL BE SO IDENTIFIED AND PROTECTED THROUGHOUT THE CONSTRUCTION WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.
- FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM THE TRAVELING PUBLIC, HIS WORKMEN AND THE WORK AREA IN GENERAL. SUCH TRAFFIC CONTROL SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT PERIOD, INCLUDING ANY TEMPORARY SUSPENSIONS OF THE WORK. MAINTENANCE TRAFFIC SHALL BE IN ACCORDANCE WITH SECTION 106 OF THE STANDARD SPECIFICATIONS AND THE STATE OF FLORIDA. MAINTENANCE TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS.
- ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND THE STATUS OF FILLING MATERIAL SHALL BE DETERMINED PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES IF APPLICABLE: FLORIDA POWER AND LIGHT COMPANY/SOUTHERN BELL-LOCAL GAS COMPANY-LOCAL WATER AND SEWER UTILITY COMPANY(S)-LOCAL CABLE TELEVISION COMPANY(S)-LOCAL CITY ENGINEERING DEPARTMENT-LOCAL CITY DEPARTMENT OF TRANSPORTATION SYSTEM, ETC.-SUNSHINE STATE ONE CALL OF FLORIDA-(1-800-438-4770) FOR STREET EXCAVATION OR CLOSING TRAFFIC SARGENT-FIRE DISPATCH-

- WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10 FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE). ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL, COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180).
- WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN OR MUCK SHALL BE REMOVED FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND RESTORATION WITHIN 24 HOURS TO REELECT TO THE ORIGINAL FINISH ELEVATION AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THE CITY'S PUBLIC WORKS CONTRACTORS, AND SHALL BE REPAIRED PROMPTLY. THIS REPAIR SHALL BE DONE AT NO EXPENSE TO THE OWNER OF THE DAMAGED UTILITY OR PROPERTY.
- COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE CITY UTILITY DEPARTMENT.
- ALL PAVEMENT RESTORATION TO BE MADE IN ACCORDANCE WITH THE CITY COUNTY OR STATE OF FLORIDA D.D.T. STANDARD SPECIFICATIONS, WHERE APPLICABLE.
- PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUPPLY THE ENGINEER OF RECORD WITH THE CERTIFICATION THAT ALL CONSTRUCTION AND MATERIALS MEET OR EXCEEDS THE DESIGN AND DRAWINGS INSTALLED PER THE DRAWINGS AND/OR AS-BUILT DRAWINGS.
- THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND CONDUIT REQUIRED FOR FINAL UTILIZATION BEFORE BEGINNING CONSTRUCTION. PRIOR TO BEGINNING SUBGRADE, THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND UTILITY COMPANIES.
- NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN OVERNIGHT WITHOUT WRITTEN PERMISSION OF THE CITY OR OWNER.
- THE CONTRACTOR MUST NOTIFY FLYNN ENGINEERING SERVICES, P.A. PRIOR TO STARTING EACH PHASE OF ANY UNDERGROUND UTILITY WORK OR PAVING AND GRADING OPERATIONS SO THAT THE PROPER INSPECTIONS MAY BE SCHEDULED.

### C. DRAINAGE

- INLETS - ALL INLETS SHALL BE IN THE LOCATION DESIGNATED ON THE PLANS AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FLORIDA D.D.T. SPECIFICATIONS, 2007 SECTION 425. ALL PAVEMENT SHALL BE CONSTRUCTED TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE EXISTING DRAINAGE SYSTEM SHALL BE CLEARED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
- PIPE SPECIFICATIONS - THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS: RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, TABLE III, F.D.D.T., SECTION 941. CMP = CORRUGATED METAL PIPE, ASTM DESIGNATION M-196. SCP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE. PVC = POLYVINYL CHLORIDE PIPE, F.D.D.T. SECTION 941 AND POMP = PERFORATED CMP, F.D.D.T. SECTION 945
- PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE FLORIDA D.D.T. SPECIFICATIONS, 2007 SECTION 129-8. PIPE BACKFILL SHALL BE PLACED IN 6" INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROVISION (AASHTO T-99) SPECIFICATIONS.
- LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE SHALL BE INSTALLED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.
- PLASTIC FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 905 OF THE F.D.D.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- ALL DRAINAGE LINES SHALL BE LAMPED PRIOR TO FINAL ACCEPTANCE.

### D. PAVING

- WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
- INTERNAL ASPHALT PAVING CONSTRUCTION ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 1" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 4.0 UNLESS OTHERWISE NOTED.
- ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 330, 331, 332, 333, 335, 337 AND 309 OF THE STANDARD SPECIFICATIONS.
- LIMBEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 EDITION. ALL LIMBEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. ALL LIMBEROCK SHALL BE PRIMED. THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIME BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.
- LIMBEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS.
- ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON THE HORIZONTAL CONTROL PLAN.

### E. CONSTRUCTION

- CONCRETE SIDEWALK SHALL BE 4" THICK ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75' CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. THE BACK OF CURB ELEVATION SHALL BE 6" HIGHER THAN THE EDGE OF PAVEMENT, UNLESS OTHERWISE SPECIFIED BY LOCAL CODES. OR SHOWN ON THE DRAWINGS. CONCRETE SIDEWALK THAT CROSS DRIVEWAYS SHALL BE 6" THICK AND HAVE A MINIMUM OF 3000 P.S.I. CONCRETE.
- CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 345 OF THE STANDARD SPECIFICATIONS.

### I. GENERAL NOTES

- APPLICABLE CODES
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY AND STATE.
- CONSTRUCTION SAFETY - ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.
- THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH CHAPTER 90-36 OF THE LAWS OF THE TRENCH SAFETY ACT AND OSHA STANDARD 29 C.F.R. SECTION 1926.650 SUBPART P. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A TRENCH SAFETY PLAN IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.
- NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL LOCAL, STATE AND FEDERAL AGENCIES.

### B. PRECONSTRUCTION RESPONSIBILITIES

- UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, ALL AFFECTED UTILITY OWNERS, THE OWNER, THE ENGINEER AND HIMSELF.
- THE CONTRACTOR SHALL OBTAIN AN SUNSHINE STATE ONE CALL OF FLORIDA PARTICIPATION NUMBER AT LEAST 48 HOURS PRIOR TO PRIOR TO BEGINNING ANY EXCAVATION.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. HE IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
- IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

### C. INSPECTIONS

- THE OWNER, ENGINEER, AND LOCAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS.

### D. SHOP DRAWINGS

- THE CONTRACTOR SHALL SUBMIT (5) FIVE SETS OF SHOP DRAWINGS FOR APPROVAL TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OF CONSTRUCTION MATERIALS USED ON THE PROJECT. APPROVED SHOP DRAWINGS FROM THE ENGINEER SHALL THEN BE SUBMITTED TO THE CITY AND CITY UTILITY DEPARTMENT FOR APPROVAL. NO CONSTRUCTION SHALL COMMENCE UNTIL THE APPROVED SHOP DRAWINGS HAVE BEEN OBTAINED BY THE CONTRACTOR FROM THE ENGINEER, CITY AND UTILITY COMPANIES.
- INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOG LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

### E. TEMPORARY FACILITIES

- TEMPORARY UTILITIES - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR AND SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO HIS EMPLOYEES, AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.
- TRAFFIC REGULATION - MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD AND THE FDOT STANDARD SPECIFICATIONS.
- ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR DRIVEWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. NO HOLES SHALL BE LEFT OPEN OVERNIGHT.

### F. PROJECT SITE

- DURING CONSTRUCTION THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE CONTRACTOR SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEP BROAD CLEAN.
- THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. TO THIS END, THE CONTRACTOR SHALL DO AS REQUIRED ALL APPROPRIATE HIGHWAY AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- WHERE MATERIAL OR DEBRIS WAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, DITCHES, DRAINAGE BASINS, OR ELSEWHERE, AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

### G. PROJECT RECORD DOCUMENTS

- THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF WORK ITEMS COMPLETED, INFORMATION RELATIVE TO MANHOLES, VALVES, SERVICES, FITTINGS, LENGTH, PIPE, INVERT ELEVATIONS, FINISH GRADE ELEVATIONS AND THE LIKE. THIS SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR. TOP ELEVATIONS 8" 100' D.C.
- PRIOR TO THE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD "AS-BUILT" PLANS SHOWING LIMBEROCK BASE, GRADES, ALL DRAINAGE, WATER, AND SEWER IMPROVEMENTS. PAVING OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER HAS REVIEWED THE "AS-BUILTS" AND THE ENGINEER HAS APPROVED PAVING TO COMMENCE.
- ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUBGRADE BASE MATERIAL SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING LIMBEROCK BASE MATERIAL.
- ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR LIMBEROCK SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING ASPHALT.
- ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER AND ANY APPLICABLE REVIEWING AGENCY THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.
- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD FIVE COMPLETED SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS (PRINTS) AND ONE MYLAR ORIGINAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED BY THE CONTRACTOR.
- ALL "AS-BUILT" INFORMATION ON ELEVATIONS OF PAVING, DRAINAGE, WATER, AND SEWER SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR.
- ALL "AS-BUILT" INFORMATION MUST BE PROVIDED IN AUTOCAD RELEASE 2000 OR LATER FORMAT.

### H. EARTHWORK

- NONE OF THE EXISTING MATERIAL IS TO BE INCORPORATED IN THE LIMBEROCK BASE.
- ALL SUBGRADE UNDER PAVED AREAS SHALL HAVE A MINIMUM LBR VALUE OF 4.0 AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- ALL ORGANIC AND OTHER UNSUITABLE MATERIAL WITHIN WORK LIMITS AND SWALE AREAS SHALL BE REMOVED.

### I. TESTING

- TESTING - REQUIRED, ASPHALT AND LIMBEROCK TESTS SHALL BE TAKEN IN THE DIRECTION OF THE ENGINEER OR THE LOCAL GOVERNMENT AGENCY.

### J. GENERAL UTILITY NOTES

- THE LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER OR THE LOCAL GOVERNMENT. TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OR DISCREPANCIES OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS OF CONSTRUCTION DRAWINGS SHALL BE RESOLVED BY THE ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES IF APPLICABLE: FLORIDA POWER AND LIGHT COMPANY/SOUTHERN BELL-LOCAL GAS COMPANY-LOCAL WATER AND SEWER UTILITY COMPANY(S)-LOCAL CABLE TELEVISION COMPANY(S)-LOCAL CITY ENGINEERING DEPARTMENT-LOCAL CITY DEPARTMENT OF TRANSPORTATION SYSTEM, ETC.-SUNSHINE STATE ONE CALL OF FLORIDA-(1-800-438-4770) FOR STREET EXCAVATION OR CLOSING TRAFFIC SARGENT-FIRE DISPATCH-

- WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10 FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE). ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL, COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180).
- WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN OR MUCK SHALL BE REMOVED FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND RESTORATION WITHIN 24 HOURS TO REELECT TO THE ORIGINAL FINISH ELEVATION AND LANDSCAPED AREAS







**SYNALOVSKI ROMANK SAYE**  
Architects - Planning - Interior Design

1800 Eller Drive, Suite 500  
Fort Lauderdale, FL 33316  
T 954.961.6806  
F 954.961.6807  
www.synalovskid.com

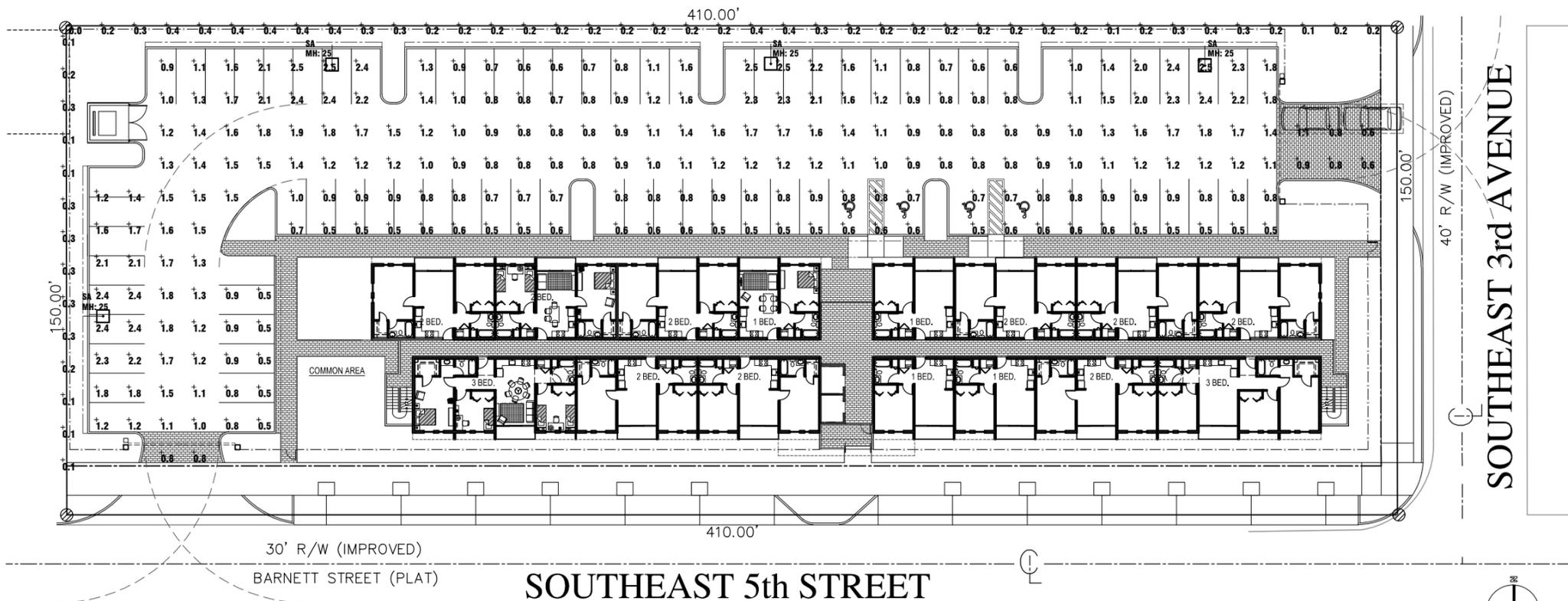
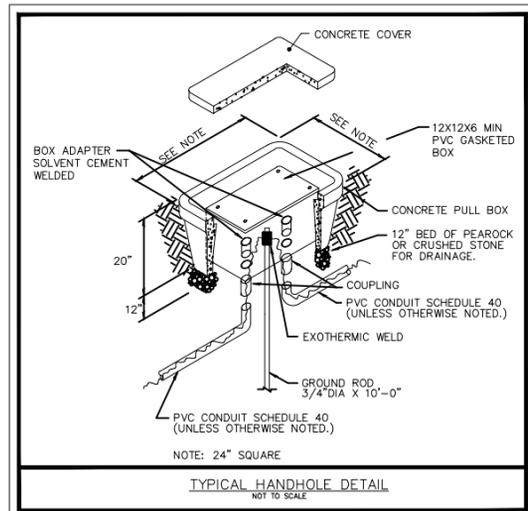
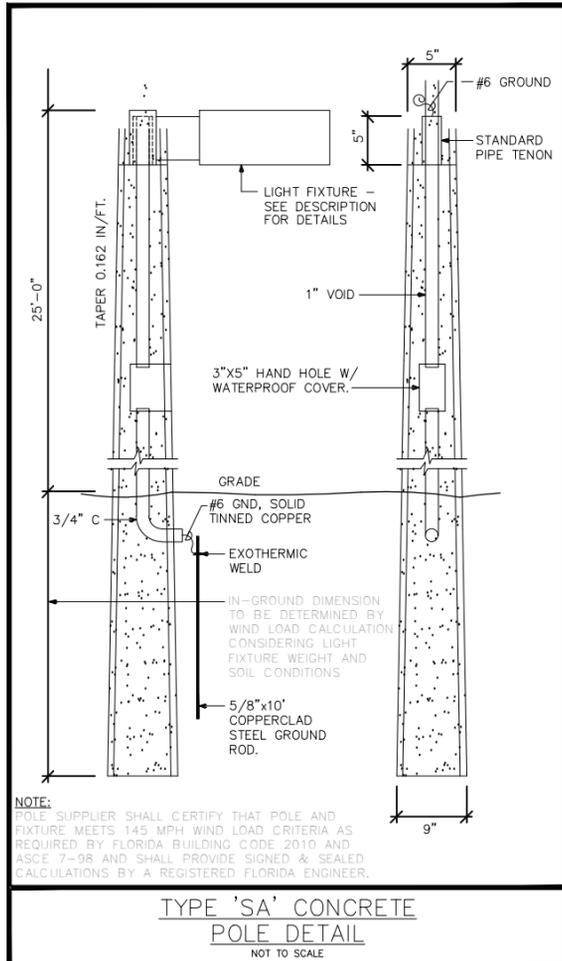
Manuel Synalovski, AIA  
AR 0011695  
SEAL

LICENSE NO. AA26001863

**VILLAGE AT BLUESTEN PARK**

NW CORNER OF SE 5TH ST AND SE 3RD AVE  
HALLANDALE BEACH, FL.

CLIENT: BLUESTEN DEVELOPERS LLC.



Luminaire Schedule						
Symbol	Qty	Label	Description	LLF	Lum. Watts	Total Watts
Project: VILLAGE AT BLUESTEN PARK - SITE --- REV1						
	4	SA	PHILIPS GARDCO ECF-S-48L-900-NW-G2-3-HIS POLE MOUNT 25' A.F.G.	0.850	137.7	550.8

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
Project: VILLAGE AT BLUESTEN PARK - SITE --- REV1					
NORTH SPILL	0.25	0.4	0.0	N.A.	N.A.
PARK & DRIVE_Planar	1.17	2.5	0.5	2.34	5.00
WEST SPILL	0.20	0.3	0.1	2.00	3.00

REV	DATE	DESCRIPTION
1	11/08/17	DRG COMMENTS
2	12/07/17	DRG COMMENTS

DESIGN DELIVERABLE: DRC SUBMITTAL  
ISSUE DATE: 04/13/2017

PROJECT NUMBER: 1445-160926

DRAWN BY: JS

CHECKED BY: JS

Copyright (c) by SYNALOVSKI ROMANK SAYE, LLC  
All Rights Reserved.

SHEET TITLE:  
**PHOTOMETRIC SITE PLAN**

SHEET NUMBER:

**PH-101**

IMPACT ANALYSIS  
FOR  
**VILLAGE AT BLUESTEN PARK**  
HALLANDALE BEACH, FLORIDA

Prepared By:

Flynn Engineering Services, P.A.

November 9, 2017

Flynn Engineering Services, P.A.  
241 Commercial Boulevard  
Lauderdale By The Sea, Florida 33308  
Phone: (954) 522-1004  
Fax: (954) 522-7630

## Table of Contents

- I. Introduction
- II. General Information – Section 32-784
- III. Professional Assistance – Section 32-785
- IV. Site Plan Review Submission – Section 32-786
- V. Impact Evaluation Submission Requirements – Section 32-788

## **I. INTRODUCTION**

### **VILLAGE AT ATLANTIC SHORES**

The owner of the property located west of SE 3<sup>rd</sup> Avenue and north of N.E. 5th Street is Bluesten Developers, LLC. These lots are currently the Gulfstream Trailer Park with 22 existing units. The owner proposes to develop the property as a multi-family residential development to cater to both the City of Hallandale Beach residences and visitors. The applicant is proposing a 45 unit building along with associated parking and landscaping to meet city and code regulations.

The property is currently zoned Transit Core Subdistrict. The lot has an approximate area of 61,500 square feet (1.41 acres). The zoning and land use are both currently appropriate for the proposed development.

The following Impact Analysis provides an overview as to how the application addresses the design and planning concerns of the City of Hallandale Beach, and shows that the application conforms to all requirements of the zoning and land development code for the City of Hallandale Beach, Florida. All section numbers referenced herein refer to Section of Article V, Appendix A, the Zoning and Land Use Section of the City of Hallandale Beach, Florida.

## **II. GENERAL INFORMATION – SECTION 32-784**

### **A) Required Information**

### **B) Ownership**

The owner of the property is Bluesten Developers, LLC. Attached to this application is a copy of the deed for the subject property.

### **C) Mortgages, liens and judgment**

Attached to this application are the Mortgage and Commitment for the Title Insurance in reference to the subject property and property owner.

### **D) Experience**

The developer has experience working on commercial developments in the City of Hallandale Beach.

### **E) Financial Capability.**

The developer has the financial capability to develop this project as demonstrated by previous commercial developments in the City of Hallandale Beach.

### **F) Burden of Proof of Applicant.**

The Applicant will work with city development review staff to furnish any professional planning, engineering or other technical data, evaluations, or reports demonstrating compliance with city code and development regulations.

### III. PROFESSIONAL ASSISTANCE – SECTION 32-785

Planner: Synalovski Romanik Saye  
1800 Eller Drive, Suite 500  
Fort Lauderdale, FL 33316  
Phone: (954) 961-6806  
Fax: (954) 961-6807

Architect: Synalovski Romanik Saye  
1800 Eller Drive, Suite 500  
Fort Lauderdale, FL 33316  
Phone: (954) 961-6806  
Fax: (954) 961-6807

Landscape Architect Barranco – RLA, Inc.  
888 South Andrews Avenue, Suite 300  
Ft. Lauderdale, Florida 33316  
Phone: (954) 224-0432

Civil Engineer: Flynn Engineering Services, P.A.  
241 Commercial Boulevard  
Lauderdale By The Sea, Florida 33308  
Phone: (954) 522-1004  
Fax: (954) 522-7630

Surveyor: Target Surveying, LLC  
6250 N. Military Trail, Suite 102  
West Palm Beach, Florida 33407  
Phone: (561) 640-4800  
Fax: (800) 741-0576

Traffic Engineer: Kimley-Horn & Associates, Inc.  
1920 Wekiva Way, Suite 200  
West Palm Beach, FL 33411  
Phone: (561) 840-0248

#### **IV. SITE PLAN REVIEW SUBMISSION REQUIREMENTS - SECTION 32-786**

a) Scope.

b) General Information

The number of required site plan copies and the appropriate filing and review fees have been submitted with the site plan application. The site plan includes all the submittal requirements per Section 32-786 (B) (1-4) of the city code.

c) Certified Property Survey.

Attached to this application is a Certified Property Survey prepared and certified by Compass Surveying.

d) Existing Site Characteristics Map.

Attached to this application is a Site Characteristics Map prepared and certified by Compass Surveying.

e) Proposed Site Development Plan. All items required to be listed on the site development plan are appropriately listed.

- 1) Attached to this application is a proposed site development plan showing the finishing grade.
- 2) Attached to this application is a proposed site development plan indicating the provisions for adequate control of erosion and sedimentation.
- 3) Attached to this application is a site development plan indicating the provisions for adequate drainage and disposition of natural water and storm water in accordance with the adopted design standards of the city, indicating the location, size, type, and grade of ditches, catch basins, pipes and connections to existing drainage system and on-site Stormwater retention.
- 4) Attached to this application is a proposed site development plan showing the proposed utility services and proposed utility relocation plan.
- 5) Attached to this application is a proposed site development plan showing the proposed structures, their location, use, height, gross floor area and structural coverage.

- 6) Attached to this application is a proposed site development plan showing the proposed vehicular use areas including loading spaces, driveways, etc.
- 7) Attached to this application is a proposed site development plan showing the proposed screening including the location, size, type and height.
- 8) Attached to this application is a proposed site development plan showing the proposed pedestrian ways and sidewalks, including their location, width, type and surfacing.
- 9) Attached to this application is a proposed site development plan showing the proposed open space areas, including location, height, type and size of all trees, plants and other landscaping. Also, the total amount and percentage of site area to be utilized for both pervious and impervious open space.
- 10) Attached to this application is a proposed site plan showing the proposed signage including their location, dimension, height and type. The proposed signage will be in compliance with Division 17 of the City of Hallandale Beach Code known as the "Sign Code of the City of Hallandale Beach, Florida". All signage within the site will be properly placed and maintained, promoting traffic and pedestrian safety and aesthetics.
- 11) Attached to this application is a proposed site development plan showing the proposed handicap design features, including ramps, parking spaces, fountains, and restrooms. The proposed project complies with ADA and Fair Housing Accessibility Guidelines. For more information on compliance with accessibility standards, refer to specifications outlined in the attached document.

#### f) Other Requirements

- 1) Description of Future Residents.

This is a multi-family residential development and 113 future residents (2.5 people per each of the 45 units) are anticipated as a result of this project.

- 2) Architectural Description

The project is a three story multi-family residential project with 45 units. The project is designed to maximize frontage along SE 5<sup>th</sup> Street and promote pedestrian traffic along the right-of-way. Parking and service are provided behind the building on the north side of the property, instead of strictly in front of the buildings. This allows portions of the buildings to be as close as possible to the street.

- 3) The use of landscaping in front of the building (south and east side) provides shade to a good portion of the glass surface. High efficiency air conditioning systems are being proposed. Also, high R-value roof insulation will be used.
- 4) Broward County Transit bus route 1 and the US 1 Breeze provides service on Federal Highway just east of the proposed project.

The following are routes and schedules.



## Customer Service

Monday - Friday.....7 am - 7:45 pm  
Saturday, Sunday and Holidays.....8:30 am - 4:45 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 8:30 am - 4:30 pm

## Holiday Bus Service

There is no service on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

## Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.\* Children (under 40 inches ride FREE)

## Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

**10 Ride Pass:** 10 Rides any time, any day. Expires after the tenth ride is taken.

**7 Day Pass:** Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

**31 Day Adult Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**31 Day Reduced Pass:** Youth\*, Seniors\*, Disabled\*, Medicare\*, College Student\*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**\*\*Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

**\*\*Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not exchangeable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

\*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

\*\* Premium Bus Pass can be purchased online at [broward.org/bct](http://broward.org/bct) and at select Broward County library locations.

**TIME TABLE**

**ROUTE**  
*U.S. 1*  
**Breeze**

**Monday - Friday  
Limited Service**

Aventura Mall to  
Broward Central Terminal

---

via U.S. 1

---

Effective 1/19/15

**BROWARD  
COUNTY**  
*Transit*  
A service of the  
Broward County Commission

**facebook**

**You Tube**

Download & Print at [broward.org/bct](http://broward.org/bct)

Wheelchair Accessible

Bike Racks

# NORTHBOUND

To Broward Central Terminal/Aventura Mall

AVENTURA MALL	HALLANDALE BCH BLVD & US 1	YOUNG CIRCLE	DANIA BEACH BLVD & US	SE 17 ST & US 1	BROWARD CENTRAL TERMINAL
1	2	3	4	5	6
6:01a	6:12a	6:21a	6:32a	6:41a	6:51a
6:21a	6:32a	6:41a	6:52a	7:01a	7:12a
6:41a	6:52a	7:01a	7:13a	7:23a	7:34a
7:01a	7:13a	7:23a	7:35a	7:46a	7:58a
7:21a	7:33a	7:43a	7:56a	8:07a	8:19a
7:41a	7:53a	8:03a	8:16a	8:27a	8:39a
8:01a	8:13a	8:23a	8:36a	8:47a	8:59a
8:21a	8:33a	8:43a	8:56a	9:07a	9:19a
8:41a	8:53a	9:03a	9:16a	9:27a	9:38a
9:01a	9:13a	9:23a	9:36a	9:46a	9:57a
9:21a	9:33a	9:43a	9:55a	10:05a	10:16a
9:41a	9:53a	10:03a	10:15a	10:25a	10:36a
10:01a	10:13a	10:23a	10:35a	10:45a	10:56a
10:21a	10:33a	10:43a	10:55a	11:05a	11:16a
10:41a	10:53a	11:03a	11:15a	11:25a	11:36a
11:01a	11:13a	11:23a	11:35a	11:45a	11:56a
11:21a	11:33a	11:43a	11:55a	12:05p	12:16p
11:41a	11:53a	12:03p	12:15p	12:25p	12:36p
12:01p	12:13p	12:23p	12:35p	12:45p	12:56p
12:21p	12:33p	12:43p	12:55p	1:05p	1:16p
12:41p	12:53p	1:03p	1:15p	1:25p	1:36p
1:01p	1:13p	1:23p	1:35p	1:45p	1:56p
1:21p	1:33p	1:43p	1:55p	2:05p	2:16p
1:41p	1:53p	2:03p	2:15p	2:25p	2:36p
2:01p	2:13p	2:23p	2:35p	2:45p	2:56p
2:21p	2:33p	2:43p	2:55p	3:05p	3:16p
2:41p	2:53p	3:03p	3:15p	3:25p	3:37p
3:01p	3:13p	3:23p	3:35p	3:45p	3:57p
3:21p	3:34p	3:44p	3:56p	4:06p	4:18p
3:41p	3:55p	4:05p	4:17p	4:27p	4:40p
4:01p	4:15p	4:25p	4:37p	4:48p	5:01p
4:21p	4:36p	4:47p	4:59p	5:10p	5:23p
4:41p	4:57p	5:08p	5:20p	5:30p	5:43p
5:01p	5:17p	5:28p	5:40p	5:50p	6:03p
5:21p	5:37p	5:48p	6:00p	6:10p	6:22p
5:41p	5:57p	6:07p	6:19p	6:29p	6:40p G
6:01p	6:15p	6:25p	6:37p	6:47p	6:58p G
6:21p	6:34p	6:44p	6:56p	7:06p	7:17p G

Times with the letter "G" before them indicate bus returns to garage.

# SOUTHBOUND

From Broward Central Terminal/Aventura Mall

BROWARD CENTRAL TERMINAL	SE 17 ST & US 1	DANIA BEACH BLVD & US 1	YOUNG CIRCLE	HALLANDALE BCH BLVD & US 1	AVENTURA MALL
6	5	4	3	2	1
6:10a	6:20a	6:29a	6:41a	6:51a	7:02a
6:30a	6:40a	6:49a	7:01a	7:12a	7:24a
6:50a	7:00a	7:10a	7:23a	7:35a	7:48a
7:10a	7:21a	7:31a	7:44a	7:57a	8:10a
7:30a	7:41a	7:51a	8:04a	8:17a	8:30a
7:50a	8:01a	8:11a	8:24a	8:37a	8:50a
8:10a	8:21a	8:31a	8:44a	8:57a	9:10a
8:30a	8:41a	8:51a	9:04a	9:17a	9:30a
8:50a	9:01a	9:11a	9:24a	9:36a	9:48a
9:10a	9:21a	9:31a	9:44a	9:55a	10:07a
9:30a	9:41a	9:51a	10:04a	10:15a	10:27a
9:50a	10:01a	10:11a	10:24a	10:35a	10:47a
10:10a	10:21a	10:31a	10:44a	10:55a	11:07a
10:30a	10:41a	10:51a	11:04a	11:15a	11:27a
10:50a	11:01a	11:11a	11:24a	11:35a	11:47a
11:10a	11:21a	11:31a	11:44a	11:55a	12:07p
11:30a	11:41a	11:51a	12:04p	12:15p	12:27p
11:50a	12:01p	12:11p	12:24p	12:35p	12:47p
12:10p	12:21p	12:31p	12:44p	12:55p	1:07p
12:30p	12:41p	12:51p	1:04p	1:15p	1:27p
12:50p	1:01p	1:11p	1:24p	1:35p	1:47p
1:10p	1:21p	1:31p	1:44p	1:55p	2:07p
1:30p	1:41p	1:51p	2:04p	2:15p	2:27p
1:50p	2:01p	2:11p	2:24p	2:35p	2:47p
2:10p	2:21p	2:31p	2:44p	2:55p	3:07p
2:30p	2:41p	2:51p	3:04p	3:15p	3:27p
2:50p	3:01p	3:11p	3:24p	3:35p	3:47p
3:10p	3:21p	3:31p	3:45p	3:56p	4:08p
3:30p	3:42p	3:53p	4:07p	4:18p	4:30p
3:50p	4:02p	4:13p	4:27p	4:39p	4:51p
4:10p	4:22p	4:34p	4:48p	5:00p	5:12p
4:30p	4:42p	4:55p	5:09p	5:21p	5:33p
4:50p	5:02p	5:15p	5:29p	5:41p	5:53p
5:10p	5:22p	5:35p	5:49p	6:01p	6:13p
5:30p	5:42p	5:55p	6:09p	6:20p	6:32p G
5:50p	6:02p	6:13p	6:27p	6:38p	6:50p G
6:10p	6:22p	6:33p	6:46p	6:57p	7:09p G
6:30p	6:41p	6:51p	7:04p	7:15p	7:27p G

# ROUTE US 1 Breeze

Monday - Friday Limited Service  
Aventura Mall to Broward Central Terminal  
via US 1

**LEGEND**

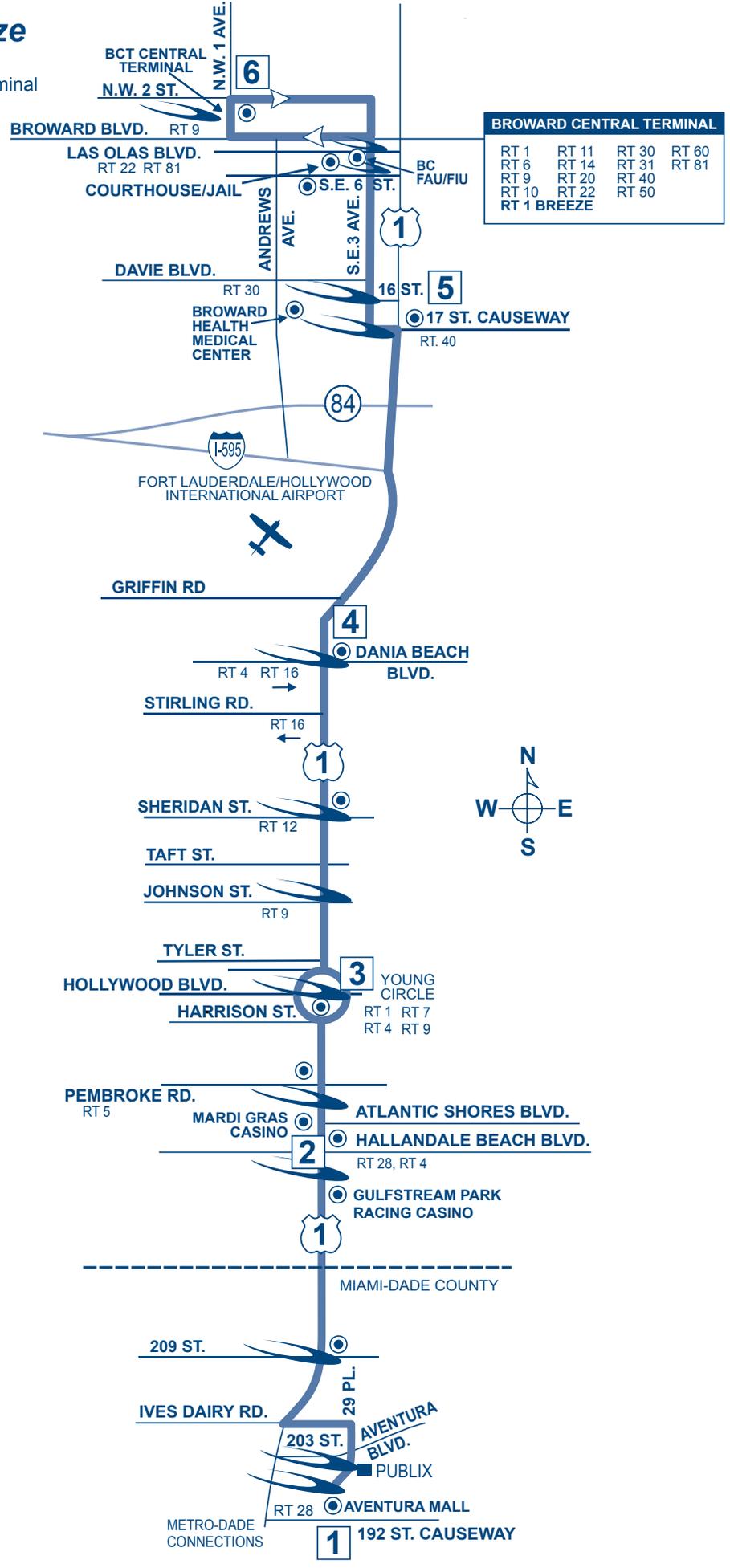
CONNECTING ROUTES → RT#

MAIN ROUTE →

TIMEPOINTS ○

The Breeze stop location →

- POINTS OF INTEREST**
- Aventura Mall
  - Gulfstream Park, Racing Casino
  - Mardi Gras Casino
  - Broward Health Medical Center
  - Courthouse/Jail
  - BC/FAU/FIU



For more details on our fares please visit our web site at [broward.org/BCT/FaresAndPasses/Pages/FaresPasses.aspx](http://broward.org/BCT/FaresAndPasses/Pages/FaresPasses.aspx) or call customer service: 954.357.8400.

### Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol .
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Information: 954.357.8400

Hearing-speech impaired/TTY:  
954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.



This symbol is used on bus stop signs to indicate accessible bus stops.



BROWARD COUNTY

BOARD OF COUNTY COMMISSIONERS

*An equal opportunity employer and provider of services.*

20,000 copies of this public document were promulgated at a gross cost of \$780., or \$.039 per copy to inform the public about the Transit Division's schedule and route information. Reprinted 1/15

### PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

### TRANSFER POLICY 7/10/11

#### TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of \$1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

#### TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

#### TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays \$.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

#### TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a \$.50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.



**TRANSIT WATCH**

**WHEN IT COMES TO OUR SAFETY,  
WE CAN ALWAYS USE AN EXTRA PAIR OF EYES AND EARS.  
BE ALERT.  
CALL 954-357-LOOK (5665). TELL US.**

## Customer Service

Monday - Friday.....7 am - 7:45 pm  
Saturday, Sunday and Holidays.....8:30 am - 4:45 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 9:00 am - 4:00 pm

## Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

## Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.\* Children (under 40 inches ride FREE)

## Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

**10 Ride Pass:** 10 Rides any time, any day. Expires after the tenth ride is taken.

**7 Day Pass:** Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

**31 Day Adult Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**31 Day Reduced Pass:** Youth\*, Seniors\*, Disabled\*, Medicare\*, College Student\*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**\*\*Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

**\*\*Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not exchangeable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

\*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

\*\* Premium Bus Pass can be purchased online at Broward.org/BCT and at select Broward County library locations.

# TIMETABLE

## ROUTE

# 1

### Monday - Friday

Effective 1/19/15

Aventura Mall to  
Broward Central Terminal

via Federal Highway/US 1



**BROWARD**  
COUNTY  
*Transit*

A service of the  
Broward County Commission

facebook

YouTube

Download & Print at [Broward.org/BCT](http://Broward.org/BCT)

Wheelchair Accessible

Bike Racks

# MONDAY-FRIDAY

There are additional bus stops in between those listed.

## NORTHBOUND

To Broward Central Terminal

AVENTURA MALL	HALLANDALE BCH BLV & US 1	YOUNG CIRCLE	FTL/HWD INTERNATIONAL AIRPORT	BROWARD CENTRAL TERMINAL
1	2	3	4	5
		5:11a	5:29a	5:51a
5:18a	5:30a	5:41a	6:01a	6:25a
5:38a	5:51a	6:02a	6:24a	6:48a
5:53a	6:06a	6:18a	6:40a	7:04a
6:13a	6:27a	6:39a	7:01a	7:26a
6:33a	6:47a	6:59a	7:22a	7:48a
6:53a	7:08a	7:21a	7:45a	8:11a
7:13a	7:28a	7:42a	8:06a	8:32a
7:33a	7:49a	8:03a	8:27a	8:52a
7:53a	8:09a	8:23a	8:46a	9:11a
8:13a	8:29a	8:42a	9:05a	9:29a
8:33a	8:48a	9:01a	9:23a	9:47a
8:53a	9:07a	9:19a	9:41a	10:05a
9:13a	9:27a	9:39a	10:01a	10:25a
9:33a	9:47a	9:59a	10:21a	10:45a
9:53a	10:07a	10:19a	10:41a	11:05a
10:13a	10:27a	10:39a	11:01a	11:25a
10:33a	10:47a	10:59a	11:21a	11:45a
10:53a	11:07a	11:19a	11:41a	12:05p
11:13a	11:27a	11:39a	12:01p	12:25p
11:33a	11:47a	11:59a	12:21p	12:45p
11:53a	12:07p	12:19p	12:41p	1:05p
12:13p	12:27p	12:39p	1:01p	1:25p
12:33p	12:47p	12:59p	1:21p	1:45p
12:53p	1:07p	1:19p	1:41p	2:05p
1:13p	1:27p	1:39p	2:01p	2:25p
1:33p	1:47p	1:59p	2:21p	2:45p
1:53p	2:07p	2:19p	2:41p	3:05p
2:13p	2:27p	2:39p	3:01p	3:26p
2:33p	2:47p	2:59p	3:22p	3:47p
2:53p	3:08p	3:21p	3:44p	4:09p
3:13p	3:28p	3:41p	4:04p	4:30p
3:33p	3:48p	4:01p	4:25p	4:51p
3:53p	4:09p	4:23p	4:47p	5:13p
4:13p	4:29p	4:43p	5:07p	5:33p
4:33p	4:49p	5:03p	5:27p	5:53p
4:53p	5:09p	5:23p	5:47p	6:13p
5:13p	5:29p	5:43p	6:07p	6:32p
5:33p	5:49p	6:03p	6:26p	6:51p
5:53p	6:08p	6:21p	6:44p	7:09p
6:13p	6:28p	6:41p	7:04p	7:28p
6:33p	6:48p	7:01p	7:23p	7:47p
6:53p	7:07p	7:19p	7:41p	8:05p
7:13p	7:27p	7:39p	8:01p	8:25p
7:33p	7:47p	7:59p	8:19p	8:41p G
7:53p	8:07p	8:18p	8:38p	9:00p
8:13p	8:26p	8:37p	8:57p	9:17p G
8:33p	8:46p	8:57p	9:15p	9:35p
9:03p	9:15p	9:25p	9:43p	10:03p
9:33p	9:45p	9:55p	10:13p	10:33p
10:03p	10:15p	10:25p	10:43p	11:03p
10:33p	10:45p	10:55p	11:13p	11:33p G
11:03p	11:15p	11:25p	11:43p	12:03a G

## SOUTHBOUND

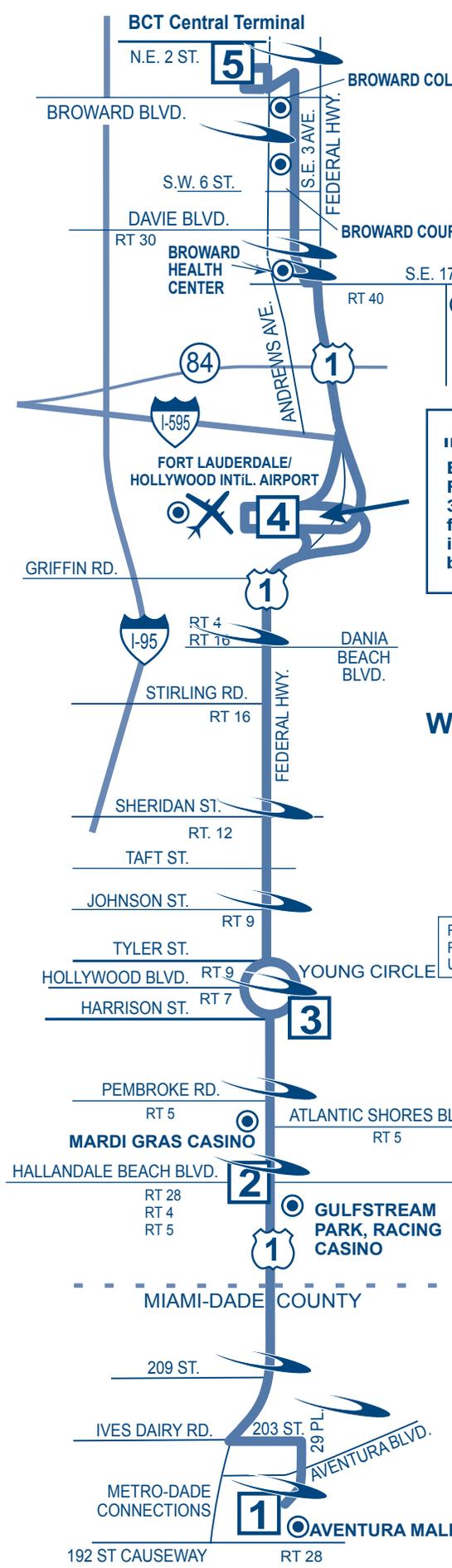
To Aventura Mall

BROWARD CENTRAL TERMINAL	FTL/HWD INTERNATIONAL AIRPORT	YOUNG CIRCLE	HALLANDALE BCH BLV & US 1	AVENTURA MALL
5	4	3	2	1
		5:18a	5:29a	5:42a
5:05a	5:23a	5:48a	6:00a	6:14a
5:25a	5:44a	6:11a	6:24a	6:38a
5:40a	6:00a	6:28a	6:41a	6:55a
6:00a	6:22a	6:50a	7:03a	7:18a
6:20a	6:42a	7:10a	7:24a	7:40a
6:40a	7:02a	7:31a	7:46a	8:02a
7:00a	7:24a	7:54a	8:09a	8:25a
7:20a	7:45a	8:15a	8:30a	8:45a
7:40a	8:05a	8:35a	8:49a	9:04a
8:00a	8:25a	8:54a	9:07a	9:21a
8:20a	8:44a	9:13a	9:26a	9:40a
8:40a	9:04a	9:32a	9:45a	9:59a
9:00a	9:23a	9:51a	10:04a	10:18a
9:20a	9:43a	10:11a	10:24a	10:38a
9:40a	10:03a	10:31a	10:44a	10:58a
10:00a	10:23a	10:51a	11:04a	11:18a
10:20a	10:43a	11:11a	11:24a	11:38a
10:40a	11:03a	11:31a	11:44a	11:58a
11:00a	11:23a	11:51a	12:04p	12:18p
11:20a	11:43a	12:11p	12:24p	12:38p
11:40a	12:03p	12:31p	12:44p	12:58p
12:00p	12:23p	12:51p	1:04p	1:18p
12:20p	12:43p	1:11p	1:24p	1:38p
12:40p	1:03p	1:31p	1:44p	1:58p
1:00p	1:23p	1:51p	2:04p	2:18p
1:20p	1:43p	2:11p	2:24p	2:38p
1:40p	2:03p	2:31p	2:44p	2:58p
2:00p	2:23p	2:51p	3:04p	3:19p
2:20p	2:43p	3:11p	3:25p	3:40p
2:40p	3:03p	3:32p	3:46p	4:01p
3:00p	3:24p	3:53p	4:08p	4:24p
3:20p	3:44p	4:13p	4:28p	4:44p
3:40p	4:04p	4:34p	4:49p	5:05p
4:00p	4:25p	4:55p	5:10p	5:26p
4:20p	4:45p	5:15p	5:30p	5:46p
4:40p	5:05p	5:35p	5:50p	6:06p
5:00p	5:25p	5:55p	6:09p	6:24p
5:20p	5:45p	6:15p	6:29p	6:44p
5:40p	6:05p	6:34p	6:48p	7:03p
6:00p	6:24p	6:53p	7:07p	7:21p
6:20p	6:44p	7:13p	7:26p	7:40p
6:40p	7:04p	7:32p	7:45p	7:59p
7:00p	7:22p	7:50p	8:03p	8:16p
7:20p	7:42p	8:09p	8:21p	8:34p G
7:40p	8:02p	8:28p	8:40p	8:53p
8:00p	8:22p	8:48p	9:00p	9:13p
8:20p	8:40p	9:06p	9:17p	9:29p
8:45p	9:05p	9:29p	9:40p	9:52p
9:15p	9:33p	9:57p	10:08p	10:20p
9:45p	10:03p	10:27p	10:38p	10:50p
10:15p	10:33p	10:57p	11:08p	11:20p G
10:45p	11:03p	11:27p	11:38p	11:50p G
11:15p	11:33p	11:57p	12:08a	12:20a G

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP  
Times with the letter "G" before them indicate bus returns to garage.

# ROUTE 1

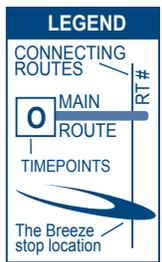
Aventura Mall to  
Broward Central Terminal  
via Federal Highway/US 1



**BROWARD CENTRAL TERMINAL**

RT 1	RT 11	RT 30	RT 60
RT 6	RT 14	RT 31	RT 81
RT 9	RT 20	RT 40	
RT 10	RT 22	RT 50	
U.S. 1 BREEZE			

**FORT LAUDERDALE/HOLLYWOOD INT'L AIRPORT TERMINAL COMPLEX**  
**Bus Stop is on upper departure level at the Rental Car Center (RCC). From Terminal 2, 3 or 4, take the shuttle bus to the RCC; from Terminal 1, access moving sidewalk into the RCC. Look for BCT and Stop 7 bus stop signs.**



RT 1	RT 7
RT 4	RT 9
US 1 BREEZE	

- POINTS OF INTEREST**
- Aventura Mall
  - Courthouse/Jail
  - Broward Health Medical Center
  - Broward College/FAU
  - Gulfstream Park Racing Casino
  - Mardi Gras Casino
  - Port Everglades
  - Fort Lauderdale/Hollywood International Airport

For more details on our fares please visit our web site at [Broward.org/BCT](http://Broward.org/BCT) or call customer service: 954.357.8400.

### Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol □.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

**Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.**

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.



This symbol is used on bus stop signs to indicate accessible bus stops.



BOARD OF COUNTY COMMISSIONERS  
*An equal opportunity employer and provider of services.*

21,000 copies of this public document were promulgated at a gross cost of \$819., or \$.039 per copy to inform the public about the Transit Division's schedule and route information. Reprinted 1/15

### TRANSFER POLICY 7/10/11

#### TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of \$1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

#### TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

#### TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays \$.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

#### TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a \$.50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.

#### PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.



**TRANSIT WATCH**

**WHEN IT COMES TO OUR SAFETY,  
WE CAN ALWAYS USE AN EXTRA  
PAIR OF EYES AND EARS.  
BE ALERT.  
CALL 954-357-LOOK (5665).  
TELL US.**

## Customer Service

Monday - Friday.....7 am - 7:45 pm  
Saturday, Sunday and Holidays.....8:30 am - 4:45 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday,  
9:00 am - 4:00 pm

## Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

## Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.\* Children (under 40 inches ride FREE)

## Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

**10 Ride Pass:** 10 Rides any time, any day. Expires after the tenth ride is taken.

**7 Day Pass:** Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

**31 Day Adult Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**31 Day Reduced Pass:** Youth\*, Seniors\*, Disabled\*, Medicare\*, College Student\*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

**\*\*Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

**\*\*Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not exchangeable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

\*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

\*\* Premium Bus Pass can be purchased online at Broward.org/BCT and at select Broward County library locations.

# TIMETABLE

## ROUTE

# 1

## Saturday - Sunday

Effective 1/18/15

Aventura Mall to  
Broward Central Terminal

via Federal Highway/US 1



A service of the  
Broward County Commission

facebook

YouTube

Download & Print at [Broward.org/BCT](http://Broward.org/BCT)

Wheelchair Accessible

Bike Racks

# SATURDAY

There are additional bus stops in between those listed.

## NORTHBOUND To Broward Central Terminal

AVENTURA MALL	HALLANDALE BCH BLV & US 1	YOUNG CIRCLE	FTL/HWD INTERNATIONAL AIRPORT	BROWARD CENTRAL TERMINAL
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
5:23a	5:35a	5:45a	6:04a	6:24a
5:43a	5:55a	6:05a	6:24a	6:44a
6:03a	6:15a	6:25a	6:44a	7:04a
6:23a	6:35a	6:45a	7:04a	7:26a
6:43a	6:55a	7:06a	7:27a	7:49a
7:03a	7:16a	7:27a	7:48a	8:10a
7:18a	7:31a	7:42a	8:03a	8:25a
7:33a	7:46a	7:57a	8:18a	8:40a
7:48a	8:01a	8:12a	8:33a	8:55a
8:03a	8:16a	8:27a	8:48a	9:10a
8:18a	8:31a	8:42a	9:03a	9:26a
8:33a	8:46a	8:57a	9:19a	9:42a
8:48a	9:01a	9:13a	9:35a	9:58a
9:03a	9:18a	9:30a	9:52a	10:15a
9:18a	9:33a	9:45a	10:07a	10:30a
9:33a	9:48a	10:00a	10:22a	10:45a
9:48a	10:03a	10:15a	10:37a	11:00a
10:03a	10:18a	10:30a	10:52a	11:15a
10:18a	10:33a	10:45a	11:07a	11:30a
10:33a	10:48a	11:00a	11:22a	11:45a
10:48a	11:03a	11:15a	11:37a	12:00p
11:03a	11:18a	11:30a	11:52a	12:16p
11:18a	11:33a	11:45a	12:07p	12:31p
11:33a	11:48a	12:00p	12:23p	12:47p
11:48a	12:03p	12:16p	12:39p	1:03p
12:03p	12:19p	12:32p	12:55p	1:19p
12:18p	12:34p	12:47p	1:10p	1:34p
12:33p	12:49p	1:02p	1:25p	1:49p
12:48p	1:04p	1:17p	1:40p	2:04p
1:03p	1:19p	1:32p	1:55p	2:19p
1:18p	1:34p	1:47p	2:10p	2:34p
1:33p	1:49p	2:02p	2:25p	2:49p
1:48p	2:04p	2:17p	2:40p	3:04p
2:03p	2:19p	2:32p	2:55p	3:19p
2:18p	2:34p	2:47p	3:10p	3:34p
2:33p	2:49p	3:02p	3:25p	3:49p
2:48p	3:04p	3:17p	3:40p	4:04p
3:03p	3:19p	3:32p	3:55p	4:19p
3:18p	3:34p	3:47p	4:10p	4:34p
3:33p	3:49p	4:02p	4:25p	4:49p
3:48p	4:04p	4:17p	4:40p	5:04p
4:03p	4:19p	4:32p	4:55p	5:19p
4:18p	4:34p	4:47p	5:10p	5:34p
4:33p	4:49p	5:02p	5:25p	5:49p
4:48p	5:04p	5:17p	5:40p	6:04p
5:03p	5:19p	5:32p	5:55p	6:18p
5:18p	5:34p	5:47p	6:10p	6:33p
5:33p	5:49p	6:02p	6:24p	6:47p
5:48p	6:04p	6:16p	6:38p	7:01p
6:03p	6:18p	6:30p	6:52p	7:15p G
6:18p	6:33p	6:45p	7:07p	7:30p
6:33p	6:48p	7:00p	7:22p	7:45p

## SOUTHBOUND To Aventura Mall

BROWARD CENTRAL TERMINAL	FTL/HWD I INTERNATIONAL AIRPORT	YOUNG CIRCLE	HALLANDALE BCH BLV & US 1	AVENTURA MALL
<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
5:20a	5:38a	6:02a	6:13a	6:25a
5:40a	5:58a	6:22a	6:33a	6:45a
6:00a	6:18a	6:42a	6:53a	7:05a
6:20a	6:38a	7:03a	7:15a	7:28a
6:40a	6:58a	7:24a	7:36a	7:49a
7:00a	7:20a	7:46a	7:58a	8:11a
7:15a	7:35a	8:01a	8:13a	8:26a
7:30a	7:50a	8:16a	8:28a	8:41a
7:45a	8:05a	8:31a	8:43a	8:56a
8:00a	8:20a	8:46a	8:59a	9:13a
8:15a	8:35a	9:01a	9:15a	9:29a
8:30a	8:50a	9:17a	9:31a	9:45a
8:45a	9:06a	9:34a	9:48a	10:02a
9:00a	9:22a	9:50a	10:04a	10:18a
9:15a	9:37a	10:05a	10:19a	10:33a
9:30a	9:52a	10:20a	10:34a	10:48a
9:45a	10:07a	10:35a	10:49a	11:03a
10:00a	10:22a	10:50a	11:04a	11:18a
10:15a	10:37a	11:05a	11:19a	11:33a
10:30a	10:52a	11:20a	11:34a	11:48a
10:45a	11:07a	11:35a	11:49a	12:03p
11:00a	11:22a	11:50a	12:04p	12:18p
11:15a	11:37a	12:05p	12:19p	12:33p
11:30a	11:52a	12:21p	12:35p	12:49p
11:45a	12:08p	12:38p	12:52p	1:06p
12:00p	12:24p	12:54p	1:08p	1:22p
12:15p	12:39p	1:09p	1:23p	1:37p
12:30p	12:54p	1:24p	1:38p	1:52p
12:45p	1:09p	1:39p	1:53p	2:07p
1:00p	1:24p	1:54p	2:08p	2:22p
1:15p	1:39p	2:09p	2:23p	2:37p
1:30p	1:54p	2:24p	2:38p	2:52p
1:45p	2:09p	2:39p	2:53p	3:07p
2:00p	2:24p	2:54p	3:08p	3:22p
2:15p	2:39p	3:09p	3:23p	3:37p
2:30p	2:54p	3:24p	3:38p	3:52p
2:45p	3:09p	3:39p	3:53p	4:07p
3:00p	3:24p	3:54p	4:08p	4:22p
3:15p	3:39p	4:09p	4:23p	4:37p
3:30p	3:54p	4:24p	4:38p	4:52p
3:45p	4:09p	4:39p	4:53p	5:07p
4:00p	4:24p	4:54p	5:08p	5:22p
4:15p	4:39p	5:09p	5:23p	5:37p
4:30p	4:54p	5:24p	5:38p	5:52p
4:45p	5:09p	5:39p	5:53p	6:07p
5:00p	5:24p	5:54p	6:08p	6:22p
5:15p	5:39p	6:08p	6:22p	6:36p
5:30p	5:54p	6:22p	6:36p	6:50p G
5:45p	6:08p	6:36p	6:50p	7:04p
6:00p	6:22p	6:50p	7:04p	7:18p
6:15p	6:37p	7:05p	7:19p	7:33p
6:30p	6:52p	7:20p	7:34p	7:48p G

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP Times with the letter "G" after them indicate bus returns to garage.

**SATURDAY** Continued on next page

**NORTHBOUND To Broward Central Terminal**

6:53p	7:08p	7:20p	7:42p	8:05p
7:13p	7:28p	7:40p	8:02p	8:25p
7:33p	7:48p	8:00p	8:22p	8:45p G
7:53p	8:08p	8:20p	8:42p	9:05p
8:13p	8:28p	8:40p	9:02p	9:25p
8:33p	8:48p	9:00p	9:21p	9:43p G
9:03p	9:16p	9:27p	9:47p	10:08p
9:33p	9:46p	9:57p	10:16p	10:36p
10:03p	10:15p	10:25p	10:44p	11:04p
10:33p	10:45p	10:55p	11:14p	11:34p G
11:03p	11:15p	11:25p	11:44p	12:04p G

**SOUTHBOUND To Aventura Mall**

6:45p	7:07p	7:35p	7:49p	8:03p
7:00p	7:22p	7:50p	8:04p	8:18p
7:20p	7:42p	8:10p	8:24p	8:38p G
7:40p	8:02p	8:30p	8:43p	8:56p
8:00p	8:22p	8:50p	9:03p	9:16p
8:20p	8:42p	9:09p	9:21p	9:34p G
8:45p	9:05p	9:31p	9:43p	9:56p
9:15p	9:35p	10:01p	10:12p	10:24p
9:45p	10:05p	10:29p	10:40p	10:52p
10:15p	10:33p	10:57p	11:08p	11:20p G
10:45p	11:03p	11:27p	11:38p	11:50p G
11:15p	11:33p	11:57p	12:08a	12:20a G

**SUNDAY**

**NORTHBOUND To Broward Central Terminal**

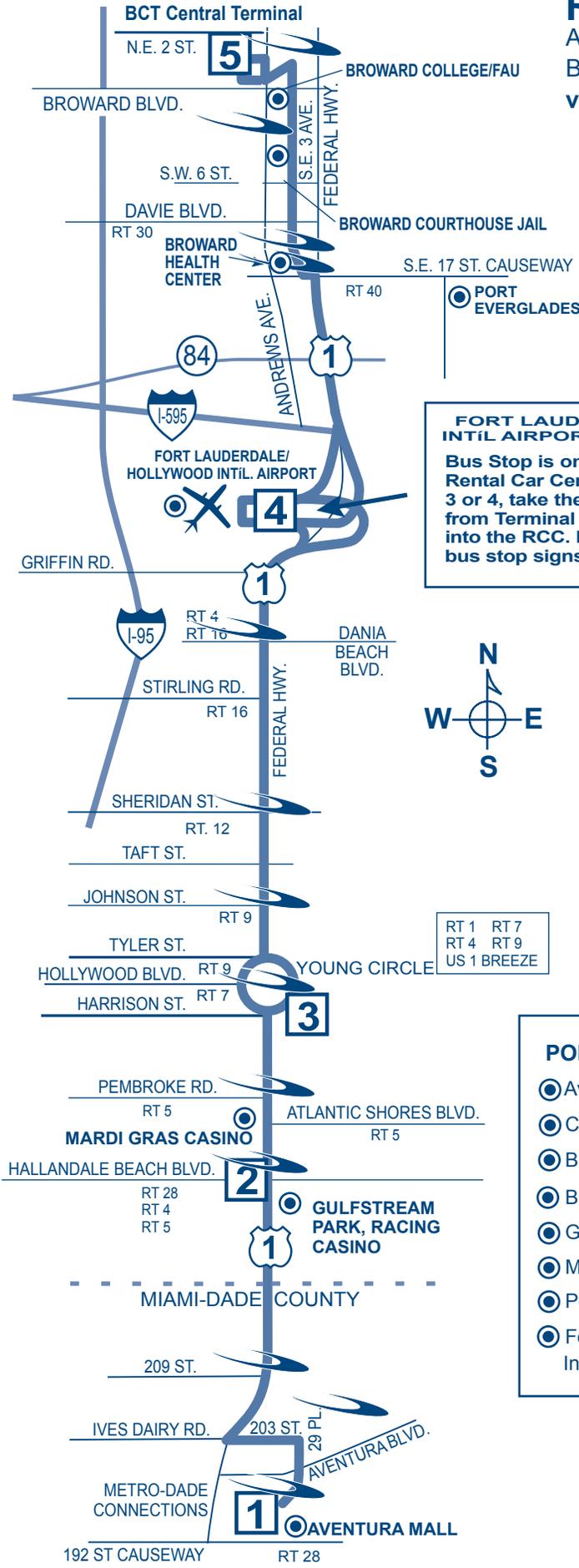
AVENTURA MALL	HALLANDALE BCH BLV & US 1	YOUNG CIRCLE	FTL/HWD INTERNATIONAL AIRPORT	BROWARD CENTRAL TERMINAL
1	2	3	4	5
6:03a	6:16a	6:25a	6:44a	7:03a
6:23a	6:36a	6:45a	7:04a	7:23a
6:43a	6:56a	7:05a	7:24a	7:43a
7:03a	7:16a	7:25a	7:44a	8:03a
7:23a	7:36a	7:45a	8:04a	8:23a
7:43a	7:56a	8:05a	8:24a	8:43a
8:03a	8:16a	8:25a	8:44a	9:03a
8:23a	8:36a	8:45a	9:04a	9:24a
8:43a	8:56a	9:06a	9:26a	9:46a
9:03a	9:17a	9:27a	9:47a	10:07a
9:23a	9:37a	9:47a	10:07a	10:28a
9:43a	9:57a	10:08a	10:29a	10:50a
10:03a	10:18a	10:29a	10:50a	11:11a
10:23a	10:38a	10:49a	11:10a	11:31a
10:43a	10:58a	11:09a	11:30a	11:51a
11:03a	11:18a	11:29a	11:50a	12:11p
11:23a	11:38a	11:49a	12:10p	12:31p
11:43a	11:58a	12:09p	12:30p	12:51p
12:03p	12:18p	12:29p	12:50p	1:11p
12:23p	12:38p	12:49p	1:10p	1:31p
12:43p	12:58p	1:09p	1:30p	1:51p
1:03p	1:18p	1:29p	1:50p	2:11p
1:23p	1:38p	1:49p	2:10p	2:31p
1:43p	1:58p	2:09p	2:30p	2:51p
2:03p	2:18p	2:29p	2:50p	3:11p
2:23p	2:38p	2:49p	3:10p	3:31p
2:43p	2:58p	3:09p	3:30p	3:51p
3:03p	3:18p	3:29p	3:50p	4:11p
3:23p	3:38p	3:49p	4:10p	4:31p
3:43p	3:58p	4:09p	4:30p	4:51p
4:03p	4:18p	4:29p	4:50p	5:11p
4:23p	4:38p	4:49p	5:10p	5:31p
4:43p	4:58p	5:09p	5:30p	5:51p
5:03p	5:18p	5:29p	5:50p	6:11p
5:23p	5:38p	5:49p	6:10p	6:31p
5:43p	5:58p	6:09p	6:30p	6:51p G
6:03p	6:18p	6:29p	6:48p	7:08p
6:33p	6:48p	6:59p	7:18p	7:38p
7:03p	7:17p	7:27p	7:47p	8:07p
7:33p	7:47p	7:57p	8:17p	8:37p
8:03p	8:17p	8:27p	8:47p	9:07p
8:33p	8:47p	8:57p	9:16p	9:35p G
9:03p	9:16p	9:25p	9:44p	10:03p G

**SOUTHBOUND To Aventura Mall**

BROWARD CENTRAL TERMINAL	FTL/HWD INTERNATIONAL AIRPORT	YOUNG CIRCLE	HALLANDALE BCH BLV & US 1	AVENTURA MALL
5	4	3	2	1
6:00a	6:19a	6:44a	6:55a	7:06a
6:20a	6:39a	7:04a	7:15a	7:26a
6:40a	6:59a	7:24a	7:35a	7:46a
7:00a	7:19a	7:44a	7:55a	8:06a
7:20a	7:39a	8:04a	8:15a	8:26a
7:40a	7:59a	8:24a	8:35a	8:46a
8:00a	8:19a	8:44a	8:55a	9:07a
8:20a	8:39a	9:04a	9:16a	9:28a
8:40a	8:59a	9:25a	9:37a	9:49a
9:00a	9:20a	9:46a	9:58a	10:11a
9:20a	9:40a	10:06a	10:19a	10:32a
9:40a	10:00a	10:27a	10:40a	10:53a
10:00a	10:21a	10:48a	11:01a	11:14a
10:20a	10:41a	11:08a	11:21a	11:34a
10:40a	11:01a	11:28a	11:41a	11:54a
11:00a	11:21a	11:48a	12:01p	12:14p
11:20a	11:41a	12:08p	12:21p	12:34p
11:40a	12:01p	12:28p	12:41p	12:54p
12:00p	12:21p	12:48p	1:01p	1:14p
12:20p	12:41p	1:08p	1:21p	1:34p
12:40p	1:01p	1:28p	1:41p	1:54p
1:00p	1:21p	1:48p	2:01p	2:14p
1:20p	1:41p	2:08p	2:21p	2:34p
1:40p	2:01p	2:28p	2:41p	2:54p
2:00p	2:21p	2:48p	3:01p	3:14p
2:20p	2:41p	3:08p	3:21p	3:34p
2:40p	3:01p	3:28p	3:41p	3:54p
3:00p	3:21p	3:48p	4:01p	4:14p
3:20p	3:41p	4:08p	4:21p	4:34p
3:40p	4:01p	4:28p	4:41p	4:54p
4:00p	4:21p	4:48p	5:01p	5:14p
4:20p	4:41p	5:08p	5:21p	5:34p
4:40p	5:01p	5:28p	5:41p	5:54p
5:00p	5:21p	5:48p	6:01p	6:14p
5:20p	5:41p	6:08p	6:21p	6:34p G
5:40p	6:01p	6:28p	6:41p	6:54p
6:00p	6:21p	6:48p	7:01p	7:13p
6:20p	6:41p	7:08p	7:20p	7:32p G
6:45p	7:06p	7:32p	7:44p	7:56p
7:15p	7:35p	8:01p	8:13p	8:25p
7:45p	8:05p	8:31p	8:43p	8:55p
8:15p	8:35p	9:01p	9:12p	9:23p G
8:45p	9:05p	9:30p	9:41p	9:52p G
9:15p	9:34p	9:59p	10:10p	10:21p G

# ROUTE 1

Aventura Mall to  
Broward Central Terminal  
via Federal Highway/US 1

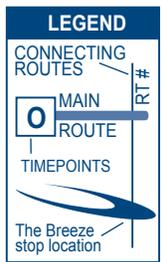


**BROWARD CENTRAL TERMINAL**

RT 1	RT 11	RT 30	RT 60
RT 6	RT 14	RT 31	RT 81
RT 9	RT 20	RT 40	
RT 10	RT 22	RT 50	
U.S. 1 BREEZE			

**FORT LAUDERDALE/HOLLYWOOD INT'L AIRPORT TERMINAL COMPLEX**

Bus Stop is on upper departure level at the Rental Car Center (RCC). From Terminal 2, 3 or 4, take the shuttle bus to the RCC; from Terminal 1, access moving sidewalk into the RCC. Look for BCT and Stop 7 bus stop signs.



RT 1	RT 7
RT 4	RT 9
US 1 BREEZE	

- POINTS OF INTEREST**
- Aventura Mall
  - Courthouse/Jail
  - Broward Health Medical Center
  - Broward College/FAU
  - Gulfstream Park Racing Casino
  - Mardi Gras Casino
  - Port Everglades
  - Fort Lauderdale/Hollywood International Airport

## TRANSFER POLICY 7/10/11

### TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of \$1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

### TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

### TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays \$.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

### TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a \$ .50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.

For more details on our fares please visit our web site at [broward.org/bct](http://broward.org/bct) or call customer service: 954.357.8400.

### Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol □.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

**Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.**

Information: 954.357.8400

Hearing-speech impaired/TTY:  
954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.



This symbol is used on bus stop signs to indicate accessible bus stops.



BROWARD COUNTY  
BOARD OF COUNTY COMMISSIONERS  
*An equal opportunity employer and provider of services.*

### PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.



**TRANSIT WATCH**

**WHEN IT COMES TO OUR SAFETY,  
WE CAN ALWAYS USE AN EXTRA  
PAIR OF EYES AND EARS.  
BE ALERT.  
CALL 954-357-LOOK (5665).  
TELL US.**

5) This development complies with all the sections of the City of Hallandale Beach Land Use Code and Broward County Land Use Code, and, in the event that there are any minor deviations from the goals, objectives or policies of the City or County Land Use Plans, it is clear that the weight of comparison is overwhelmingly in favor of approval. The applicant would like to call attention to certain specific goals, objectives and policies in both the City and the County Land Use Plans.

A. City Land Use Plan:

All policies listed under Objective 1.1 shall be met. The applicant has submitted this pursuant to Policy 1.1.3 and all of the concurrency items listed in other policy sections under 1.1 are met.

B. Compliance with Broward County Land Use Plan:

This site is in conformity with the county with the following county land use plan goals, objectives and policies:

**GOAL 2.00.00**

**PROVIDED A COMPLETE RANGE OF CONVENIENT AND ACCESSIBLE COMMERCIAL FACILITIES SUFFICIENT TO SERVE BROWARD COUNTY'S RESIDENT AND TOURIST POPULATION.**

**OBJECTIVE 2.01.00 PERMITTED USES IN COMMERCIAL AREAS.**

Establish within the Future Broward County Land Use Plan Map (series) a commercial land use category addressing the provision of office, retail and other non-residential activities necessary to support Broward County's resident and tourist populations.

**POLICY 2.01.01** Permit those land uses within designated commercial areas which are identified in the Commercial Permitted Uses subsection of the Plan Implementation Requirements section of the Broward County Land Use Plan.

**OBJECTIVE 2.04.00 LOCATION, INTENSITY AND FLEXIBILITY OF COMMERCIAL DEVELOPMENT.**

Provide a sufficient level of commercial development to accommodate the population and economy of Broward County while ensuring that the planned level of service on the regional road network is achieved and maintained.

POLICY 2.04.03 Local governments shall employ their local land use plans and zoning ordinances to establish differing intensities of commercial development compatible with adjacent and surrounding land uses.

PLOICY 2.04.07 Land use plan designations for community and regional commercial development should be based upon adequate existing or planned public services and facilities.

C. Compliance with the State Land Use Plan:

This site plan is in conformity with the following state land use plan goals:

Listing entitled “Consistency of the Local Comprehensive Plan Amendment with the State Comprehensive Plan”, which lists the State Comprehensive Plan goals and policies (Ch. 187) which are addressed by the plan amendment:

Land use (a) Goal – In recognition of the importance of preserving the natural resources and enhancing the quality of life of the State, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and services capacity to accommodate growth in an environmentally acceptable manner.

- 6) The property is not located on or adjacent to any areas of concern or waterways. Accordingly, the only governmental entities which applicant believes it needs to contact are a) Broward County Planning Council, b) South Florida Regional Planning Council, c) Other county agencies as necessary. The applicant has either contacted or will contact each of these agencies.

## V. IMPACT EVALUATION SUBMISSION REQUIREMENTS – SECTION 32-788

- a) **Scope.** After careful evaluation of the project requirements and the impact of the existing public services and facilities, it was determined that the proposed development will not adversely affect any of the existing public facilities, services and the adopted levels of service for the City of Hallandale Beach. The following sections provide a summery statement of the impact evaluation for the proposed project.
- b) **Groundwater Quality.** This project will be designed in accordance with County, State, and Federal provisions for the protection of groundwater quality. This will include provisions required for water quality treatment including on-site retention for the greater of one inch (1”) of runoff from the total project area or two and an half inches (2 ½”) times the percent impervious as required Broward County Chapter 27. In addition, the Federal NPDES guidelines will be incorporated in the design for the elimination of pollutant discharges during construction. The stormwater system proposed is a series of exfiltration trenches and pollution retardant devices in the catch basins with ultimate discharge to an on-site drainage well.
- c) **Waste Water.** The City sends it wastewater to the City of Hollywood Southern Regional Wastewater Treatment Plant (WWTP) located at 1621 N. 14<sup>th</sup> Avenue in Hollywood, Florida. The plant is currently permitted to treat 48.75 MGD had has a utilized capacity (existing and committed flow) of 41.94 MGD. This means that the plant is 86% committed capacity. Due to the small demand projected for this development, it is most likely that the city will approve the additional connections required for this development.

Existing trailer park flow of 22 units x 315 gpd x 0.47 factor = 3,258.2 gpd. New multi-family residential units flow of 45 units x 315 gpd x 0.60 factor = 8,505 gpd. The net increase in flow is 5,247 gpd. Proposed sewer discharge is into existing 8-inch gravity system in SE 5<sup>th</sup> Street to the south of the site.

- d) **Potable Water.** The City of Hallandale Beach Water plant, located at 215 NW 6<sup>th</sup> Avenue, currently has adequate potable water supply to serve this site.

Existing trailer park flow of 22 units x 360 gpd x 0.47 factor = 3,722.4 gpd. New multi-family residential units flow of 45 units x 360 gpd x 0.60 factor = 9,7220 gpd. The net increase in flow is 5,998 gpd. Proposed water meter connections will be to the existing 8-inch water main SE 5<sup>th</sup> Street to the south of the site.

- e) **The sanitation division** is responsible for the collection and disposal of both commercial and residential garbage and trash and the recovery of recyclable materials.

f) **Other Utilities.** Other Utilities having jurisdiction in this area include FP&L, BellSouth, Cable TV and Gas. All the aforementioned utilities currently serve the project site. This project should not burden the facilities of these utility companies.

g) **Traffic.** A traffic impact analysis will be submitted for the proposed project.

h) **Public Safety.** There are three fire stations within the city of Hallandale Beach available to serve the site at the following locations:

Fire Station #7 – 121 SW 3<sup>rd</sup> Street. Fire Station #7 houses several fire suppression and emergency medical units. From this station, Rescue #7, Engine #7, Quint #7 and Battalion Chief #7 respond to calls in their assigned zone. This station provides housing for emergency personnel 24 hours a day, 7 days a week.

Fire Station 60 – 2801 E. Hallandale Beach Boulevard. Fire Station #60 is located under the water tower on North Beach. From this station, Rescue #60 and Engine #60 respond to emergencies on South Ocean Drive. This station is also staffed 24 hours a day, 7 days a week

Fire Station 90-101 Three Island Boulevard. Fire Station #90 houses a single rescue unit. Rescue #90 responds to medical calls in their zone, as well as fire calls and motor vehicle crashes. Station #90 is fully staffed 24 hours a day, 7 days a week.

The City of Hallandale Police Department will provide police service to the site. It is not anticipated that the proposed development will place an undue demand on police service in the city.

Public entrances shall be clearly defined by walkways and signage.

Parking areas and walkways shall be well lit.

i) **School Facilities.** This project contains 45 dwelling units, the resulting impacts on school facilities will be offset by paying the concurrency fee to Broward County.

j) **Parks and Open Spaces.** The City currently has 58.76 acres of public parks and open spaces and 106.68 acres of public waterways.

***Peter Bluesten Park, 501 Southeast 1<sup>st</sup> Avenue***

13.5 acre facility that consists of a community center, tennis courts, racquet courts, outdoor basketball courts, sand volleyball courts, ball fields, in-line skating area, concession stand and a playground.

***B.F. James Park, 101 Northwest 9<sup>th</sup> Street***

2-acre park with playground, baseball field, outdoor basketball courts and pavilion.

***Foster Park, 609 Northwest 6<sup>th</sup> Avenue***

1-acre park with playground, outdoor basketball court, pavilion and community center.

***Golden Isles and Tennis Complex, Egret Drive and Layne Boulevard***

This park contains a tot lot, pavilion, basketball court, tennis complex and walking trail

***Ingalls Park, 735 Southwest 1<sup>st</sup> Street***

4.6-acre park that houses a community center, fitness trail, pavilions, gazebo and playground area.

***Oresta Blake Johnson Park, 900 Northwest 8<sup>th</sup> Avenue***

This park is a 4.5-acre facility that consists of a gymnasium, recreation rooms, tennis courts, racquetball courts, outdoor basketball courts, fields, in-line skating area, concession stand and playground.

***Joseph Scavo Park, 900 Three Island Boulevard***

7-acres that include a walking trail, benches and tot lot.

**k) Community Facilities.** The project is not expected to have any negative impact on the City's Community facilities.

Below is a list of community facilities in the city of Hallandale Beach.

*Hallandale Beach Cultural Community Center*

*Hallandale Beach Teen Center*

*Hallandale Beach Municipal Pool*

*Broward County Library –Hallandale Beach Branch*

**l) Historical Aspects**

There are no identified historical or archaeological sites existing on the site.

**m) Scenic Vistas**

This site contains no identified scenic vistas

**n) Low and Moderate priced housing**

The proposed residential development will provide 45 housing units.

# TRAFFIC IMPACT ANALYSIS

## VILLAGE AT BLUESTEN PARK HALLANDALE BEACH, FL

**PREPARED FOR:**  
BLUESTEN  
DEVELOPERS LLC

**Kimley»Horn**

Project # 144511008  
November 10, 2017  
Revised December 7, 2017  
Revised January 25, 2018  
CA 00000696  
Kimley-Horn and Associates, Inc.  
1920 Wekiva Way  
West Palm Beach, Florida 33411  
561/845-0665 TEL

# TRAFFIC IMPACT ANALYSIS

## VILLAGE AT BLUESTEN PARK HALLANDALE BEACH, FL

Prepared by:  
Kimley-Horn and Associates, Inc.  
West Palm Beach, Florida



Project # 144511008  
November 10, 2017  
Revised December 7, 2017  
Revised January 25, 2018  
CA 00000696  
Kimley-Horn and Associates, Inc.  
1920 Wekiva Way  
West Palm Beach, Florida 33411  
561/845-0665 TEL

---

Christopher W. Heggen, P.E.  
Florida Registration Number 58636

**TABLE OF CONTENTS**

INTRODUCTION ..... 1

PROJECT TRAFFIC ..... 3

    Existing and Proposed Land Uses..... 3

    Trip Generation Potential..... 3

    Trip Distribution ..... 4

    Traffic Assignment..... 4

ROADWAY LINK ANALYSIS ..... 6

INTERSECTION DISTRIBUTION AND ASSIGNMENT..... 8

INTERSECTION ANALYSIS ..... 11

SITE ACCESS ..... 13

CONCLUSION ..... 15

**LIST OF TABLES**

Table 1 Trip Generation .....3  
Table 2 Link Analysis .....7  
Table 3 2017 Existing LOS.....12  
Table 4 2022 Background LOS .....12  
Table 5 2022 Full Buildout LOS.....12

**LIST OF FIGURES**

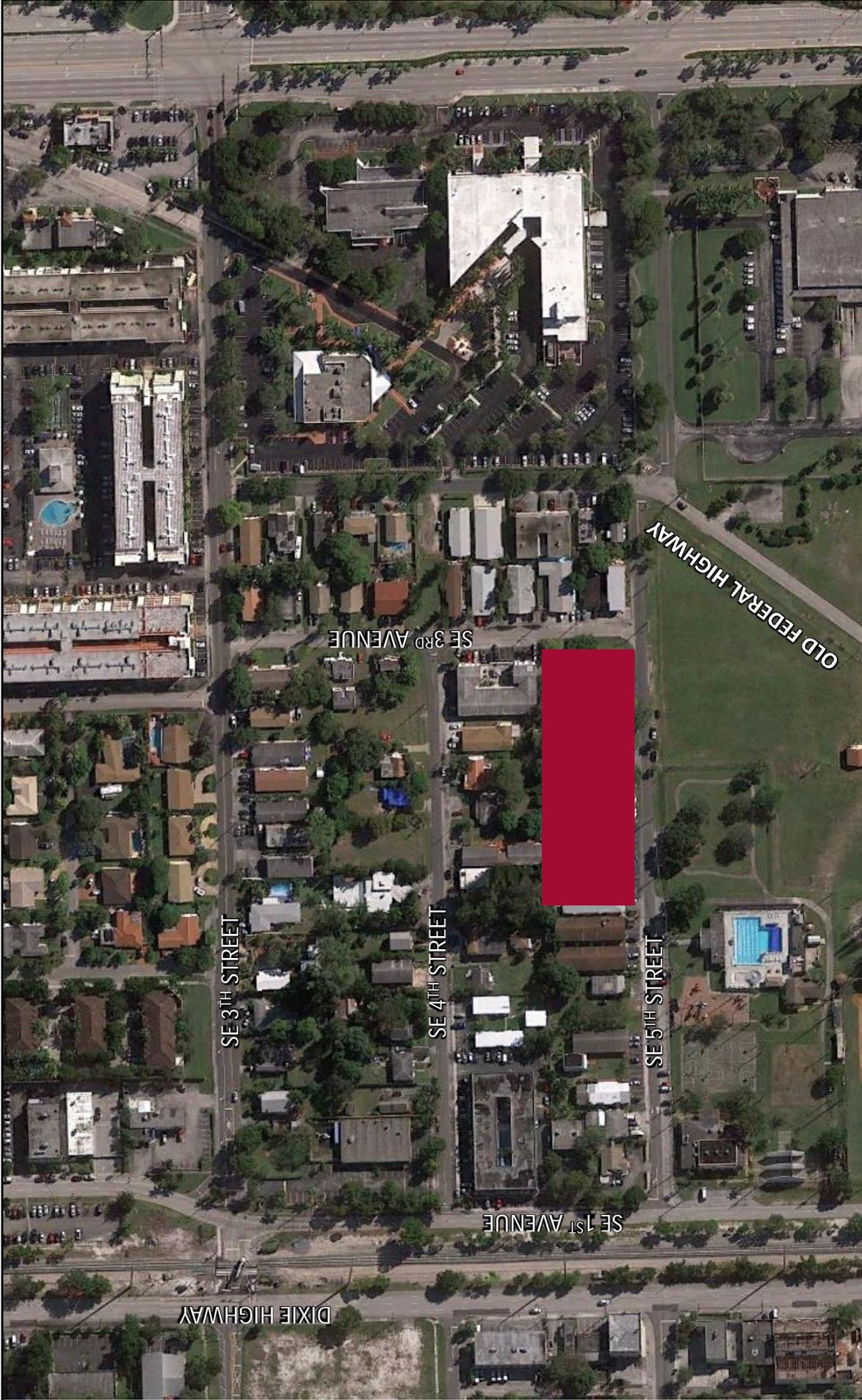
Figure 1 Project Location Map.....2  
Figure 2 Site Traffic Assignment .....5  
Figure 3A Intersection Project Volumes ..... 9  
Figure 3B Intersection Project Volumes .....10  
Figure 4 Project Driveway Volumes.....14

## INTRODUCTION

The Village at Bluesten Park is a proposed 45-unit multi-family residential project to be located at the northwest quadrant of SE 5<sup>th</sup> Street & SE 3<sup>rd</sup> Avenue in Hallandale Beach, Florida. *Figure 1* illustrates the location of the proposed development. A site plan is included in Appendix A.

Kimley-Horn and Associates, Inc. has prepared this traffic impact analysis for submittal to the City of Hallandale Beach. The purpose of the study is to assess the project's impact on the surrounding roadway network and determine if adequate capacity is available to support future traffic volumes. This report summarizes the data collection, project trip generation, distribution and link analysis.

Consistent with the City of Hallandale Beach's Development Review Procedures – Impact Evaluation submission requirements (City Code Section 32-788(g)), traffic conditions were examined at vehicular access points to the site as well as major street intersections and roadways within the vicinity of the site.



LEGEND



FIGURE 1  
SITE LOCATION  
VILLAGE AT BLUESTEN PARK  
**Kimley»Horn**



## PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project, and the distribution and assignment of that traffic over the study roadway network.

### Existing and Proposed Land Uses

The project site currently contains the Gulfstream Trailer Park mobile home community, which contains 22 mobile home units. The proposed use will be a total of 45 residential apartment units.

### Trip Generation Potential

The trip generation potential of the existing and proposed uses has been calculated using rates and equations published for Land Use 220 (Apartment) and Land Use 240 (Mobile Home Park) by the Institute of Transportation Engineers (ITE) in the *Trip Generation Handbook, Ninth Edition*.

Table 1 summarizes the trip generation potential for the existing and proposed uses in the weekday daily, a.m. and p.m. peak hour conditions.

Table 1 WEEKDAY PEAK HOUR TRIP GENERATION Village of Bluesten Park								
Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<u>Existing</u>								
Mobile Home Park	22 DU	110	10	2	8	13	8	5
<i>Total</i>		<i>110</i>	<i>10</i>	<i>2</i>	<i>8</i>	<i>13</i>	<i>8</i>	<i>5</i>
<u>Proposed</u>								
Apartment	45 DU	299	23	5	18	28	18	10
<i>Total</i>		<i>299</i>	<i>23</i>	<i>5</i>	<i>18</i>	<i>28</i>	<i>18</i>	<i>10</i>
<i>Net New External Trips</i>		<i>189</i>	<i>13</i>	<i>3</i>	<i>10</i>	<i>15</i>	<i>10</i>	<i>5</i>
Trip generation was calculated using the following data: Daily Trip Generation Mobile Home Park           ITE 240   = T=4.99*DU Apartment                    ITE 220   = T=6.65*DU AM Peak Hour Trip Generation Mobile Home Park           ITE 240   = T=0.44*DU                   (20% in/ 80% out) Apartment                    ITE 220   = T=0.51*DU                   (20% in/ 80% out) PM Peak Hour Trip Generation Mobile Home Park           ITE 240   = T=0.59*DU                   (62% in/ 38% out) Apartment                    ITE 220   = T=0.62*DU                   (65% in/ 35% out)								

**Trip Distribution**

Trip distribution is the pairing of trip ends from the subject site with other land uses in the area. These trips were assigned to the surrounding roadways based upon a review of the roadway network proposed to be in place at the time of buildout and its travel time characteristics. The project distribution according to the cardinal directions was assumed to be:

- North: 20%
- South: 25%
- East: 10%
- West: 45%

**Traffic Assignment**

The site traffic was assigned to the surrounding network based upon existing travel patterns and the traffic distribution. *Figure 2* illustrates the project traffic assignment percentages to the surrounding roadway network. The AM and PM peak hour trips for the project were then assigned to the surrounding roadway network projected to be in place by 2022.



FIGURE 2  
PROJECT DISTRIBUTION  
VILLAGE AT BLUESTEN PARK



**LEGEND**

- SITE
- XX% INBOUND DISTRIBUTION
- XX% OUTBOUND DISTRIBUTION

## ROADWAY LINK ANALYSIS

The analysis has been conducted to evaluate year 2022 traffic conditions. Link data was provided in tables published by the Broward County MPO. Relevant excerpts from these tables are provided in *Appendix B*. The project traffic was assigned to nearby major roadway links to determine the project impacts in the immediate vicinity of the project. Table 2 provides a summary of the roadway link analysis. As shown in this analysis, the segments of Hallandale Beach Boulevard between I-95 and Dixie Highway and between Dixie Highway and Federal Highway are currently operating at LOS F. The remaining roadways in the vicinity of the site currently operate at an acceptable level of service. As shown in this table, project traffic will not result in a change in level of service on any roadway segment; furthermore, project traffic is equal to or less than 0.16% of the adopted service capacity on all segments and therefore does not generate a significant impact.

TABLE 2  
VILLAGE AT BLUESTEN PARK  
PM TWO-WAY PEAK HOUR LOS CALCULATIONS (2022)

Roadway From	To	Roadway Class	Existing		Committed		Existing Base Peak Hour Volume/LOS	Growth Rate	2022 Background Growth (growth rate)	2022 Background Traffic	PM Peak Hour Project Traffic			2020 Peak Hour Volume with Project Traffic	V/C
			Lanes	LOS D* Service Volume	Lanes	LOS D* Service Volume					% Assignment	Project Trips	% Impact		
PM TWO-WAY PEAK HOUR															
Federal Highway															
Hallandale Beach Blvd	SE 3rd Street	Class I	6LD	5,390	6LD	5,390	4,550	1.00%	426	4,976	30%	5	0.09%	4,981	0.924
SE 5th Street	Miami-Dade County Line	Class I	6LD	5,390	6LD	5,390	4,550	1.00%	426	4,976	20%	3	0.06%	4,979	0.924
Hallandale Beach Boulevard															
East of I-95	Dixie Highway	Class I	6LD	5,390	6LD	5,390	6,275	1.00%	453	6,728	45%	7	0.13%	6,735	1.25
Dixie Highway	Federal Highway/US 1	Class I	6LD	5,390	6LD	5,390	6,275	1.00%	453	6,728	0%	0	0.00%	6,728	1.248
Miami-Dade County line															
SE 3rd Street	SE 3rd Street	Class II	3LO	3,154	3LO	3,154	798	1.00%	75	873	5% (out)	0	0.00%	873	0.277
SE 3rd Street	Hallandale Beach Blvd	Class II	3LO	3,154	3LO	3,154	798	1.00%	75	873	45% (in)	5	0.16%	878	0.278
SE 1st Ave															
Miami-Dade County line	SE 3rd Street	Class II	2LO	1,752	2LO	1,752	370	1.00%	35	405	5% (in)	1	0.06%	406	0.232
SE 3rd Street	Hallandale Beach Blvd	Class II	2LO	1,752	2LO	1,752	370	1.00%	35	405	45% (out)	2	0.11%	407	0.232

## INTERSECTION DISTRIBUTION AND ASSIGNMENT

Project traffic volumes were assigned to the following intersections:

- i. SE 5th St at SE 3rd Ave
- ii. SE 5th St at SE 1st Ave
- iii. SE 5th St at Old Federal Hwy
- iv. SE 5th St at US 1/S Federal Hwy
- v. SE 3rd St at US 1/S Federal Hwy
- vi. SE 9th St at US 1/S Federal Hwy
- vii. SE 3rd St at SE 1st Ave/Dixie Hwy
- viii. SE/SW 10th St at SE 1st Ave/Dixie Hwy
- ix. Hallandale Beach Boulevard at SE 1st Ave/Dixie Hwy
- x. Hallandale Beach Boulevard at US 1/S Federal Hwy

A figure has been prepared to summarize the overall project traffic assignment at the affected intersections. *Figures 3A and 3B* show the net new external traffic at the intersections listed above. As shown, the net new external traffic volumes are minimal at all of the intersections listed above.

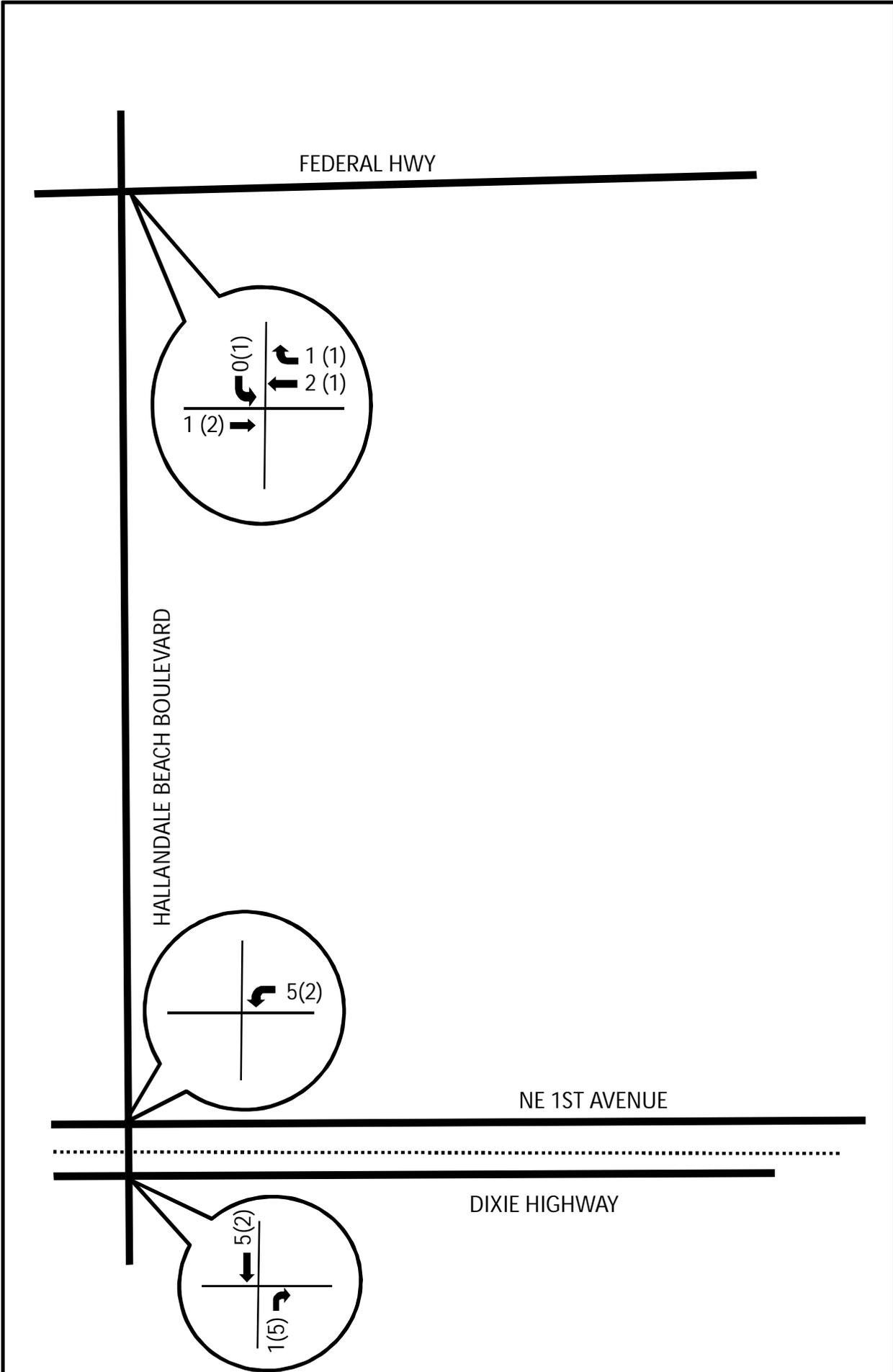


FIGURE 3A  
 INTERSECTION PROJECT VOLUMES  
 VILLAGE AT BLUESTEN PARK



LEGEND

- XX AM PROJECT VOLUMES
- (XX) PM PROJECT VOLUMES



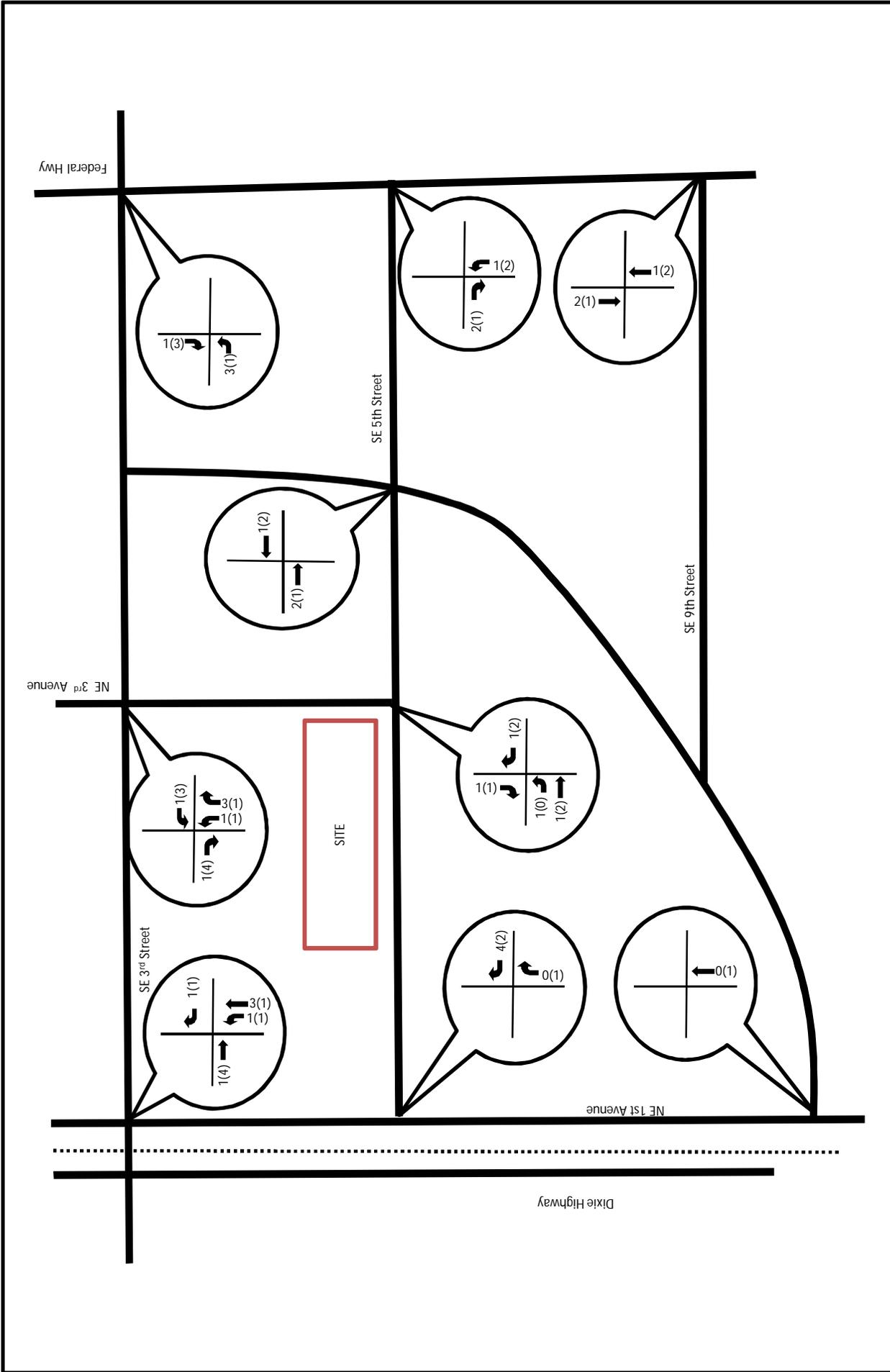


FIGURE 3B  
 INTERSECTION PROJECT VOLUMES  
 VILLAGE AT BLUESTEN PARK

LEGEND  
 XX AM PROJECT VOLUMES  
 (XX) PM PROJECT VOLUMES



## INTERSECTION ANALYSIS

The operating conditions for three conditions (existing, background, and future total buildout) were analyzed at the following signalized intersections during the AM peak hour and PM peak hour using Trafficware's Synchro 9.0 Software:

- Hallandale Beach Boulevard & US-1
- Hallandale Beach Boulevard & Dixie Highway/SE 1<sup>st</sup> Avenue
- SE 3<sup>rd</sup> Street & US-1
- SE 3<sup>rd</sup> Street & SE 1<sup>st</sup> Avenue

These analyses use the methodologies outlined in the *Highway Capacity Manual, 2000 Edition* in order to determine overall intersection level of service and delay.

Existing intersection analyses were based upon existing year turning movement counts conducted at the study intersections. An areawide growth rate was calculated to be 0.07% based on traffic volumes from 2013 to 2016 at FDOT count stations in the vicinity of the proposed development. The areawide growth rate calculation is included in Appendix E. To provide a conservative analysis, a 1.0% growth rate, compounded annually, as well as committed traffic were included in order to determine Year 2022 background volumes. Year 2022 Total volumes were then determined by adding project traffic to the Year 2022 background traffic volumes. *Table 3* summarizes the existing level of service (LOS) at the study intersections. *Table 4* summarizes the Year 2022 background (LOS) at the study intersections. *Table 5* summarizes the Year 2022 future total (LOS) with existing conditions at the study intersections.

As shown in these tables, the study intersections operate at LOS F conditions during existing, 2022 background, and 2022 full buildout conditions. While these study intersections experience LOS F conditions, there is no impact to the level of service and negligible impact to delay at the study intersections from the proposed redevelopment.

Traffic Impact Analysis

Table 3 2017 Existing Conditions Level Of Service							
Condition	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	71.1	E	E	E	E	E
Hallandale Beach Boulevard & Dixie Highway	Signalized	65.6	E	-	E	F	A
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	107.8	F	F	-	B	F
SE 3rd Street & US-1	Signalized	34.4	C	C	C	E	E
SE 3rd Street & SE 1st Avenue	Signalized	21.9	C	D	-	A	D
PM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	101.7	F	F	E	F	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	29.1	C	-	E	D	A
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	598.7	F	F	-	A	F
SE 3rd Street & US-1	Signalized	39.4	D	D	C	E	E
SE 3rd Street & SE 1st Avenue	Signalized	59.8	E	F	-	A	D

Table 4 2022 Background Conditions Level Of Service							
Intersection	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	120.9	F	F	F	F	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	164.7	F	-	E	F	A
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	323.6	F	F	-	C	F
SE 3rd Street & US-1	Signalized	83.9	F	D	F	F	E
SE 3rd Street & SE 1st Avenue	Signalized	23.3	C	D	-	A	D
PM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	180.6	F	F	F	F	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	88.4	F	-	E	F	B
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	900.9	F	F	-	B	F
SE 3rd Street & US-1	Signalized	98.7	F	F	D	E	E
SE 3rd Street & SE 1st Avenue	Signalized	95.9	F	F	-	A	E

Table 5 2022 Full Buildout Conditions Level Of Service							
Intersection	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	121.0	F	F	F	F	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	164.7	F	-	E	F	A
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	330.4	F	F	-	C	F
SE 3rd Street & US-1	Signalized	84.1	F	D	F	F	E
SE 3rd Street & SE 1st Avenue	Signalized	23.6	C	D	-	A	D
PM Peak Hour							
Hallandale Beach Boulevard & US-1	Signalized	180.8	F	F	F	F	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	89.2	F	-	E	F	B
Hallandale Beach Boulevard & SE 1st Avenue	Signalized	904.4	F	F	-	B	F
SE 3rd Street & US-1	Signalized	98.8	F	F	D	E	E
SE 3rd Street & SE 1st Avenue	Signalized	96.2	F	F	-	A	E

## SITE ACCESS

Vehicular access to the site is proposed to be provided via a full-access gated driveway on SE 3<sup>rd</sup> Avenue and an outbound-only gated driveway on SE 5<sup>th</sup> Street. Figure 4 illustrates the anticipated driveway volumes for the site.

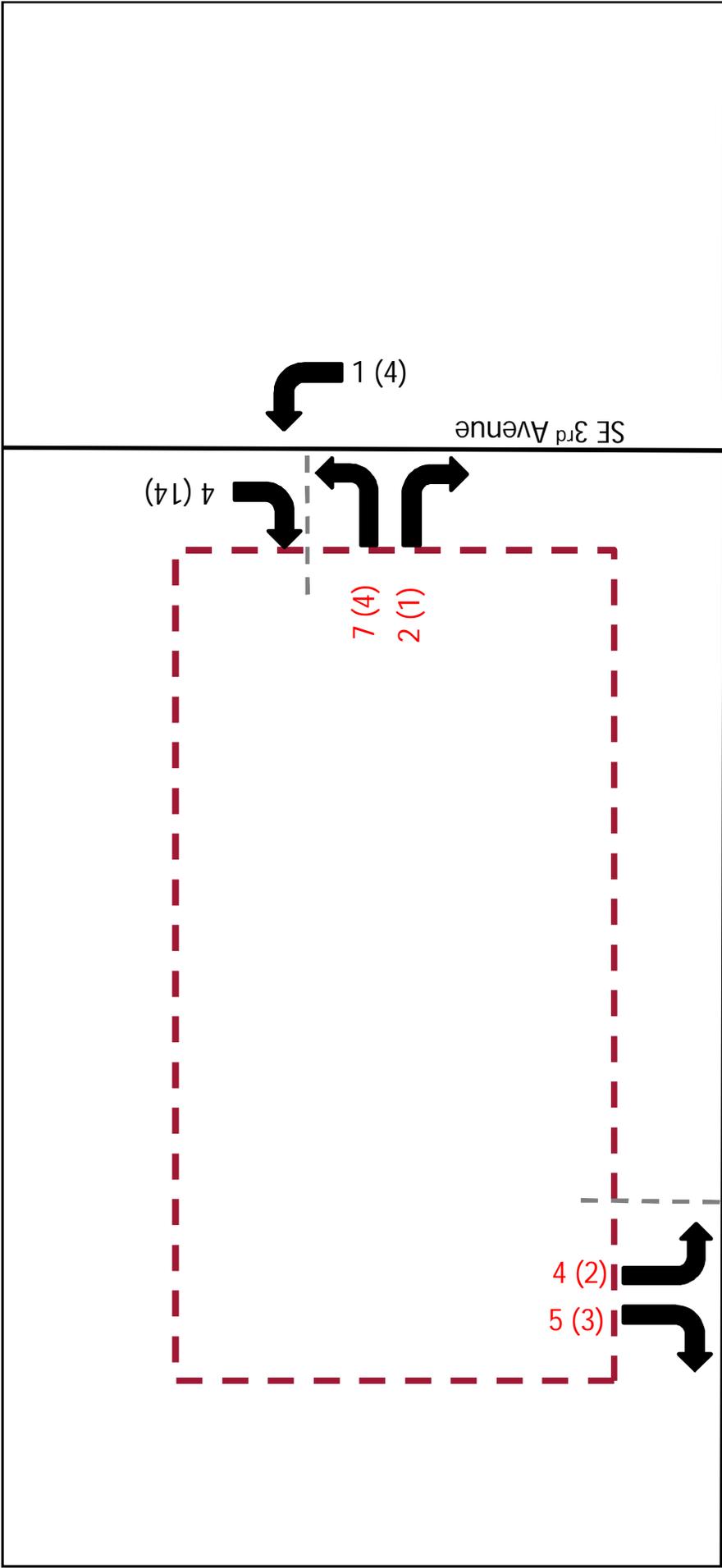
### Gated Queuing Analysis

Access to and from the site development is proposed to be controlled via gates on both driveways. The gate on SE 5<sup>th</sup> Street is proposed to be outbound only; therefore, any queuing will be internal to the site. The gate on SE 3<sup>rd</sup> Avenue is proposed to be inbound and outbound. A queuing analysis has been performed for the inbound movement at this gated entry. The queuing analysis uses the methodologies and equations found in Chapter 8 of *Transportation and Land Development (First Edition)*, published by the Institute of Transportation Engineers (ITE). Figure 4 shows the traffic volumes at the entrance gates. Below is a list of parameters used for the storage length calculation for the gate at the main entry driveway on SE 3<sup>rd</sup> Avenue:

- Service Rate: 0.27 minutes per resident vehicle (220 vehicles per hour based upon a study performed by RK Engineering Group, see attached summary)
- Volume: 18 resident vehicles per hour (based upon PM peak hour trip generation calculation)
- Probability of the queue occurring: 95<sup>th</sup> percentile

As determined in the calculation, the required storage at this gate is less than 1 vehicle. As shown on the site plan, 38 feet of storage is proposed to be provided, which is more than sufficient to accommodate the anticipated demand. The calculations to determine the required storage length are included in Appendix C.

It should be noted that in Chapter 13 of *Transportation and Land Development (Second Edition)*, published by the Institute of Transportation Engineers (ITE), a simplified approach is presented to determine the required storage length at the gate. In the Second Edition, there are only suggested minimum storage lengths based on the number of dwelling units. Based on 45 dwelling units, 50 feet of storage length is suggested. Effectively, the intent is to provide storage length for two vehicles. 38 feet of storage length is being provided according to the site plan, which was based on a minimum storage length for two vehicles. Therefore, the site plan also meets the intent of the requirements in the Second Edition.



SE 5th Street

SE 3rd Avenue



LEGEND

- XX INBOUND AM
- (XX) INBOUND PM
- XX DAILY
- XX OUTBOUND AM
- (XX) OUTBOUND PM

## CONCLUSION

The Village at Bluesten Park is a proposed residential site located at the northwest quadrant of SE 3<sup>rd</sup> Avenue & SE 5<sup>th</sup> Street in Hallandale Beach, Florida. Trip generation calculations were prepared to evaluate the volume of trips anticipated to be generated for weekday daily, AM & PM peak periods by this site in comparison to the trip generation potential of the existing 22-unit mobile home park on this site. As shown in this evaluation, the site will generate a total of 189 net new daily trips, 13 net new external AM peak hour trips and 15 net new external PM peak hour trips. Project traffic results in minimal impact to surrounding roadways and adjacent intersections. Although some of the surrounding roadway segments and intersections operate at LOS F under background conditions, this project will not change level of service conditions on any of these transportation facilities and has minimal impact on delay. A queuing analysis for the gated entry driveways determined that the 95<sup>th</sup> percentile queue at the gated entry driveway is less than one vehicle; therefore, the queue storage provided is anticipated to be adequate for typical peak hour conditions. Furthermore, the project will be required to contribute to a transportation mitigation payment to the City per the City's transportation mitigation payment schedule.



December 12, 2017

Christy Dominguez  
City of Hallandale Beach  
400 South Federal Highway  
Hallandale Beach, Florida 33009

**RE: Village of Bluesten Park  
Parking Requirement Evaluation  
Hallandale Beach, Florida  
Kimley-Horn #144511008**

Dear Christy:

Kimley-Horn and Associates, Inc. has conducted a parking analysis associated with the proposed redevelopment of a site located at the northwest quadrant of SE 5<sup>th</sup> Street & SE 3<sup>rd</sup> Avenue in Hallandale Beach, Florida. The current plan of redevelopment includes replacing the existing mobile home community with 45 residential apartment units.

The following memorandum and attached exhibits provide a summary of the parking analyses that have been undertaken. A preliminary site plan is attached for reference.

**Preliminary Parking Evaluation - Residential**

A preliminary parking evaluation was conducted to evaluate the anticipated minimum parking ratio needed for the proposed redevelopment. Below is a summary of code-required parking for the site, a summary of site-specific conditions that are anticipated to contribute to lower general parking demand for the site, and data from several different sources demonstrating that actual parking requirements for multi-family sites are lower than rates defined in the City of Hallandale Beach Code of Ordinances.

**Code Parking Requirements**

The development is proposed to contain 45 multi-family dwelling units consisting of 12 one-bedroom units, 27 two-bedroom units, and 6 three-bedroom units. Based upon the code parking requirements, the residential parking requirements were calculated as summarized in Table 1.

**Table 1  
Code Parking Requirements**

Land Use	Intensity	City of Hallandale Beach Code	Required Parking (spaces)
Resident Parking			
1 BR	12 Units	1.25 Spaces / 1 BR Unit	15
2 BR	27 Units	1.75 Spaces / 2 BR Unit	47.25
3 BR	6 Units	1.75 Spaces / 3 BR Unit	10.5
Guest Parking			
First 20 Units	20 Units	0.5 Spaces / Unit	10
Units 21-45	25 Units	0.3 Spaces / Unit	7.5
<b>Total Code-Required Parking</b>			<b>91</b>

Application of the City's parking requirements identified a code-required parking supply of 91 parking spaces. The current site plan proposes a total of 81 parking spaces within the residential community.

**Data Evaluation of Multi-Family Parking Ratios**

Kimley-Horn has undertaken a review and evaluation of multiple sources of data to evaluate the anticipated parking requirements for multi-family uses in comparison to the requirements defined in the City of Hallandale Beach Code. Three separate evaluations have been undertaken using data obtained from the following sources:

- *Parking Generation, 4<sup>th</sup> Edition*, published by the Institute of Transportation Engineers (ITE). This resource contains data and information based upon national studies based upon the nationally-recognized professional organization that represents the Transportation Engineering profession.
- South Florida area parking data collected by Kimley-Horn and Associates, Inc. at three multi-family communities in the Boynton Beach/Delray Beach area.
- Parking data collected by Kimley-Horn and Associates, Inc. at 13 multi-family communities in the Dallas, Texas area.

Evaluation 1: Parking Supply Rates Based Upon *Parking Generation, 4<sup>th</sup> Edition* (ITE) data

A calculation of anticipated parking demand was undertaken using data published by the Institute of Transportation Engineers (ITE) in *Parking Generation, 4<sup>th</sup> Edition*. For each land use defined in this publication, empirical parking demand data that has been collected on sites throughout the country is compiled to develop rates and/or equations that represent the typical parking demand expected for that type of land use. The parking demand data published for ITE Land Use 221 (Low/Mid-Rise Apartment) for a suburban setting are attached to this letter for reference. As shown in the data, the 95th percentile confidence interval for anticipated parking demand for Low/Mid-Rise Apartments was within a range of 1.10 spaces per unit to 1.37 spaces per unit.

The data published by ITE represents parking demand, not supply. Using the upper end of the rates published by ITE, the base parking demand for the site was calculated to be 62 spaces. Therefore, for the purposes of determining a supply requirement, a buffer of 10% was applied to ensure that additional spaces will be available on site, resulting in a recommended parking supply of 68 spaces. This rate includes the total parking supply requirement for the site, resident parking, guest parking, and leasing office parking. Table 2 provides a summary of this calculation.

**Table 2  
Minimum Parking Requirement – ITE Data**

Land Use	Intensity	ITE Rate	Required Parking (Spaces)
Low-Rise Apt	45 Units	1.37 Spaces / Unit	62
		ITE Parking + 10% Buffer	68

Evaluation 2: Parking Supply Rates Derived from Local (South Florida) Data

A second calculation of parking requirements was conducted by collecting data at three local multi-family communities. Following is a summary of the local study that was undertaken.

*Data Collection*

Weekday parking counts were collected between 5:00 AM and 6:00 AM on Thursday, August 7, 2014 at three sites in the City of Boynton Beach and the City of Delray Beach. The following sites were chosen for the data collection:

- La Costa Apartments (Boynton Beach)
- Water's Edge Apartments (Delray Beach)
- The Fountains of Delray Beach Apartments (Delray Beach)

Table 3 summarizes the unit count and unit occupancy for the sites.

**Table 3  
Unit Count & Occupancy – Local Parking Data Collection Sites**

	La Costa	Water's Edge	The Fountains at Delray
1 Bedroom Units	180	-	-
2 Bedroom Units	148	150	101
3 Bedroom Units	-	8	48
<b>Total</b>	<b>328</b>	<b>158</b>	<b>149</b>
Percent Occupancy	97%	100%	98%
Occupied Units	318	158	146

*Parking Demand Determination*

A parking demand rate was then calculated based on the observed demand at the count sites. Table 4 summarizes the demand calculations for the three sites. As presented in Table 6, all of the parking demand rates fall below 1.5 spaces per unit.

**Table 4  
Observed Peak Parking Demand – Local Sites**

	La Costa	Water's Edge	The Fountains at Delray
Total Occupied Units	318	158	146
Observed Parking Demand	400	208	216
Parking Demand Rate	1.26	1.32	1.48

Although the reported occupancy ranged between 97% and 100% at the time of data collection, a peak season factor has been added to the observed data to adjust for any seasonal fluctuations that may occur. Based upon the Florida Department of Transportation (FDOT)-published Peak Season Conversion Factors (PSCF) for the portion of Palm Beach County where these communities are located, the observed data was adjusted upward by a factor of 1.08. Additionally, instead of using the average of the three rates, the highest locally-observed parking demand rate was then applied to the proposed residential site to determine the maximum projected demand. With the PSCF applied, the parking rate used for this calculation becomes 1.60 spaces/unit (1.48 spaces/unit x 1.08 = 1.60 spaces/unit). For the purposes of determining a supply requirement, a buffer of 10% was also applied to ensure that additional spaces will be available on site. Table 5 compares the proposed parking supply with the recommended parking based on the local rate.

**Table 5  
Minimum Parking Requirement Based Upon Highest Observed Parking Demand**

Intensity	Local Parking Demand Rate (Peak Observation with Peak Season Adjustment)	Required Parking (Spaces)
45 Units	1.60 Spaces / Unit	72
	Parking + 10% Buffer	80

Evaluation 3: Parking Supply Rates Derived from Dallas, Texas Data

A third calculation of parking requirements was conducted by collecting data at thirteen multi-family communities in the Dallas, Texas area. Following is a summary of the study that was undertaken.

*Data Collection*

Weekday parking counts were collected between 11:00 PM and 5:00 AM in Fall 2011 at thirteen sites in Dallas, Texas. The data collection information is attached for reference.

*Parking Demand Determination*

A parking demand rate was then calculated based on the observed demand at the count sites. As presented in Table 6 and the attached observations summary, the average parking demand rate is 1.13 spaces per unit. Table 6 compares the proposed parking supply with the recommended parking based on the calculated rate from the sites in Dallas, Texas. For the purposes of determining a supply requirement, a buffer of 10% was applied to ensure that additional spaces will be available on site, resulting in a recommended parking supply of 56 spaces.

**Table 6**  
**Minimum Parking Requirement Based Upon Highest Observed Parking Demand**  
**– Dallas, Texas Sites**

Intensity		Average Rate	Required Parking (Spaces)
45	Units	1.13 Spaces / Unit	51
		Demand + 10% Buffer	56

**Table 7**  
**Minimum Parking Requirement Summary**

Parking Supply Source	Required Parking (Spaces)
ITE Data	68
Local Sites	80
Dallas, Texas Sites	56

As shown in the Table 7, the highest minimum total recommended parking supply using the three methodologies listed above is 80 spaces. The proposed parking supply for the residential site is 81 spaces. Therefore, the supply provided on site will be adequate to accommodate the anticipated needs. Furthermore, it is important to note that the Applicant is constructing 12 on-street parallel parking spaces on Southeast 5<sup>th</sup> Street adjacent to the site. Although these are open to the general public and are not counted toward the supply for this site, it is reasonable to expect that some of these spaces will also be used by vehicles accessing this site, especially during the overnight hours when Bluesten Park is closed and when residential demand is highest.

Should you have any questions regarding the information contained in this memorandum, please contact me via telephone at (561) 840-0248 or via e-mail at [chris.heggen@kimley-horn.com](mailto:chris.heggen@kimley-horn.com).

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Christopher W. Heggen, P.E.  
 Transportation Engineer

Florida Registration  
 Number 58636  
 Certificate of Authorization  
 Number 696

Attachments

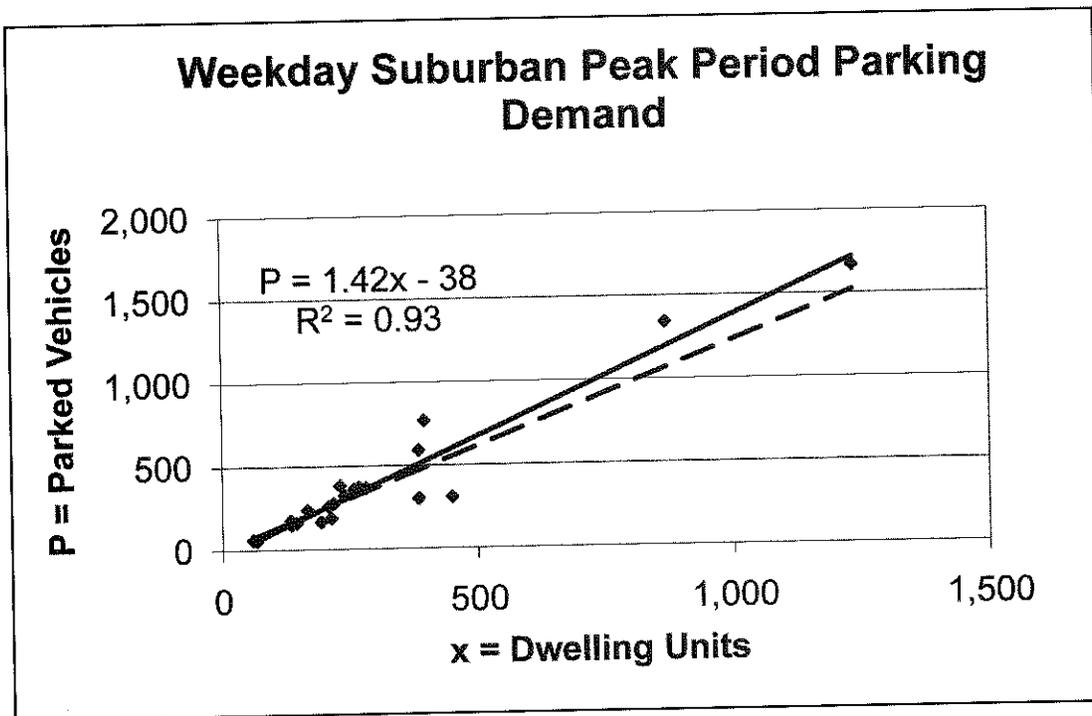
*k:\wpb\_tpto\1445\144511008 village at bluesten park\parking\parking study.docx*



# Land Use: 221 Low/Mid-Rise Apartment

**Average Peak Period Parking Demand vs. Dwelling Units**  
On a: Weekday  
Location: Suburban

Statistic	Peak Period Demand
	Peak Period
Number of Study Sites	21
Average Size of Study Sites	311 dwelling units
Average Peak Period Parking Demand	1.23 vehicles per dwelling unit
Standard Deviation	0.32
Coefficient of Variation	21%
95% Confidence Interval	1.10–1.37 vehicles per dwelling unit
Range	0.59–1.94 vehicles per dwelling unit
85th Percentile	1.94 vehicles per dwelling unit
33rd Percentile	0.68 vehicles per dwelling unit



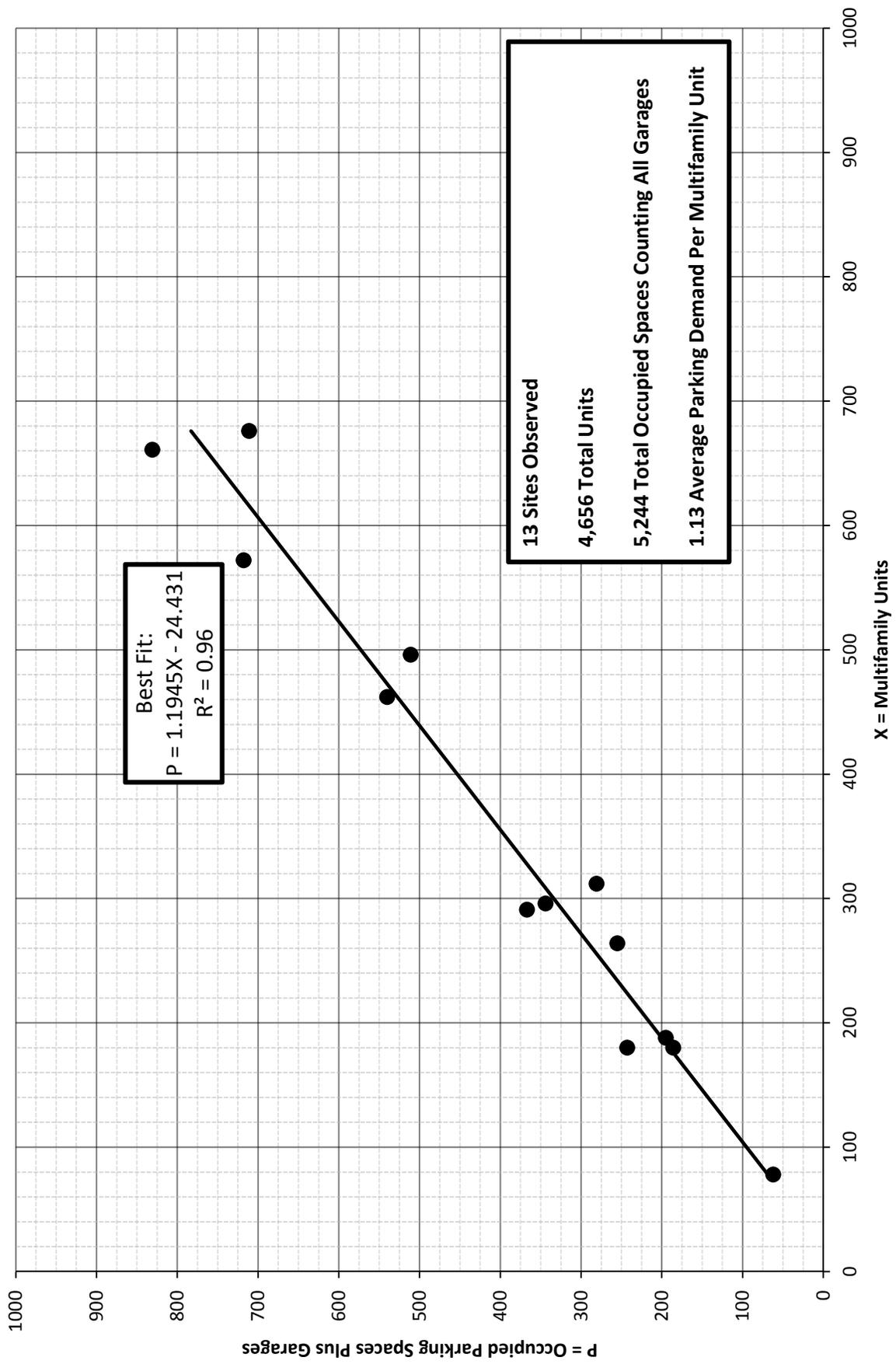
◆ Actual Data Points

— Fitted Curve

--- Average Rate

# Multifamily Parking Demand in Dallas

KHA Observations in Fall 2011 - Sites Inside or On Loop 12



**Multifamily Parking Occupancy Observations**  
**Data Collected Fall 2011**

Data Collection Methodology: Counts of vehicles parked on site between 11 PM and 5 AM. Reserved garages were counted as occupied spaces, whether or not they contained a vehicle. Vehicles parked on the street which could be identified as being connected to the site were also added to the vehicle count in the "surface" category.

Site	Site Name	Units	Observed Parking Occupancy			Demand Per Unit Including Garages
			Surface	Garage	Total	
1	AMLI Knox-Henderson	180	186		186	1.03
2	Saltillo	78	62		62	0.79
3	Bell Carlisle	180	163	80	243	1.35
4	Cross Creek	264	255		255	0.97
5	Renaissance Preston Hollow	291	263	104	367	1.26
6	Cambridge Court	312	281		281	0.90
7	Gables Knoxbridge	188	195		195	1.04
8	The Gate (Village)	462	540		540	1.17
9	Northbridge (Village)	572	582	136	718	1.26
10	The Lakes (Village)	676	711		711	1.05
11	The Meadows (Village)	296	344		344	1.16
12	The Chase (Village)	496	511		511	1.03
13	Westside + The Hill (Village)	661	766	65	831	1.26
	<b>Totals</b>	<b>4,656</b>	<b>4,859</b>	<b>385</b>	<b>5,244</b>	
	<b>Averages</b>	<b>358</b>				<b>1.13</b>