

# SITE DEVELOPMENT PLANS FOR: MARGATE HYBRID CONVENIENCE MARKET

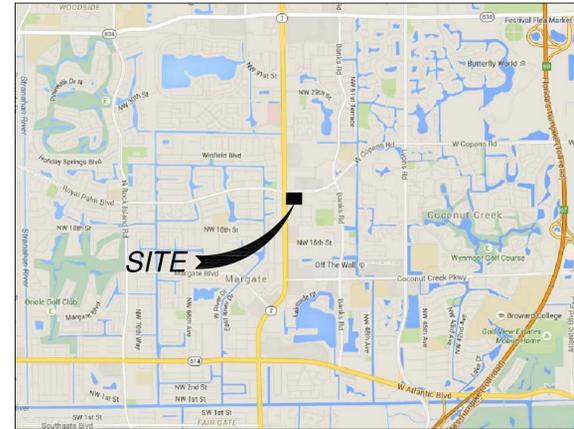
2000 N. STATE ROAD NO. 7  
MARGATE, FL 33063  
PARCEL ID# 4842-30-05-0010

PERMIT LIST	
PERMIT	PERMIT #
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## LEGAL DESCRIPTION

TRACT A, OF MARGATE DISTRICT HEADQUARTERS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 88, PAGE 14 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

Section 30, Township 48 South, Range 42 East, Broward County, Florida

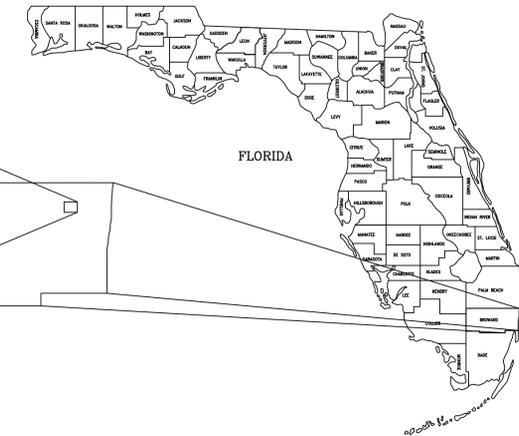


SITE LOCATION MAP

NOT TO SCALE

### DIRECTIONS TO PROJECT SITE:

FROM THE FLORIDA TURNPIKE (SR-91) TAKE EXIT 67 COCONUT CREEK PARKWAY WEST 2.3 MILES. TURN NORTH ON US-441 / SR-7 FOR 0.5 MILES. SITE IS ON THE RIGHT AT THE INTERSECTION WITH W. COPANS ROAD.



BROWARD COUNTY

### LAND USE DATA:

BUILDING STRUCTURE: 1 CONCRETE BLOCK BUILDING, FUEL CANOPY  
FUTURE LAND USE CLASSIFICATION: TRANSIT ORIENTED CORRIDOR  
ZONING CLASSIFICATION: TRANSIT ORIENTED CORRIDOR - GATEWAY  
LOCAL JURISDICTION: CITY OF MARGATE

### GENERAL STATEMENT:

THE PROJECT CONSISTS OF DEMOLITION OF AN EXISTING BUILDING, PARKING LOT AND UTILITIES ON A TOTAL SITE AREA OF 3.6 ACRES. THE PROPOSED IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO THE CONSTRUCTION OF A 5,943 SF CONVENIENCE STORE WITH ASSOCIATED FUEL CANOPY, UTILITIES, AND PARKING.

## UTILITY PROVIDERS:

SEWER	CITY OF MARGATE JOHN SHELTON 901 NW 66TH AVENUE, SUITE A MARGATE, FL 33063 PHONE: (954) 797-5000	ELECTRIC	FLORIDA POWER AND LIGHT SHAVONTI ARCHER PHONE: (954) 956-2036
STORM WATER	SFWMD 3301 GUN CLUB ROAD WEST PALM BEACH, FL 33406 PHONE: (561) 686-8800	TELEPHONE	AT&T BRANDON EDMUNDSON PHONE: (214) 527-0457
	BROWARD COUNTY ENVIRONMENTAL LICENSING SURFACE WATER MANAGEMENT ASHLEY RESTA 1 NORTH UNIVERSITY DRIVE PLANTATION, FL 33324	NATURAL GAS	TECO PEOPLES GAS COMPANY 702 NORTH FRANKLIN STREET PO BOX 2562 TAMPA, FL 33601 PHONE: (954) 931-9742
WATER	CITY OF MARGATE JOHN SHELTON 901 NW 66TH AVENUE, SUITE A MARGATE, FL 33063 PHONE: (954) 797-5000		

## FLOOD NOTE

THE PROPERTY SHOWN HEREON APPEARS TO FALL WITHIN FLOOD ZONE "AE", B.F.E.=11"; AS SHOWN ON THE FLOOD INSURANCE RATE MAP, 12011C0165H, MAP REVISED 08/18/2014, NATIONAL FLOOD INSURANCE PROGRAM, FEDERAL EMERGENCY MANAGEMENT AGENCY.

## BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED UPON THE FOLLOWING BENCHMARKS AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFIC PURPOSE SURVEY FOR SECTION 36, TOWNSHIP 48 SOUTH, RANGE 41 EAST, PROJECT No. 416878-1-52-01:

- #1 A 3.5" BRASS DISK IN CONCRETE STAMPED 7-86-07-B06 ELEVATION 12.14 FEET NAVD 88.
- #2 SET MAG NAIL ELEVATION 11.51 FEET NAVD 88.

## OWNER / DEVELOPER

OWNER:  
VICJ CORPORATE PLAZA LLC  
2000 N. STATE ROAD 7  
MARGATE, FL 33063

DEVELOPER:  
TVC MARGATE CO. LLC  
5757 W. MAPLE RD., STE 800  
W. BLOOMFIELD, MI 48322

**SURVEYOR**  
BOWMAN CONSULTING GROUP  
KURT STAFLINGER  
4450 W. EAU GALLIE BLVD., STE 232  
MELBOURNE, FL 32934  
PHONE: (321) 255-5434  
FAX: (321) 255-7751

**CIVIL ENGINEER**  
BOWMAN CONSULTING GROUP  
ANDREW J. PETERSEN  
PROJECT MANAGER  
4450 W. EAU GALLIE BLVD., STE 232  
MELBOURNE, FL 32934  
PHONE: (321) 255-5434  
FAX: (321) 255-7751

**LANDSCAPE ARCHITECT**  
JAMES SANTIAGO  
612 NE 14TH AVE.  
FT. LAUDERDALE, FL 33304  
PHONE: (305) 791-3156

**ARCHITECT**  
CUHACI & PETERSON  
NATHAN GRIFFIS  
1925 PROSPECT AVE.  
ORLANDO, FL 32814

## Sheet List Table

Sheet Number	Sheet Title
C0	COVER SHEET
SU-1	SURVEY
SU-2	SURVEY
ES1.0	EROSION CONTROL PLAN
ES2.0	EROSION CONTROL DETAILS
DM1.0	DEMOLITION PLAN
C1.0	SITE PLAN
C2.0	PAVING, GRADING & DRAINAGE PLAN
C3.0	UTILITY PLAN
C4.0	DRAINAGE PROFILES & SECTIONS
D1.0	STANDARD SITE DETAILS
D2.0	STANDARD GENERAL DETAILS
D3.0	WATER DETAILS
D4.0	SEWER DETAILS
D5.0	FDOT DETAILS
D6.0	FDOT DETAILS
D7.0	FDOT DETAILS
D8.0	MAINTENANCE OF TRAFFIC DETAILS
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE DETAILS
TD-1	TREE DISPOSITION PLAN
TD-2	TREE DISPOSITION LEGEND
IR-1	IRRIGATION PLAN
IR-2	IRRIGATION DETAILS

**Bowman**  
CONSULTING  
Certificate of Authorization License No. 30462

**VELMEIR**  
COMPANIES  
Your Partner in Development

COVER SHEET  
MARGATE HYBRID CONVENIENCE MARKET  
2000 STATE ROAD NO. 7  
MARGATE, FL 33063  
CITY OF MARGATE  
BROWARD COUNTY, FL



ANDREW J. PETERSEN  
LICENSE NO. 75493  
01/12/2016

PLAN STATUS		
DATE	DESCRIPTION	
DESIGN	EC	AJP
DRAWN		CHKD
SCALE	NONE	
JOB No.	010032-01-012	
DATE	December, 2015	
FILE	010032-01-01-02-01-01-COV	
SHEET	C0	

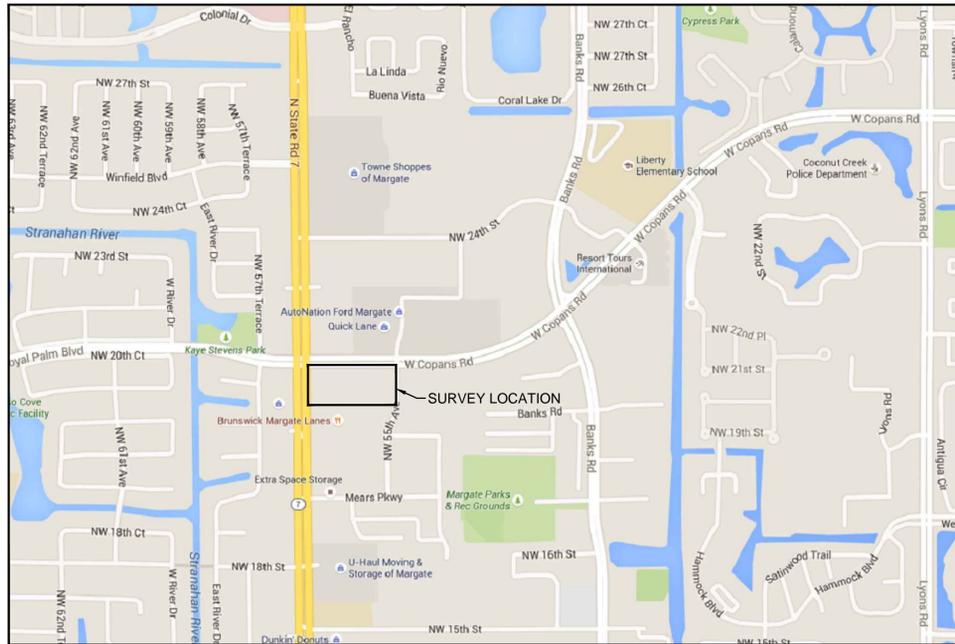
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.



**BOUNDARY AND TOPOGRAPHIC SURVEY**

**SURVEYOR'S NOTES**

- THIS IS A BOUNDARY AND TOPOGRAPHIC SURVEY AS DEFINED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE. SAID SURVEY MEETS THE "MINIMUM TECHNICAL STANDARDS" FOR SURVEYING AND MAPPING, AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
- THE TOPOGRAPHIC INFORMATION IS BASED UPON A GROUND SURVEY PERFORMED IN JUNE 2015. THE CONTOUR INTERVAL IS ONE FOOT.
- THE BOUNDARY SURVEY SHOWN HEREON WAS PREPARED UTILIZING THE DESCRIPTION AS CONTAINED WITHIN THE TITLE COMMITMENT PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ORDER No. 5190137, EFFECTIVE DATE: MARCH 10, 2015 AT 5:00 PM.
- THE BEARINGS SHOWN HEREON ARE BASED UPON THE NORTH AMERICAN DATUM 1983, 2011 ADJUSTMENT, FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE. THIS REFERENCE WAS ESTABLISHED BY USING TOPCON GR5 RECEIVERS WITH THE TRIMBLE VRN (VIRTUAL REFERENCE NETWORK) AND TIED TO THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) NETWORK CONTROL FOR STATE ROAD 7 AS DEPICTED ON A SPECIFIC PURPOSE SURVEY, FDOT PROJECT ID 230012-1-32-04. MORE PARTICULARLY THE SOUTH LINE OF THE SUBJECT PARCEL BEARS SOUTH 89°32'02" WEST AS SHOWN. THE CONTROL POINTS USED TO ESTABLISH THIS REFERENCE WERE:
  - BLC 33, A 3.5" BRASS DISK IN CONCRETE MONUMENT  
NORTHING = 698,179.13, EASTING = 917,803.66 US SURVEY FEET.
  - BLC 34, A 3.5" BRASS DISK IN CONCRETE MONUMENT  
NORTHING = 699,165.98, EASTING = 917,950.64 US SURVEY FEET.
- THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED UPON THE FOLLOWING BENCHMARK AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFIC PURPOSE SURVEY FOR SECTION 36, TOWNSHIP 48 SOUTH, RANGE 41 EAST, PROJECT No. 416878-1-52-01:  
  
A 3.5" BRASS DISK IN CONCRETE STAMPED 7-86-07-B06 HAVING A PUBLISHED ELEVATION OF 12.14 FEET NAVD 88.
- THIS SURVEY WAS PERFORMED UTILIZING G.P.S.-R.T.K. PROCEDURES AND TRADITIONAL SURVEY PROCEDURES WITH REDUNDANT MEASUREMENTS, AND HAS A HORIZONTAL AND VERTICAL POSITIONAL TOLERANCE OF 0.10 FEET.
- ALL DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF AND ARE CALCULATED UNLESS OTHERWISE NOTED.
- THE LANDS BOUND BY THIS SURVEY ARE LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION "AE BASE FLOOD ELEVATION 11" BY THE FEDERAL MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP NUMBER 12011C0165H, DATED AUGUST 18, 2014 AND IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY THIS PARCEL IS SITUATED.
- THE EXPECTED USE OF THE LAND BOUND BY THIS SURVEY, AS CLASSIFIED IN THE "MINIMUM TECHNICAL STANDARDS" IS "COMMERCIAL" WITH THE MINIMUM LINEAR CLOSURE FOR THIS TYPE OF BOUNDARY SURVEY TO BE 1 FOOT IN 10,000 FEET (1:10,000). THE ACCURACY OBTAINED BY MEASUREMENT, OBSERVATION AND CALCULATION OF THE CLOSED GEOMETRIC FIGURE FOR THIS SURVEY WAS DETERMINED TO MEET SAID REQUIREMENT.
- THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- ADDITIONS OR DELETIONS TO THIS SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.



**VICINITY MAP**  
NOT TO SCALE

**TITLE COMMITMENT**

FIDELITY NATIONAL TITLE INSURANCE COMPANY  
ORDER NO.: 5190137  
CUSTOMER REFERENCE: 59580-MARGATE  
EFFECTIVE DATE: MARCH 10, 2015 AT 5:00 PM

**LEGAL DESCRIPTION**

TRACT A, OF MARGATE DISTRICT HEADQUARTERS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 88, PAGE 14 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

**SCHEDULE B SECTION II EXCEPTIONS**

(a) THE FOLLOWING ITEMS OF THE SPECIAL EXCEPTIONS PERTAIN TO THE SURVEYED PROPERTY HOWEVER, ARE NOT SURVEY MATTERS: ITEMS 1 AND 2

(b) THE FOLLOWING ITEMS OF THE SPECIAL EXCEPTIONS ARE SURVEY RELATED MATTERS, PERTAIN TO THE SURVEYED PROPERTY AND ARE SHOWN ON THE SURVEY UNLESS OTHERWISE EXPLAINED AS TO HOW THEY AFFECT THE SURVEYED PROPERTY:

- STANDARD EXCEPTIONS:
  - ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND. (A LIFT STATION AND ELECTRICAL CABINET NEAR THE NORTHWEST CORNER OF THE SITE MAY BE EVIDENCE OF USE BY OTHERS OTHERWISE NO VISIBLE ENCROACHMENTS WERE OBSERVED)
  - RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
  - ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIALS HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
  - TAXES OR ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS IN THE PUBLIC RECORDS.
- EASEMENT IN FAVOR OF FLORIDA POWER & LIGHT COMPANY, RECORDED JUNE 22, 1971 IN OFFICIAL RECORDS BOOK 4532, PAGE 26, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (AFFECTS THE SUBJECT PARCEL AS SHOWN IN ITS APPROXIMATE LOCATION. THE EASEMENT DOCUMENT DOES NOT FURNISH SPECIFIC DIRECTION AND REFERENCES AN EXISTING BUILDING WHICH APPEARS TO DEMOLISHED IN ORDER TO FACILITATE THE CONSTRUCTION OF THE CURRENT BUILDING).
- EASEMENTS AND MATTERS AS SET FORTH, SHOWN OR REFLECTED ON THE PLAT OF MARGATE DISTRICT HEADQUARTERS, RECORDED IN PLAT BOOK 88, PAGE 14, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (AFFECTS THE SUBJECT PARCEL AS SHOWN)
- LEASE BY AND BETWEEN RLC, LTD., A FLORIDA LIMITED PARTNERSHIP, AS LANDLORD AND PRECISION RESPONSE CORPORATION, AS TENANT, DATED JULY 7, 2010 AND EVIDENCED BY THAT SUBORDINATION OF LEASE RECORDED JULY 29, 2010 IN OFFICIAL RECORDS BOOK 47265, PAGE 1663, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (NOT A SURVEY ISSUE, NO COMMENT)
- UNRECORDED LEASE BY AND BETWEEN VICJ CORPORATE PLAZA, LLC, AS LANDLORD AND UNITED STATES VAN LINES RELOCATION DIVISION, INC., AS TENANT, DATED JULY 7, 2010 AND EVIDENCED BY THAT SUBORDINATION OF LEASE RECORDED JULY 29, 2010 IN OFFICIAL RECORDS BOOK 47265, PAGE 1663, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (NOT A SURVEY ISSUE, NO COMMENT)
- UNRECORDED LEASE BY AND BETWEEN VICJ CORPORATE PLAZA, LLC, AS LANDLORD AND NATIONWIDE RELOCATION SERVICES, INC., AS TENANT, DATED JULY 7, 2010, AS EVIDENCED BY THAT SUBORDINATION AGREEMENT RECORDED JULY 29, 2010 IN OFFICIAL RECORDS BOOK 47265, PAGE 1668, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (NOT A SURVEY ISSUE, NO COMMENT)
- MARGATE COMMUNITY REDEVELOPMENT AGENCY LANDSCAPE UPGRADE MATCHING GRANT PROGRAM AGREEMENT FOR REIMBURSEMENT, RECORDED MARCH 29, 2012 IN OFFICIAL RECORDS BOOK 48622, PAGE 1780, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. (AFFECTS THE SUBJECT PARCEL, NOT A SURVEY ISSUE, NO COMMENT)
- MARGATE COMMUNITY REDEVELOPMENT AGENCY COMMERCIAL FACADE IMPROVEMENT MATCHING GRANT PROGRAM AGREEMENT FOR ARCHITECTURAL SERVICES AND CONSTRUCTION REIMBURSEMENT RECORDED MARCH 29, 2012 IN OFFICIAL RECORDS BOOK 48622, PAGE 1776, PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA (AFFECTS THE SUBJECT PARCEL, NOT A SURVEY ISSUE, NO COMMENT)

**LEGAL DESCRIPTION (BY SURVEYOR)**

TRACT A, MARGATE DISTRICT HEADQUARTERS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 88, PAGE 14, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF SAID TRACT A; THENCE SOUTH 01°10'00" EAST ALONG THE EAST LINE OF SAID TRACT A AND THE WEST RIGHT OF WAY LINE OF N.W. 55TH AVENUE, FOR A DISTANCE OF 250.00 FEET TO THE SOUTH LINE OF SAID TRACT A;  
 THENCE SOUTH 89°32'02" WEST, ALONG SAID SOUTH LINE, FOR A DISTANCE OF 630.20 FEET TO THE WEST LINE OF SAID TRACT A AND THE EAST RIGHT OF WAY LINE OF STATE ROAD NO. 7;  
 THENCE NORTH 01°00'34" WEST, ALONG SAID WEST LINE OF SAID TRACT A AND THE EAST RIGHT OF WAY LINE OF STATE ROAD NO. 7, FOR A DISTANCE OF 250.18 FEET TO THE NORTH LINE OF SAID TRACT A AND THE SOUTH RIGHT OF WAY LINE OF COPANS ROAD;  
 THENCE NORTH 89°33'02" EAST, ALONG SAID NORTH LINE OF TRACT A AND SOUTH RIGHT OF WAY LINE OF COPANS ROAD, FOR A DISTANCE OF 629.52 FEET TO THE POINT OF BEGINNING.  
 CONTAINING 3.62 ACRES MORE OR LESS.

**SURVEYOR'S CERTIFICATION:**

TO: TVC MARGATE CO., L.L.C.  
 THE PRIVATEBANK AND TRUST COMPANY  
 GRAYROBINSON, PA  
 FIDELITY NATIONAL TITLE INSURANCE COMPANY  
 WAWA FLORIDA LLC.  
 SAUL EWING LLP

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDES ITEMS 1, 2, 3, 4, 5, 8a, 7a, 8, 9, 11a, 13, 14, 16, 17, 18, AND 20a OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 12, 2015.

I CERTIFY THAT THIS "BOUNDARY AND TOPOGRAPHIC SURVEY" MEETS THE STANDARDS OF PRACTICE SET FORTH IN RULE 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE.

KURT STAFFLINGER  
 FLORIDA SURVEYOR AND MAPPER  
 REGISTRATION No. 5496  
 NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

BOWMAN CONSULTING GROUP, LTD., INC.  
 FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER LB 8030  
 (LB 8030 = LICENSED BUSINESS NUMBER 8030)

**ABBREVIATIONS**

- A/C = AIR CONDITIONING
- BP = BACKFLOW PREVENTER
- CO = CLEAN OUT
- CONC = CONCRETE
- CBS = CONCRETE BLOCK STRUCTURE
- CM = CONCRETE MONUMENT
- CMP = CORRUGATED METAL PIPE
- CPP = CONCRETE POWER POLE
- DIP = DUCTILE IRON PIPE
- EHI = ELECTRIC HAND HOLE
- ELEC = ELECTRIC
- ELEV = ELEVATION
- EO = ELECTRICAL OUTLET
- ET = ELECTRICAL TRANSFORMER
- EX = EXISTING
- FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
- FDC = FIRE DEPARTMENT CONNECTOR
- FH = FIRE HYDRANT
- FM = FORCE MAIN
- FOC = FIBER OPTIC CONDUIT
- GA = GUY ANCHOR
- GEN = GENERATOR
- HDPE = HIGH DENSITY POLYETHYLENE PIPE
- ICV = IRRIGATION CONTROL VALVE
- INV = INVERT
- LB = LICENSED BUSINESS
- LP = LIGHT POLE
- (M) = MEASURED DISTANCE
- NAD = NORTH AMERICAN DATUM
- NAVD = NORTH AMERICAN VERTICAL DATUM
- ORB = OFFICIAL RECORDS BOOK
- OU = OVERHEAD UTILITY
- (P) = PLAT DISTANCE
- PG = PLAT BOOK
- PG = PAGE
- P.O.B. = POINT OF BEGINNING
- P.O.C. = POINT OF COMMENCEMENT
- PVC = POLYVINYL CHLORIDE PIPE
- PRM = PERMANENT REFERENCE MONUMENT
- (R) = RECORD DISTANCE
- RCP = REINFORCED CONCRETE PIPE
- R/W = RIGHT OF WAY
- SR = STATE ROAD
- SWK = SIDEWALK
- TYP = TYPICAL
- WM = WATER METER
- WV = WATER VALVE
- WPP = WOOD POWER POLE

**LEGEND**

- SIGN
- TRAFFIC SIGNAL HAND HOLE
- FIBER OPTIC PULL BOX
- ▣ ELECTRICAL CABINET
- ⊕ POWER POLE
- ⊙ LIGHT POLE
- ⊞ WATER VALVE
- ⊚ WATER METER
- ⊛ FIRE HYDRANT
- ⊜ SANITARY MANHOLE
- CLEAN OUT
- IRRIGATION CONTROL VALVE
- BOLLARD
- TRAFFIC SIGNAL POLE
- IRON ROD FOUND
- IRON PIPE FOUND
- MONUMENT
- ⊕ BENCHMARK
- ⊞ RIGHT OF WAY
- W — WATER LINE
- X — FENCE LINE

**MARGATE HYBRID  
 CONVENIENCE MARKET**  
 2000 N. STATE ROAD NO. 7  
 MARGATE BROWARD COUNTY, FLORIDA

PROJECT NO  
 8536-01-001

11/20/15	PLAN STATUS
12/9/15	ADDED TREES
	REV. CERTIFICATIONS
	ADDED LEGAL

DATE	DESCRIPTION
DESIGN	RT KS
DRAWN	CHKD

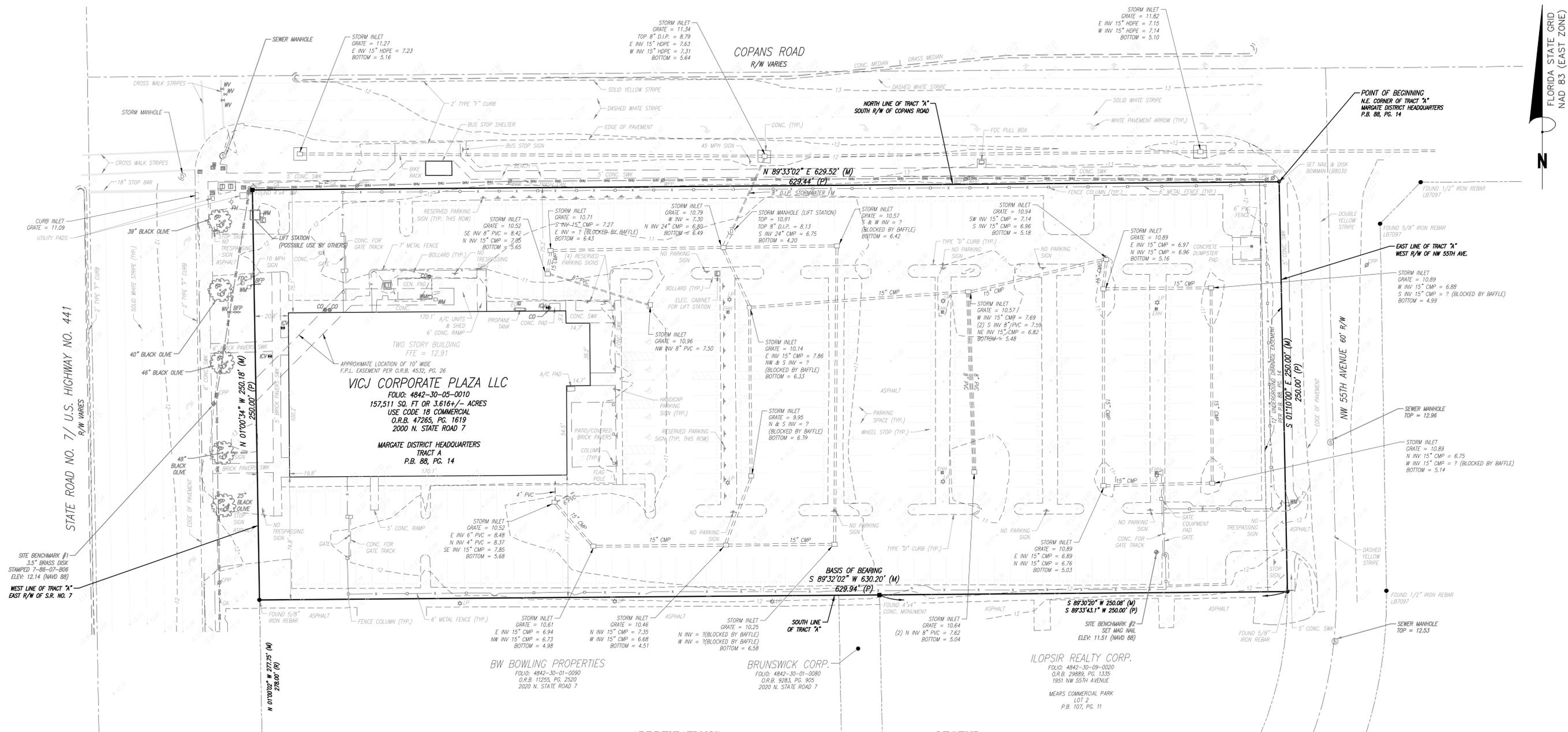
SCALE: NONE  
 JOB No. 8536-01-001  
 DATE: 06/26/2015  
 FILE: 8536-01-001 xbaxe

SHEET **SU-1**



Bowman Consulting Group, Ltd.  
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 Suite 232  
 Melbourne, FL 32934  
 Phone: (321) 255-5434  
 Fax: (321) 255-7751  
 www.bowmanconsulting.com  
 © Bowman Consulting Group, Ltd.

# BOUNDARY AND TOPOGRAPHIC SURVEY



### ABBREVIATIONS

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### LEGEND

- T — SIGN
- TRAFFIC SIGNAL HAND HOLE
- FIBER OPTIC PULL BOX
- ELECTRICAL CABINET
- ⊕ POWER POLE
- ⊙ LIGHT POLE
- ⊕ WATER VALVE
- ⊕ WATER METER
- ⊕ FIRE HYDRANT
- ⊕ SANITARY MANHOLE
- CLEAN OUT
- IRRIGATION CONTROL VALVE
- BOLLARD
- TRAFFIC SIGNAL POLE
- IRF ● IRON ROD FOUND
- IRP ● IRON PIPE FOUND
- MON ● MONUMENT
- BENCHMARK
- BENCHMARK
- R/W RIGHT OF WAY
- W — WATER LINE
- X — FENCE LINE



THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 30' OR SMALLER.



# Bowman

CONSULTING

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Melbourne, FL 32934  
Phone: (321) 255-5434  
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MARGATE HYBRID  
CONVENIENCE MARKET  
2000 N. STATE ROAD NO. 7  
MARGATE BROWARD COUNTY, FLORIDA

PROJECT NO  
8536-01-001

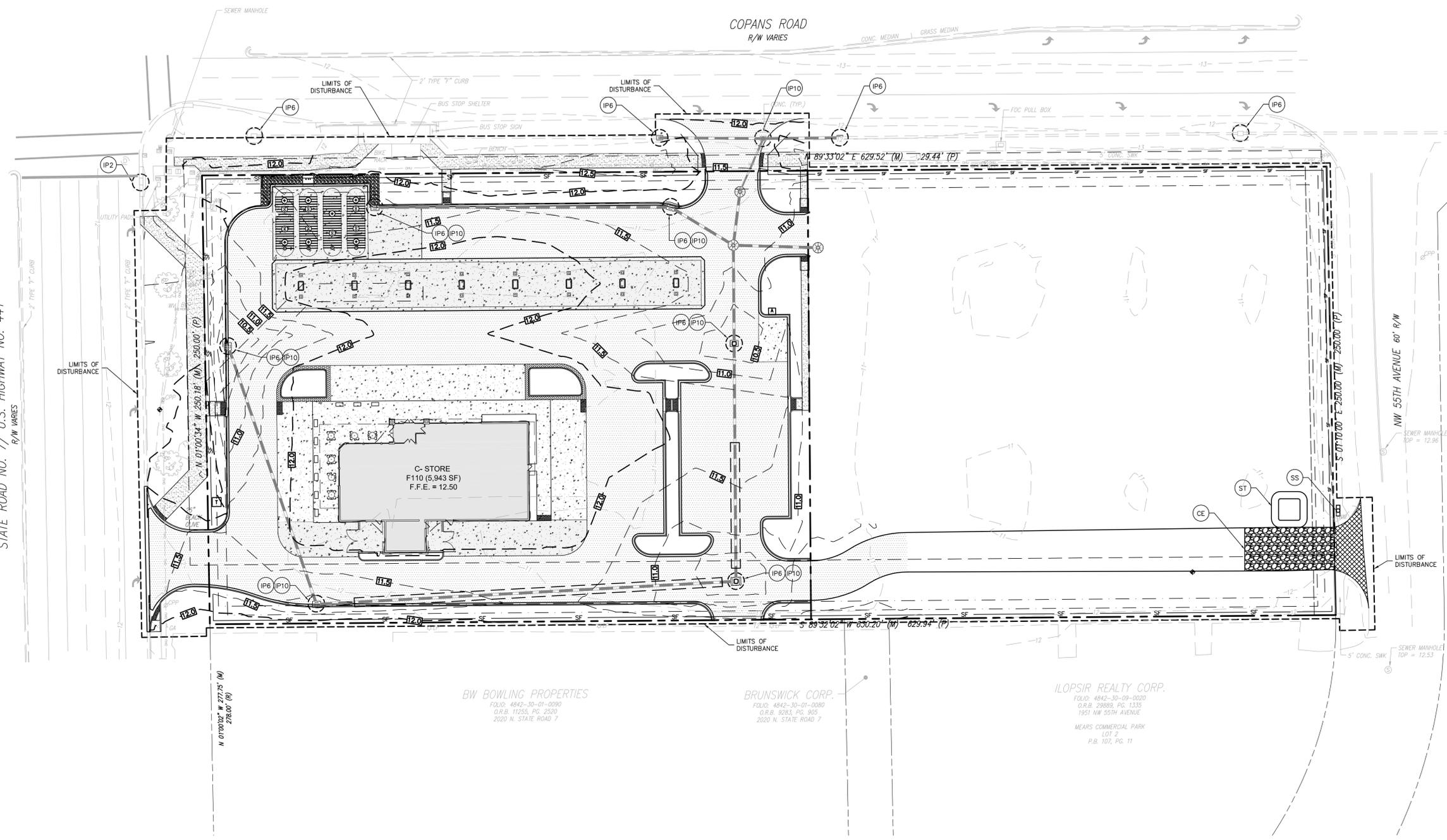
PLAN STATUS	
11/20/15	ADDED TREES
12/9/15	REV. CERTIFICATIONS ADDED LEGAL

DATE	DESCRIPTION
DESIGN	RT KS DRAWN CHKD
SCALE: 1" = 30'	
JOB No. 8536-01-001	
DATE: 06/26/2015	
FILE: 8536-01-001 xbese	

SHEET **SU-2**

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.

STATE ROAD NO. 7 / U.S. HIGHWAY NO. 441  
R/W VARIES



**LEGEND - EXISTING**

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li>□ SIGN</li> <li>□ TRAFFIC SIGNAL HAND HOLE</li> <li>□ FIBER OPTIC PULL BOX</li> <li>□ ELECTRICAL CABINET</li> <li>□ POWER POLE</li> <li>□ LIGHT POLE</li> <li>□ WATER VALVE</li> <li>□ WATER METER</li> <li>□ FIRE HYDRANT</li> <li>□ SANITARY MANHOLE</li> <li>□ CLEAN OUT</li> <li>□ IRRIGATION CONTROL VALVE</li> <li>□ BOLLARD</li> <li>□ TRAFFIC SIGNAL POLE</li> <li>□ IRP = IRON ROD FOUND</li> <li>□ IPP = IRON PIPE FOUND</li> <li>□ MON = MONUMENT</li> <li>□ BENCHMARK</li> <li>□ RW = RIGHT OF WAY</li> <li>□ WATER LINE</li> <li>□ FENCE LINE</li> </ul> | <ul style="list-style-type: none"> <li>A/C = AIR CONDITIONING</li> <li>BFP = BACKFLOW PREVENTER</li> <li>CO = CLEAN OUT</li> <li>CONC = CONCRETE</li> <li>CBS = CONCRETE BLOCK STRUCTURE</li> <li>CM = CONCRETE MONUMENT</li> <li>CMP = CORRUGATED METAL PIPE</li> <li>CWP = CONCRETE POWER POLE</li> <li>DIP = DUCTILE IRON PIPE</li> <li>EHH = ELECTRIC HAND HOLE</li> <li>ELEC = ELECTRIC</li> <li>ELEV = ELEVATION</li> <li>EO = ELECTRICAL OUTLET</li> <li>ET = ELECTRICAL TRANSFORMER</li> <li>EX = EXISTING</li> <li>FDT = FLORIDA DEPARTMENT OF TRANSPORTATION</li> <li>FDC = FIRE DEPARTMENT CONNECTOR</li> <li>FH = FIRE HYDRANT</li> <li>FM = FORCE MAIN</li> <li>FOC = FIBER OPTIC CONDUIT</li> <li>GA = GUY ANCHOR</li> <li>GEN = GENERATOR</li> <li>HDP = HIGH DENSITY POLYETHYLENE PIPE</li> <li>ICV = IRRIGATION CONTROL VALVE</li> <li>INV = INVERT</li> </ul> | <ul style="list-style-type: none"> <li>LB = LICENSED BUSINESS</li> <li>LP = LIGHT POLE</li> <li>(M) = MEASURED DISTANCE</li> <li>NAD = NORTH AMERICAN DATUM</li> <li>NAV = NORTH AMERICAN VERTICAL DATUM</li> <li>ORB = OFFICIAL RECORDS BOOK</li> <li>OR = OVERHEAD UTILITY</li> <li>(PI) = PLAT DISTANCE</li> <li>PB = PLAT BOOK</li> <li>PG = PAGE</li> <li>P.O.B. = POINT OF BEGINNING</li> <li>P.O.C. = POINT OF COMMENCEMENT</li> <li>PVC = POLYVINYL CHLORIDE PIPE</li> <li>PRM = PERMANENT REFERENCE MONUMENT</li> <li>(R) = RECORD DISTANCE</li> <li>RCP = REINFORCED CONCRETE PIPE</li> <li>R/W = RIGHT OF WAY</li> <li>SR = STATE ROAD</li> <li>SWK = SIDEWALK</li> <li>TYP = TYPICAL</li> <li>WM = WATER METER</li> <li>WV = WATER VALVE</li> <li>WPP = WOOD POWER POLE</li> </ul> |
|--|---|--|

**LEGEND**

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|--|--|
| <ul style="list-style-type: none"> <li>--- BOUNDARY LINE</li> <li>--- PROPOSED STORM PIPE</li> <li>--- HEAVY-DUTY CONCRETE PAVEMENT</li> <li>--- STANDARD-DUTY CONCRETE PAVEMENT</li> <li>--- 6" THICK CONCRETE SIDEWALK</li> <li>--- STANDARD-DUTY ASPHALT</li> <li>--- CONSTRUCTION ENTRANCE</li> <li>--- ASPHALT APRON FOR CONSTRUCTION ENTRANCE</li> <li>--- CURB INLET SEDIMENT CONTROL</li> <li>--- SILT FENCE INLET PROTECTION</li> <li>--- FILTER SACKS</li> <li>--- SILT DIKE</li> <li>--- TEMPORARY CONSTRUCTION EXIT/ENTRANCE</li> <li>--- TEMPORARY SEDIMENT TRAP</li> <li>--- SWPP SIGN</li> <li>--- TEMPORARY SILT FENCE</li> <li>--- LIMITS OF DISTURBANCE</li> </ul> | <ul style="list-style-type: none"> <li>IP2</li> <li>IP6</li> <li>IP10</li> <li>SD</li> <li>CE</li> <li>ST</li> <li>SS</li> </ul> |
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**CONSTRUCTION SEQUENCE**

1. CONDUCT PRE-CONSTRUCTION MEETING WITH THE CITY TO DISCUSS EROSION AND SEDIMENT CONTROLS AND CONSTRUCTION PHASING.
  2. INSTALL STABILIZED CONSTRUCTION EXIT AND POST SWPPP AND SITE COMPLIANCE SIGNAGE PUBLICLY VISIBLE.
  3. INSTALL CONSTRUCTION FENCES AND TEMPORARY TRAFFIC AND PEDESTRIAN CONTROL DEVICES.
  4. PREPARE TEMPORARY PARKING AND STORAGE AREAS.
  5. INSTALL INLET PROTECTION, SILT DIKES, AND SILT FENCE ON THE SITE AS SHOWN WITHIN THE CONSTRUCTION LIMITS.
  6. DEMO EXISTING STRUCTURES, PAVEMENT, AND SPECIFIED UTILITIES.
  7. BEGIN GRADING THE SITE.
  8. BEGIN CONSTRUCTION OF UTILITIES.
  9. BEGIN SUBGRADE PREPARATION AND CONSTRUCTION OF STRUCTURES.
  10. BEGIN INSTALLATION OF CURB, GUTTER, AND PAVING.
  11. COMPLETE PERMANENT STABILIZATION ON AREAS WHERE CONSTRUCTION HAS COMPLETED.
  12. COMPLETE FINAL GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
  13. OBTAIN CONCURRENCE FROM THE OWNER AND THE CITY THAT THE SITE HAS BEEN FULLY STABILIZED.
  14. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
  15. STABILIZE ALL AREAS DISTURBED BY BMP REMOVAL.
- CONTRACTOR MAY COMPLETE CONSTRUCTION RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPs HAVE BEEN COMPLETELY INSTALLED.
- THE ACTUAL SCHEDULE FOR IMPLEMENTING POLLUTANT CONTROL MEASURES WILL BE DETERMINED BY THE PROJECT CONSTRUCTION PROGRESS AND RECORDED BY THE GENERAL CONTRACTOR ON THESE PLANS.

**BMP MAINTENANCE NOTES**

- ALL MEASURES STATED ON THESE PLANS SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF DETERIORATION.
  2. ALL SEEDED/SODDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED, WATERED AND REPAIRED AS NEEDED.
  3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT REACHES ONE-HALF THE HEIGHT OF THE FENCE.
  4. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF SEDIMENT FROM THE SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE EXIT AS CONDITIONS DEMAND.
  5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN A GOOD CONDITION. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE AREA AS CONDITIONS DEMAND.
  6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT LEAVING THE SITE SHALL BE CLEANED IMMEDIATELY.
  7. ALL INLETS AND STORM DRAINS SHALL BE KEPT CLEAN OF DEBRIS AND SEDIMENT. ANY DEBRIS AND/OR SEDIMENT THAT ENTERS ANY INLET OR STORM DRAIN SHALL BE CLEANED IMMEDIATELY. FLUSHING SHALL NOT BE USED TO CLEAN DEBRIS AND/OR SEDIMENT FROM STORM DRAINS.

**GENERAL EROSION CONTROL NOTES**

1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP AND THAT CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY PERMITTING AGENCY AND OWNER OR AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. PERMIT FOR ANY CONSTRUCTION ACTIVITY MUST BE MAINTAINED ON SITE AT ALL TIMES.
3. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
4. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
5. ALL WASH WATER SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
6. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
7. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
8. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
9. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
10. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
11. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE SODDED/LANDSCAPED PER PLANS. THESE AREA SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS, REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
12. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
13. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
14. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
15. ON-SITE AND OFFSITE SOIL, STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
16. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
17. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT EROSION AND SEDIMENTATION.
18. CONTRACTOR SHALL DESIGNATE IDENTIFY AREAS INSIDE THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
19. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL. SEQUENCING SHOWN ON THIS PLAN, NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
20. AN INSPECTOR, CERTIFIED BY THE STATE OF FLORIDA OR EXPERIENCED IN THE INSTALLATION AND MAINTENANCE OF EROSION CONTROLS, IS REQUIRED TO INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES AS SHOWN ON THE APPROVED STORMWATER POLLUTION PREVENTION PLAN. INSPECTION REPORTS ARE TO BE COMPLETED ON THE CITY OF SANFORD'S FORM ONCE EVERY WEEK AND AFTER EVERY RAINFALL EVENT OF 0.50" OR MORE DURING THE CONSTRUCTION PHASE. THESE REPORTS SHALL BE MADE AVAILABLE TO THE CITY AT ANY TIME AND COPIES OF ALL THE INSPECTIONS SHALL BE SUBMITTED TO THE CITY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF COMPLETION OR OCCUPANCY.



**EROSION CONTROL PLAN**  
**MARGATE HYBRID CONVENIENCE MARKET**  
 2000 STATE ROAD NO. 7  
 MARGATE, FL 33063  
 CITY OF MARGATE  
 BROWARD COUNTY, FL

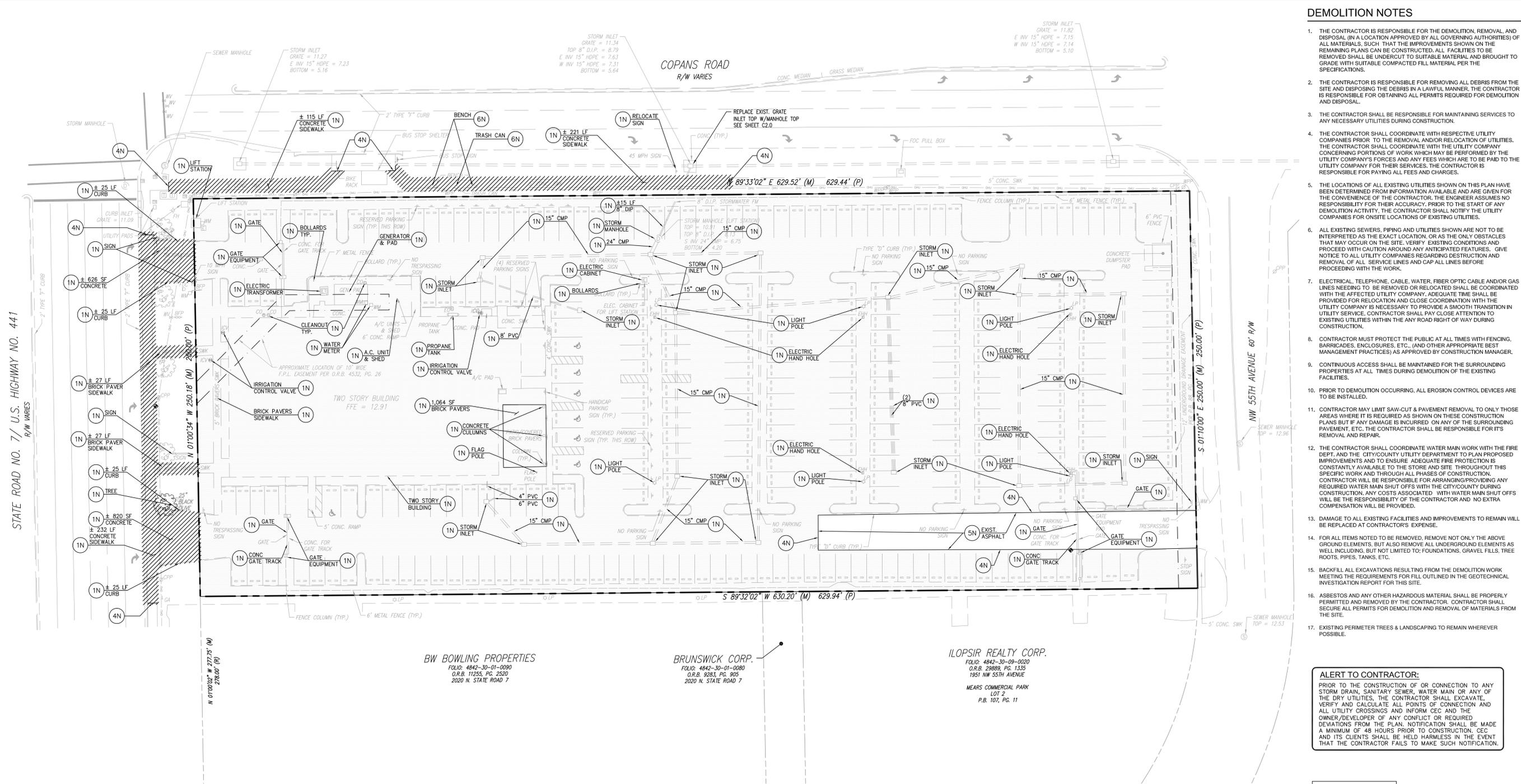


ANDREW J. PETERSEN  
LICENSE NO. 75493  
01/26/2016

PLAN STATUS		
DATE	DESCRIPTION	
SW DESIGN	EC DRAWN	AJP CHKD
SCALE: NONE		
JOB No. 010032-01-012		
DATE: January, 2016		
FILE: 010032-01-0-02-03-ESP		
SHEET		ES1.0



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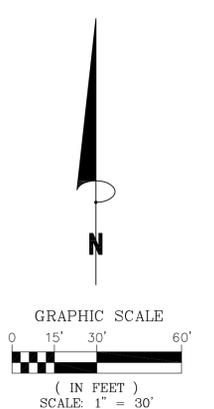
- ### DEMOLITION NOTES
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) OF ALL MATERIALS, SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
  - THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICES TO ANY NECESSARY UTILITIES DURING CONSTRUCTION.
  - THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
  - THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.
  - ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DEMOLITION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
  - ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
  - CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY CONSTRUCTION MANAGER.
  - CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
  - PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
  - CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
  - THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY/COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE STORE AND SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY/COUNTY DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
  - DAMAGE TO ALL EXISTING FACILITIES AND IMPROVEMENTS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
  - FOR ALL ITEMS NOTED TO BE REMOVED, REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALSO REMOVE ALL UNDERGROUND ELEMENTS AS WELL INCLUDING, BUT NOT LIMITED TO: FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, PIPES, TANKS, ETC.
  - BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK MEETING THE REQUIREMENTS FOR FILL OUTLINED IN THE GEOTECHNICAL INVESTIGATION REPORT FOR THIS SITE.
  - ASBESTOS AND ANY OTHER HAZARDOUS MATERIAL SHALL BE PROPERLY PERMITTED AND REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL SECURE ALL PERMITS FOR DEMOLITION AND REMOVAL OF MATERIALS FROM THE SITE.
  - EXISTING PERIMETER TREES & LANDSCAPING TO REMAIN WHEREVER POSSIBLE.

- ### LEGEND - EXISTING
- SIGN
  - TRAFFIC SIGNAL HAND HOLE
  - FIBER OPTIC PULL BOX
  - ELECTRICAL CABINET
  - POWER POLE
  - LIGHT POLE
  - WATER VALVE
  - WATER METER
  - FIRE HYDRANT
  - SANITARY MANHOLE
  - CLEAN OUT
  - IRRIGATION CONTROL VALVE
  - BOLLARD
  - TRAFFIC SIGNAL POLE
  - IRF - IRON ROD FOUND
  - IPF - IRON PIPE FOUND
  - MCN - MONUMENT
  - BENCHMARK
  - R/W - RIGHT OF WAY
  - WATER LINE
  - FENCE LINE
- ### LEGEND - PROPOSED
- PROPERTY LINE
  - ⊗ TREE REMOVAL - REFER TO LANDSCAPE PLANS
  - REMOVE ALL ASPHALT PAVEMENT, CONCRETE CURB, CONCRETE TIRE STOPS, CONCRETE SIDEWALKS AND PADS, FENCING AND SIGNS
  - REMOVAL
- ### NOTES
- 1N EXISTING TO BE REMOVED
  - 2N PROTECT EXISTING TREES TO REMAIN
  - 3N PROTECT EXISTING UTILITIES TO REMAIN
  - 4N SAWCUT LINE
  - 5N EXISTING TO REMAIN
  - 6N REMOVE AND RELOCATE

- ### LEGEND - EXISTING
- A/C = AIR CONDITIONING
  - BFP = BACKFLOW PREVENTER
  - CO = CLEAN OUT
  - CONC = CONCRETE
  - CBS = CONCRETE BLOCK STRUCTURE
  - ORB = OFFICIAL RECORDS BOOK
  - CMP = CORRUGATED METAL PIPE
  - OPP = CONCRETE POWER POLE
  - DIP = DUCTILE IRON PIPE
  - PB = PLAT BOOK
  - PG = PAGE
  - ELEC = ELECTRIC
  - ELEV = ELEVATION
  - EO = ELECTRICAL OUTLET
  - ET = ELECTRICAL TRANSFORMER
  - EX = EXISTING
  - FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
  - FDC = FIRE DEPARTMENT CONNECTOR
  - FH = FIRE HYDRANT
  - FM = FORCE MAIN
  - FOC = FIBER OPTIC CONDUIT
  - GA = GUY ANCHOR
  - GEN = GENERATOR
  - HDPE = HIGH DENSITY POLYETHYLENE PIPE
  - ICV = IRRIGATION CONTROL VALVE
  - INV = INVERT
- ### LEGEND - PROPOSED
- LB = LICENSED BUSINESS
  - LP = LIGHT POLE
  - (M) = MEASURED DISTANCE
  - NAD = NORTH AMERICAN DATUM
  - NAVD = NORTH AMERICAN VERTICAL DATUM
  - ORB = OFFICIAL RECORDS BOOK
  - OU = OVERHEAD UTILITY
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  - SWK = SIDEWALK
  - TYP = TYPICAL
  - WM = WATER METER
  - WV = WATER VALVE
  - WPP = WOOD POWER POLE
- ### NOTES
- REFER TO TREE SURVEY FOR TREE REMOVAL / PROTECTION

**ALERT TO CONTRACTOR:**  
 PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM CEC AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. CEC AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

**DISTURBED AREA**  
 41,103 SF  
 (0.94 AC)



PLAN STATUS		
DATE	DESCRIPTION	BY
SW	DESIGN	EC
EC	DRAWN	AJP
AJP	CHKD	
SCALE 1" = 30'		
JOB No. 010032-01-012		
DATE January, 2016		
FILE 010032-01-0-CP-012-04-DMO		
SHEET <b>DM1.0</b>		

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STATE ROAD NO. 7 / U.S. HIGHWAY NO. 441  
R/W VARIES

COPANS ROAD  
R/W VARIES

NW 55TH AVENUE 60' R/W

**SITE DATA**

SITE ADDRESS: 2000 N. STATE ROAD 7, MARGATE, FL 33063  
 PARCEL ID: 4842-30-05-0010

TOTAL SITE AREA: 3.61 AC (TENANT 1.94 AC, FUTURE 1.67 AC)  
 EXISTING USE: COMMERCIAL  
 ZONING: TOC-G (TRANSIT ORIENTED CORRIDOR - GATEWAY)  
 PROPOSED BUILDING AREA: 5,943 SF  
 \*FIRST LAYER EXTENDS TO CANOPY FACADE

**SURROUNDING LAND USE:**

DIRECTION	ZONED	EXISTING LAND USE
NORTH	TOC - C	COMMERCIAL RETAIL
SOUTH	TOC - C	BOWLING ALLEY
EAST	M1	COMMERCIAL
WEST	TOC - C	GAS STATION

**LANDSCAPE BUFFER:**

DIRECTION	REQUIRED	PROPOSED
NORTH	10'	10'
SOUTH	5'	9'
EAST	10'	14'
WEST	10'	10'

**BUILDING SETBACKS:**

DIRECTION	REQUIRED*	PROPOSED
NORTH	20'	138.49'
SOUTH	33'	39'
EAST	15'	156.91'
WEST	25'	72.99'

\* MEASURED FROM EDGE OF PAVEMENT  
 † 5' SIGN SETBACK

**LAND COVERAGE SUMMARY:**

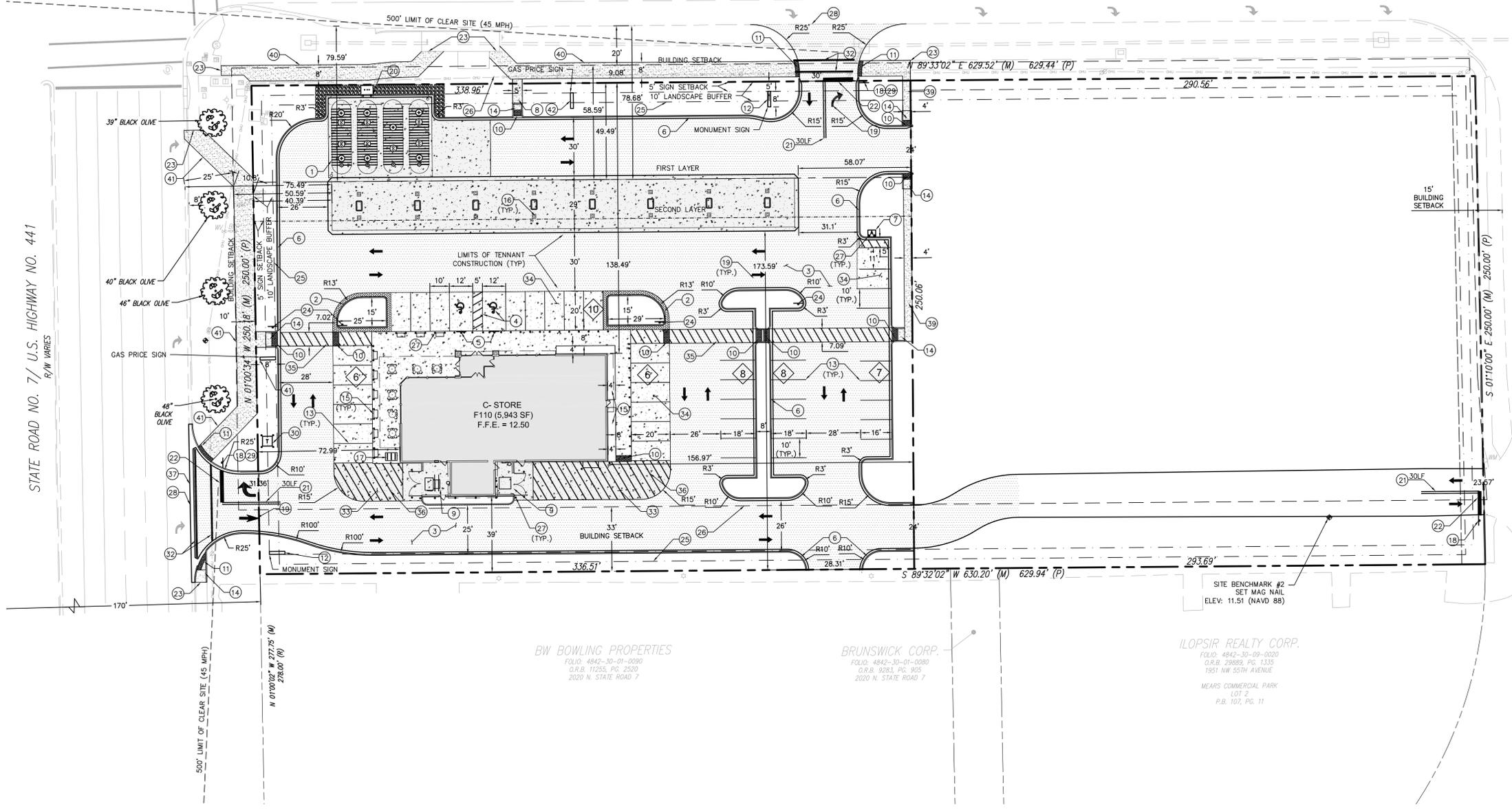
CONVENIENCE STORE	PERVIOUS AREA	IMPERVIOUS AREA	TOTAL
	14,057 SF (0.32 AC)	16.8%	
	70,415 SF (1.62 AC)	83.4%	
	84,472 SF (1.94 AC)	100%	

**PARKING REQUIREMENTS:**

REQUIRED	PROVIDED
C-STORE 30 SPACES 1 SPACE / 200 SF	C-STORE 47 SPACES 1 SPACES / 127 SF

**LAYER 1:** \_\_\_\_\_  
 TOTAL AREA: 26,935 SF (100%)  
 REQUIRED OPEN SPACE: 3,959.25 (15%)  
 PROVIDED OPEN SPACE: 14,000.8 SF (52%)

**LAYER 2:** - - - - -  
 TOTAL AREA: 6,767.41 SF (100%)



**BW BOWLING PROPERTIES**  
 FOLIO: 4842-30-01-0090  
 O.R.B. 11255, PG. 2520  
 2020 N. STATE ROAD 7

**BRUNSWICK CORP.**  
 FOLIO: 4842-30-01-0090  
 O.R.B. 9283, PG. 905  
 2020 N. STATE ROAD 7

**ILOPSIR REALTY CORP.**  
 FOLIO: 4842-30-09-0020  
 O.R.B. 29889, PG. 1335  
 1951 NW 55TH AVENUE  
 MEARS COMMERCIAL PARK  
 LOT 2  
 P.B. 107, PG. 11

**LEGEND - EXISTING**

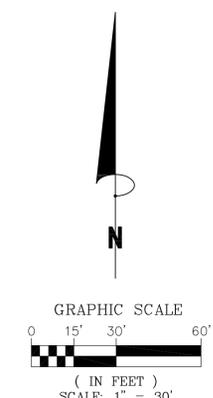
- 4 SIGN
  - TRAFFIC SIGNAL HAND HOLE
  - FIBER OPTIC PULL BOX
  - ELECTRICAL CABINET
  - POWER POLE
  - LIGHT POLE
  - WATER VALVE
  - WATER METER
  - FIRE HYDRANT
  - SANITARY MANHOLE
  - CLEAN OUT
  - IRRIGATION CONTROL VALVE
  - BOLLARD
  - TRAFFIC SIGNAL POLE
  - IRON ROD FOUND
  - IRON PIPE FOUND
  - MONUMENT
  - BENCHMARK
  - R/W RIGHT OF WAY
  - WATER LINE
  - FENCE LINE
- A/C = AIR CONDITIONING
  - BFP = BACKFLOW PREVENTER
  - CO = CLEAN OUT
  - CONC = CONCRETE
  - CBS = CONCRETE BLOCK STRUCTURE
  - CM = CONCRETE MONUMENT
  - CMP = CORRUGATED METAL PIPE
  - CWP = CONCRETE POWER POLE
  - DIP = DUCTILE IRON PIPE
  - EHH = ELECTRIC HAND HOLE
  - ELEC = ELECTRIC
  - ELEV = ELEVATION
  - EO = ELECTRICAL OUTLET
  - ET = ELECTRICAL TRANSFORMER
  - EX = EXISTING
  - FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
  - FDC = FIRE DEPARTMENT CONNECTOR
  - FH = FIRE HYDRANT
  - FM = FORCE MAIN
  - FOC = FIBER OPTIC CONDUIT
  - GA = GUY ANCHOR
  - GEN = GENERATOR
  - HDPE = HIGH DENSITY POLYETHYLENE PIPE
  - ICV = IRRIGATION CONTROL VALVE
  - INV = INVERT
- LB = LICENSED BUSINESS
  - LP = LIGHT POLE
  - (M) = MEASURED DISTANCE
  - NAD = NORTH AMERICAN DATUM
  - NAVD = NORTH AMERICAN VERTICAL DATUM
  - ORB = OFFICIAL RECORDS BOOK
  - OU = OVERHEAD UTILITY
  - (P) = PLAT DISTANCE
  - PB = PLAT BOOK
  - PG = PAGE
  - P.O.B. = POINT OF BEGINNING
  - P.O.C. = POINT OF COMMENCEMENT
  - PVC = POLYVINYL CHLORIDE PIPE
  - PRM = PERMANENT REFERENCE MONUMENT
  - (R) = RECORD DISTANCE
  - RCP = REINFORCED CONCRETE PIPE
  - R/W = RIGHT OF WAY
  - SR = STATE ROAD
  - SWK = SIDEWALK
  - TYP = TYPICAL
  - WM = WATER METER
  - WV = WATER VALVE
  - WPP = WOOD POWER POLE

**PAVEMENT LEGEND**

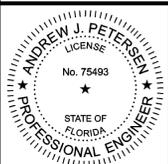
- PROPOSED STANDARD DUTY CONCRETE PAVEMENT
- PROPOSED HEAVY DUTY CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STAMPED CONCRETE

**SITE LEGEND**

1. UNDERGROUND FUEL TANKS BY TENANT
2. CORNER/PARKING ISLAND, SEE DETAIL SHEET D2.0
3. ASPHALT PAVING, SEE DETAIL SHEET D1.0
4. ACCESSIBLE STRIPING, SEE DETAIL SHEET D1.0
5. ACCESSIBLE PARKING SIGN, SEE DETAIL SHEET D1.0
6. TYPE "F" CURB, SEE DETAIL SHEET D2.0
7. AIR PUMP ON 4"x4" CONCRETE PAD W/ 2 BOLLARDS, SEE DETAIL SHEET D1.0
8. 5' CONCRETE SIDEWALK, SEE DETAIL SHEET D1.0
9. DUMPSTER ENCLOSURE, PER ARCHITECTURAL PLANS
10. TRUNCATED DOMES TO BE OVERLAY PAD, 3" DEEP
11. DETECTABLE WARNING PER FDOT INDEX NO. 304
12. SIGN TO BE PERMITTED UNDER SEPARATE COVER
13. 4" SINGLE YELLOW STRIPE LINE (SYSL4\*)
14. CONCRETE RAMP PER A.D.A. REQUIREMENTS AND FDOT INDEX NO. 304
15. LANDSCAPE PLANTER, SEE DETAIL SHEET D2.0
16. "3+1" GAS DISPENSER (MPD) BY TENANT
17. BIKE RACK, SEE DETAIL SHEET D1.0
18. 36" STOP SIGN (R1-1) PER FDOT INDEX NO. 11960
19. PAVEMENT MARKINGS, PER FDOT INDEX NO. 17346
20. VENT STACK ON 5' X 8' CONCRETE PAD W/ 2 BOLLARDS, BY TENANT
21. 6" DOUBLE YELLOW STRIPE LINE (DYSL6\*), SEE LENGTH INDICATED AT SYMBOL
22. 24" WIDE WHITE STOP BAR, PER FDOT INDEX NO. 17346
23. MATCH EXISTING CONCRETE SIDEWALK
24. PEDESTRIAN CROSSING SIGN (WW11-2) PER FDOT INDEX NO. 17346
25. LANDSCAPE BUFFER
26. BUILDING SETBACK
27. PIPE BOLLARD, SEE DETAIL SHEET D1.0
28. SAW-CUT AND CONSTRUCT SMOOTH TRANSITION TO MATCH EXISTING CURB/PAVEMENT
29. RIGHT TURN ONLY SIGN (RS-SR) PER FDOT INDEX NO. 17346
30. TRANSFORMER PAD WITH (4) BOLLARDS, CONTRACTOR TO CONFIRM REQUIREMENTS AND COORDINATE ELECTRIC SERVICE WITH POWER COMPANY
31. NOT USED
32. CROSSWALK STRIPING PER FDOT INDEX NO. 17346
33. HEAVY DUTY CONCRETE PAVEMENT, SEE DETAIL SHEET D1.0
34. STANDARD DUTY CONCRETE PAVEMENT, SEE DETAIL SHEET D1.0
35. CROSS WALK STRIPING, SYSL6\* SPACED AT 3.5' O.C. @ 60' BOUND BY DYSL6\*
36. LOADING ZONE STRIPING, SYSL4\* SPACED AT 2' O.C. @ 45' BOUND BY SYSL4\*
37. DROP CURB, PER FDOT INDEX NO. 300
38. LIGHT POLE, SEE DETAIL SHEET D1.0
39. 4" CONCRETE SIDEWALK, SEE DETAIL SHEET D1.0
40. 8" CONCRETE SIDEWALK, SEE DETAIL SHEET D1.0
41. 10" CONCRETE SIDEWALK, SEE DETAIL SHEET D1.0
42. 1.5' X 8' GAS PRICE SIGN



**SITE PLAN**  
**MARGATE HYBRID CONVENIENCE MARKET**  
 2000 STATE ROAD NO. 7  
 MARGATE, FL 33063  
 CITY OF MARGATE  
 BROWARD COUNTY, FL



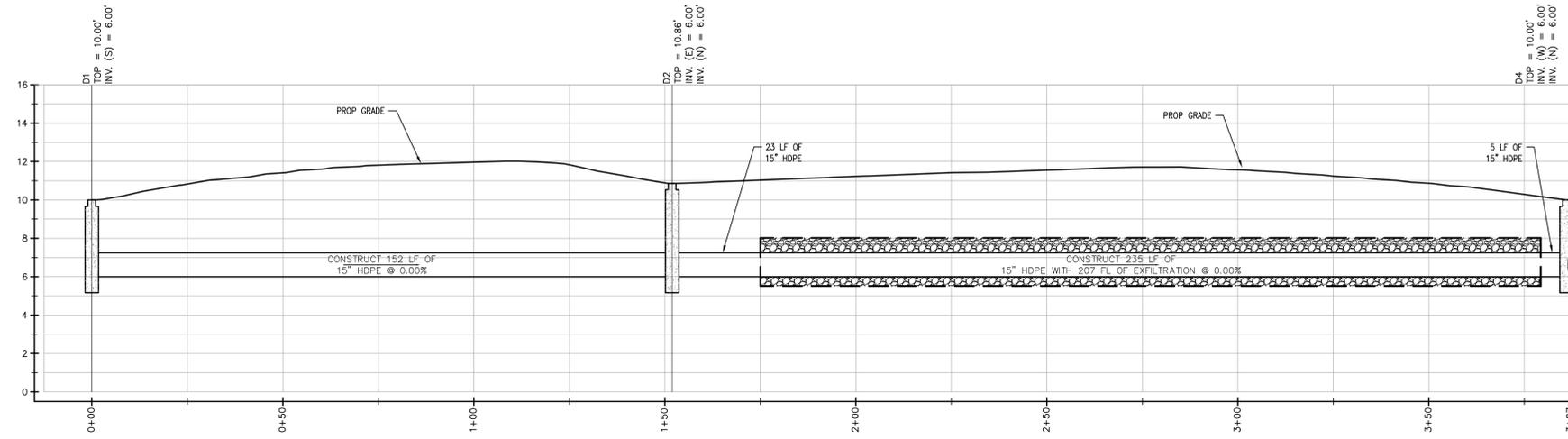
ANDREW J. PETERSEN  
 LICENSE NO. 75493  
 01/26/2016

PLAN STATUS		
DATE	DESCRIPTION	
	SW	AJP
	DESIGN	CHKD
	EC	
	DRAWN	
	SCALE	1" = 30'
	JOB No.	010032-01-012
	DATE	January, 2016
	FILE	010032-01-0-02-05-SIT
	SHEET	C1.0

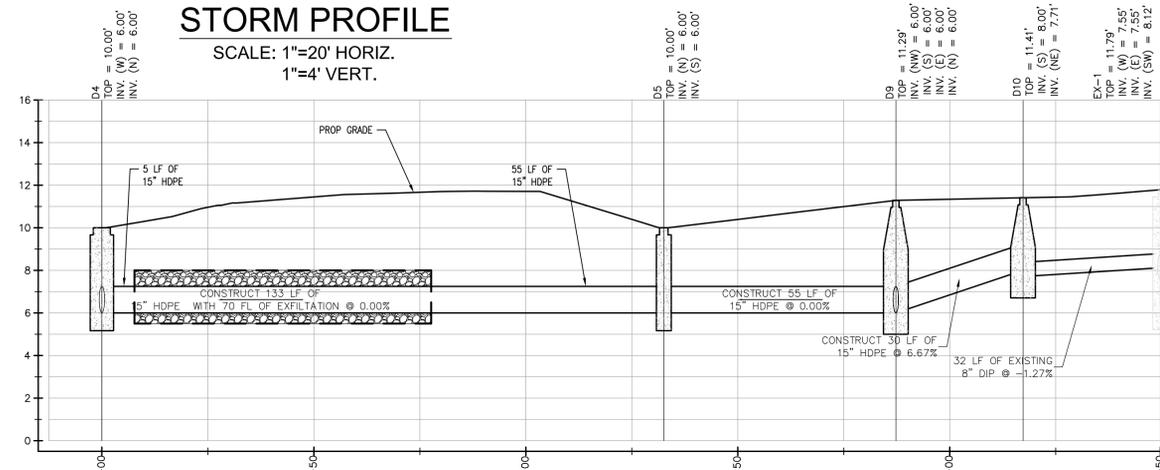




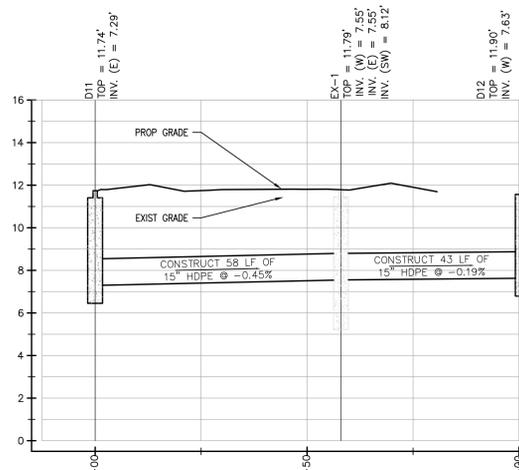
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.



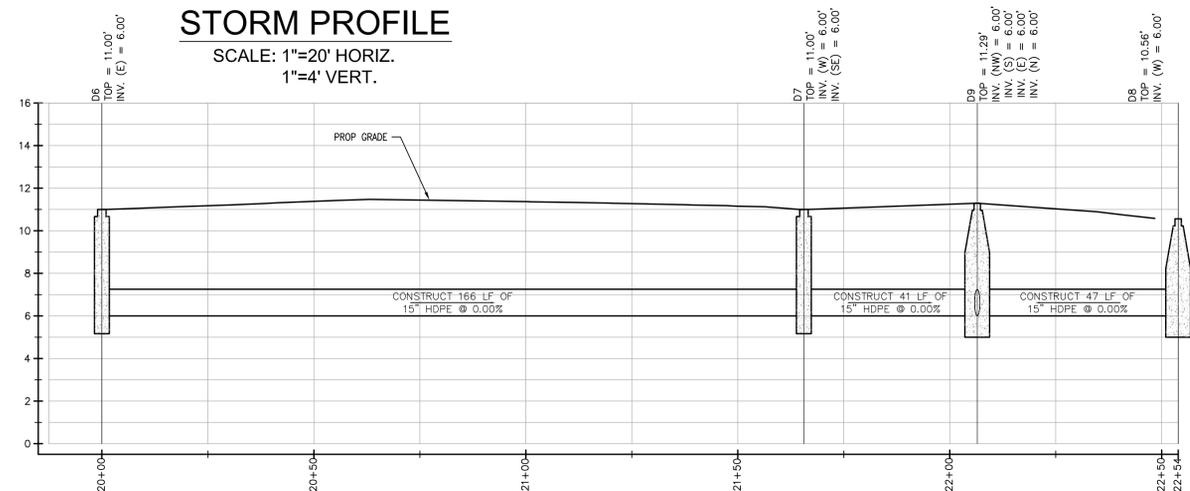
**STORM PROFILE**  
SCALE: 1"=20' HORIZ.  
1"=4' VERT.



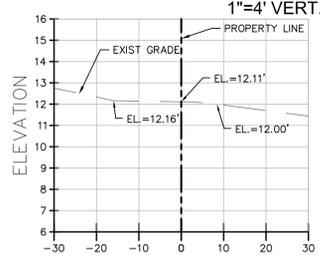
**STORM PROFILE**  
SCALE: 1"=20' HORIZ.  
1"=4' VERT.



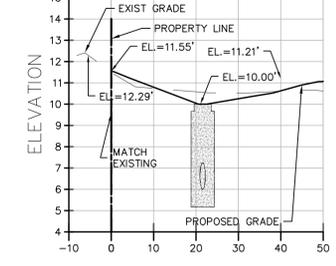
**STORM PROFILE**  
SCALE: 1"=20' HORIZ.  
1"=4' VERT.



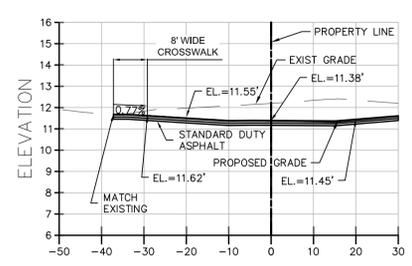
**STORM PROFILE**  
SCALE: 1"=20' HORIZ.  
1"=4' VERT.



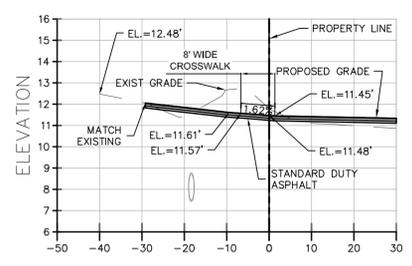
**SECTION A - A**  
SCALE: 1"=20' HORIZ.  
1"=2' VERT.



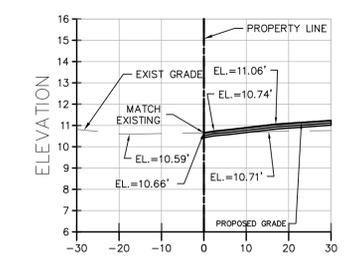
**SECTION B - B**  
SCALE: 1"=20' HORIZ.  
1"=2' VERT.



**SECTION C - C**  
SCALE: 1"=20' HORIZ.  
1"=2' VERT.



**SECTION D - D**  
SCALE: 1"=20' HORIZ.  
1"=2' VERT.



**SECTION E - E**  
SCALE: 1"=20' HORIZ.  
1"=2' VERT.

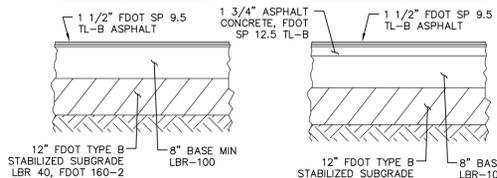
DATE	DESCRIPTION
SW	EC
DESIGN	DRAWN
SCALE	AS SHOWN

JOB No.	010032-01-012
DATE	January, 2016
FILE	010032-01-0-02-02-08-PROF

# PAVEMENT DETAILS

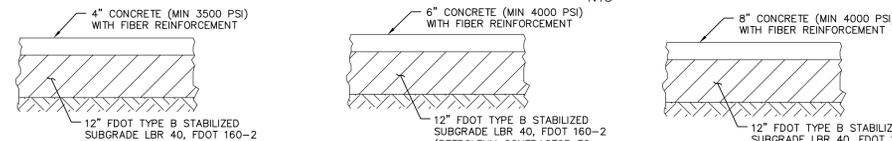
STANDARD DUTY ASPHALT PAVEMENT OPTIONS: SELECT ONE. TO BE DETERMINED BY SITE GEOTECHNICAL ENGINEER

- FOR SANDY AND GRAVEL SUB-GRADES CAPABLE OF ACHIEVING A LBR OF 10 OR GREATER (SN OF 2.60)
- FOR CLAY AND SILTY SUB-GRADES CAPABLE OF ACHIEVING A LBR VALUE OF 6 TO 10 (SN OF 3.04)
- FOR SUB-GRADES CAPABLE OF ACHIEVING A LBR OF LESS THAN 6 (SN OF 3.30)



NOTE: TO BE CONSTRUCTED PER FDOT SPECIFICATIONS (SECTIONS 330, 351, 200, & 160), GEOTECHNICAL ENGINEERING REPORT AND SPECIFICATIONS

STANDARD DUTY ASPHALT PAVEMENT TYPICAL CROSS SECTION



NOTE: TO BE CONSTRUCTED PER FDOT SPECIFICATIONS (SECTIONS 350) AND GEOTECHNICAL ENGINEERING REPORT

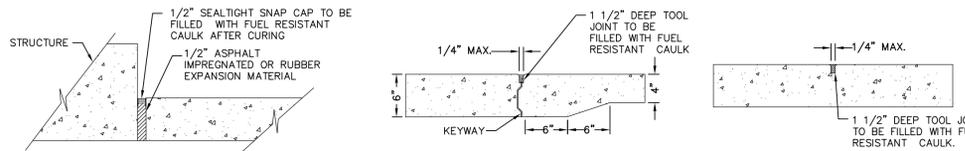
CONCRETE SIDEWALK TYPICAL CROSS SECTION

NOTE: TO BE CONSTRUCTED PER FDOT SPECIFICATIONS (SECTIONS 350) AND GEOTECHNICAL ENGINEERING REPORT

STANDARD DUTY CONCRETE PAVEMENT TYPICAL CROSS SECTION

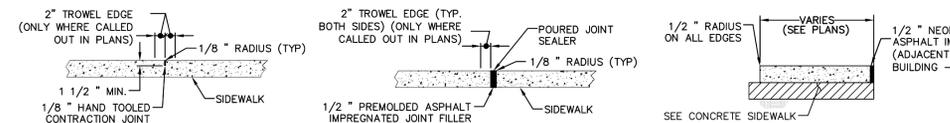
NOTE: TO BE CONSTRUCTED PER FDOT SPECIFICATIONS (SECTIONS 350) AND GEOTECHNICAL ENGINEERING REPORT

HEAVY DUTY CONCRETE PAVEMENT TYPICAL CROSS SECTION



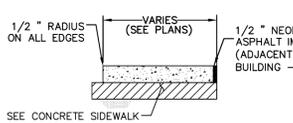
NOTE: SEE ARCHITECT SPECIFICATIONS FOR COMPLETE CONCRETE DETAILS.

CONCRETE JOINT DETAILS



NOTE: EXPANSION JOINTS TO BE SPACED AT A MAX. OF 30'.

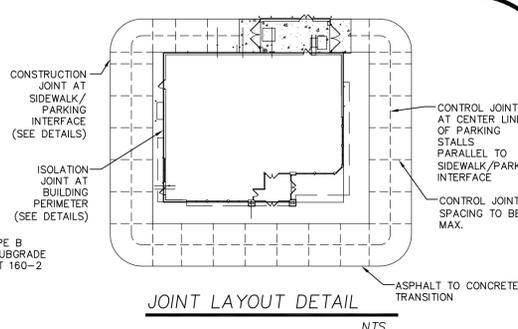
SIDEWALK DETAILS



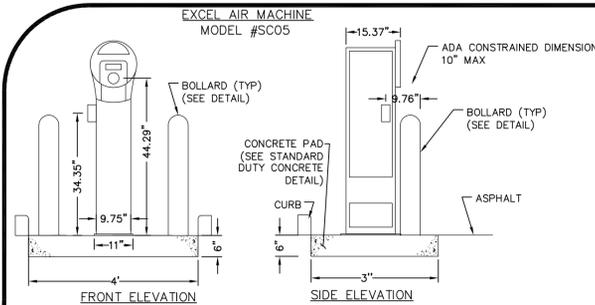
NOTE: TO BE CONSTRUCTED PER FDOT INDEX 310 & FDOT SPECIFICATIONS (SECTION 350)

SIDEWALK

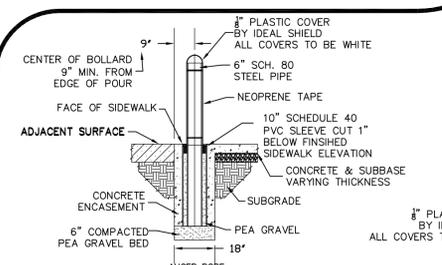
# GENERAL DETAILS



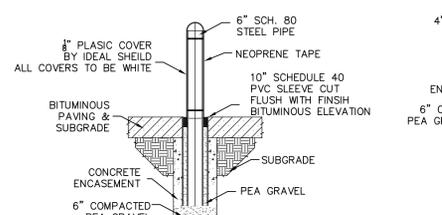
JOINT LAYOUT DETAIL



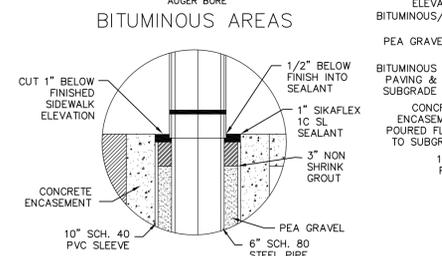
AIR PUMP STAND



CONCRETE AREAS

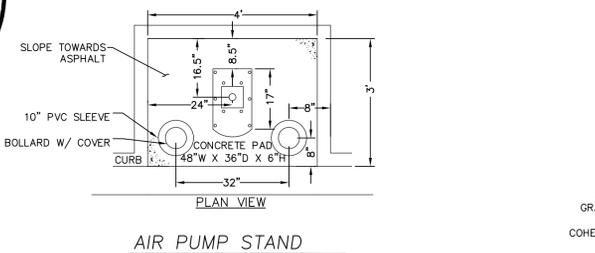


LANDSCAPED AREAS

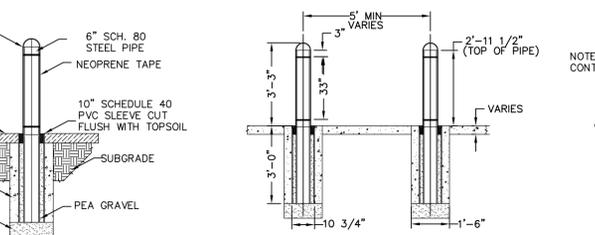


BITUMINOUS AREAS

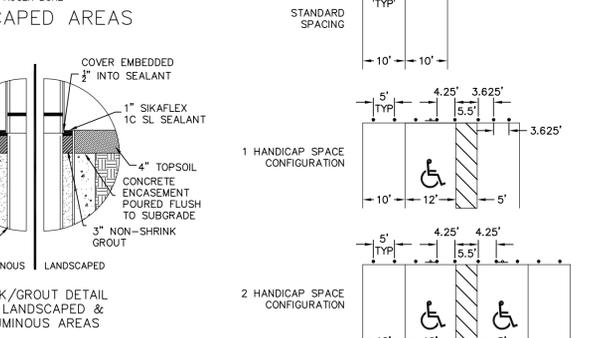
GENERAL DETAILS AND CAULK/GROUT DETAIL FOR CONCRETE AREAS



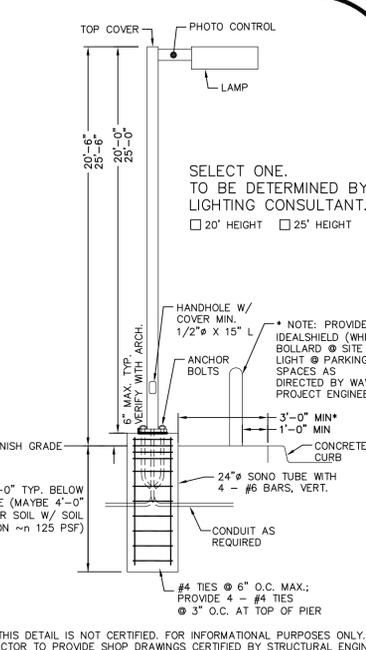
PLAN VIEW



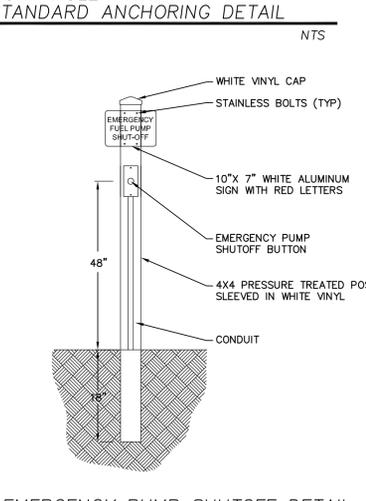
BOLLARD DETAIL



STANDARD BICYCLE RACK DETAIL



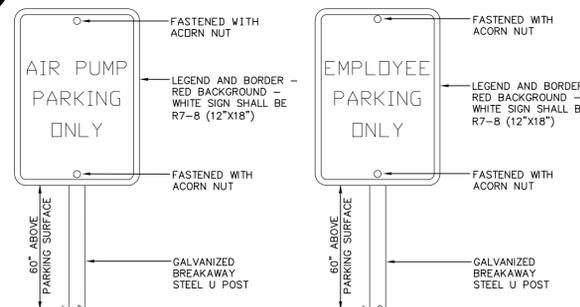
LIGHT POLE WITH STANDARD ANCHORING DETAIL



EMERGENCY PUMP SHUTOFF DETAIL

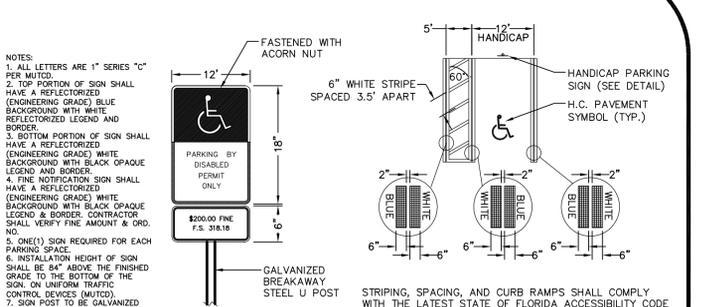
# SIGNAGE/STRIPING DETAILS

REV. OCTOBER 16, 2012



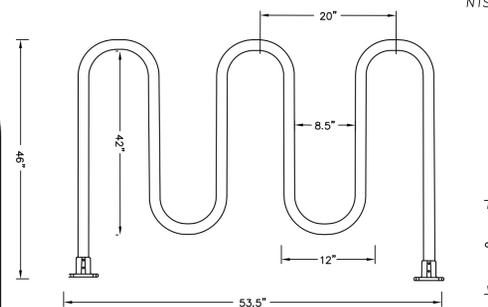
NOTE: SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

AIR PARKING SIGN

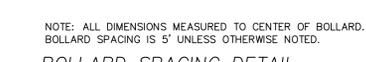


NOTE: ALL SIGNS TO USE ACORN BOLTS.

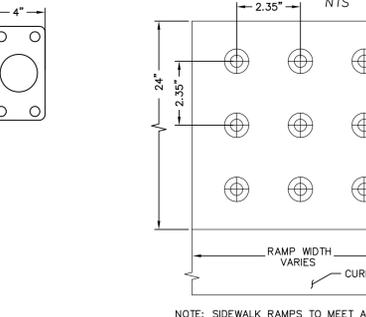
HANDICAP PARKING SIGN



STANDARD BICYCLE RACK DETAIL



BOLLARD SPACING DETAIL



ADA DETECTABLE CURB WARNING DETAIL

**Bowman**  
CORPORATION

**VELMEIR**  
COMPANIES

STANDARD SITE DETAILS  
MARGATE HYBRID CONVENIENCE MARKET  
2000 STATE ROAD NO. 7  
MARGATE, FL 33063  
CITY OF MARGATE  
BROWARD COUNTY, FL

ANDREW J. PETERSEN  
LICENSE  
No. 75493  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

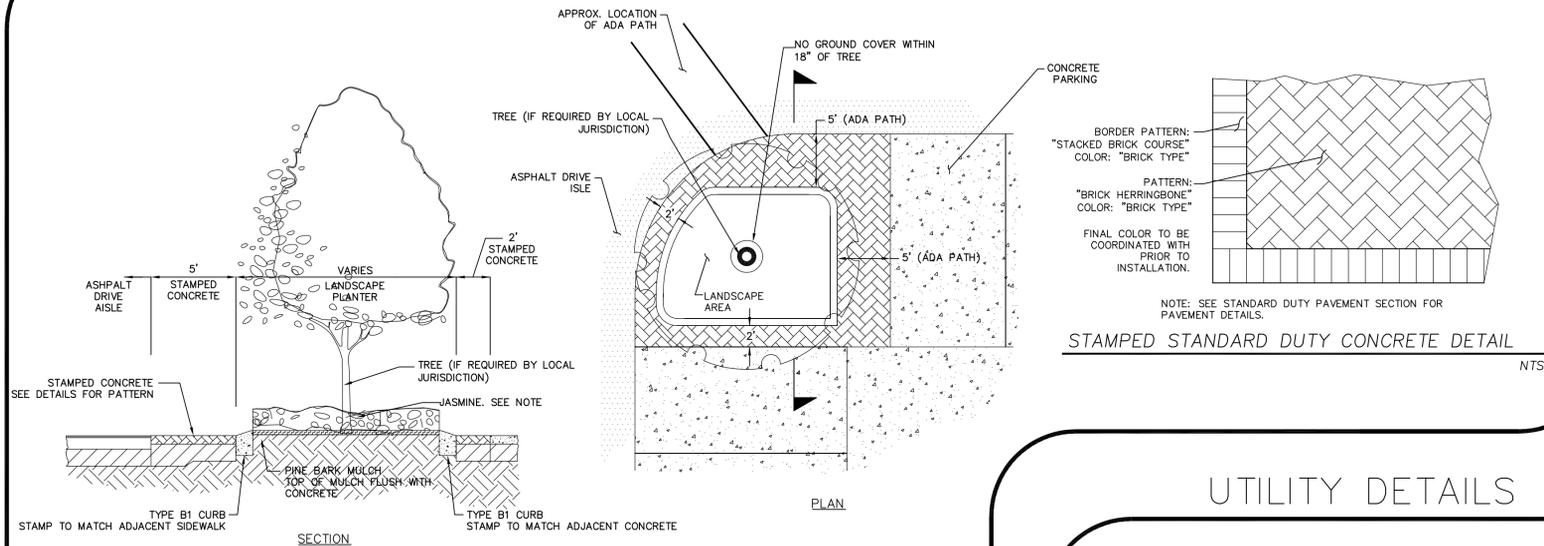
ANDREW J. PETERSEN  
LICENSE No. 75493  
09/15/2015  
PLAN STATUS

DATE	DESCRIPTION
SW	DESIGN
EC	DRAWN
AJP	CHKD
SCALE	AS SHOWN
JOB No.	010032-01-012
DATE	August, 2015
FILE	010032-01-01-CP-012-10-MWD

SHEET **D1.0**

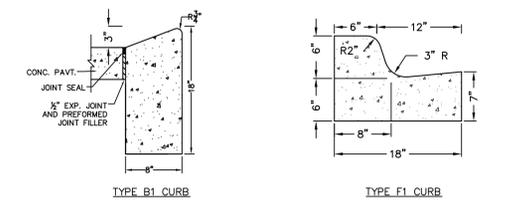
# GENERAL DETAILS

REV. FEBRUARY 7, 2014



# CURB DETAILS

REV. FEBRUARY 7, 2014

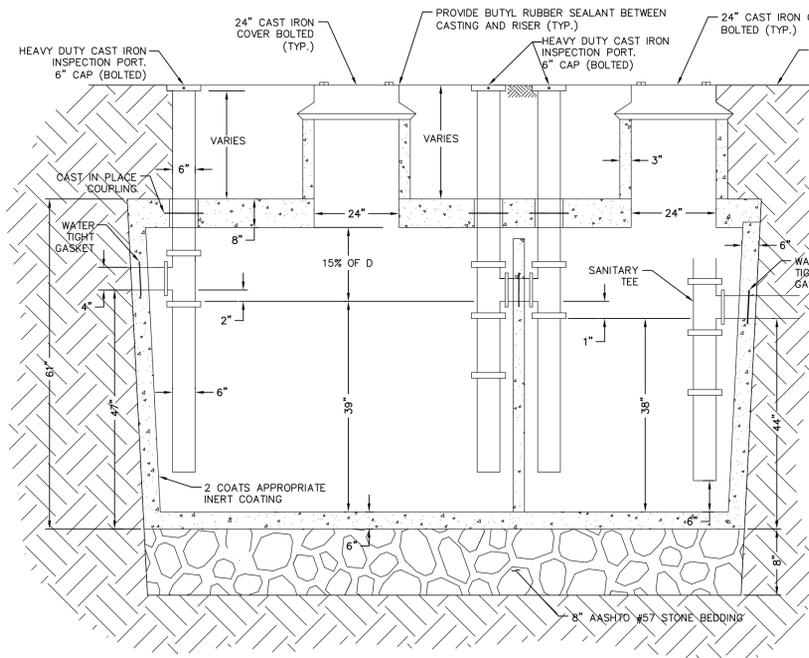


CURB DETAILS

NTS

# UTILITY DETAILS

REV. DECEMBER 26, 2012



ALL INLET AND OUTLET PIPES SHALL BE INSTALLED NO MORE THAN 6" FROM THE BOTTOM OF THE GREASE TRAP. TANK TAPERS TOP TO BOTTOM AND IS TRAPEZOIDAL IN CROSS SECTION. TANK IS 5000 PSI CONCRETE-STEEL REINFORCED (28 DAYS) CONCRETE CONFORMS TO ACI 318-16-4.5.1 AND 318-16-4.5.2, ASTM A615 AND A185

-DIMENSION: 10'7" INTERIOR/ 11'7" EXTERIOR LENGTH x 5'2" INTERIOR/ 6'2" EXTERIOR WIDTH

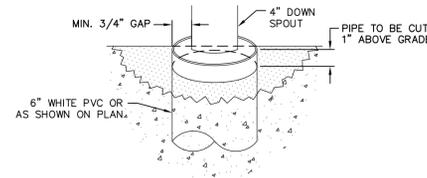
NOTES:

- 1) WHEN LOCATED IN DRIVEWAYS OR PAVED AREAS, GREASE TRAP TO BE DESIGNED FOR APPROPRIATE LOAD BEARING CONDITIONS. GREASE TRAP SHALL BE CAPABLE OF WITHSTANDING HS-20 LOADING.
- 2) ALL PIPE PENETRATIONS SHALL BE WATERTIGHT.
- 3) GREASE TRAP SHALL BE PROVIDED WITH GAS-TIGHT MANHOLE COVERS, IN ACCORDANCE WITH TOWNSHIP STANDARD SPECIFICATIONS.
- 4) PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH 5000 PSI.
- 5) EXTERIOR CONCRETE SURFACES BELOW GRADE SHALL HAVE 2 COATS OF COAL TAR EPOXY.
- 6) SPECIFIC SEALANT DETAIL AT CONCRETE RISER TO CONCRETE VAULT INTERFACE SHALL BE WATERTIGHT. AT A MINIMUM, THE JOINT SHALL BE SEALED WITH BUTYL RUBBER SEALANT (KENT SEAL #2 OR APPROVED EQUIVALENT) AND THE EXTERIOR OF THE JOINT SHALL BE SEALED WITH NON-SHRINK GROUT IN CONFORMANCE WITH THE TOWNSHIP STANDARD GREASE TRAP DETAIL.
- 7) TANK SHALL BE TESTED FOR WATER TIGHTNESS BY FILLING FOR 24 HRS. TO SOAK, THEN TOPPED OFF, AND THEN WATCHED FOR 24 HRS. NO DROP IN WATER IS ALLOWED.
- 8) CAST IRON SHALL BE BOLTED TO CONCRETE WITH MASTIC TAPE (KENT SEAL OR APPROVED EQUIVALENT) SEALANT.
- 9) MAXIMUM EARTH COVER=5.0'; HS-20 LOADING.
- 10) INLET AND OUTLET EQUIPPED WITH PIPE SEALS.

NOTE: 1250 GALLON (2 COMPARTMENT) TANK

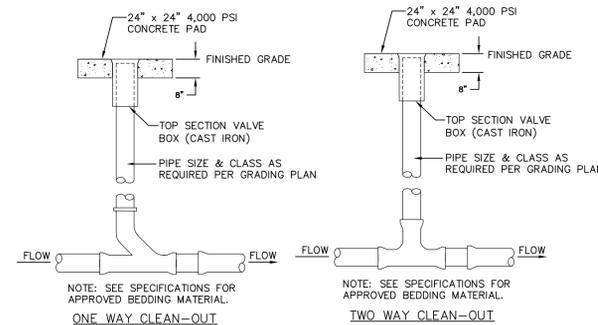
GREASE TRAP DETAIL

NTS



ROOF DRAIN CONNECTION DETAIL

NTS



CLEAN OUT DETAIL

NTS

# CORNER ISLAND LANDSCAPE DETAIL

NTS

- JASMINE
1. TO BE FULL PLANT, FLORIDA NO.1 GRADE OR BETTER, 1 GALLON CONTAINERS
  2. PLANT 9" ON CENTER SPACING, 6" MINIMUM LENGTH RUNNERS

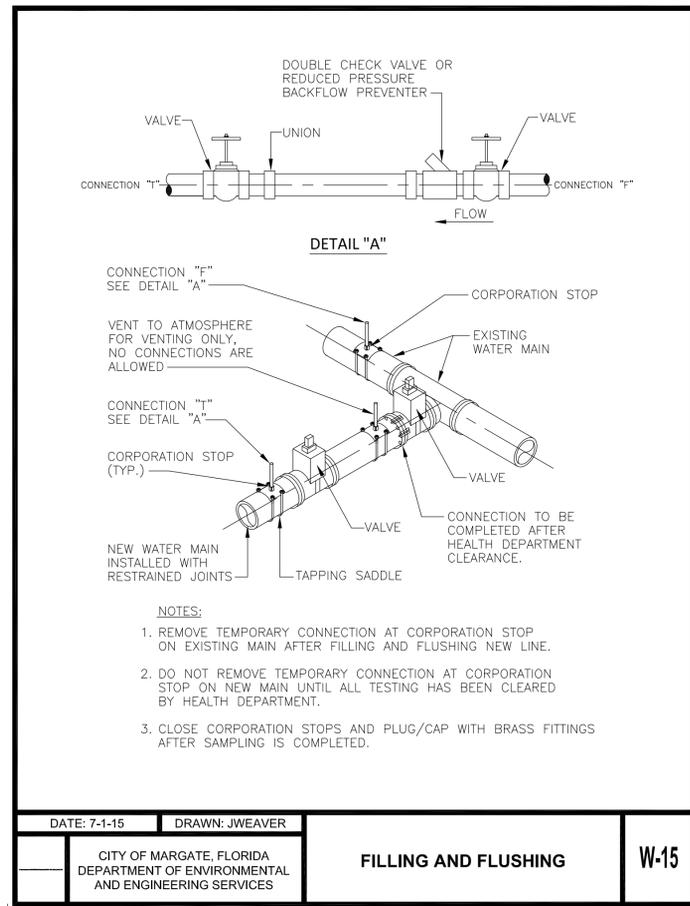
# PARKING ISLAND LANDSCAPE DETAIL

NTS

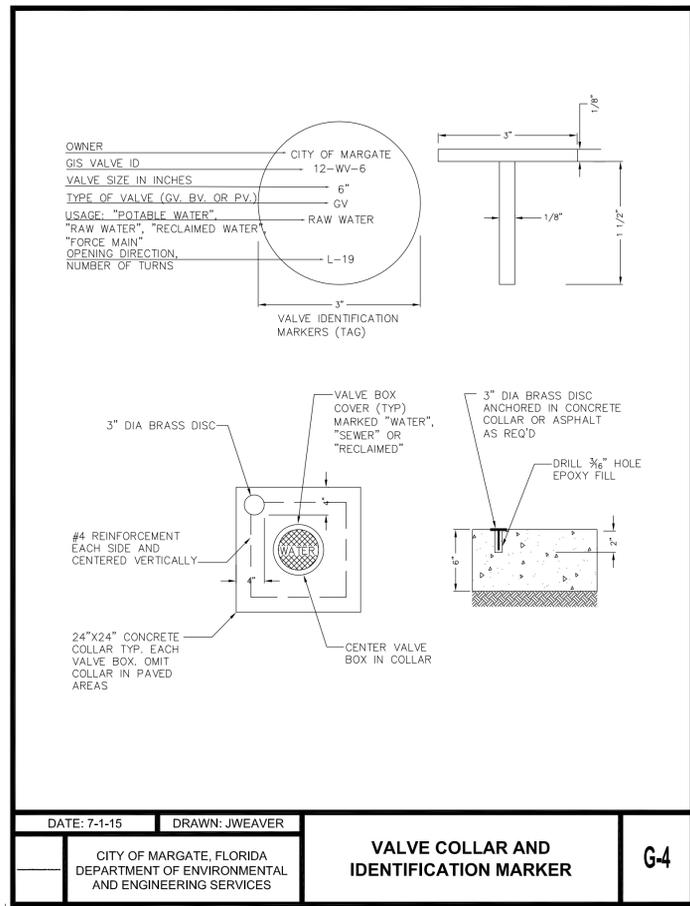
- JASMINE
1. TO BE FULL PLANT, FLORIDA NO.1 GRADE OR BETTER, 1 GALLON CONTAINERS
  2. PLANT 9" ON CENTER SPACING, 6" MINIMUM LENGTH RUNNERS.

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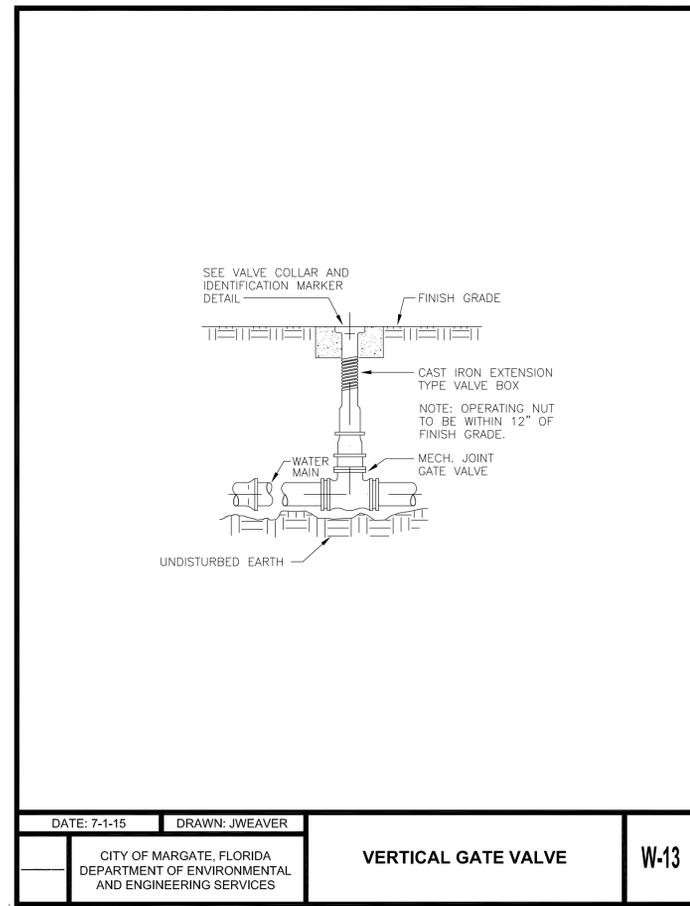
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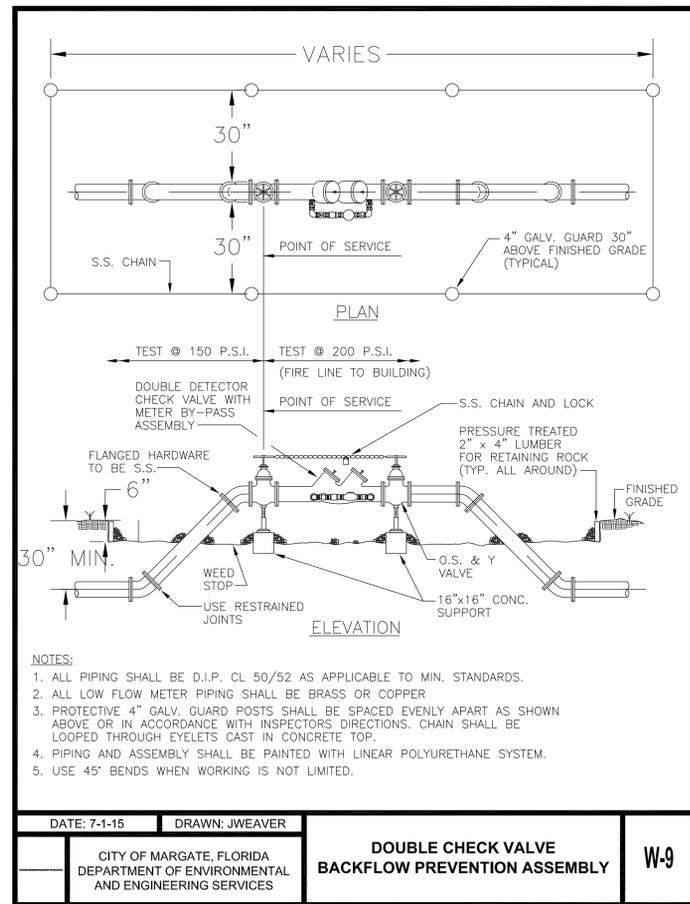
DATE: 7-1-15	DRAWN: JWEAVER	<b>FILLING AND FLUSHING</b>	<b>W-15</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



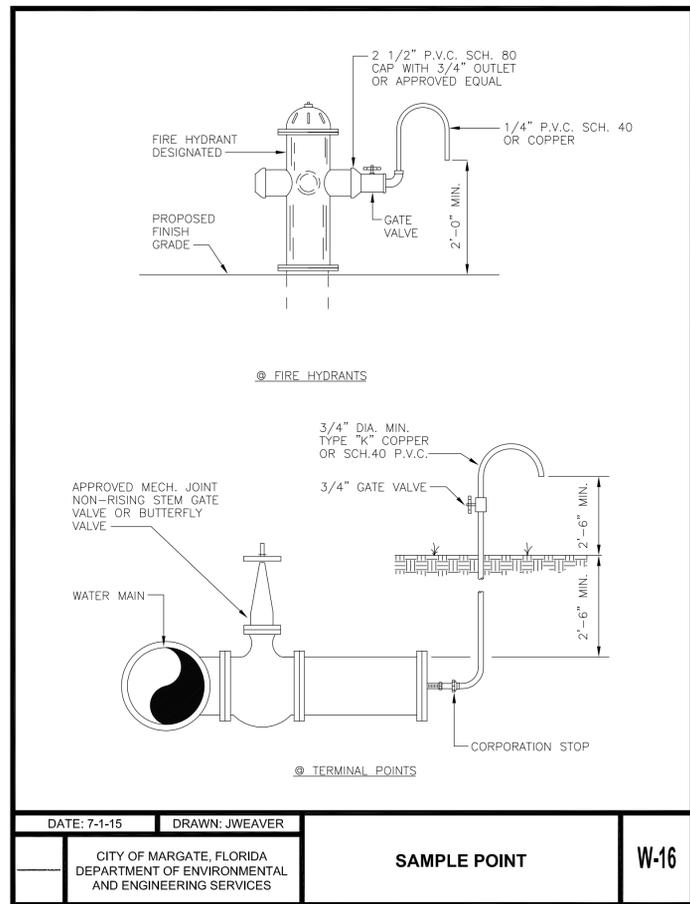
DATE: 7-1-15	DRAWN: JWEAVER	<b>VALVE COLLAR AND IDENTIFICATION MARKER</b>	<b>G-4</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



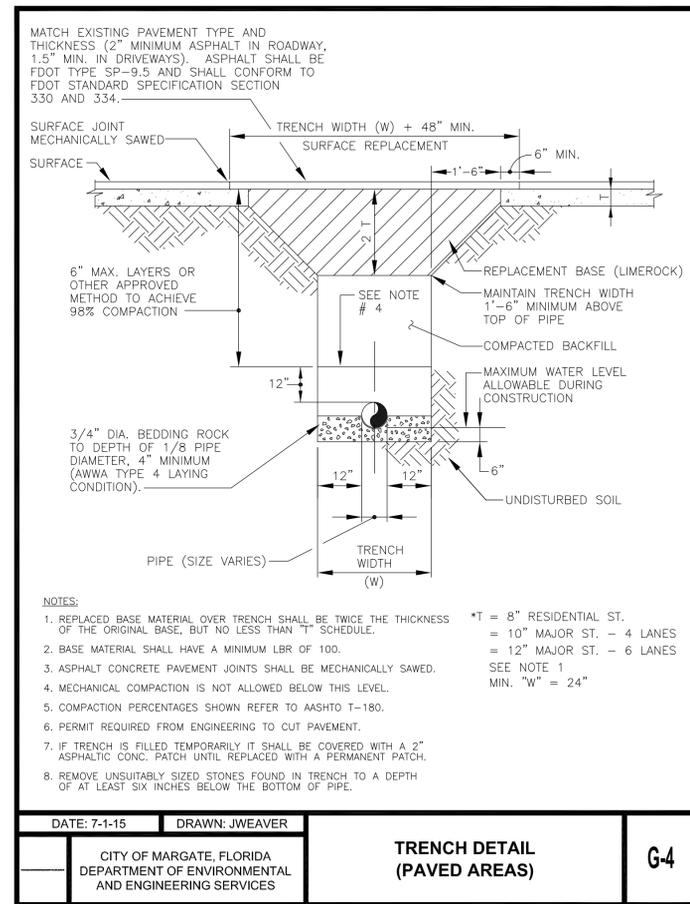
DATE: 7-1-15	DRAWN: JWEAVER	<b>VERTICAL GATE VALVE</b>	<b>W-13</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



DATE: 7-1-15	DRAWN: JWEAVER	<b>DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY</b>	<b>W-9</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



DATE: 7-1-15	DRAWN: JWEAVER	<b>SAMPLE POINT</b>	<b>W-16</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



DATE: 7-1-15	DRAWN: JWEAVER	<b>TRENCH DETAIL (PAVED AREAS)</b>	<b>G-4</b>
CITY OF MARGATE, FLORIDA DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING SERVICES			



ANDREW J. PETERSEN  
LICENSE NO. 75493  
09/15/2015

PLAN STATUS		
DATE	DESCRIPTION	
SW	EC	AJP
DESIGN	DRAWN	CHKD
SCALE NONE		
JOB No. 010032-01-012		
DATE August, 2015		
FILE 010032-01-0-02-012-11-DET		



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**TOP SLAB REINFORCING STEEL DIAGRAM (ALTERNATE A)**

**SQUARE OPENING WITH CORNER FILLETS TOP SLAB REINFORCING STEEL DIAGRAM (ALTERNATE B)**

**ROUND RISER OPENING TOP SLAB REINFORCING STEEL DIAGRAM (ALTERNATE A)**

**SECTION A-A (ALTERNATE A)**

**SECTION B-B (ALTERNATE B)**

**SECTION C-C SPECIAL TOP SLAB\***

**TYPICAL SLAB TO WALL DETAILS FOR PRECAST STRUCTURES**

**INDEX NO. 200 SHEET NO. 1 of 5**

**TOP VIEW**

**SECTION AA (At Inlet)**

**SECTION BB**

**SKETCH SHOWING FRAME SEAT AND THROAT RECESS**

**INLET TYPE 5 (Curb Inlet Type 6 Symmetrical With Left Half)**

**GENERAL NOTES**

- The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.
- For inlets constructed on a curve, refer to the plans to determine the radius, and modify the inlet details accordingly. Bend steel when necessary.
- All reinforcing steel to be Grade 60 bars with 1/2" minimum cover unless otherwise shown, see Sheet 4 for equivalent area Welded Wire Reinforcement details.
- Inlet tops shall be either cast-in-place or precast concrete. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer.
- Concrete meeting the requirements of ASTM C478 (4,000 psi) may be used in lieu of Class II concrete for precast units, manufactured in plants which meet the requirements of Section 445 of the Specifications.
- Corner fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet boxes. Finish top of fillets flush with drain throat bottom and match slope.
- For inlet bottoms see Index No. 200. Inlet tops are to be used with Type P bottoms, or Type J bottoms with 3'-0" square (Type B), 3'-0" or 4'-0" round (Type A) risers or top slab openings.
- These inlet tops are designed for use with standard curb and gutter Type E and Type F. Locate inlet outside of pedestrian crosswalks. For Type E curb, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type F).
- See Index No. 201 for supplemental details.
- All steel used for frame and grate shall meet the requirements of ASTM A36/A36M.
- Either cast iron grates or steel grates may be used.
- When Alternate "G" grate is specified in the plans either the cast iron grate and galvanized steel frame or the galvanized steel grate and frame must be used. Grates are to be grouted in accordance with the grouting detail shown on Sheet 5, in lieu of face welding.
- Inlet to be paid for under the contract unit price for inlets (Curb) (Type J), Each.

**INDEX NO. 211 SHEET NO. 1 of 5**

**TOP VIEW**

**SECTION**

**WEIGHT OF CASTINGS (lb)**

Frame Type	2' OPENING		3' OPENING	
	Frame	Cover (Std.)	Frame	2-Piece Cover
I*	155	190	220	190
II	145	190	255	190
III	90	190	180	190

**COVER FOR ALL FRAMES**

**INDEX NO. 201 SHEET NO. 1 of 5**

**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)**

WALL DEPTH	SCHEDULE	AREA (in. <sup>2</sup> /ft.)	MAX. SPACING BARS	WWF
0'-13"	A12	0.20	12"	8"

**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)**

WALL DEPTH	SCHEDULE	AREA (in. <sup>2</sup> /ft.)	MAX. SPACING BARS	WWF
0'-0"	A12	0.20	12"	8"
0'-10"	A6	0.20	6"	5"
10'-13"	A4	0.20	4"	3"
10'-15"	B5.5	0.24	5 1/2"	5"

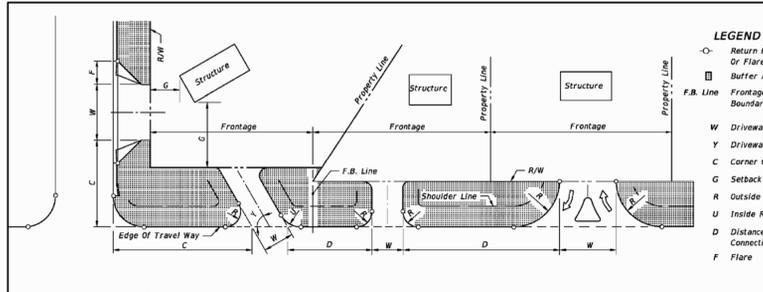
**HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)**

WALL DEPTH	SCHEDULE	AREA (in. <sup>2</sup> /ft.)	MAX. SPACING BARS	WWF
0'-5"	A12	0.20	12"	8"
0'-7.5"	A6	0.20	6"	5"
7.5'-10"	B5.5	0.24	5 1/2"	5"
10'-15"	C6.5	0.37	6 1/2"	6"

**INDEX NO. 232 SHEET NO. 1 of 7**



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For Corner Clearance (C) Requirements see General Note 3.  
For Additional Information Refer To FDOT Rules Chapters 14-96 And 14-97.  
**SKETCH ILLUSTRATING DEFINITIONS**

ELEMENT DESCRIPTION	URBAN (CURB & GUTTER)			RURAL		
	1-20 Trips/Day or 1-5 Trips/Hour	21-60 Trips/Day or 6-60 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour	1-20 Trips/Day or 1-5 Trips/Hour	21-60 Trips/Day or 6-60 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour
CONNECTION WIDTH W	12' Min. 24' Max.	24' Min. 36' Max.	24' Min. 36' Max.	12' Min. 24' Max.	24' Min. 36' Max.	24' Min. 36' Max.
FLARE (Drop Curb) F	10' Min.	10' Min.	N/A	N/A	N/A	N/A
RETURNS (Radius) R & U	N/A	△	25' Min. 50' Std. 75' Max.	15' Min. 25' Std. 50' Max.	25' Min. 50' Std. 75' Max.	25' Min. 50' Std. (Or 3-Centered Curves)
ANGLE OF DRIVE Y		60°-90°	60°-90°		60°-90°	60°-90°
DIVISIONAL ISLAND (Through Median)		4'-22' Wide	4'-22' Wide		4'-22' Wide	4'-22' Wide
SETBACK G	12' Min. All categories. See General Note No. 5.					

Side road intersection design, with possible auxiliary lanes and channelization, may be necessary. Intersection design, with possible auxiliary lanes and channelization, should be considered for connections with more than 4000 trips/days.  
 (1) "2-Way" refers to one "in" movement and one "out" movement i.e., not exclusive left or right turn lanes on the connection.  
 (2) When more than 2 lanes in the turnout connection are required, the 36' max. width may be increased to relieve interference between entering and exiting traffic which adversely affects traffic flow. These cases require documented site specific study and design.  
 (3) Small radii may be used in lieu of flares as approved by the Department.  
 DESIGN NOTE: 1-Way connections will be designed to effectively eliminate unpermitted movements.

**NOT INTENDED FOR FULL INTERSECTION DESIGN  
SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS**

LAST REVISION: 07/01/13	DESCRIPTION: 2016 DESIGN STANDARDS	INDEX NO. 515	SHEET NO. 1 of 7
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- LEGEND**
- Return Radius Point Or Flare Point
  - Buffer Areas
  - F.B. Line Frontage Boundary Line
  - W Driveway Width
  - Y Driveway Angle
  - C Corner Clearance
  - R Setback
  - G Outside Radius
  - U Inside Radius
  - D Distance Between Connections
  - F Flare
- GENERAL NOTES**
- For definitions and descriptions of access connection "Categories" and access "Classifications" of highway segments, and for other detailed information on access to the State Highway System, refer to FDOT Rule Chapter 14-96, "State Highway System Access Management Classification System And Standards."
  - For this index the term "turnout" applies to that portion of driveways or side roads adjoining the outer roadway. For this index the term "connection" encompasses a driveway or side road and their appurtenant islands, separators, transition tapers, auxiliary lanes, travelway flares, drainage pipes and structures, crossovers, sidewalks, curb cut ramps, signing, pavement marking, required signalization, maintenance of traffic or other means of access to or from controlled access facilities. The turnout requirements set forth in this index do not provide complete intersection design, construction or maintenance requirements.
  - The location, positioning, orientation, spacing and number of connections and median openings shall be in conformance with FDOT Rule Chapter 14-97.
  - On Department construction projects all driveways not shown on the plans shall be reconstructed at their existing location in conformance to these standards, or, in conformance to permits issued during the construction project.
  - Driveways shall have sufficient length and size for all vehicular queuing, stacking, maneuvering, standing and parking to be carried out completely beyond the right of way line. Except for vehicles stopping to enter the highway, the turnout areas and drives within the right of way shall be used only for moving vehicles entering or leaving the highway.
  - Connections with expected daily traffic over 4000 vpd shall be constructed as intersecting side roads. The design requirement of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department. For connections with expected daily traffic less than 4000 vpd, the Department will determine if a drop curb or radius returns are required in accordance with existing or planned connections. Where radius returns apply, the design requirements of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department.
  - For connections that are intended to daily accommodate either multi-unit vehicles or single unit vehicles exceeding 30' in length, returns with 50' radii shall be used, unless otherwise called for in the plans or otherwise stipulated by permit. Where large numbers of multi-unit vehicles will use the connection, the connection width and radii shall be increased and auxiliary lanes, tapers, lane flares, separators and/or islands constructed, as determined by the Department to be necessary for safe turning movements.
  - Any connection requiring or having a specified median opening with left turn storage and served directly by that opening shall have radial returns.
  - Where a connection is intended to align with a connection across the highway, the through lanes shall align directly with the corresponding through lanes.
  - For new connections and for connections on all new construction and reconstruction projects, pavement materials and thicknesses shall meet the requirements applicable to either that detailed for "Urban Flared Turnouts", or, that described in "Table 515-1" for connections with radial returns and/or auxiliary lanes.
  - The responsibility for the cost of construction or alteration to an access connection shall be in accordance with FDOT Rule Chapter 14-96.
- DESIGN NOTES**
- Prior to the adoption of FDOT Rules Chapters 14-96 and 14-97, connections to the State Highway System were defined and permitted by Classes. Connections have been redefined by Categories under Rule 14-96, and, the term "Class" has been applied to highway segments of the State Highway System as defined under Rule 14-97.

**Footnotes:**

- All 1/2" joints shall be constructed with preformed joint filler.
- 1/2" Open Joints placed at equal (20' max) intervals for driveways over 20' wide. Joints in curb and gutter to match joints in driveways.
- When connecting to side road curb and gutter sections, the no drop curb limits should extend back to the side road radius point. With or without curb and gutter, no driveway should encroach on the corner radius.
- Driveways (6" concrete) shall be of a uniform width (W) to the right of way line.
- Alpha-numeric identification of a flared driveway type specifically called for in the plans, see sheets 3 and 4.

**TURNOUT WITHOUT SIDEWALK**

**TURNOUT WITH SIDEWALK AND UTILITY STRIP (10' OR GREATER)**

**TURNOUT WITH SIDEWALK AND UTILITY STRIP (LESS THAN 10')**

**SPECIAL NOTES FOR URBAN FLARED TURNOUTS**

- Drop curb, concrete sidewalks (6" thick) and driveways (6" thick) shall meet Specification Sections 520 and 522. The driveway foundation shall meet the requirements of Subpart 522-4.
- For details of drop curb and sidewalk curb ramps refer to indexes Nos. 300 and 304 respectively.
- Where turnouts are constructed within existing curb and gutter, the existing curb and gutter shall be removed either to the nearest joint beyond the flare point or to the extent that no remaining section is less than 3' long; and, drop curb constructed in accordance with Notes 1 and 2.
- For turnouts with radial returns see the requirements under the "Summary of Geometric Requirements For Turnouts", the "General Notes", the details of "Rural Turnout Construction" and the detail of "Limits Of Clearing & Grubbing, Stabilization And Base At Intersections".
- Maintenance of pavement shall extend out to the right of way or 2' beyond the back of sidewalk, whichever distance is less.
- The maintenance and operation of highway lighting, traffic signals, associated equipment, and other necessary devices shall be the responsibility of a public agency.
- All pavement markings on the State highways, including acceleration and deceleration lane markings, and signing installed for the operation of the State highway shall be maintained by the Department.
- All signing and marking installed for the operation of the connection (such as stop bars and stop signs for the connection) shall be the responsibility of the permittee.
- All sidewalk surfaces crossing driveways with a cross slope shown in this index to be 0.02 shall be 0.02 Maximum.

**DESIGN NOTES FOR URBAN FLARED TURNOUTS**

- Driveways indicated as "Adverse Applications" are those with slopes that can cause overhang drag for representative standard passenger vehicles under fully loaded conditions; or, those with slopes that can cause drivers who are leaving the roadway to slow or pass to the extent that traffic demand volumes will be impeded.
- Driveways indicated as "Marginal Applications" are those with slopes that can cause overhang drag for representative standard passenger vehicles under fully loaded conditions when the driveway is located on the low side of fully super-elevated roadways.
- Driveways indicated as "General Applications" are those with slopes that can readily accommodate representative standard passenger vehicles and those that can accommodate representative standard trucks, vans, buses and recreational vehicles operating under normal crown and super-elevation conditions.
- The standard flared driveways on this index may not accommodate vehicles with low beds, low undercarriage or low appendage features. Where such vehicles are design vehicles, driveways shall have site specific flare designs or Category III designs.
- When specific flare type driveways shall be constructed, the type shall be designated in the plans using the assigned alpha-numeric designation.

**URBAN FLARED TURNOUTS**

LAST REVISION: 07/01/13	DESCRIPTION: 2016 DESIGN STANDARDS	INDEX NO. 515	SHEET NO. 2 of 7
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\* See "DESIGN NOTES FOR URBAN FLARED TURNOUTS."

**DRIVEWAY SECTIONS ON CURBED FACILITIES WITH SIDEWALKS**

**GENERAL APPLICATIONS**

**MARGINAL APPLICATIONS ON LOW SIDE OF FULLY SUPERELEVATED ROADWAY (REFER TO MODIFICATIONS ON SHEET 4)**

**ADVERSE APPLICATIONS (REFER TO MODIFICATIONS ON SHEET 4)**

**SIDEWALK ADJACENT TO CURB**

**SIDEWALK WITH UTILITY STRIP ON 0.02 SLOPE**

**SIDEWALK WITH UTILITY STRIP ON 0.04 SLOPE**

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**MODIFICATIONS OF 'ADVERSE' AND 'MARGINAL' APPLICATIONS**

**MODIFICATIONS TO ADVERSE AND MARGINAL SECTIONS**

**SIDEWALK WITH UTILITY STRIP ON 0.04 SLOPE**

\* See "DESIGN NOTES FOR URBAN FLARED TURNOUTS."

LAST REVISION: 07/01/13	DESCRIPTION: 2016 DESIGN STANDARDS	INDEX NO. 515	SHEET NO. 4 of 7
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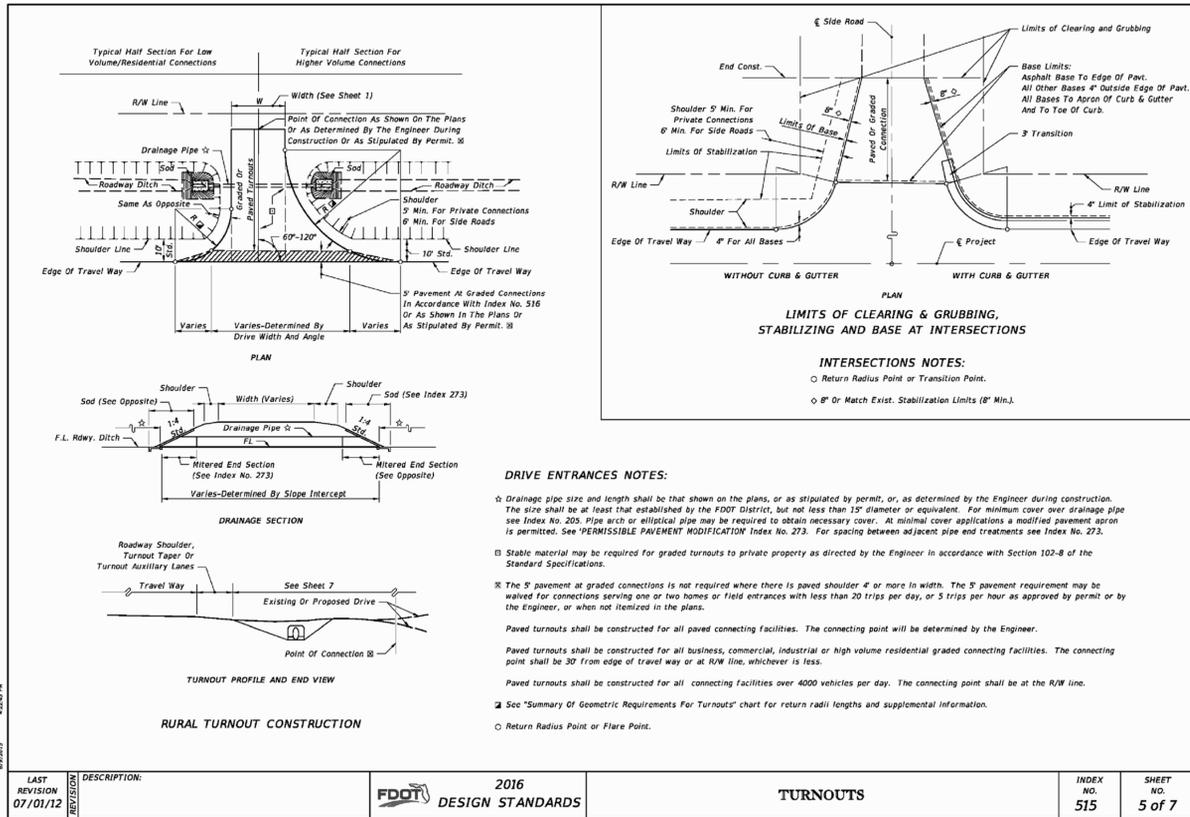


**MARGATE HYBRID CONVENIENCE MARKET**  
 2000 STATE ROAD NO. 7  
 MARGATE, FL 33063  
 CITY OF MARGATE

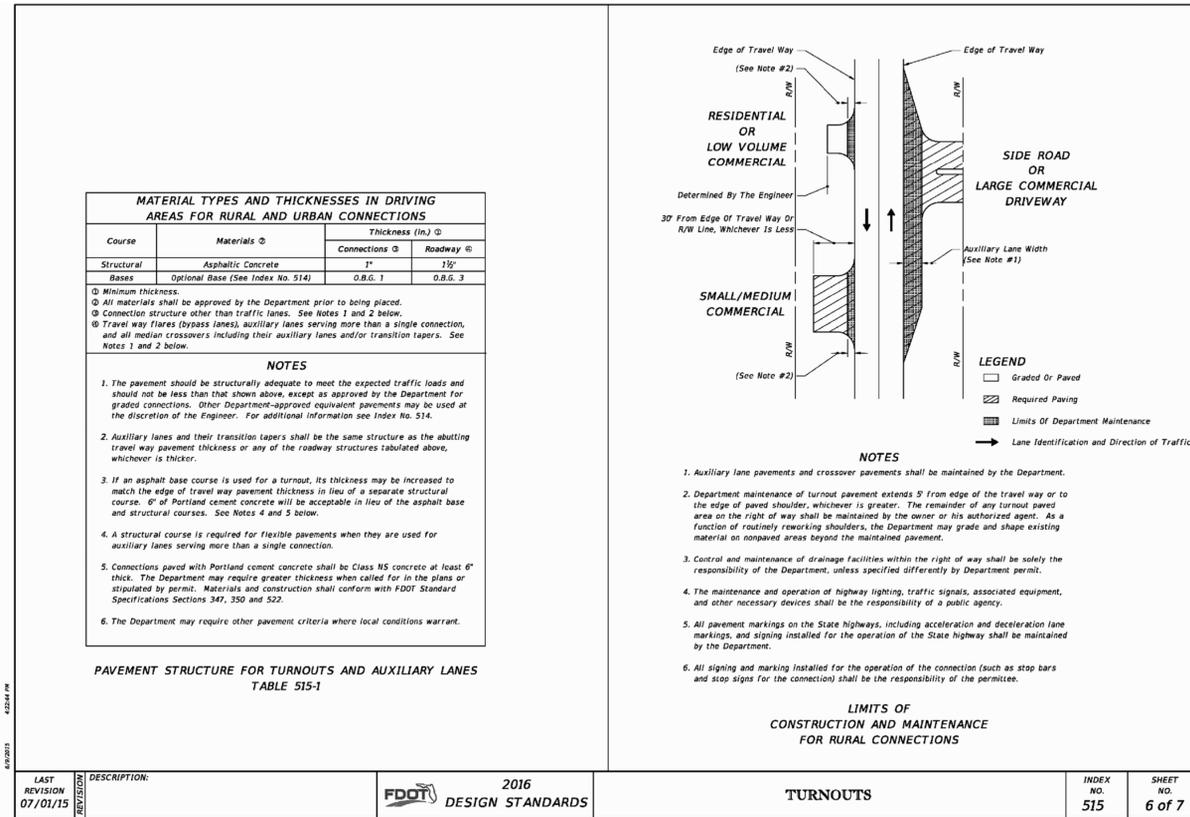


DATE	DESCRIPTION
SW DESIGN	EC DRAWN
AJP	CHKD
SCALE	AS SHOWN
JOB No.	010032-01-012
DATE	December, 2015
FILE	010032-01-0-02-012-11-DET
SHEET	D6.0

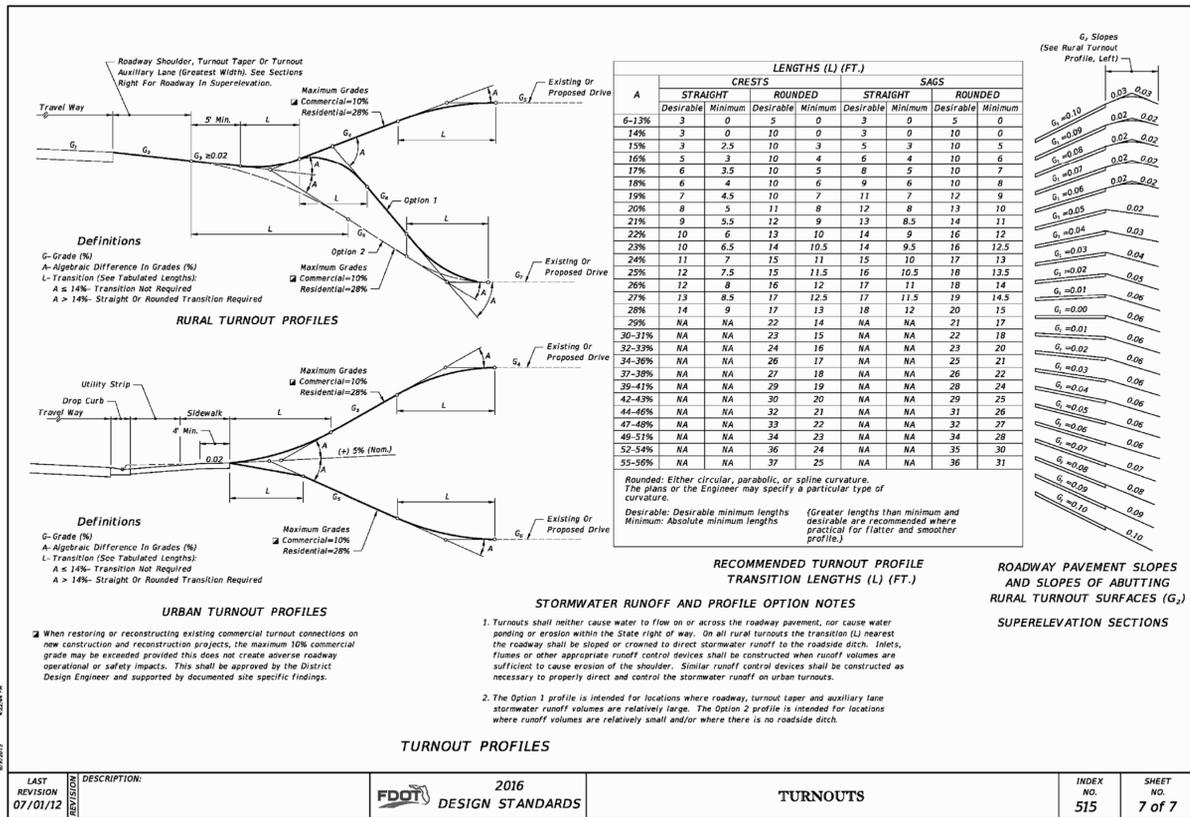
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LAST REVISION 07/01/12	DESCRIPTION: REVISED	2016 DESIGN STANDARDS	TURNOUTS	INDEX NO. 515	SHEET NO. 5 of 7
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LAST REVISION 07/01/12	DESCRIPTION: REVISED	2016 DESIGN STANDARDS	TURNOUTS	INDEX NO. 515	SHEET NO. 6 of 7
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LAST REVISION 07/01/12	DESCRIPTION: REVISED	2016 DESIGN STANDARDS	TURNOUTS	INDEX NO. 515	SHEET NO. 7 of 7
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DATE	DESCRIPTION
SW DESIGN	EC DRAWN
	AJP CHKD
SCALE	AS SHOWN
JOB No.	010032-01-012
DATE	December, 2015
FILE	010032-01-0-01-02-11-DET
SHEET	D7.0



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**Table I  
Device Spacing**

Speed (mph)	Max. Distance Between Devices (ft.)	
	Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums
25	25	50
30 to 45	25	50
45 mph	350	350
50 mph or greater	500	500

**Table II  
Taper Length - Shoulder**

Speed (mph)	L (ft.)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L = WS' 60
30	40	50	60	
35	55	68	82	L = WS' 60
40	72	90	107	
45	120	150	180	L = WS
50	133	167	200	
55	147	183	220	L = WS
60	160	200	240	
65	173	217	260	L = WS
70	187	233	280	

**Table III  
Distance Between Signs**

Speed (mph)	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

**GENERAL NOTES**

- If the work operation encroaches on the through traffic lanes or when four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), a flagger shall be provided and a FLAGGER sign shall be substituted for the WORKERS sign. The flagger shall be positioned at the point of vehicle entry or departure from the work area.
- This TCZ plan also applies to work performed in the median more than 2' but less than 15' from the edge of travelway.
- When work is being performed on a multilane undivided roadway the signs normally mounted in the median (as shown) shall be omitted.
- WORKERS signs to be removed or fully covered when no work is being performed.
- SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
- For general TTC requirements and additional information, refer to Index No. 600.

**DURATION NOTES**

- Signs and channelizing devices may be omitted if all of the following conditions are met:
  - Work operations are 60 minutes or less.
  - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

**CONDITIONS**

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOUCH ON THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

INDEX NO. 612 SHEET NO. 1 of 1

**Table I  
Device Spacing**

Speed (mph)	Max. Distance Between Devices (ft.)	
	Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums
25	25	50
30 to 45	25	50
45 mph	350	350
50 mph or greater	500	500

**Table II  
Taper Length - Shoulder**

Speed (mph)	L (ft.)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L = WS' 60
30	40	50	60	
35	55	68	82	L = WS' 60
40	72	90	107	
45	120	150	180	L = WS
50	133	167	200	
55	147	183	220	L = WS
60	160	200	240	
65	173	217	260	L = WS
70	187	233	280	

**Table III  
Distance Between Signs**

Speed (mph)	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

**GENERAL NOTES**

- Arrow Board Operation Discontinued And Arrow Board Shall Be Removed Or Relocated Outside The Clear Zone Or Be Shielded By A Barrier Or Crash Cushion
- Area Temporarily Reopened To Traffic
- Temporary Pavement Markings Placed Through Work Area And Devices Relocated Laterally 2' To 4' Outside Edge Of Travel Way.

**DURATION NOTES**

- Signs and channelizing devices may be omitted if all of the following conditions are met:
  - Work operations are 60 minutes or less.
  - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

**CONDITIONS**

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOUCH ON THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

INDEX NO. 613 SHEET NO. 2 of 2

**Table I  
Device Spacing**

Speed (mph)	Max. Distance Between Devices (ft.)	
	Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums
25	25	50
30 to 45	25	50
45 mph	350	350
50 mph	500	500
55 mph or greater	2640	1000

**Table II  
Buffer Space and Taper Length**

Speed (mph)	Buffer Space (ft.)	Taper Length (12' Lateral Transition)		Notes
		L	Notes (Merge)	
25	155	125	L = WS' 60	
30	200	160		
35	250	245	L = WS	
40	305	320		
45	360	540	L = WS	
50	425	600		
55	495	660	L = WS	
60	570	720		
65	645	780	L = WS	
70	730	840		

**Table III  
Distance Between Signs**

Speed (mph)	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph	500	500
55 mph or greater	2640	1000

**GENERAL NOTES**

- Work operations shall be confined to one traffic lane, leaving the adjacent lane open to traffic.
- On undivided highways the median signs as shown are to be omitted.
- When work is performed in the median lane on divided highways, the channelizing device plan is inverted and left lane closed and lane ends signs substituted for the right lane closed and lane end signs.
- The same applies to undivided highways with the following exceptions:
  - Work shall be confined within one median lane.
  - Additional barricades, cones, or drums shall be placed along the centerline abutting the work area and across the trailing end of the work area.
- Signs and traffic control devices are to be modified in accordance with INTERMITTENT WORK STOPPAGE details (sheet 2 of 2) when no work is being performed and the highway is open to traffic.
- The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
- When paved shoulders having a width of 8 ft. or more are closed, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC indexes.
- This TCZ plan does not apply when work is being performed in the middle lane(s) of a six or more lane highway. See Index No. 614.
- For general TTC requirements and additional information, refer to Index No. 600.

**CONDITIONS**

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOUCH ON THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

INDEX NO. 613 SHEET NO. 1 of 2

**Table I  
Device Spacing**

Speed (mph)	Max. Distance Between Devices (ft.)	
	Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums
25	25	50
30 to 45	25	50
45 mph	350	350
50 mph	500	500
55 mph or greater	2640	1000

**Table II  
Buffer Space and Taper Length**

Speed (mph)	Buffer Space (ft.)	Taper Length (12' Lateral Transition)		Notes
		L	Notes (Merge)	
25	155	125	L = WS' 60	
30	200	160		
35	250	245	L = WS	
40	305	320		
45	360	540	L = WS	
50	425	600		
55	495	660	L = WS	
60	570	720		
65	645	780	L = WS	
70	730	840		

**Table III  
Distance Between Signs**

Speed (mph)	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph	500	500
55 mph or greater	2640	1000

**GENERAL NOTES**

- Only the signs controlling pedestrian flows are shown. Other work zone signs will be needed to control traffic on the streets.
- For spacing of traffic control devices and general TTC requirements refer to Index No. 600. Maximum spacing between barricades, vertical panels, drums or tubular markers shall not be greater than 25'.
- Street lighting should be considered.
- For nighttime closures use Type A flashing warning lights on barricades supporting signs and closing sidewalks. Use Type C steady-burn lights on channelizing devices separating the work area from vehicular traffic.
- Pedestrian traffic signal display controlling closed crosswalks shall be covered or deactivated.
- Post Mounted Signs located near or adjacent to a sidewalk shall have a 2' minimum clearance from the bottom of sign to the sidewalk.
- A pedestrian longitudinal channelizing device shall be placed across the full width of the closed sidewalk.
- When construction activities involve sidewalks on both sides of the street, efforts should be made to stage the construction so that both sidewalks are not out of service at the same time.
- In the event that sidewalks on both sides of the street are closed, pedestrians shall be guided around the construction zone.
- Temporary walkways shall be a minimum of 4' wide with a maximum 0.02 cross slope and a maximum 0.05 running slope between ramps. Temporary walkways less than 5' in width shall provide for a 5' x 5' passing space at intervals not to exceed 200'. Temporary ramps shall meet the requirements for curb ramps specified in Index No. 304. Temporary walkway surfaces and ramps shall be stable, firm, slip resistant, and kept free of any obstructions and hazards such as holes, debris, mud, construction equipment, stored materials, etc.
- Temporary ramps and temporary crosswalk markings shall be removed with reopening of the sidewalk, unless otherwise noted in the plans. All work and materials associated with constructing temporary curb ramps and temporary crosswalk markings, removal and disposal of temporary curb ramps and temporary crosswalk markings, and restoration to original condition shall be paid for as Maintenance of Traffic, Lump Sum.

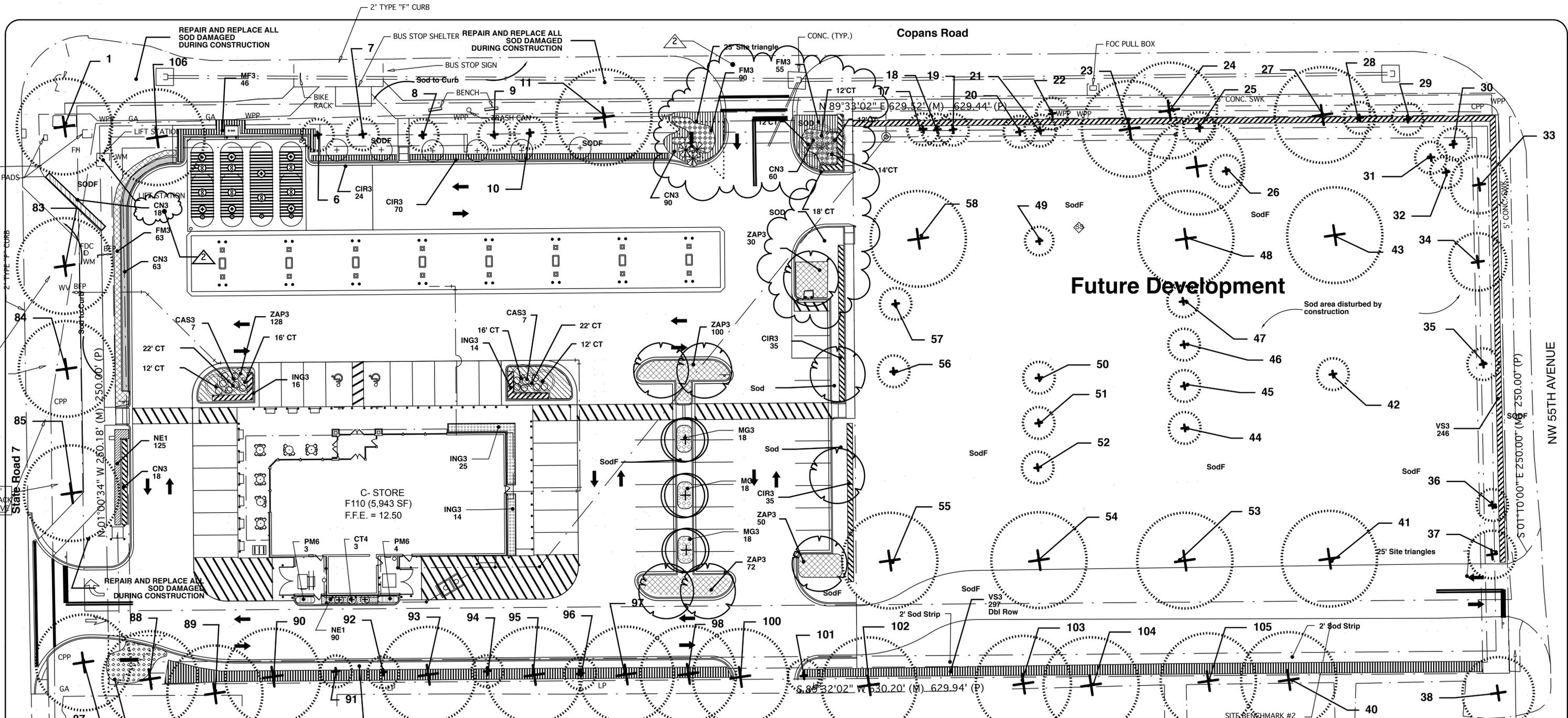
**CONDITIONS**

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOUCH ON THE SIDEWALK FOR A PERIOD OF MORE THAN 60 MINUTES.

INDEX NO. 660 SHEET NO. 1 of 1



DATE	DESCRIPTION
SW DESIGN	EC DRAWN
	AJP CHKD
SCALE	
JOB No.	010032-01-012
DATE	December, 2015
FILE	010032-01-0-CP-012-11-DET
SHEET	D8.0



**TREES**

N = Native

Symbol	Trees	Qty	Symbol	Trees	Qty
	Southern Live Oak <i>Quercus virginiana</i> 14' X 8-10' Spr. 2.5-3" DBH	8		Sabal Palm Sabal palmetto GW shown On Plans	11
	Triple Montgomery Palm <i>Veitchia montgomeryana</i> 3 mature heads, 8'-12'-8" G.W.	1		Crape Myrtle <i>Lagerstromia Indica</i> Pink 14' X 8' Spr. Single trunk 2.5-3" DBH	6
	GUMBO LIMBO TREE <i>BURSERA SIMARUBA</i> 16' X 8' SPR. 3" DBH FIELD GROWN/BALLED & BURLAPPED	3		Existing trees to remain SEE TD-1 FOR LIST	XX

**SHRUBS AND GROUNDCOVERS**

CAS7	CRINUM ASIATICUM CRINUM LILLY, WHITE	30" O.A., MIN 5-7 PPP	14	NET	NEPHROLEPIS EXALTATA BOSTON FERN	12" OA FULL TO POT 12" O.C. 1 Gal.	90
CIR3	CHRYSOBALANUS ICACO RED TIP COCO PLUM	24" X 24" 2" O.C. FULL 3 gal.	142	PM6	PODOCARPUS MACROPHYLLA YEW PODOCARPUS	3" X 24" SPR. FULL TO BASE 36" O.C.	7
CN3	CODIAEUM VARIEGATUM CROTON NORMA	24" HT, 12" WIDE, 24" OC 3 gal. 24" O.C.	97	SODF	ST. AUGUSTINE FLORATAM	solid sod, rolled, in sq. ft. w/ 2" base of topsoil, the price per sq. ft. to include soil, sod and installation	
CT4	CORDYLINE TERMINALIS HAWIIAN TI PLANT PINK SISTER	4-5' HT X 2-3' SPR. MIN. 7-8 HEADS, STAGGERED HEIGHTS FOR INFORMAL PLANTING	3				
FM3	FICUS MICROCARPA GREEN ISLAND FICUS	18" SPR. 3 GAL. FULLPOT. 24" O.C. 3 gal.	125				
ING3	IXORA COCCINEA NORA GRANT IXORA	24" X 24" SPR. 24" O.C.	55				
ME3	MYRCIANTHES FRAGRANS-SIMPSON STOPPER	30" X 30", FULL, 2" O.C.	102				
MG3	MUHLENBERGIA CAPILLARIS MUHLY GRASS	3 gal. 24" ht. 2" o.c.	54				

**LANDSCAPE BID CONDITIONS**

1. The quantities on the plant list are for the convenience of the contractor only and not to be considered as the final quantity for installation. The callouts and entities drawn on these plans take precedence over the plant list.

2. The contractor shall be responsible for his own takeoffs of the plantings drawn.

3. The contractor shall be expected to visit the site prior to bid. The contractor shall have an understanding of the on site conditions to prepare his bid. Any questions concerning conditions are to be brought to the owners attention prior to bid.

4. Any discrepancies concerning the materials or conditions of the site that shall inhibit the installation as drawn shall be brought to the attention of the owners representatives. Issues found prior to bid will become a condition of the bid after the award of the contract.

5. After the award of the contract, any discrepancies in the plans or additional materials and costs because of pre-existing conditions at the site shall not be a reason for any additional charges to the owners.

6. These bid conditions are not to be considered all inclusive. There may be additional conditions included in other documents of the construction agreement. It is the contractors responsibility to make himself and his subcontractors aware of any other such conditions.

**WAWA Site Data**

PERVIOUS AREA	14,915 SF (0.34 AC)	17.7%
IMPERVIOUS AREA	69,557 SF (1.60 AC)	82.3%
TOTAL	84,472 SF (1.94 AC)	100%

Parking Spaces Provided = 37  
Tree coverage required = 12% of gross lot size, ((10,136 sq.ft. of canopy)  
Tree coverage provided = XX% of gross lot size, ((17,175 sq.ft. of canopy)

**FUTURE**

PERVIOUS AREA	17,928 SF (0.41 AC)	24.5%
IMPERVIOUS AREA	55,111 SF (1.26 AC)	75.5%
TOTAL	73,039 SF (1.67 AC)	100%

Tree coverage required = 12% of gross lot size, (8,764 sq.ft. of canopy)  
Tree coverage provided = NA

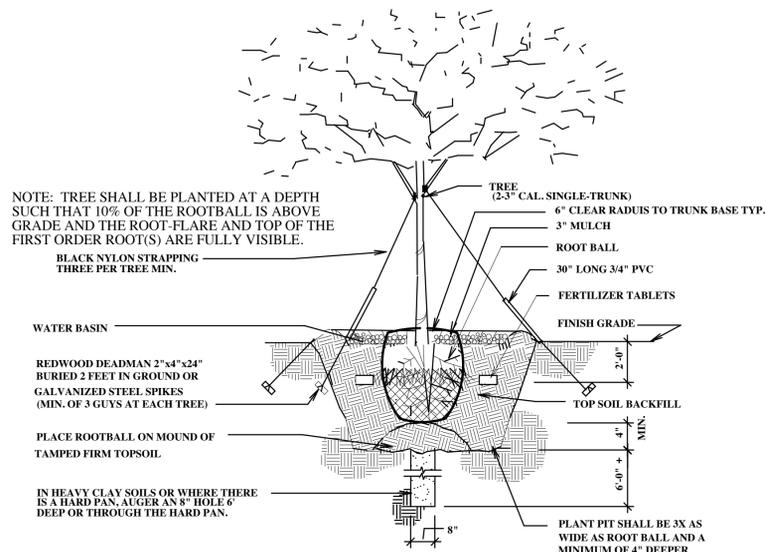
**Perimeter Landscape (both sites)**

ROW Perimeter 1129 LF / 40 = 8 tree required.  
Sideyard Perimeter 629 LF / 75 = 8 tree required.

Total perimeter trees req. = 36  
Total perimeter trees provided = 39, (37 Cat. 1 and 2 Cat. 2)

**Interior Landscape for WASA only**

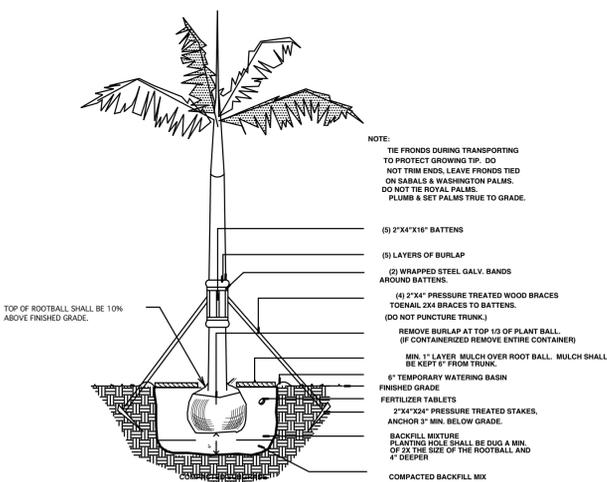
Trees required, 1/20 spaces, (37/20) = 2 trees  
Trees provided = 5



### SINGLE TRUNK GUYING AND PLANTING DETAIL

NOT TO SCALE

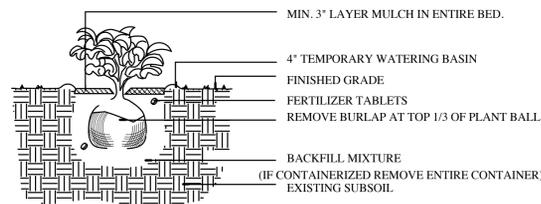
A



### PALM PLANTING DETAIL

NOT TO SCALE

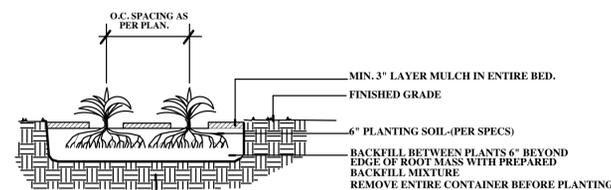
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### SHRUB PLANTING DETAIL

NOT TO SCALE

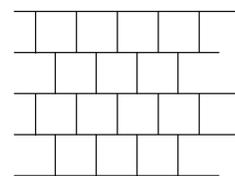
C



### GROUNDCOVER/ANNUALS PLANTING DETAIL

NOT TO SCALE

D



### SOD PLANTING DETAIL

NOT TO SCALE

E

## CITY OF Margate LANDSCAPE CALCULATIONS

### BASIS INFORMATION

GROSS SITE 423,906 SQ.FT.  
IMPERVIOUS 339,065 SQ.FT.  
VUA 138,311 SQ.FT.

REQUIRED LOT GREENSPACE  
(.15 X 138,311) = 20,746.65 SQ.FT.

Green area = 84,841 SQ.FT.  
Maximum sodded area = 50% = 42,420 SQ.FT.  
Sodded area provided = 41,000 SQ.FT.s

### TREES

PARKING AREA GREEN REQ. (15% OF VUA = 20,746.65), PROVIDED 26,889 SF.

1. PARKING LOT TREES: 1/200SF OF REQ PARKING ISLAND,  
20 ISLANDS = 20 TREES REQUIRED

2. ON LOT TREES FOR GROSS LOT AREA:

TOTAL LOT TREES REQUIRED = 45 TOTAL PROVIDED = 45

4 PER 1ST 20,000 S.F. = 4 TREES

1 PER ADD'T 10,000 S.F. (of 403,906/10,000) = 41 trees

PROVIDED AS PALMS: XXX OF EXISTING = 14  
20% MAX PALM COUNT

3. TOTAL PERIMETER TREES REQUIRED = 65 PERIMETER TREES PROVIDED = 65  
ADJ. TO RESIDENTIAL TO R.O.W. AND INDUSTRIAL ZONING

(1) 14'-16' HT. TREE PER 40 L.F. + 1 ACCENT PER 100 L.F. = 91

TOTAL TREES REQ @ 14'-16' HT. (2565 LF/ 40) = 65

ACCENTS REQ = 26 ACCENTS PROVIDED: 27

2' HT. HEDGE PROVIDED ALONG ALL PERIMETERS

### SHRUBS

20 PER 1ST 20,000 S.F. OF GROSS LOT AREA REQ. = 408 SHRUBS  
5 SHRUBS FOR EACH ADDITIONAL 1,000 S.F.  
TOTAL REQ. = 225 TOTAL PROVIDED: 470

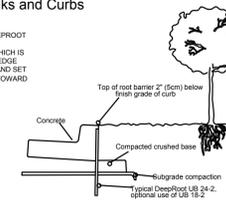
GROUNDCOVER = 225 TOTAL PROVIDED: 11,498

### Linear Application of "DeepRoot Tree Root Barriers" at Time of Installing Concrete Sidewalks and Curbs

TYPICAL SECTION OF CURB AND GUTTER WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE. BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (50MM) BELOW FINISH GRADE OF CURB. AND SET FLUSH WITH EDGE OF CURB. BARRIER RISERS FACE TOWARD TREE ROOTS.

#### INSTALLATION SEQUENCE:

1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (50mm) below finish grade of top of curb
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (it may be nailed from the outside of the form)

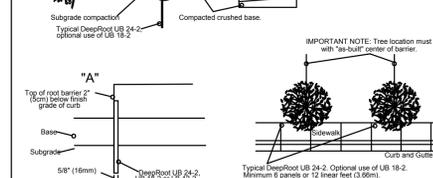


TYPICAL SECTION OF CURB, GUTTER AND SIDEWALK WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE.

BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (50MM) ABOVE COMPACTED BASE (or halfway between base and finish grade of 50% BARRIER RISERS FACE TOWARD TREE ROOTS.

#### INSTALLATION SEQUENCE:

1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (50mm) below finish grade of top of sidewalk (or halfway between top of compacted base and finish grade of 50%)
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (it may be nailed from the outside of the form)



### Tree Protection Detail

NOT TO SCALE

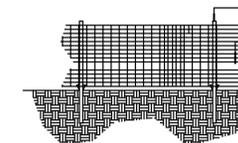
F

Note  
Rootbarrier, (see sheet L-2), shall be installed whenever a tree is less than 10feet from any sidewalk or curb.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXISTING LANDSCAPE MATERIAL AND ROOTS WITHIN THE SCOPE AREA.

ROOT BARRIER WILL BE PLACED ALONG ANY PAVEMENT WITHIN 5' OF ANY NEWLY SUPPLIED OR TRANSPLANTED TREE OR PALM. SEE SHEET TD-1 FOR SPECIFICATIONS.

### Tree Protection Detail



EXISTING GRADE

NOTE: ERECT FENCE PRIOR TO BEGINNING DEMOLITION. LEAVE IN PLACE UNTIL ALL PAVING & GRADING IS COMPLETE. FENCE TO BE REMOVED AT TIME SITE IS BEING PREPARED FOR SOD INSTALLATION.

## Planting Notes

In case of conflict the notes on this sheet by the City of Davie, take precedence over all others found in these plans.

1. ALL SIZES SHOWN FOR PLANT MATERIAL ON PLAN ARE TO BE CONSIDERED AS MINIMUMS. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN WILL ALSO BE REQUIRED FOR FINAL ACCEPTANCE.
2. ALL PLANT MATERIAL FURNISHED BY THE LANDSCAPE CONTRACTOR UNLESS OTHERWISE SPECIFIED SHALL BE FLORIDA NO.1 OR BETTER, AND SHALL BE INSTALLED AS SPECIFIED IN GRADES AND STANDARDS FOR NURSERY PLANTS, PART I & II, STATE PLANT BOARD OF FLORIDA, LATEST EDITION
3. IN ADDITION TO THESE REQUIREMENTS ALL LOCAL LANDSCAPE CODES AND REQUIREMENTS SHALL BE MET IN ORDER TO SATISFY THE REVIEW AND APPROVAL OF THE GOVERNING MUNICIPALITY.
4. ALL LANDSCAPING SCHEDULED TO OCCUR IN VEHICULAR USE AREAS SHALL BE PROTECTED FROM VEHICULAR ENCROACHMENT BY CURBING OR OTHER DURABLE BARRIERS.
5. ALL PLANTING HOLES SHALL BE A MINIMUM OF 2 1/2 TIMES THE DIAMETER OF THE PLANT BALL. ALL PLANTING HOLES AND GROUND COVER PLANTING BEDS SHALL BE EXCAVATED TO A DEPTH OF 30" TO REMOVE ALL OBJECTIONABLE MATERIALS, SUCH AS ROADROCK, ASPHALT, SUB-BASE, CONCRETE, ROCK, CAUSTIC MATERIALS WITH AN EXCESSIVE SOIL Ph, OR SIMILAR MATERIALS NOT SUITED FOR LANDSCAPE PLANTING.
6. ALL PLANT MATERIALS SHALL BE PLANTED IN PLANTING SOIL THAT IS DELIVERED TO THE SITE IN A CLEAN, LOOSE AND FRIABLE CONDITION. ALL SOIL SHALL HAVE A WELL DRAINED CHARACTERISTIC. SOIL MUST BE FREE OF ALL ROCKS, STICKS, OBJECTIONABLE DEBRIS INCLUDING WEEDS AND WEED SEED. PLANTING MIX BACKFILL SHALL BE PROVIDED TO A MINIMUM DEPTH OF 30" IN ALL SHRUB HOLES AND GROUND COVER PLANTING AREAS.
7. ALL PLANT MATERIALS SHALL BE THOROUGHLY WATERED IN AT THE TIME OF PLANTING. NO DRY PLANTING SHALL BE PERMITTED. ALL PLANT MATERIALS SHALL BE PLANTED SUCH THAT THE TOP OF THE PLANT BALL IS FLUSH WITH THE SURROUNDING GRADE.
8. ALL PLANT MATERIALS SHALL BE INSTALLED WITH FERTILIZER WHICH SHALL BE STATE APPROVED AS A COMPLETE FERTILIZER CONTAINING THE REQUIRED MINIMUM OF TRACE MINOR ELEMENTS IN ADDITION TO N-P-K, OF WHICH 50% OF THE NITROGEN SHALL BE DERIVED FROM AN ORGANIC SOURCE.
9. ALL LANDSCAPE AREAS NOT COVERED BY SHRUBS OR GROUND COVERED SHALL BE COVERED BY SOD AND ALL AREAS NOT COVERED BY SOD SHALL BE COVERED WITH MALEUCA MULCH, TO A MINIMUM DEPTH OF THREE (3) INCHES OF COVER WHEN SETTLED. MULCH SHALL BE EUCALYPTUS OR STERILIZED MELALEUCA ONLY. MULCH IS TO BE HELD BACK 6 INCHES FROM THE TRUNK OF ANY TREE.
10. SOD SHALL BE (AS NOTED) SOLID SOD AND SHALL BE LAID ON A SMOOTH PLANTING BASE WHICH HAS BEEN GRADED TO MEET THE DRAINAGE CHARACTERISTICS OF THE SITE. ALL SOD SHALL BE LAID WITH CLOSELY FITTED JOINTS, AND SHALL BE IN A GREEN AND HEALTHY GROWING CONDITION AT PLANTING. SOD SHALL BE PLACED ON A BED OF TOP SOIL 2" IN DEPTH. SOD SHALL BE ST. AUGUSTINE FLORATAM UNLESS NOTED OTHERWISE IN PLANTING NOTES OR ON THE PLANTING PLAN. RETENTION AREAS MAY REQUIRE BAHIA SOD.
11. ALL LANDSCAPE AREAS SHALL BE IRRIGATED BY A FULLY AUTOMATIC SYSTEM ADJUSTED TO PROVIDE 150% COVERAGE OF ALL LANDSCAPE AREAS. ALL HEADS SHALL BE ADJUSTED TO MIN. 50% OVERLAP. IRRIGATION WATER SHALL COME FROM A RUST FREE SOURCE THERE AN AUTOMATIC SHUTOFF/RAIN SENSOR ATTACHED TO THE SYSTEM.
12. ANY SUBSTITUTIONS TO PLANT MATERIALS FOR AREAS AND ITEMS ADDRESSED BY LOCAL CODES SHALL BE APPROVED BY THE GOVERNING MUNICIPALITY PRIOR TO WORK PERFORMED.
13. ALL LANDSCAPE AREAS SHALL BE FINISH GRADED SUCH THAT THEY ARE FLUSH AND LEVEL WITH SURROUNDING PAVED SURFACES AS NOT TO IMPEDE THE FLOW OF DRAINAGE INTO LANDSCAPE AREAS AND TO PREVENT THE BACKWASH OF MULCH AND DEBRIS INTO PAVED AREAS.
14. ALL NEW LANDSCAPED ISLANDS ADJACENT TO EXISTING PAVEMENT SHALL BE EXCAVATED DOWN TO 24" DEPTH BELOW PAVEMENT, AND BACKFILLED WITH APPROVED SOIL.
15. PLANTING PLAN TAKES PRECEDENT OVER PLANT LIST.
16. MULCH SHALL BE STERILIZED MELALEUCA MULCH.
17. FOR LANDSCAPE WITHIN THE SITE TRIANGLES,
  - A. HEDGES AND ANY OTHER LOW-GROWING VEGETATION SHALL BE MAINTAINED TO A MAXIMUM HEIGHT OF TWENTY-FOUR (24) INCHES.
  - B. TREES LIMBS SHALL BE PRUNED TO PROVIDE A MINIMUM OF EIGHT (8) FEET OF VERTICAL CLEARANCE.

NO.	DATE	REVISION	BY
2.	1-25-16	For Revised Site Plan rcd 1-22-16	JS
1.	12-10-15	For Revised Site Plan rcd 12-9-15	JS

Drawn: JS 8-19-15  
Checked: JS

SCALE  
1" = 20'

FILE NO.

PROJECT  
213057

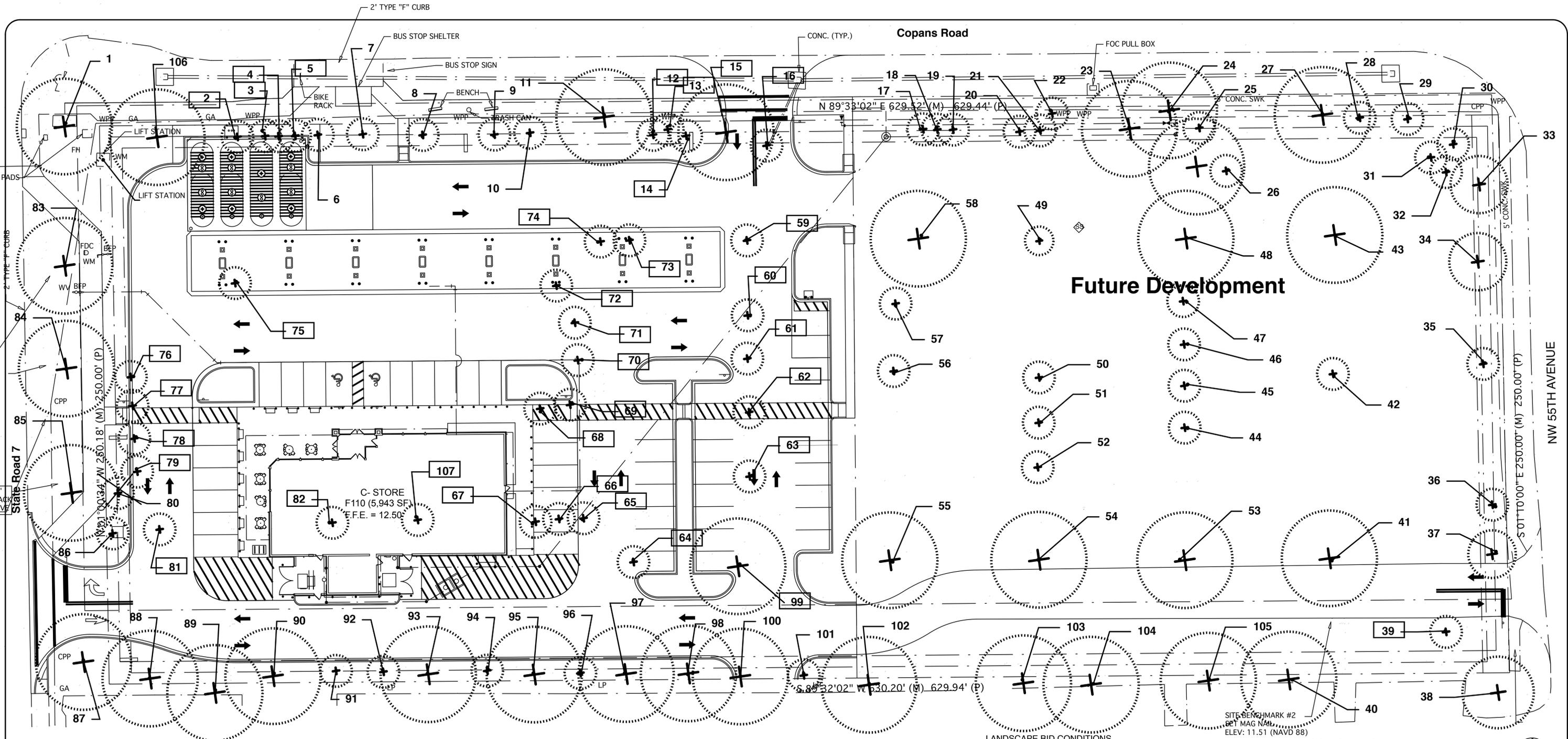
ISSUE

james santiago  
landscape architecture and design  
612 NE 14th Ave. Unit A, Fort Lauderdale, FL 33304  
Tel. 954-560-1695  
Email, Jsantiago@Gmail.com

Landscape Details

Convenience Store  
Margate, Fl

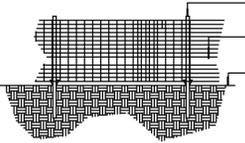
SHEET  
L-2  
OF 2  
SEAL #795 DATE



**Future Development**

48 HOURS BEFORE YOU DIG  
CALL SUNSHINE  
1-800-432-4770  
IT'S THE LAW IN FLORIDA

**Tree Protection Detail**



STEEL FENCEPOST. SPACE AS REQUIRED TO MAINTAIN FENCE FABRIC IN TAUT, UPRIGHT CONDITION.  
HIGH DENSITY POLYETHYLENE SAFETY FENCE, 4' HT. (ALP) OR EQUAL, FASTEN TOP, BOTTOM, & CENTER  
EXISTING GRADE  
NOTE: ERECT FENCE PRIOR TO BEGINNING DEMOLITION. LEAVE IN PLACE UNTIL ALL PAVING & GRADING IS COMPLETE. FENCE TO BE REMOVED AT TIME SITE IS BEING PREPARED FOR SOD INSTALLATION. THE BARRIER SHALL BE PLACED AT THE DRIP LINE OF THE TREE OR AT THE FARTHEST UNPAVED EXTENT AT THE BASE OF THE TREE, WHICHEVER IS LARGEST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXISTING LANDSCAPE MATERIAL AND ROOTS WITHIN THE SCOPE AREA.  
ROOT BARRIER WILL BE PLACED ALONG ANY PAVEMENT WITHIN 5' OF ANY NEWLY SUPPLIED OR TRANSPLANTED TREE OR PALM. SEE SHEET TD-1 FOR SPECIFICATIONS.

**LANDSCAPE BID CONDITIONS**

- The quantities on the plant list are for the convenience of the contractor only and not to be considered as the final quantity for installation. The callouts and entities drawn on these plans take precedence over the plant list.
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- After the award of the contract, any discrepancies in the plans or additional materials and costs because of pre-existing conditions at the site shall not be a reason for any additional charges to the owners.
- These bid conditions are not to be considered all inclusive. There may be additional conditions included in other documents of the construction agreement. It is the contractors responsibility to make himself and his subcontractors aware of any other such conditions.

**TREE DISPOSITION LEGEND**

- XX EXISTING TREE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
  - XX EXISTING TREES TO REMOVE
  - XX EXISTING TREES TO RELOCATE
- See sheet TD-2 for the Master list of trees

**Mitigation Quantities**

TOTAL DBH INCHES OF TREES TO BE REMOVED = 1,696"  
THIS QUANTITY DOES NOT INCLUDE ANY EXOTICS

NO.	DATE	REVISION	BY
2.	1-25-16	For Revised Site Plan rcd 1-22-16	JS
1.	12-10-15	For Revised Site Plan rcd 12-9-15	JS

Drawn: JS 8-19-15  
Checked: JS

SCALE  
1" = 20'

FILE NO.  
PROJECT 213057  
ISSUE

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Tel. 954-560-1695  
Email. Jsantiagolainc@gmail.com

**Tree Disposition Plan**

**Convenience Store**  
Margate, Fl

SHEET  
TD-1  
SEAL #795 DATE

Tree Inventory						
Number	Tree Name	Caliper"	Spread / Ft.	Ht./ft.	Disposition	Canopy in sq.ft.
001	Mahogany Tree	48	50	45	Remain	1963
002	Pigeon Plum Tree	12	8	10	Remove	50
003	Sabal Palm	12	8	12	Remain	50
004	Sabal Palm	12	8	12	Remain	50
005	Sabal Palm	12	8	12	Remain	50
006	Sabal Palm	12	8	12	Remain	50
007	Sabal Palm	12	8	12	Remain	50
008	Mahogany Tree	6	24	24	Remain	452
009	Mahogany Tree	6	24	24	Remain	452
010	Mahogany Tree	8	22	20	Remain	380
011	Mahogany Tree	8	24	30	Remain	452
012	Sabal Palm	12	8	12	Remove	50
013	Sabal Palm	12	8	12	Remove	50
014	Sabal Palm	12	8	12	Remove	50
015	Mahogany Tree	8	8	14	Remove	50
016	Pigeon Plum Tree	12	8	10	Remove	50
017	Sabal Palm	12	8	12	Remain	50
018	Sabal Palm	12	8	12	Remain	50
019	Sabal Palm	12	8	12	Remain	50
020	Sabal Palm	12	8	12	Remain	50
021	Gumbo Limbo Tree	4"	12	24	Remain	113
022	Mahogany Tree	14	40	28	Remain	1257
023	Mahogany Tree	24	28	28	Remain	616
024	Mahogany Tree	12	30	14	Remain	707
025	Pigeon Plumb Tree	3	6	14	Remain	28

Tree Inventory						
Number	Tree Name	Caliper"	Spread / Ft.	Ht./ft.	Disposition	Canopy in sq.ft.
026	Sabal Palm	12	8	12	Remain	50
027	Sabal Palm	12	30	24	Remain	707
028	Mahogany Tree	12	24	24	Remain	452
029	Mahogany Tree	12	24	24	Remain	452
030	Sabal Palm	12	8	12	Remain	50
031	Sabal Palm	12	8	12	Remain	50
032	Sabal Palm	12	8	12	Remain	50
033	Mahogany Tree	24	35	35	Remain	962
034	Live Oak Tree	5	10	22	Remain	79
035	Sabal Palm	5		28	Remain	0
036	Live Oak Tree	4	8	14	Remain	50
037	Mahogany Tree	14	30	34	Remain	707
038	Mahogany Tree	35	49	34	Remain	1886
039	Sabal Palm	8		28	Remain	0
040	Acacia Tree	14	30	34	Remain	707
041	Mahogany Tree	14	25	30	Remain	491
042	Sabal Palm	12		8	Remain	0
043	Mahogany Tree	20	24	24	Remain	452
044	Sabal Palm	12		12	Remain	0
045	Gumbo Limbo Tree	4	12	10	Remain	113
046	Sabal Palm	12		12	Remain	0
047	Mahogany Tree	4	8	24	Remain	50
048	Mahogany Tree	8	20	28	Remain	314
049	Gumbo Limbo Tree	4	12	10	Remain	113
050	Gumbo Limbo Tree	4	12	10	Remain	113

Tree Inventory						
Number	Tree Name	Caliper"	Spread / Ft.	Ht./ft.	Disposition	Canopy in sq.ft.
051	Sabal Palm	12		10	Remain	0
052	Gumbo Limbo Tree	4	10	8	Remain	79
053	Mahogany Tree	14	20	40	Remain	314
054	Mahogany Tree	20	35	33	Remain	962
055	Mahogany Tree	40	30	50	Remain	707
056	Gumbo Limbo Tree	6	14	10	Remain	154
057	Sabal Palm	12		10	Remain	0
058	Mahogany Tree	60	50	50	Remain	1963
059	Mahogany Tree	24	45	35	Remove	1590
060	Sabal Palm	12		10	Remove	0
061	Sabal Palm	12		10	Remove	0
062	Sabal Palm	12		10	Remove	0
063	Sabal Palm	12		10	Remove	0
064	Sabal Palm	12		10	Remove	0
065	Sabal Palm	12		10	Remove	0
066	Sabal Palm	12		10	Remove	0
067	Sabal Palm	12		10	Remove	0
068	Royal Palm DBL	24	12	24	Remove	113
069	Royal Palm Triple	36	14	24	Remove	154
070	Royal Palm Triple	36	14	24	Remove	154
071	Royal Palm Triple		14	24	Remove	154
072	Sabal Palm	12		10	Remove	0
073	Sabal Palm	12		10	Remove	0
074	Sabal Palm	12		10	Remove	0
075	Sabal Palm	12		10	Remove	0

Tree Inventory						
Number	Tree Name	Caliper"	Spread / Ft.	Ht./ft.	Disposition	Canopy in sq.ft.
076	Royal Palm	12		28	Remove	0
077	Royal Palm	12		28	Remove	0
078	Royal Palm	12		28	Remove	0
079	Royal Palm	12		28	Remove	0
080	Montgomery Palm, Dbl	12		28	Remove	0
081	Sabal Palm	12		10	Remove	0
082	Phoenix Roebelenii Palm, Dbl	6	6	7	Remove	28
083	Mahogany Tree	60	50	50	Remain	1963
084	Mahogany Tree	64	50	50	Remain	1963
085	Mahogany Tree	66	60	50	Remain	2827
086	Montgomery Palm, Dbl	12	8	30	Remain	50
087	Mahogany Tree	8	22	24	Remain	380
088	Live Oak Tree	3	10	20	Remain	79
089	Mahogany Tree	16	30	30	Remain	707
090	Live Oak Tree	4	10	20	Remain	79
091	Live Oak Tree	4	10	20	Remain	79
092	Live Oak Tree	4	10	20	Remain	79
093	Mahogany Tree	16	30	30	Remain	707
094	Live Oak Tree	3	6	12	Remain	28
095	Mahogany Tree	16	30	30	Remain	707
096	Live Oak Tree	2	18	12	Remain	254
097	Mahogany Tree	18	40	30	Remain	1257
098	Live Oak Tree	4	8	24	Remain	50
099	Mahogany Tree	20	35	55	Remove	962
100	Mahogany Tree	50	50	30	Remain	1963
101	Live Oak Tree	4	8	12	Remain	50
102	Mahogany Tree	40	30	35	Remain	707
103	Earleaf Accacia Tree	40	35	30	Remain	962
104	Earleaf Accacia Tree	40	35	30	Remain	962
105	Earleaf Accacia Tree	40	35	30	Remain	962
106	Mahogany Tree	50	50	35	Remove	1963
107	Phoenix Roebelenii Palm, Dbl	6			Remove	0

2.	1-25-16	For Revised Site Plan revd 1-22-16	JS
1.	12-10-15	For Revised Site Plan revd 12-9-15	JS
NO.	DATE	REVISION	BY

Drawn: JS 8-19-15  
 Checked: JS

SCALE  
1" = 20'

FILE NO.  
  
 PROJECT  
213057  
 ISSUE

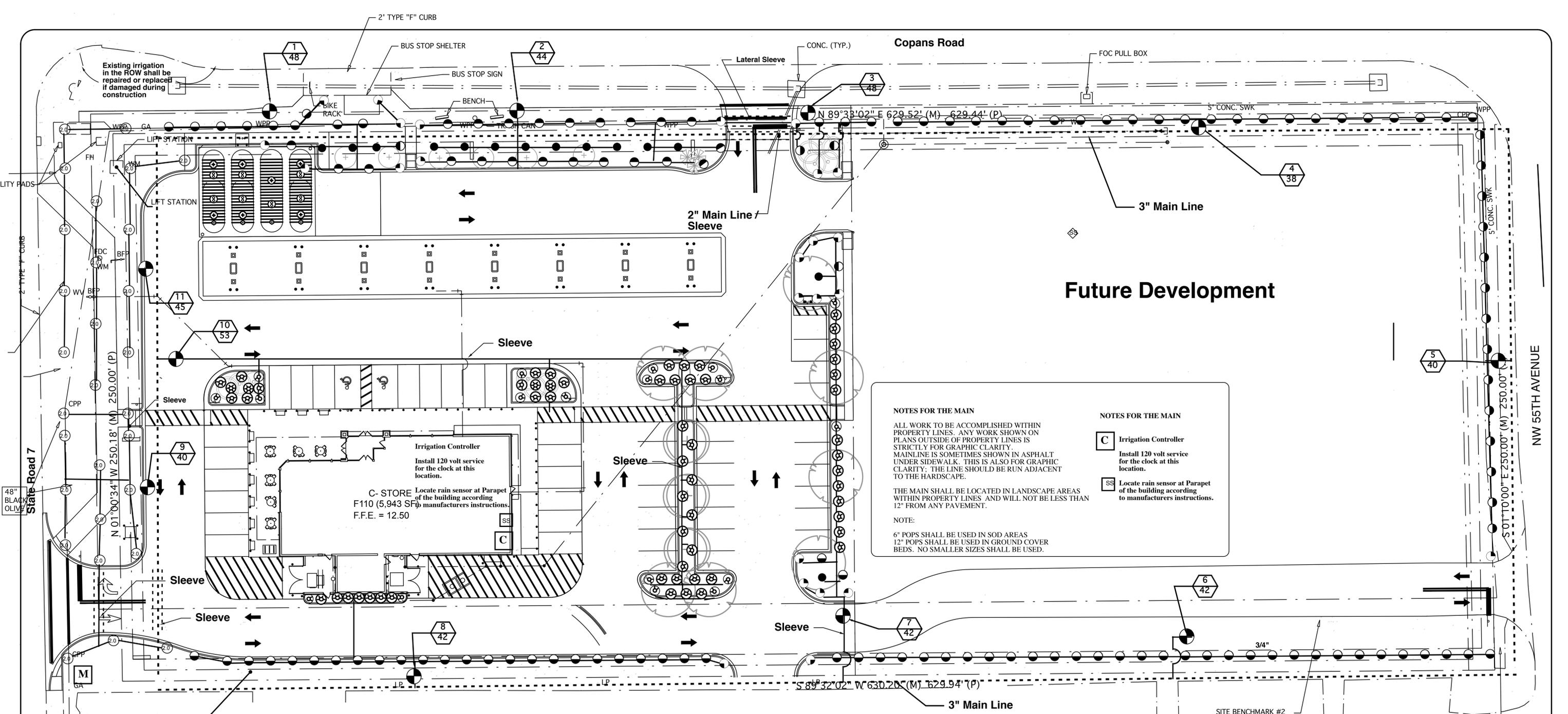
**j a m e s s a n t i a g o**  
 landscape architecture and design  
 612 NE 14th Ave. Unit A, Fort Lauderdale, FL. 33304  
 Tel. 954-560-1695  
 Email, Jsantiagolainc@gmail.com



**Tree Disposition  
Existing Tree List**

**Convenience Store  
Margate, Fl**

SHEET  
TD-2  
SEAL #795, DATE



**NOTES FOR THE MAIN**

ALL WORK TO BE ACCOMPLISHED WITHIN PROPERTY LINES. ANY WORK SHOWN ON PLANS OUTSIDE OF PROPERTY LINES IS STRICTLY FOR GRAPHIC CLARITY. MAINLINE IS SOMETIMES SHOWN IN ASPHALT UNDER SIDEWALK. THIS IS ALSO FOR GRAPHIC CLARITY. THE LINE SHOULD BE RUN ADJACENT TO THE HARDSCAPE.

THE MAIN SHALL BE LOCATED IN LANDSCAPE AREAS WITHIN PROPERTY LINES AND WILL NOT BE LESS THAN 12" FROM ANY PAVEMENT.

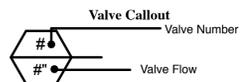
NOTE:  
 6" POPS SHALL BE USED IN SOD AREAS  
 12" POPS SHALL BE USED IN GROUND COVER BEDS. NO SMALLER SIZES SHALL BE USED.

**NOTES FOR THE MAIN**

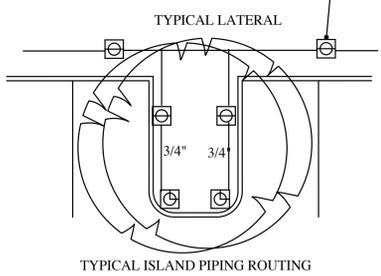
**C** Irrigation Controller  
 Install 120 volt service for the clock at this location.

**SS** Locate rain sensor at Parapet of the building according to manufacturers instructions.

The location of the main is schematic. The main should be located within the landscape buffer a minimum of 4' off any pavement.



Locate the heads 2' off the front of curb typical



**Control Wire Note**  
 The contractor is to install a 2" conduit from the clock to the trench of the main. The conduit shall contain all control wires and be according to the spec for a sleeving.

**SYSTEM DESIGN NOTE**

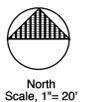
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE HEADS SHOWN AS A MINIMUM. HE SHALL PROVIDE ANY ADDITIONAL HEADS REQUIRED FOR THE SPECIFIED COVERAGE AND SIZE THE PIPE ACCORDING TO THE SPECIFICATIONS FOR PIPE SIZING AND SLEEVING PROVIDED ON THIS SHEET AND SHALL PROVIDE 100% OVERLAP.
- THE DESIGN SHALL PROVIDE SUFFICIENT PRESSURE AND FLOW TO SATISFY THE MANUFACTURERS SPECIFICATIONS FOR THE EQUIPMENT SPECIFIED.
- WHERE AN EXISTING SYSTEM IS DEMOLISHED THE CONTRACTOR SHALL SUPPLY TEMPORARY WATER TO ALL LANDSCAPE NOT EFFECTED BY DEMOLITION FOR THE PERIOD OF CONSTRUCTION AND UNTIL THE SYSTEM IS IN PLACE AND OPERATIONAL.
- WHERE POSSIBLE THE ZONES SHOWN ARE TO BE RESPECTED IN THE DESIGN SEE SHEET EP 1 FOR ELECTRICAL COORDINATION AND CONTINUATION OF INSTALLATION SPECIFICATIONS.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUPPLY HIS DESIGN TO THE ARCHITECT FOR APPROVAL. THE LANDSCAPE ARCHITECT SHALL SIGN AND SEAL THE IRRIGATION DOCUMENTS FOR PERMIT.
- THE CONTRACTOR SHALL SUPPLY TO THE OWNER AN ASBUILT OF THE SYSTEM.

- LANDSCAPE AND IRRIGATION BID CONDITIONS**
- The quantities on the plan are for the convenience of the contractor only and not to be considered as the final quantity for installation. The callouts and entities drawn on the plans take precedence over the Spec list.
  - The contractor shall be responsible for his own takeoffs of the materials drawn.
  - The contractor shall be expected to visit the site prior to bid. the contractor shall have an understanding of the on site conditions to prepare his bid. Any questions concerning conditions are to be brought to the owners attention prior to bid.
  - Any discrepancies concerning the materials or conditions of the site that shall inhibit the installation as drawn shall be brought to the attention of the owners representatives. Issues found prior to bid will become a condition of the bid after submission.
  - After the award of the contract, any discrepancies in the plans or additional materials and costs because of pre-existing conditions at the site shall not be a reason for any additional charges to the owners.
  - These bid conditions are not to be considered all inclusive. There may be additional conditions included in other documents of the construction agreement. It is the contractors responsibility to make himself and his subcontractors aware of any other such conditions.

48 HOURS BEFORE YOU DIG  
 CALL SUNSHINE  
 1-800-432-4770  
 IT'S THE LAW IN FLORIDA

SITE BENCHMARK #2  
 SET MAG NAIL  
 KEY: 11N0; (N CODE 88)

ITEM DESCRIPTION	Head	Head	Head
Hunter I-20-ADV, 36V	20		
Turf Rotor, 6" popup, adjustable and full circle, with check valve			
RAINBIRD 1806 or 1812-PRS Turf or Shrub Spray with 6" or 12" popup with pressure regulator	78	Head	FULL HEADS
Radius as required on the plansplan			3/4 HDS
			1/2 HDS
			1/4 HDS
15 STRIP SERIES			
15RCS OR 15LCS			
15SST			
RAINBIRD 1800 SERIES STREAM BUBBLER 16H-SLA, SQ-B, & SHB PCS-040 PCS-060 PCS-090			
12" POP-UP, 30 PSI HEADS TO BE PRESSURE COMPENSATING			



NO.	DATE	REVISION	BY
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SCALE  
 1" = 20'

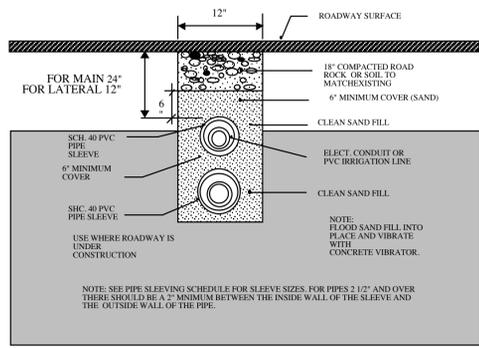
FILE NO.  
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james santiago  
 landscape architecture and design  
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Irrigation Plan

Convenience Store  
 Margate, Fl

SHEET  
 IR-1  
 of 2  
 SEAL #795, DATE



ALSO FOR PIPE AND CONDUIT ACROSS ROADWAYS

**PIPE SIZING SCHEDULE 40**

0-7 GPM	= 3/4"
8-12	= 1"
13-22	= 1 1/4"
23-30	= 1 1/2"
31-50	= 2"
51-70	= 2 1/2"
71-110	= 3"

**SLEEVE UNDER ALL PAVEMENT ACCORDING TO THE SCHEDULE BELOW.**

**PIPE SLEEVING SCHEDULE**

PIPE SIZE	SLEEVE SIZE
1"	2"
1 1/4"	2"
1 1/2"	3"
2"	4"
2 1/2"+	6"

NOTE THAT NO SLEEVE SHALL BE LESS THAN 2"

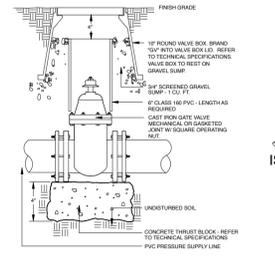
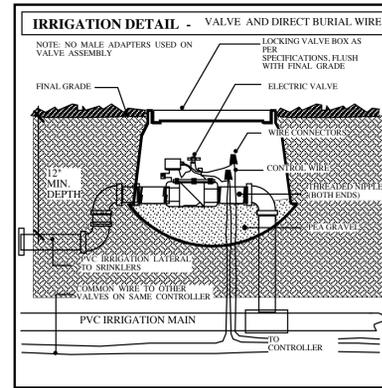
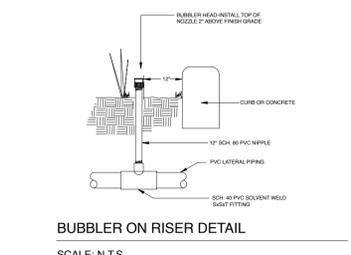
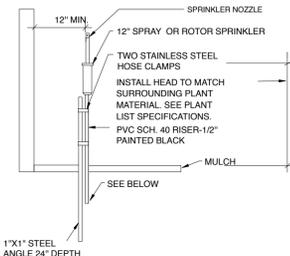
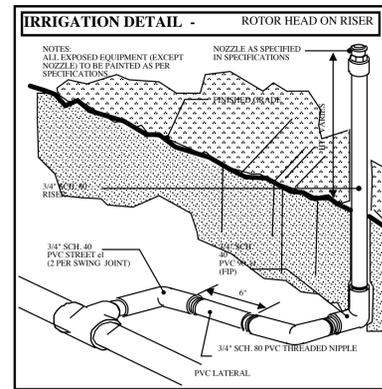
**SYMBOL MANUFACTURER/MODEL/DESCRIPTION**

- Rain Bird PGA-PRS-D- Globe 1", 1-1/2", 2" Electric Remote Control Valve, Globe. With Pressure Regulator Module.
- Nibco T-113-K Class 125 bronze gate shut off valve with cross handle, same size as mainline pipe diameter at valve location. Size Range - 1/4" - 3"
- Rainbird ESP LX 12 station controller wall mounted in an LX-MM metal enclosure. Attach RSD-BEX rain sensor as per manufacturers specification. Provide conduit from controller to sensor location.
- Irrigation Lateral Line: PVC Class 160 SDR 26 PVC Class 315 for 1/2" pipe, PVC Class 200 for 3/4" pipe, PVC Class 160 SDR 26 for 1" and above.
- Irrigation Mainline: 2 1/2" PVC Class 200 SDR 2 PVC Class 200 irrigation pipe.
- Pipe Sleeve: HDPE PE4710 DR 11 (202psi)
- Typical pipe sleeve for irrigation pipe. See chart.
- 1 1/2" CITY WATER METER by the City.

**Valve Callout**

**INSTALLATION NOTE:**

- IRRIGATION CONTRACTOR SHALL NOT BE ALLOWED TO USE A MECHANICAL TRENCHER WHEN INSTALLING LATERALS, MAINS, AND/OR WIRING OR ANY OTHER MATERIAL NECESSARY FOR THE IRRIGATION SYSTEM WITHIN 10' FROM THE FACE OF AN EXISTING TREE. ALL TRENCHES WITHIN THE 10' OF THE TREE SHALL BE HAND DUG. ALL ROOTS EXPOSED SHALL BE CUT CLEANLY WITH NO JAGGED EDGES AND/OR TEARS.
- THE WATER SOURCE SHALL BE FROM THE EXISTING LAKE
- ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED PER THE SOUTH FLORIDA BUILDING CODE LATEST EDITION.
- THE LOCATION OF THE MAIN IS SCHEMATIC.
- THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY AND CONSTRUCTION DOCUMENTS.
- THESE PLANS ARE NOT COMPLETE WITHOUT THE COMPLETE SET OF LANDSCAPE PLANS, SHEET L-1 AND L-2
- THE LAYOUT AND ZONING ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE ACTUAL LAYOUT AND WATER LOADS MAY BE REVISED BY THE CONTRACTOR TO ACCOMMODATE CONSTRUCTION.



**GATE VALVE 3" AND UP**  
SCALE: N.T.S.

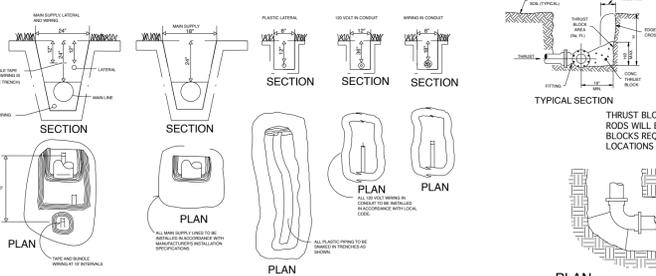
- TRUST BLOCK NOTES**
- Thrust block bearing areas shall be poured against undisturbed material. Where trench wall has been disturbed, excavate all loose material and extend to undisturbed material.
  - Extend thrust block for full length of fittings. Put board in front of plug before pouring concrete. Joints shall not be covered by thrust block.
  - Rough blocking forms shall be used along sides of thrust blocks.
  - Thrust blocks shall be used in combination, as required, to suit the specific fitting arrangement.
  - Alternate designed restraining systems shall be provided where standard thrust blocking is not suitable.
  - All wood blocking shall be pressure treated with preservative.
  - Install a plastic barrier (Visqueen) between fittings and thrust block.

**SCHEDULE FOR THRUST BLOCK AREAS**

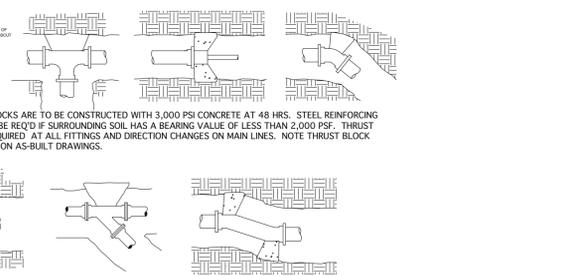
PIPE SIZE (INCH)	SOIL BOND (INCH)							
2	5	3	2	1	4	150		
2.5	1.5	8	4	2	1.1	150		
3	1.5	8	4	2	1.1	150		
4	2.0	1.0	0.5	0.25	1.4	150		

NOTE: Thrust block areas computed on basis of 2000 lbs. per sq. ft. soil resistance bearing.

**SCHEDULE OF TYPICAL THRUST BLOCK AREAS**  
SCALE: N.T.S.



**TYPICAL TRENCHING DETAILS**  
SCALE: N.T.S.



**TYPICAL THRUST BLOCK DETAIL**  
SCALE: N.T.S.

**IRRIGATION MASTER KEY**

KEY	NO.	CODE	ITEM DESCRIPTION	INSTALLATION SPEC.	
20		Head	Hunter I-20-ADV, 36V Turf Rotor, 6" pop-up, adjustable and full circle, with check valve	*All heads in open grass areas to be mounted on poly pipe swing joints. Height of heads adjusted to finish grade and sod. Heads on risers in shrub areas to be installed 6" above plant height, with risers on rigid pvc swing joints.	
78		Head	RAINBIRD 1806 or 1812-PRS Turf or Shrub Spray with 6" or 12" pop-up with pressure regulator Radius as shown on plan	FULL HEADS 3/4 HDS 1/2 HDS 1/4 HDS 15 STRIP SERIES 15RCS OR 15LCS 15SST	*All heads in open grass areas to be mounted on poly pipe swing joints. Height of heads adjusted to finish grade and sod. Heads on risers in shrub areas to be installed 6" above plant height, with risers on rigid pvc swing joints.
00C26		CON	SEE SHEET IR-1 FOR THE LOCATION OF THE CLOCK AND METER.		
11		PIPE GEN NOTE	LATERAL PIPE All New Pipe and Fittings. Size as noted in plans. ALL MAINLINE PIPE SHALL BE SCH 40	3/4" Pipe to be Class 200. All other lateral pipe to be Class 160, except where ground is rocky; in rocky ground SCH 40 pipe will be used or Class 200/160 will be protected on all sides with at least 6" of clean, debris-free builders sand. All laterals to be placed 12" minimum below grade. All lateral pipe under pavement to be sleeved. No lateral installed shall be less than 3/4".	
56.5		Head	RAINBIRD 1800 SERIES STREAM BUBBLER 16H-SLA, SQ-B, & SHB PCS-040 PCS-060 PCS-090 6" POP-UP, 30 PSI HEADS TO BE PRESSURE COMPENSATING	Height of heads adjusted to finish grade.	
13		PIPE GEN NOTE	PIPES NEAR EXISTING TREES EXISTING TREES TAKE PRIORITY OVER PROPOSED IRRIGATION LINES. CONTRACTOR SHALL MAKE ADJUSTMENTS WHERE NECESSARY TO ACCOMMODATE EXISTING TREES.	Particular care shall be taken while installing pipe in the vicinity of existing or newly planted trees. Laterals shall run clear of rootballs and heads set to throw back toward trees.	
10		MAIN LINE NOTE	MAIN LINE NOTE ALL MAINLINE PIPE SHALL BE SCH 40 MAINLINE SHOWN ON PLANS AS SCHEMATIC ONLY. MAINLINE SHALL BE INSTALLED WITHIN PROPERTY LINES AT ALL TIMES.	Main lines location is shown schematically. Where ever possible, lateral lines are to be buried in common trench with main line. All wires shall be run under mains for protection. All Mains shall be buried at minimum 24" depth. Mains should run deeper at road crossings. All pipe and fitting materials shall be new. All pipe to be cut squarely and burrs removed. All P.V.C. Mainline 4" and larger to be assembled with use of HARCO Gasketed fittings and poured concrete thrust blocks as per manf. specifications.	
01		CODE REQ.	Contractor shall comply w/ all Local Codes & include any and all Code requirements in their Base Bid. Extras shall be awarded the Contractor for materials work that are a basic requirement of codes whether or details are shown in schematic plans or not. ALL CONSTRUCTION MINIMUMS SHALL BE EQUAL TO OR GREATER THAN THE STANDARDS AS SET FORTH BY THE FLORIDA IRRIGATION SOCIETY INC. (FIS)	Contractor to supply and install all check valves, back flow preventers, and supply in the bid the cost for all permits, etc., as required by these codes even if those items are not shown on drawings. Each municipality making inspections for a job C.O., shall have it's own list of requirements which shall be included in the base bid and provided as part of the installation. It is the sole responsibility of the General Contractor to assure compliance with all local codes.	
02		CONTR NOTE	IRRIGATION CONTRACTOR UTILITIES ABOVE AND BELOW GROUND.	Contractors shall be responsible for the location and verification of all overhead and underground utilities. Contractor shall coordinate with all of the appropriate agencies to verify utilities in the field. Contractor shall be responsible for the protection and maintenance and any damage to existing utilities and structures that may occur in the implementation of the scope of this project. CONTRACTORS MUST USE THE NEW STANDARD SCHEDULE OF COLORS DESIGNATED FOR MARKINGS ON THE GROUND, 1994 edition or better.	
00V1		WIRE LOW VOLT	Control wires for 24V Automatic Valves, shall be installed by Irrigation Contractor. Where required wire shall be sleeved in minimum 1" SCH 40 pipe electrical conduit buried beneath the mainline, where not possible wires shall be sleeved and at no less than 12" depth Contractor shall run two spare control wires to the furthest ends of system in each direction. Common wire shall be white, while the control wires shall each be a different color, and be different from spares...	All irrigation control wires shall be U. L. approved 24V solid copper wire. Wires shall operate 24V automatic sprinkler valves and enter the box from below. Individual control wires to be AWG size 14 gauge and common wires to be AWG white size 12 gauge. All BE APPROVED BY THE LAND. ARCH. ALL VALVE BOXES SET LEVEL, W/ GRADE Loop up spare wires at each control valve ALL SPLICING SHALL BE DONE IN VALVE BOXES ONLY.	
00V11		VALV BOX	VALVE COVER BOX - AMETEK Heavy Duty Box Locking Covers, with JVB-12 Box 12" d with 14"x20" Cover	All valve assemblies to be installed below grade shall include AMETEK valve boxes with a 2" layer of drainage gravel as clean dry ballast for a bottom. Install top of box flush with surrounding grade, grass or mulch depending on location. Group valve assemblies so they are accessible with the correct size box. Any substitutions must be approved by landscape architect by providing sample or product information for review and written approval.	
00V1A		VALVE	PGV-101 to 201G - S - DC = 1" Globe valve, with flow control, slip x slip, and DC latching solenoid Electric w/ 24V Solenoid - SIZE OF VALVE TO ACCOMMODATE SYSTEM 2.20 GPM 1" 20-50 GPM 1.5" 50-100 GPM 2"	*All Valves shall be installed in a separate AMETEK valve box. All valve boxes to be placed upon a 2" layer of gravel. All valves assembled with IPS threaded nipples and then to PVC adapters. Top stem of valve assembly to be 6" below cap of valve cover box. This valve shall be used as the job standard Valve controlling each Zone as well as use as the Master Control Valve for applicable plans. All valve box locations to be approved by the Landscape Architect. All boxes to be set level with grade.	
			Rain Bird PGA-PRS-D- Globe 1", 1-1/2", 2" Electric Remote Control Valve, Globe. With Pressure Regulator Module.		

2.	1-25-16	For Revised Site Plan rev'd 1-22-16	JS
1.	12-10-15	For Revised Site Plan rev'd 12-9-15	JS
NO.	DATE	REVISION	BY

Drawn: JS 8-19-15  
Checked: JS

SCALE  
1" = 20'

FILE NO.  
PROJECT 213057  
ISSUE

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612 NE 14th Ave. Unit A, Fort Lauderdale, FL 33304  
Tel. 954-560-1695  
Email, Jsantiagoainc@gmail.com

IRRIGATION DETAILS

Irrigation Details

Convenience Store  
Margate, FL

SHEET  
IR-2  
of 2  
SEAL #795, DATE