





**City of Pembroke Pines**  
**Planning & Economic Development Department**  
**601 City Center Way 3<sup>rd</sup> Floor**  
**Pembroke Pines FL, 33025**

## Summary

<b>Agenda Date:</b>	June 27, 2019	<b>Application ID:</b>	SP 2019-05
<b>Project:</b>	Bergeron Park of Commerce South 15.25 Acre Storage	<b>Project Number:</b>	PRJ 2019-07
<b>Project Planner:</b>	Joseph Yaciuk, Planning Administrator		
<b>Owner:</b>	Bergeron Park of Commerce South Family LTD Partnership	<b>Agent:</b>	Bill Barbaro
<b>Location:</b>	South of Stirling Road and west of Southwest 196 Avenue		
<b>Existing Zoning:</b>	M-3 (General Industrial)	<b>Existing Land Use:</b>	Industrial
<b>Reference Applications:</b>	SP 2018-14 (Withdrawn), SP 2017-12, MSC 2018-12		
<b>Applicant Request:</b>	Construction of outdoor industrial storage with associated office trailer, parking, and security fencing.		
<b>Staff Recommendation:</b>	<b>Approval.</b>		
<b>Final:</b>	<input checked="" type="checkbox"/> Planning & Zoning Board	<input type="checkbox"/> City Commission	
<b>Reviewed for the Agenda:</b>	Director: <u></u> Planning Administrator: <u></u>		



## **Project Description / Background**

---

Bill Barbaro, agent for owner Bergeron Park of Commerce South Family LTD Partnership, submitted a site plan application for the construction of outdoor industrial storage with associated office trailer, parking, and security fencing. The proposed 15.25-acre parcel is generally located south of Stirling Road and west of Southwest 196 Avenue. It is the intent of the owner to lease the subject parcel to one tenant for auto auction use.

On June 22, 2017 the Planning and Zoning Board approved with conditions a site plan amendment application (SP 2017-12) for the development of an outdoor industrial storage facility with site perimeter fencing and landscaping for the property. The approval allowed for the flexibility for tenants to lease one acre or larger storage spaces on site. The approved plan required all tenant storage areas to be enclosed by 6-foot high, chain link fences. These fences may be modified throughout the site by building permit only as long as the minimum lot size requirements and associated building, engineering and fire access requirements are met. The approval also included the installation of perimeter landscape. As part of that approval, the applicant voluntarily agreed to return to the Board for consideration of associated sales trailers / permanent structures and parking areas for future tenants should that need arise.

On June 21, 2018, the applicant modified their outdoor storage plan for this property (MSC 2018-12) by reducing the overall size of the Bergeron Outdoor Storage South storage area from the originally approved 52.6 acres to 48.4 acres to accommodate two tenants. The first tenant, Insurance Auto Auctions, currently occupies an "L" shaped +/-37 acres parcel that is generally located along the entire western most portion and all of the land south of Sylvan Pass (private) of the Bergeron Outdoor Storage South site. The site will be used as additional storage of vehicles similar to their existing location in Bergeron Park of Commerce North. The remaining property within that plan is a rectangular shaped parcel that is generally located south of Republic Pass (private) and immediately east of the Insurance Auto Auctions. The site has yet to be leased.

Earlier this year, City staff received an application (SP 2018-14 – Bergeron Distribution Building #2) to build a distribution facility building on the subject parcel of similar design to the building which was recently completed at the southwest corner of Stirling Road and Southwest 196 Avenue. The proposed site plan was withdrawn during the staff review process by the owner and replaced with the proposed application.

### **BUILDINGS / STRUCTURES:**

Bergeron will be installing perimeter fencing and one (1), 13 foot high, trailer office (William Scotsman - 60' x 20' (1200 square feet) with ADA accessible ramp and associated parking areas. The trailer will be white with blue trim.

### **ACCESS:**

Access to this storage site will be through two driveways along Southwest 196 Avenue. The southernmost driveway will provide secure access to the proposed office trailer while the driveway to the north will provide main secured access to the storage area.



#### **PARKING:**

The applicant proposes 11 parking spaces on site where 5 parking spaces are required based on Code. Parking will be provided to the south of the proposed trailer as depicted within the site plan.

#### **LANDSCAPING:**

The Southwest 196 Avenue bufferyard for this site, consisting of Silver Buttonwood trees, Clusia hedge, and an 8 foot high chainlink fence with privacy screening; was approved as part of the original outdoor storage application (SP 2017-12). During review of that site plan, Bergeron voluntarily agreed to continue that perimeter landscaping theme fronting SW 196<sup>th</sup> Avenue (from Bergeron Distribution Center to the north to the existing US Post Office to the south of the site), creating a buffer theme along the road. The Southwest 196 Avenue perimeter plantings approved comply with Code requirements for the subject site.

In addition to the buffering already approved above, Bergeron has voluntarily agreed with this submittal to enhance the currently approved Southwest 196 Avenue buffer along this site above and beyond Code requirements by adding 48 Green Buttonwood trees along Southwest 196 Avenue. The Green Buttonwood trees will be planted at 12' height and will provide additional screening on the site from the residential property to the east.

- In total, the site will contain the following landscape:
- 48 Green Buttonwoods Trees
- 48 Silver Buttonwood Trees,
- 8 Crape Myrtles on the corners entries
- 1,967 Clusia Hedges

#### **OTHER SITE FEATURES:**

The proposed parking area will be illuminated by three (3) concrete pole mounted full cut off fixtures (30 feet in height). The remaining storage area will not be lit and is not required to be illuminated per Code requirements. Lighting, as proposed, must comply with Section 116 of the Code of Ordinances.

**Staff has reviewed the proposed site plan and finds that the proposal meets code requirements. Staff therefore recommends approval of this application.**

#### **Enclosed:**

Site Plan Application  
Memo from Planning Division (6/19/19)  
Memo from Zoning Administrator (6/19/19)  
Email from SBDD (6/19/19)  
Memo from Fire Prevention Bureau (6/10/19)  
Memo from Environmental Services (6/4/19)  
Memo from SBDD (6/3/19)  
Memo from Zoning Administrator (5/30/19)



Memo from Planning Division (5/29/19)  
Memo from Landscape Planner (5/29/19)  
Memo from Fire Prevention Bureau (5/29/19)  
Site Plan  
Subject Site Aerial Photo



## **PLANNING DIVISION STAFF COMMENTS**

### **Memorandum:**

**Date:** June 19, 2019  
**To:** SP 2019-05 file  
**From:** Joseph Yaciuk, Planning Administrator  
**Re:** Bergeron South 15.25 Acres

**Items which do not conform with the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:**

ALL OF MY COMMENTS HAVE BEEN ADDRESSED

**Recommendations:** N/A



**Yaciuk, Joseph**

---

**Subject:**

FW: 190411 SP2019-05 / Bergeron 15.25 Acre Parcel / Response to DRC SBDD Comments

**From:** Kevin Hart [mailto:kevin@sbdd.org]

**Sent:** Wednesday, June 19, 2019 1:46 PM

**To:** Yaciuk, Joseph <jyaciuk@ppines.com>

**Cc:** Frank Saia <fsaia@bergeroninc.com>; Bill Barbaro <BBarbaro@cpc-eng.com>; Marc Tolliver <MTolliver@cpc-eng.com>; Pam Walsh <Pam@SBDD.org>

**Subject:** RE: 190411 SP2019-05 / Bergeron 15.25 Acre Parcel / Response to DRC SBDD Comments

Joe,

Please be advised that the applicant has addressed SBDD's DRC comments on the site plan for this project.

A Paving & Drainage Permit will be required from SBDD and all District criteria will need to be met.

Thanks.

Kevin Hart, P.E., CFM  
District Director  
South Broward Drainage District  
6591 Southwest 160th Avenue  
Southwest Ranches, FL 33331  
954-680-3337 (office)  
e-mail: [kevin@sbdd.org](mailto:kevin@sbdd.org)



## **DRC REVIEW FORM**

**PEMBROKE PINES FIRE RESCUE**

**FIRE PREVENTION BUREAU**

**FIRE PLANS EXAMINER BY:** Sandra Lluís, Fire Marshal  
(954) 499-9560

**PROJECT NAME:** Bergeron 15.25 Acre Parcel

**REFERENCE #:** SP 2019-05

**DATE REVIEWED:** June 10, 2019

**CONFORMS TO THE CITY OF PEMBROKE PINES FIRE DEPARTMENT  
STANDARDS**

---

YOU HAVE SATISFIED THE FIRE DEPARTMENT'S CONCERNS REGARDING THE  
SITE PLAN REVIEW.

Plan review approved contingent COPP Engineering verification of the following:

1. Fire Hydrant installation on a minimum of an eight – inch looped water line in city rights-of-way or easement.
2. Turning Radius
3. All-weather driving surface to support the imposed load of fire apparatus weight a minimum of 32 tons.

Hardcopies from June 10<sup>th</sup>, 2019 meeting to be submitted.

**CITY OF PEMBROKE PINES  
PUBLIC SERVICES DEPARTMENT  
ENVIRONMENTAL SERVICES/ENGINEERING DIVISION**

# **DRC REVIEW FORM**



**JUNE 4, 2019**

**PROJECT: BERGERON 15.25 ACRE PARCEL SP 2019-05**

**To: Cole Williams, Planner  
Planner/Zoning Technician, Planning and Economic Development Department**

**From: KARL KENNEDY, P.E.  
Environmental Services/Engineering Division, Public Services Department  
(954) 518-9044**

## **RECOMMENDATIONS:**

---

The Environmental Services/Engineering Division's DRC 'Comments' for the proposed project have been satisfied and the proposed project is hereby recommended for 'Consideration' by the Planning and Zoning Board.



**DRC REVIEW COMMENTS  
CITY OF PEMBROKE PINES**

**AGENCY:** SOUTH BROWARD DRAINAGE DISTRICT  
**CONTACT:** KEVIN HART, P.E. (954)680-3337

**PROJECT NAME:** Bergeron 15.25 Acre Parcel

**DATE:** 6/3/2019

---

**THE SITE PLAN FOR THE ABOVE-REFERENCED PROJECT HAS BEEN REVIEWED BY THE DISTRICT AND THE FOLLOWING COMMENTS MUST BE MET ADDRESSED/SATISFIED/NOTED:**

1. A Paving and Drainage Permit will be required from SBDD.
2. Provide an overall drainage plan to include Bergeron Distribution Center I, Bergeron Distribution Center II, Bergeron Outdoor Storage South, Ryder Trailer Storage, and the Bergeron 15.25 Acre Parcel.
3. Include SBDD's standard notes and details (as applicable) in the SBDD permit set.
4. The drainage report indicates that the "proposed project is consistent with the land use and site grading assumptions from the original permit". The grading plan is showing pavement high points (ridges) at elevations ranging between 9.06' NGVD (7.53' NAVD) and 9.38' NGVD (9.85' NAVD). These elevations are over 18" above the calculated 100-year, 3-day flood elevations for the property. The maximum pavement grades should be closer to 7.5' NGVD or 8.0' NGVD, which would coincide with the grading assumptions from the original permit. These high pavement grades may also impact previously calculated site storage (flood protection) and maximum stages, as indicated in previous drainage calculations.
5. The Node Basins listed in the Stage-Storage Calculations starting on Page 11 of the drainage report do not seem to match the node basin designations shown on Exhibit 1 at the end of the report.
6. Verify that the downstream drainage system (culvert sizes) is sized properly to handle the design runoff from this project.
7. Please note that all drainage inlets in grass areas will require a minimum 12" concrete apron.
8. Please note that portions of the existing drainage system may need to be cleaned upon completion of construction. To be determined in the field by SBDD's inspector.
9. Prior to final approval/acceptance of the project, SBDD will require a Maintenance Plan for the drainage system, with special emphasis on the maintenance of the perimeter swale

system.

10. The property owner will be required to enter into Maintenance and Indemnification Agreement with SBDD.
11. Additional comments may be issued upon receipt of the final Paving & Drainage Plans and drainage calculations.

(REGARDLESS OF APPLICABLE COMMENTS, THE PETITIONER IS NOT EXEMPT FROM MEETING ALL STORMWATER MANAGEMENT REGULATIONS, STANDARDS AND PROCEDURES AS OUTLINED IN THE SBDD DESIGN CRITERIA MANUAL DATED MAR. 26, 2015.)

---

**(ALL STANDARD COMMENTS WILL BE GIVEN TO THE PETITIONER ON A SEPARATE HANDOUT. THE PETITIONER WILL ONLY BE REQUIRED TO RESPOND TO THE COMMENTS RAISED ON THE DRC REVIEW FORM.)**

## MEMORANDUM

May 30, 2019

To: Joe Yaciuk  
Planning Administrator

From: Dean A. Piper  
Zoning Administrator

Re: SP 2019-05 (Bergeron 15.25 Acre Parcel)

---

The following are my comments regarding the above Miscellaneous Plan:

1. Provide all color names, color numbers, finishes, materials, etc. on elevations of trailer.
2. Provide screening/mesh on fence along SW 196<sup>th</sup> Ave. to provide additional screening.
3. Will there be any lighting on trailer? If so, provide detail(s)/cut sheet of fixture(s)..
4. Include existing landscape plan with this submittal to show landscaping being provided along SW 196<sup>th</sup> Ave.

Please contact me with any questions.



## **PLANNING DIVISION STAFF COMMENTS**

### **Memorandum:**

**Date:** May 29, 2019  
**To:** SP 2019-05 file  
**From:** Joseph Yaciuk, Planning Administrator  
**Re:** Bergeron South 15.25 Acres

### **Items which do not conform with the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:**

1. Provide notice per City Requirements (Note: Cutro and Associates reached out to staff and expects to have proper notice within the next day or so). Please note that notice must be provided by June 3 in order to potentially be scheduled for late June meeting.
2. Provide summary of operations of the business on this parcel
3. Provide colors of trailer on plans. Provide paint chips.
4. Provide fabric mesh on fence along 196<sup>th</sup> Avenue in order to help screen the storage use.
5. Missing landscape plan in my submittal. Please provide. Landscape should be designed to mitigate views of active storage site from residents on east side of property. Consider using mature landscaping at time of planting.
6. Provide terminal islands at ends of parking rows.

**Recommendations:** N/A

# MEMORANDUM

May 29<sup>th</sup>, 2019

To: Joseph Yaciuk  
Planning Administrator

From: Kristen Jensen  
Landscape Planner

Re: (SP 2019-05) Bergeron Park of Commerce South 15.25 Acre Parcel

---

The City of Pembroke Pines Planning Division has conducted a landscape review as documents provided. The following items need to be addressed prior to this project being found in compliance:

1. Please provide a landscape plan.
2. The existing landscape along 196<sup>th</sup> Ln does not provide a tall enough buffer from the residential community. Recommend installing additional category 3 trees between the existing trees along with mature plant material where the auto auction tenant will be located.
3. Irrigation must be repaired/installed properly to ensure that all new and existing landscape material is properly being irrigated. A "wet-check" shall be done at time of final inspection to ensure all irrigation heads are working properly etc.

Plant diversification is important for the project in order to sustain a healthy and vigorous landscape. It is also required that projects utilize best management practices set by Florida Friendly Landscape Standards.

Please contact me with any questions.

**Kristen Jensen**

Landscape Planner/Designer

Planning and Economic Development Division

City of Pembroke Pines

954.392.2107 (Office) • [kjensen@ppines.com](mailto:kjensen@ppines.com)

Please consider the environment before printing this email.

## DRC REVIEW FORM

PEMBROKE PINES FIRE RESCUE  
FIRE PREVENTION BUREAU

FIRE PLANS EXAMINER BY: Sandra Lluís, Fire Marshal  
(954) 499-9563

PROJECT NAME: Bergeron 15.25 Acre Parcel  
REFERENCE #: SP 2019-05  
DATE REVIEWED: May 29, 2019

### ITEMS WHICH DO NOT CONFORM TO THE CITY OF PEMBROKE PINES CODE OF ORDINANCES OR OTHER GOVERNMENTAL REGULATIONS:

---

**All submittals for Site Plan Approval must first be stamped by our Planning Department and delivered by planning per their procedures.**

1. Fire hydrant spacing is not met. Fire hydrants in all commercially and business zoned areas shall be installed on a minimum of an eight – inch looped water line in city rights-of-way or easements and shall not be spaced not further than 500 feet apart as measured along street or alleys. **COPP CO 93.25 (C)**. Where new hydrants are required to meet spacing, hydrants shall be placed at the entrances to access roads and entrances to the complex. Measurements taken as the fire truck travels. Engineering department verification required.
2. Please rework fire department access circulation to provide improved access to the longest inventory storage area.
3. Provide note to plans that indicate that gates shall be provided with signs to indicate the direction that they open.



BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
PEMBROKE PINES, FLORIDA  
DRC PLAN SET 6/20/2019

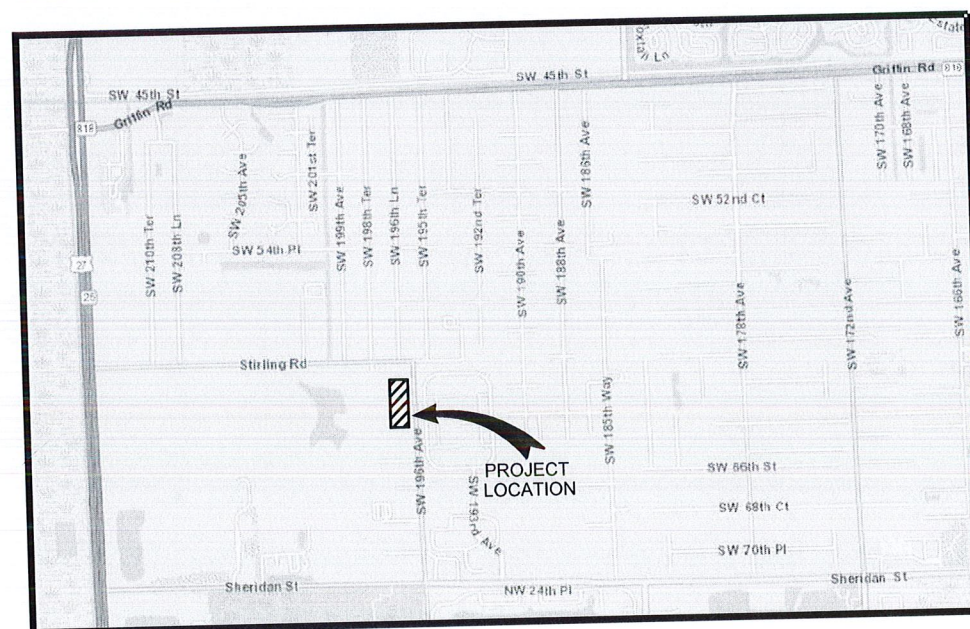
**City of Pembroke Pines  
Received**

JUN 20 2019

## Planning & Economic Development

## LOCATION MAP

SECTION 02, TWP 51, RNG. 39



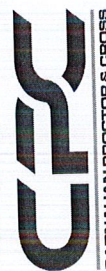
N.T.S.

## INDEX OF DRAWINGS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
CV-1	COVER SHEET
S-0	SPECIFIC PURPOSE SURVEY
S-1, S-2	SURVEY
SP-1	OVERALL SITE PLAN
SP-2	SITE PLAN
GN-1, GN-2	GENERAL NOTES & SPECIFICATIONS
EC-1	EROSION & SEDIMENT CONTROL PLAN
EC-2	EROSION & SEDIMENT CONTROL DETAILS
PGD-1	PAVING, GRADING, DRAINAGE, STRIPING & SIGNAGE PLANS
PGD-2	PAVING, GRADING, DRAINAGE & SIGNAGE DETAILS & SECTIONS
WS-1	WATER AND SEWER PLANS
WS-2, WS-3	WATER AND SEWER DETAILS
FA-1	FIRE ACCESS PLAN
E-1	PHOTOMETRIC PLAN
A-1	OFFICE TRAILER DETAILS

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

COVER SHEET

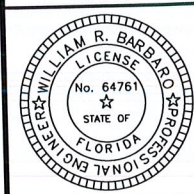


CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (954) 972-3959 FAX: (954) 972-4178

FILE NO. 190411

SCALE:	N.T.S
DATE:	6/20/2019
DRAWN BY:	M.T.
CHECKED BY:	W.R.B
DESIGNED BY:	M.T.

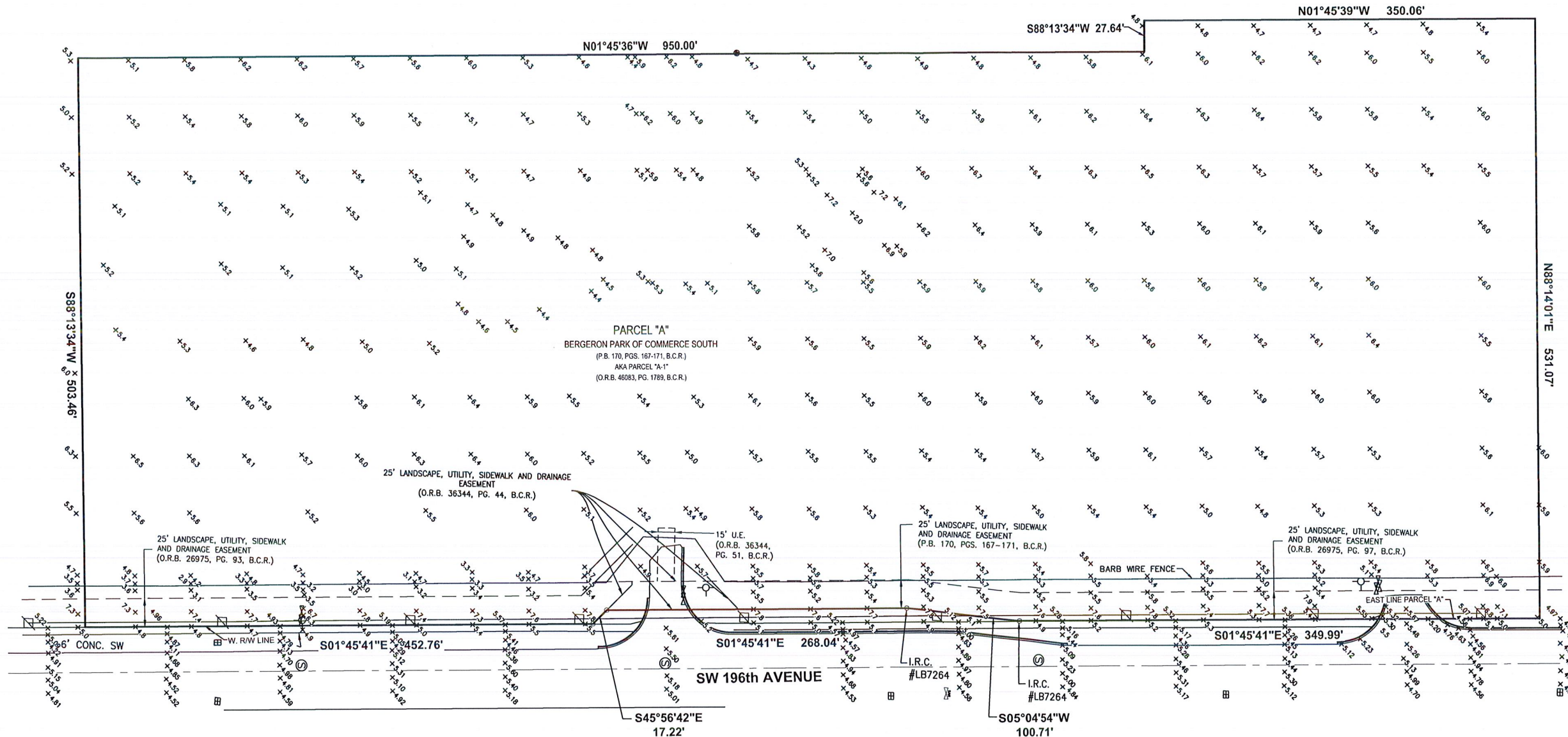
CV-1



WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761



A location map showing the survey area in relation to surrounding streets and landmarks. The map is enclosed in a rectangular border. A vertical line on the left is labeled 'WY 200th AVENUE'. A vertical line on the right is labeled 'SW 99th AVENUE'. Four horizontal lines represent streets, labeled from top to bottom: 'SW 68th COURT', 'SW 69th PLACE', 'STIRLING ROAD', and 'S HERIDAN STREET'. A hatched rectangular area is located between Stirling Road and SW 69th Place, between the two vertical lines. The text 'THIS SURVEY' is placed to the left of this hatched area. To the right of the vertical line 'SW 99th AVENUE' is a circular logo with a cross inside, representing a church. Below the map, the text 'LOCATION MAP' is written in a large, bold, serif font, and 'NOT TO SCALE' is written below it in a smaller, bold, serif font.



LONDON M. CROSS  
PROFESSIONAL SURVEYOR AND MAPPER  
FLORIDA REGISTRATION NO. LS 3348

					SCALE: 1" = 50'
					DATE: 12/8/2018
					DRAWN BY: NI
					CHECKED BY: LMC
					FB/PG: S/T
NO.	DATE	BY	CK'D	REVISIONS	FB/PG



PROJECT NO.

SHEET 1 OF 1

SEAL



BOUNDARY AND PARTIAL TOPOGRAPHIC SURVEY

A PORTION OF SECTION 02, TOWNSHIP 51 SOUTH, RANGE 39 EAST,  
BROWARD COUNTY, FLORIDA

ABBREVIATIONS

A	=	ARC
ASPH	=	ASPHALT
B.C.R.	=	BROWARD COUNTY RECORDS
C	=	CALCULATED
CBS	=	CONCRETE BLOCK STRUCTURE
C&G	=	CURB & GUTTER
C.L.F.	=	CHAIN LINK FENCE
CMP	=	CORRUGATED METAL PIPE
C.O.	=	CLEAN OUT
CONC.	=	CONCRETE
COR.	=	CORNER
D	=	DELTA (CENTRAL ANGLE)
DDCV	=	DOUBLE DETECTOR CHECK VALVE
D.E.	=	DRAINAGE EASEMENT
G.U.E.	=	GENERAL UTILITY EASEMENT
INV	=	INVERT
I.R.	=	IRON ROD
I.R.C.	=	IRON ROD AND CAP
L.B.	=	LICENSED BUSINESS
L.S.	=	LICENSED SURVEYOR
M.H.	=	MANHOLE
MON.	=	MONUMENT
N.V.A.	=	NON-VEHICULAR ACCESS
O.R.B.	=	OFFICIAL RECORDS BOOK
P.B.	=	PLAT BOOK
PLTR	=	PLANTER
P.C.	=	PAGE
P.S.M.	=	PROFESSIONAL SURVEYOR & MAPPER
P.R.M.	=	PERMANENT REFERENCE MONUMENT
R.C.P.	=	REINFORCED CONCRETE PIPE
SAN.	=	SANITARY
SWK	=	SIDEWALK
U.E.	=	UTILITY EASEMENT
V.C.P.	=	VITREOUS CLAY PIPE
W.E.	=	WATER EASEMENT
W.F.	=	WOOD FENCE
S.V.	=	SANITARY VALVE
C.B.	=	CATCH BASIN
W.V.	=	WATER VALVE
R/W	=	RIGHT-OF-WAY

LEGEND

	WATER VALVE
	FIRE HYDRANT
	CATCH BASIN
	SIGN
	WATER METER
	SANITARY MANHOLE
	ELECTRIC BOX
	TRANSFORMER
	WOOD POWER POLE
	CONCRETE POWER POLE
	GUY ANCHOR
	GAS VALVE
	SANITARY VALVE
	LIGHT POLE
	MAIL BOX
	FENCE
	OVERHEAD WIRES
	GUARD RAIL

MISCELLANEOUS NOTES:

- (P) DENOTES DATA BASED ON THE PLAT OF RECORD.
- (M) DENOTES DATA BASED ON FIELD MEASUREMENTS.
- (C) DENOTES DATA BASED ON COMPUTATIONS AND OR CALCULATIONS.
- (R) DENOTES DATA BASED ON INFORMATION RECORDED IN THE PUBLIC RECORDS.
- (MAP) DENOTES DATA BASED ON A MAP OTHER THAN A PLAT.

LEGAL DESCRIPTION:

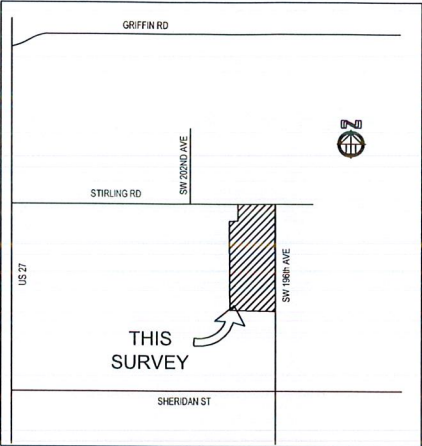
A PORTION OF PARCEL "A", "BERGERON PARK OF COMMERCE SOUTH", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 170 AT PAGES 167 THROUGH 171 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, AND PORTIONS OF SYLVAN PASS AND REPUBLIC PASS AS SHOWN ON SAID PLAT AND ABANDONED PER OFFICIAL RECORDS BOOK 36344 AT PAGE 1021 OF SAID PUBLIC RECORDS, ALL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF PARCEL C OF SAID PLAT; THENCE NORTH 88°14'21" EAST, ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 340.86 FEET; THENCE NORTH 01°45'39" WEST, A DISTANCE OF 702.00 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 28.09 FEET; THENCE NORTH 44°52'20" EAST, A DISTANCE OF 38.18 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 349.82 FEET; THENCE SOUTH 86°41'39" EAST, A DISTANCE OF 200.36 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 300.00 FEET; THENCE SOUTH 45°56'41" EAST, A DISTANCE OF 48.80 FEET (THE LAST EIGHT DESCRIBED COURSES BEING COINCIDENT WITH THE NORTH LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 1018.15 FEET; THENCE SOUTH 05°04'53" WEST, A DISTANCE OF 100.72 FEET (THE LAST TWO DESCRIBED COURSES BEING COINCIDENT WITH THE EAST LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 17.22 FEET; THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 585.50 FEET; THENCE SOUTH 05°04'53" WEST, A DISTANCE OF 100.72 FEET (THE LAST THREE DESCRIBED COURSES BEING COINCIDENT WITH THE EAST LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, ALONG SAID EAST LINE AND THE SOUTHERLY EXTENSION THEREOF, A DISTANCE OF 268.04 FEET; THENCE SOUTH 89°53'08" WEST, ALONG SAID WEST LINE, A DISTANCE OF 1280.40 FEET; THENCE NORTH 01°45'39" WEST, ALONG SAID WEST LINE, A DISTANCE OF 2217.72 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN THE CITY OF PEMBROKE PINES, BROWARD COUNTY, FLORIDA, AND CONTAIN 80.789 ACRES, MORE OR LESS.

SHEET INDEX

SHEET 1 - COVER SHEET  
SHEET 2 - SURVEY SKETCH



LOCATION MAP  
NOT TO SCALE

SURVEY NOTES:

- THIS SKETCH OF BOUNDARY AND PARTIAL TOPOGRAPHIC SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR SURVEYING ESTABLISHED BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN FLORIDA ADMINISTRATIVE CODES, PURSUANT TO SECTION 472.027, FLORIDA STATUTES. THIS SURVEY WAS ALSO PREPARED IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS.
- THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- A SEARCH OF THE PUBLIC RECORDS FOR OWNERSHIP, EASEMENTS, RIGHTS-OF-WAY, OR OTHER MATTERS OF RECORD WAS NOT PERFORMED BY CARNAHAN, PROCTOR AND CROSS, INC., (CPC). THERE MAY BE ADDITIONAL INFORMATION RECORDED IN THE PUBLIC RECORDS THAT IS NOT SHOWN HEREON.
- THE BEARINGS SHOWN HEREON ARE BASED ON S 01°45'41" E, ALONG THE EASTERLY LINE, AS SHOWN ON THE PLAT, RECORDED IN PLAT BOOK 170, AT PAGES 167-171 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.
- THE HORIZONTAL COORDINATES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (EAST ZONE), NORTH AMERICAN DATUM 1983/1990 ADJUSTMENT (N.A.D. 83/90). THE COORDINATES FOR EACH CONTROL POINT WERE ESTABLISHED BY UTILIZING A COMBINATION OF GPS OBSERVATIONS AND/OR CONVENTIONAL SURVEY MEASUREMENTS.
- THE ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 88), FCE 3943 PID AD7240, ELEVATION = 22.37'.
- THE PROPERTY SHOWN HEREON HAS THE FOLLOWING FLOOD ZONE DESIGNATION:
  - NFP COMMUNITY NUMBER: 125093
  - COUNTY NAME: BROWARD
  - STATE OF FLORIDA
  - MAP/PANEL NUMBER: 0280F
  - FIRM PANEL EFFECTIVE/REVISED DATE: 9-18-92
  - FLOOD ZONE: AH
  - BASE FLOOD ELEVATION: 6' & 7'THE FLOOD ZONE INFORMATION SHOWN HEREON IS BASED UPON THE CURRENT PUBLISHED FLOOD INSURANCE RATE MAP (FIRM) ON THE DATE THIS SURVEY WAS PREPARED. THE DATA CONTAINED IN THE FIRM MAP IS SUBJECT TO CHANGE WITHOUT NOTICE. THE FLOOD ZONE BOUNDARIES SHOWN HEREON ARE APPROXIMATE, BASED ON THE NATIONAL FLOOD HAZARD LAYER (FEMA) SHOWN AS AN OVERLAY IN GOOGLE EARTH. FOR THE LATEST FLOOD ZONE INFORMATION CONSULT THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OR YOUR LOCAL GOVERNMENTAL BUILDING DEPARTMENT.
- CERTAIN FEATURES ARE REPRESENTED BY THE SYMBOLS REFLECTED IN THIS MAP. THE LEGEND OF FEATURES MAY HAVE BEEN ENLARGED FOR CLARITY AND MAY NOT REPRESENT THE ACTUAL SHAPE OR SIZE OF THE FEATURE. THE SYMBOLS HAVE BEEN PLOTTED AT THE APPROXIMATE CENTER OF THE FEATURE BASED UPON THE FIELD LOCATION.
- THIS SKETCH IS INTENDED TO BE DISPLAYED AT A HORIZONTAL SCALE OF 1 INCH = 100 FEET.
- THE HORIZONTAL ACCURACY FOR WELL DEFINED IMPROVEMENTS DEPICTED ON THIS SKETCH IS ONE-TENTH (0.1' ±) OF A FOOT, PLUS OR MINUS. THE VERTICAL (ELEVATIONS) ACCURACY FOR WELL DEFINED IMPROVEMENTS, FEATURES, AND SURFACES DEPICTED ON THIS SURVEY IS TWO-TENTHS (0.2' ±) OF A FOOT, PLUS OR MINUS.
- TREES, HEDGES, GROUND COVER, AND OTHER LANDSCAPE FEATURES ARE NOT SHOWN HEREON, UNLESS OTHERWISE NOTED.
- IRRIGATION FEATURES, SUCH AS SPRINKLERS, ARE NOT SHOWN HEREON.
- FENCES AND WALL DIMENSIONS ARE APPROXIMATE. THE SURVEYOR DID NOT DETERMINE OWNERSHIP OF FENCES AND WALLS.
- SUBSURFACE FEATURES ARE NOT SHOWN HEREON. THIS SITE COULD HAVE UNDERGROUND INSTALLATIONS THAT ARE NOT SHOWN HEREON. BEFORE DESIGN, CONSTRUCTION, OR EXCAVATION CONTACT 811 AND/OR THE APPROPRIATE UTILITY COMPANIES FOR FIELD VERIFICATION OF UTILITIES.
- THE EXTERIOR BUILDING DIMENSIONS SHOWN HEREON REPRESENT THE OVERALL SIZE OF THE BUILDING (FOOTPRINT). SUBSURFACE BUILDING FOOTINGS AND SUPPORTS WERE NOT LOCATED. CERTAIN ARCHITECTURAL FEATURES MAY NOT BE SHOWN ON THE SURVEY. ROOF OVERHANGS ARE NOT SHOWN UNLESS OTHERWISE NOTED. BUILDING DIMENSIONS AND BUILDING BACKS ARE SHOWN ROUNDED TO THE NEAREST ONE-TENTH (0.1') OF A FOOT. BEFORE DESIGN OF IMPROVEMENTS CRITICAL DIMENSIONS SHOWN BE CONFIRMED.
- THE DIMENSIONS SHOWN HEREON ARE BASED UPON U.S. SURVEY FEET AND FRACTIONAL PARTS THEREOF.
- AREA COMPUTATIONS, WHEN SHOWN IN ACRES, ARE ROUNDED TO THE NEAREST ONE-HUNDREDTH OF AN ACRE, AND WHEN SHOWN IN SQUARE FEET ARE ROUNDED TO THE NEAREST SQUARE FOOT. THE AREA FIGURES SHOWN HEREON SHOULD NOT BE UTILIZED AS THE BASIS OF PURCHASE PRICE FOR A REAL ESTATE CLOSING, WITHOUT PRIOR VERIFICATION OF THE AREA FIGURES, IN WRITING FROM THE SIGNING SURVEYOR.
- THE SURVEYOR DID NOT INSPECT THIS PROPERTY FOR ENVIRONMENTAL HAZARDS.
- THE INFORMATION DEPICTED ON THIS SKETCH OF SURVEY REPRESENTS THE RESULTS OF A FIELD SURVEY ON THE DATE INDICATED ON THE BORDER OF THE DRAWING AND CAN ONLY BE CONSIDERED VALID FOR THIS DATE AND INDICATES THE GENERAL CONDITIONS EXISTING AT THE TIME OF THE FIELD SURVEY.
- THIS SKETCH OF SURVEY CANNOT BE RELIED UPON BY PERSONS OR ENTITIES OTHER THAN THOSE PERSONS OR ENTITIES CERTIFIED TO HEREON. ADDITIONS OR DELETIONS TO THIS SURVEY AND/OR REPORTS BY PEOPLE OR PERSONS OTHER THAN THE SIGNING PARTIES ARE PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- THE INFORMATION CONTAINED IN THIS DOCUMENT WAS PREPARED BY CARNAHAN, PROCTOR AND CROSS, INC. (CPC). CPC HAS TAKEN PRECAUTIONS TO ENSURE THE ACCURACY OF THIS DOCUMENT AND THE DATA REFLECTED HEREIN. CPC CANNOT NOT GUARANTEE THAT ALTERATIONS AND/OR MODIFICATIONS WILL NOT BE MADE TO THE DATA CONTAINED IN THIS DOCUMENT BY OTHERS AFTER IT LEAVES OUR POSSESSION. THIS DOCUMENT MUST BE COMPARED TO THE ORIGINAL HARD COPY (WHICH BEARS THE RAISED SURVEYOR'S CERTIFICATION SEAL) TO ENSURE THE ACCURACY OF THE INFORMATION CONTAINED HEREON AND TO FURTHER ENSURE THAT ALTERATIONS AND/OR MODIFICATIONS HAVE NOT BEEN MADE. CPC MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY OF THE INFORMATION CONTAINED IN THIS OR ANY DOCUMENT TRANSMITTED OR REVIEWED BY COMPUTER OR OTHER ELECTRONIC MEANS. CONTACT CPC FOR VERIFICATION OF ACCURACY.
- THERE WAS NO EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS. THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. THERE WAS NO EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL. THERE ARE NO WETLANDS WITHIN OR AROUND THE SURVEYED PROPERTY. THERE ARE NO CEMETERY OR BURIAL GROUNDS WITH THE SURVEYED PROPERTY.
- PROPERTY OWNER, ADDRESS AND PARCEL IDENTIFICATION NUMBERS SHOWN HEREON ARE PER BROWARD COUNTY PROPERTY APPRAISER'S OFFICE AT THE TIME OF THE SURVEY.
- EASEMENTS SHOWN HEREON WERE NOT DIMENSIONED.

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON COMPLIES WITH THE STANDARDS OF PRACTICE FOR SURVEYS AS CONTAINED IN CHAPTER 5J17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND THAT SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE OF PLAT OR MAP: 04/27/17  
DATE OF SIGNATURE:

SEAL

THOMAS A. ENGLISH  
PROFESSIONAL SURVEYOR AND MAPPER NO. 6930  
STATE OF FLORIDA  
CARNAHAN, PROCTOR AND CROSS, INC. L.B. 6633  
TEnglish@cpc-eng.com

SEE BACK FOR LIMITED  
SEAL AND HERE  
AN ENLARGED  
SURVEYOR'S SEAL

NO.	REVISION	DATE	BY

CONSULTING ENGINEERS  
SURVEYORS  
PLANNERS  
814 S. MILITARY TRAIL-DEERFIELD BEACH, FL 33442  
PHONE: 954-972-3859 FAX: 954-972-4178  
WEBSITE: [www.cpc-eng.com](http://www.cpc-eng.com)



BOUNDARY AND PARTIAL TOPOGRAPHIC SURVEY  
PART OF PB 170 PAGES 167-171, BROWARD COUNTY  
PART OF SECTION 02, TOWNSHIP 51 SOUTH, RANGE 39 EAST

LAST DATE OF FIELD SURVEY	DRAWN: TAE	CHECKED: TAE	BOOK/PAGE(S): DC
04/27/17			

PROJECT

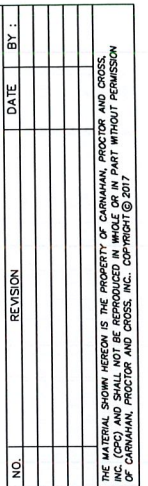
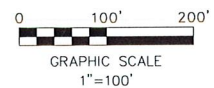
170307

SHEET NO.

1 OF 2



**A PORTION OF SECTION 02, TOWNSHIP 51 SOUTH, RANGE 39 EAST,  
BROWARD COUNTY, FLORIDA**



**CPS** **70 years**  
CARNAHAN PROCTOR & CROSS

LAST DATE OF FIELD SURVEY	04/22/17
DRAWN: TAE	
CHECKED: TAE	
BOOK/PAGE(S):	DC
PROJECT	
170307	
SHEET NO.	
2 OF 2	



BERGERON 15.25 ACRE PARCEL  
PARCEL AREA = 664386 S.F. (15.25 AC)  
GROSS INVENTORY STORAGE AREA = 501068 S.F. (11.50 AC)  
NET TENANT INVENTORY STORAGE AREA = 355434 S.F. (8.16 AC)  
DROP ZONE AREA = 62502 S.F. (1.43 AC)  
OFFICE LOADING AREA = 17124 S.F. (0.39 AC)

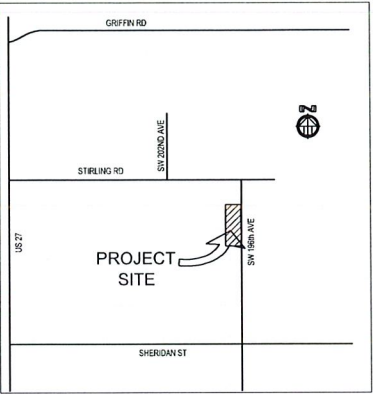
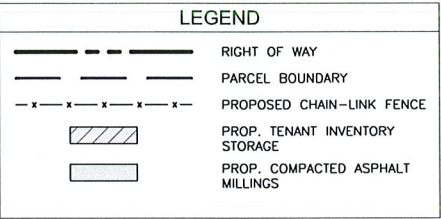
SITE DATA			
DESCRIPTION	Sq. Ft.	Acre	% of Gross Site
Gross Site Area	664,386	15.25	100.0%
Total Pervious Area	78,445	1.80	11.8%
Total Impervious Area	585,941	13.45	88.2%
Pervious/Impervious Ratio:	0.13		
Gross Storage Area	501,068	11.50	75.4%
ZONING DATA			
Current Zoning:	M3		
Proposed Zoning:	M3		
LAND USE DATA			
Current Land Use:	Industrial		
Proposed Land Use:	Industrial		

**LEGAL DESCRIPTION**

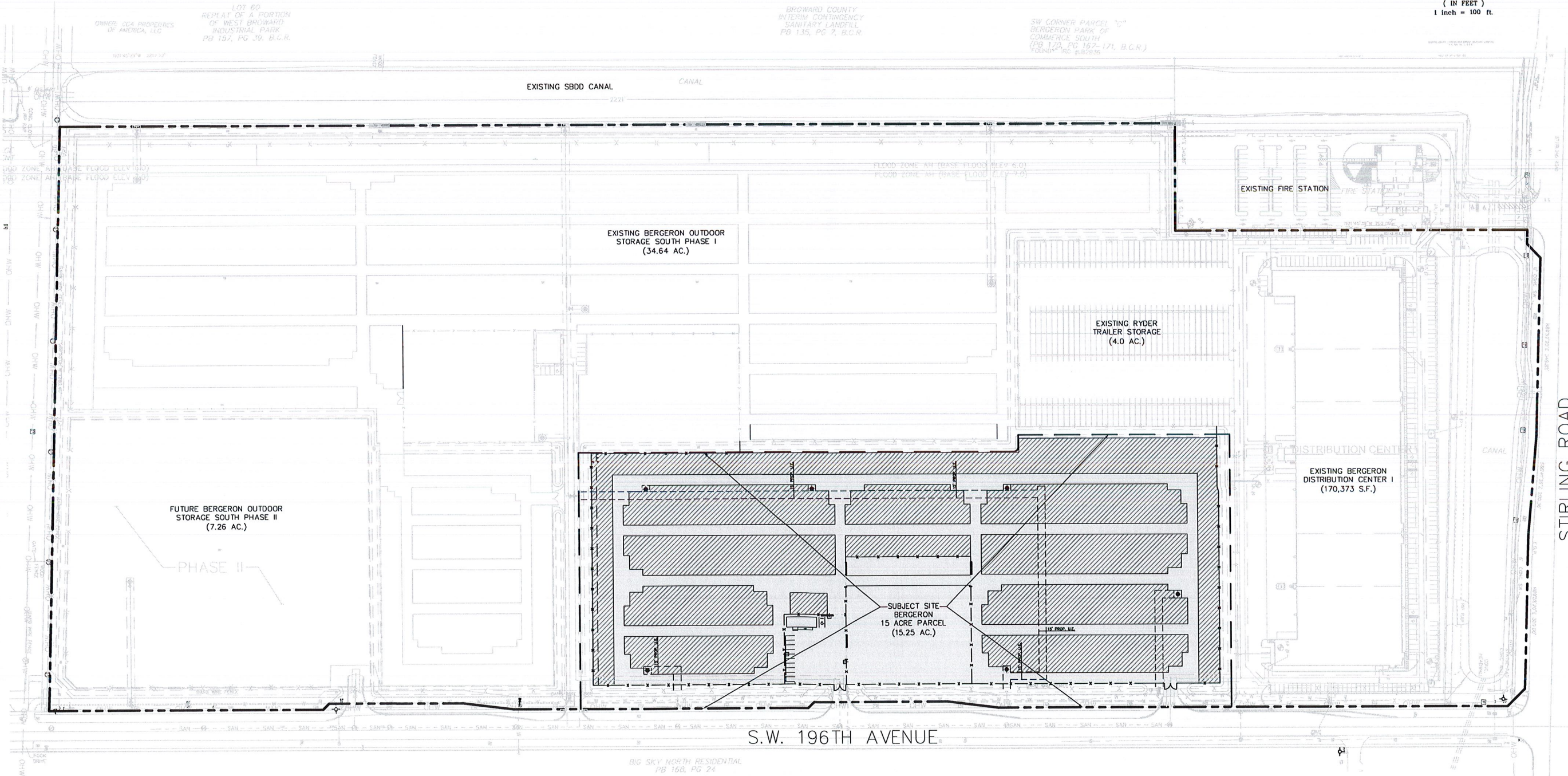
A PORTION OF PARCEL "A", "BERGERON PARK OF COMMERCE SOUTH", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 170 AT PAGES 167 THROUGH 171 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, AND PORTIONS OF SYLVAN PASS AND REPUBLIC PASS AS SHOWN ON SAID PLAT AND ABANDONED PER OFFICIAL RECORDS BOOK 36344 AT PAGE 1021 OF SAID PUBLIC RECORDS, ALL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF PARCEL C OF SAID PLAT; THENCE NORTH 88°14'21" EAST, ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 340.86 FEET; THENCE NORTH 01°45'39" WEST, A DISTANCE OF 702.00 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 28.09 FEET; THENCE NORTH 44°52'20" EAST, A DISTANCE OF 38.18 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 349.82 FEET; THENCE SOUTH 86°41'39" EAST, A DISTANCE OF 200.36 FEET; THENCE NORTH 89°52'20" EAST, A DISTANCE OF 300.00 FEET; THENCE SOUTH 45°56'41" EAST, A DISTANCE OF 48.80 FEET (THE LAST EIGHT DESCRIBED COURSES BEING COINCIDENT WITH THE NORTH LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 1018.15 FEET; THENCE SOUTH 05°04'53" WEST, A DISTANCE OF 100.72 FEET (THE LAST TWO DESCRIBED COURSES BEING COINCIDENT WITH THE EAST LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, ALONG SAID EAST LINE AND THE SOUTHERLY EXTENSION THEREOF, A DISTANCE OF 268.04 FEET; THENCE SOUTH 45°56'41" EAST, A DISTANCE OF 17.22 FEET; THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 585.50 FEET; THENCE SOUTH 05°04'53" WEST, A DISTANCE OF 100.72 FEET (THE LAST THREE DESCRIBED COURSES BEING COINCIDENT WITH THE EAST LINE OF SAID PARCEL "A"); THENCE SOUTH 01°45'41" EAST, ALONG SAID EAST LINE AND THE SOUTHERLY EXTENSION THEREOF, A DISTANCE OF 268.04 FEET; THENCE SOUTH 45°56'41" EAST, A DISTANCE OF 17.22 FEET; THENCE SOUTH 01°45'41" EAST, A DISTANCE OF 546.28 FEET; THENCE SOUTH 89°53'08" WEST, ALONG SAID WEST LINE, A DISTANCE OF 1280.40 FEET; THENCE NORTH 01°45'39" WEST, ALONG SAID WEST LINE, A DISTANCE OF 2217.72 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN THE CITY OF PEMBROKE PINES, BROWARD COUNTY, FLORIDA, AND CONTAIN 80.789 ACRES, MORE OR LESS.



GRAPHIC SCALE  
( IN FEET )  
1 inch = 100 ft.



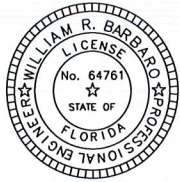
BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

OVERALL SITE PLAN

**CPS**  
CARNAHAN PROCTOR & CROSS  
CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL DEERFIELD BEACH, FLORIDA 33442  
PHONE: (954) 972-3899 FAX: (954) 972-4178

SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

SP-1



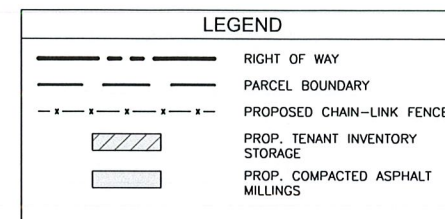
WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761



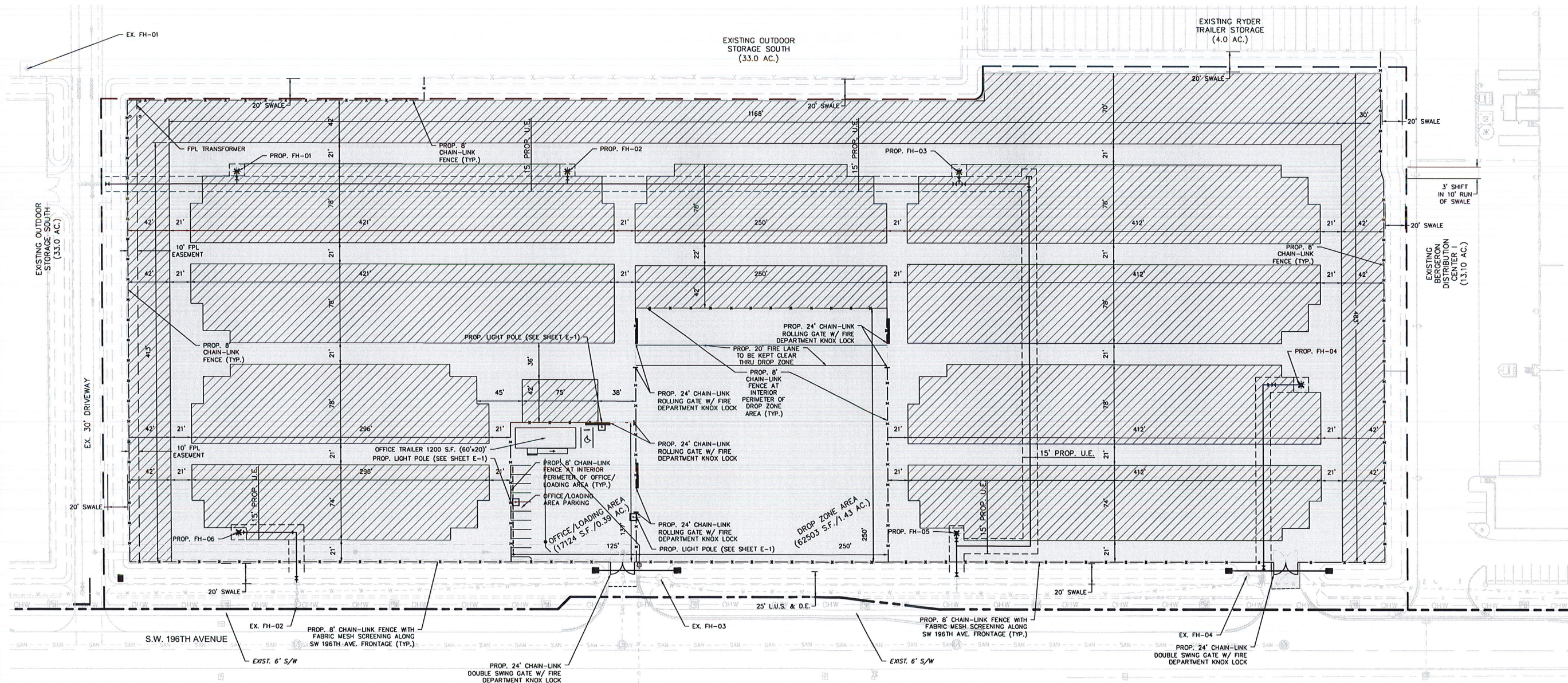
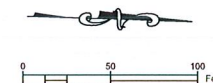
PARCEL AREA = 664386 S.F. (15.25 AC)  
GROSS INVENTORY STORAGE AREA = 501068 S.F. (11.50 AC)  
NET TENANT INVENTORY STORAGE AREA = 355434 S.F. (8.16 AC)  
DROP ZONE AREA = 62502 S.F. (1.43 AC)  
OFFICE LOADING AREA = 17124 S.F. (0.39 AC)

NOTE:

- 1) INVENTORY STORAGE PACK CORNERS MAY BE REDUCED TO ALLOW SAFE CIRCULATION OF FIRE TRUCK THROUGHOUT SITE.



LOCATION MAP  
NOT TO SCALE



BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

## SITE PLAN

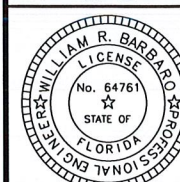


CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FL 33442  
PHONE: (561) 675-9550 FAX: (561) 675-4170

42

SCALE:	AS SHOWN
DATE:	6/20/2019
DRAWN BY:	M.T.
CHECKED BY:	W.R.B
DESIGNED BY:	M.T.

SP-2



WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 647



6/20/19 P:\Projects\_2019\190411 - Copart Auto Auction\cod\vd\Planest\0n.dwg

## I. APPLICABLE CODES

- A. GENERAL:
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF PEMBROKE PINES, FLORIDA DEPARTMENT OF PLANNING AND ENVIRONMENTAL PROTECTION (BCDEP), BROWARD COUNTY HEALTH DEPARTMENT (BCHD), SOUTH BROWARD DRAINAGE DISTRICT (SBDD), SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE.
- B. CONSTRUCTION SAFETY:
- ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.
- C. TRENCH SAFETY ACT
1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT.
  2. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID.
    - A. A REFERENCE TO THE SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
    - B. WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
    - C. A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
  3. WHERE A BID IS NOT SUBMITTED, THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM 2, TO THE ENGINEER PRIOR TO STARTING WORK.
- D. SURVEY DATA:
- ALL ELEVATIONS ON THE PLANS, OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

## II. PRECONSTRUCTION RESPONSIBILITY

1. UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE THE CITY OF PEMBROKE PINES ENGINEERING DIVISION, THE OWNER, AND THE ENGINEER, AFTER OBTAINING A CONSTRUCTION PERMIT FROM THE ENGINEERING DIVISION.
2. THE CONTRACTOR SHALL OBTAIN A "SUNSHINE CERTIFICATION NUMBER" AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
3. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS SUNSHINE CERTIFICATION NUMBER. HE IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
5. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER, WHO WILL IN TURN NOTIFY THE CITY OF PEMBROKE PINES UTILITIES DEPARTMENT.

## III. INSPECTIONS

- THE CONTRACTOR SHALL NOTIFY THE CITY OF PEMBROKE PINES ENGINEERING DIVISION 954-518-9040, SBDD 954-680-3337, AND THE ENGINEER OF RECORD AT LEAST 24 HOURS PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS:
1. STORM DRAINAGE.
  2. SANITARY SEWER.
  3. WATER SYSTEM.
  4. SUBGRADE; SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
  5. LIMEROCK BASE; SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT.
  6. ASPHALTIC CONCRETE.
  7. FINAL.
- B. ALL INSPECTIONS MADE BY THE CITY OF PEMBROKE PINES, SBDD, AND FDOT THE ENGINEER OF RECORD WILL PROVIDE CONSTRUCTION OBSERVATION SERVICES.

## IV. SHOP DRAWINGS

1. PRIOR TO ISSUANCE OF A CONSTRUCTION PERMIT, A MATERIAL LIST SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD AND THE CITY OF PEMBROKE PINES FOR SANITARY MANHOLES, HYDRANTS, VALVES, PIPING, LIFT STATIONS AND OTHER ACCESSORIES. CATALOGUE LITERATURE SHALL BE SUBMITTED FOR WATER AND SEWER PIPES, FITTINGS AND APPURTENANCES.
2. ANY PRODUCT THAT IS NOT ON THIS LIST MUST BE APPROVED IN ADVANCE BY THE ENGINEER OF RECORD AND THE CITY OF PEMBROKE PINES ENGINEERING DIVISION. SUCH APPROVAL REQUIRES THE SUBMISSION OF A SHOP DRAWING (SIX COPIES) FOR EACH PRODUCT. SHOP DRAWINGS WILL ALSO BE REQUIRED FOR ALL NON-STANDARD ITEMS.
3. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

## V. TEMPORARY FACILITIES

- A. TEMPORARY UTILITIES:
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO HIS EMPLOYEE AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.
  2. OBTAIN CONSTRUCTION METER FOR ALL WATER USED ON JOB. ALL WATER USED FOR CLEANING, TESTING, ETC. WILL BE PAID FOR BY THE CONTRACTOR. IF WATER CAN NOT BE METERED THEN IT WILL BE CALCULATED.
- B. TRAFFIC REGULATION:
1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD AND BCTD.
  2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
  3. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE CITY OF PEMBROKE PINES.

## VI. PROJECT CLOSE OUT

- A. CLEANING UP:
1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEP BROOM CLEAN.
  2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, THE CITY OF PEMBROKE PINES, ANY PRIVATE PROPERTY OR PUBLIC PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO AS REQUIRED, ALL NECESSARY HIGHWAY OR DRIVEWAY, SIDEWALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
  3. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER WATER COURSES, GRAVITY SEWER, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
  4. WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED AS REQUIRED BY SOUTH BROWARD DRAINAGE DISTRICT.
- B. PROJECT RECORD DOCUMENTS:
1. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF ALL WORK ITEMS COMPLETED.
  2. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDED A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.

## VII. WATER DISTRIBUTION AND/OR SEWAGE FORCE MAIN SYSTEM

- A. GENERAL:
1. THE CONTRACTOR SHALL NOTIFY THE CITY OF PEMBROKE PINES UTILITIES DEPARTMENT AND THE ENGINEER OF RECORD NO LATER 24 HOUR PRIOR TO MAKING CONNECTIONS TO EXISTING SYSTEMS. A CITY OF PEMBROKE PINES ENGINEERING DIVISION REPRESENTATIVE AND THE ENGINEER OF RECORD MUST BE PRESENT.
  2. SEPARATION OF WATER AND SEWER MAINS:
    - A. PARALLEL WATER AND SEWER MAINS SHALL HAVE A MINIMUM 10 FEET HORIZONTAL SEPARATION. IF THIS IS NOT POSSIBLE, THE SEWER MAIN SHALL BE IN A SEPARATE TRENCH AND BE AT LEAST 18 INCHES BELOW THE WATER MAIN AND BOTH MAINS SHALL BE DUCTILE IRON PER PRESSURE PIPE SPECIFICATIONS.
    - B. THE SEWER MAIN SHALL CROSS BELOW ALL WATER MAINS WITH A MINIMUM OF 18 INCHES VERTICAL CLEARANCE. WHERE THE CLEARANCE IS LESS THAN 18 INCHES, THE SEWER MAIN SHALL BE DUCTILE IRON PIPE WITH A MINIMUM 12" CLEARANCE, FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING SHALL BE MECHANICALLY RESTRAINED.
    - C. IF A SEWER MAIN MUST CROSS ABOVE A WATER MAIN, REGARDLESS OF VERTICAL CLEARANCE, THE PRECAUTION IN ITEM (B.) ABOVE SHALL BE TAKEN.
  3. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL PRESSURE TESTS FOR THE WATER MAINS AND SEWER FORCE MAINS AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED AND THE SYSTEM IS ACCEPTABLE TO THE CITY OF PEMBROKE PINES AND THE BROWARD COUNTY HEALTH DEPARTMENT.
  4. CLEANING OF NEWLY INSTALLED PIPING SYSTEMS SHALL BE ACCOMPLISHED USING PIPE JIGGING METHODS. OPEN FLUSHING SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL OF THE UTILITIES DEPARTMENT. ALL WATER WILL BE ACCOUNTED FOR.
  5. ALL EFFORTS SHALL BE MADE SO THAT WATER AND FORCE MAINS CROSS ABOVE DRAINAGE LINES WITH ADEQUATE COVER AND SEPARATION. IF THIS IS NOT POSSIBLE, IT SHALL BE INDICATED ON THE PLANS.
  6. A THREE (3) FOOT LATERAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER/SEWER LINES AND OBSTRUCTIONS (I.E., CATCH BASINS, CONCRETE POLES, ETC.), FIVE (5) FEET FROM TREES.
  7. THE MAXIMUM DEPTH TO THE BOTTOM OF THE PRESSURE MAIN INSTALLED SHALL NOT EXCEED SIX (6) FEET UNLESS APPROVED BY THE CITY OF PEMBROKE PINES ENGINEERING DIVISION.
  8. RESTRAINED JOINTS SHALL BE USED, IN LIEU OF CONCRETE THRUST BLOCKS, AT ALL CHANGES IN DIRECTION OF WATER MAINS, SEWAGE FORCE MAINS AND ELSEWHERE AS INDICATED ON THE DRAWINGS. RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCES ON EACH SIDE OF FITTINGS AS REQUIRED TO PROPERLY RESTRAIN AND SUPPORT BENDS, TEES, VALVES, DEAD ENDS AND OTHER SUCH FITTINGS WITH THE EXCEPTION OF FIRE HYDRANTS.

- B. MATERIALS:
1. PIPE:

THE WATER MAIN AND/OR SEWAGE FORCE MAIN SHALL BE EITHER POLYVINYL CHLORIDE (PVC) OR DUCTILE IRON PIPE (DIP) AND SHALL BE DESIGNED FOR A MINIMUM WORKING PRESSURE OF 150 PSI.

    - A. PVC PIPE SHALL BE ASTM 1120 PRESSURE PIPE WITH IRON O.D., CLASS 150 (OR 18") CONFORMING TO ANSI/AWWA C900-97 OR C905-97 AND SHALL HAVE PUSH RUBBER GASKET JOINTS.
    - B. DIP SHALL BE CLASS 350 WALL THICKNESS (UP TO 12") CLASS 300 (14"-18") CLASS 250 (20" OR GREATER) WITH INTERIOR CEMENT LINING AND INTERIOR COAT LAR COATING CONFORMING TO ANSI/AWWA C151/A21.51-02, OR LATEST REVISION. SEWAGE PIPE SHALL BE EITHER DOUBLE CEMENT CONFORMING TO ANSI/AWWA C104/A21.51-99 OR LATEST REVISION, OR POLYETHYLENE CONFORMING TO ANSI/AWWA C105/A21.51-99 OR LATEST REVISION, OR APPROVED EQUAL. THE PIPE SHALL WITHSTAND A WORKING PRESSURE OF 350 PSI. THE JOINTS SHALL BE BELL AND SPIGOT PUSH ON TYPE, MECHANICAL JOINT OR FLANGED. FLANGED PIPE SHALL CONFORM WITH THE PHYSICAL AND CHEMICAL REQUIREMENTS AS SET FORTH IN THE HANDBOOK OF DUCTILE IRON PIPE OF THE CAST IRON PIPE RESEARCH ASSOCIATION.
  2. FITTINGS:

FITTINGS SHALL BE DUCTILE IRON COMPACT MECHANICAL JOINT AND SHALL BE CLASS 350 (TROUGH 24" CONFORMING TO ANSI/AWWA C121.53-00, OR LATEST REVISION, AND CLASS 250 IN SIZES 24" AND LARGER, CONFORMING TO ANSI/AWWA C110/A21.10-98, OR LATEST REVISION, COMPLETE WITH GLANDS, GASKETS, BOLTS AND NUTS. ALL FITTINGS SHALL BE CEMENT LINED AND SEAL COATED WITH THE SAME AS PIPE.
  3. VALVES:
    - A. VALVES SHALL BE GATE VALVES FOR WATER (4"-12" SIZE), BUTTERFLY VALVES FOR WATER (16" AND UP SIZE), OR PLUG VALVES FOR FORCE MAIN (ALL SIZES).
      - I. GATE VALVES SHALL BE IRON BODY, FULLY RISEL SEAT, BRONZE MOUNTED NON-RISING STEM, DOUBLE DOWEL RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509-01 OR LATEST REVISION. EXPOSED VALVES SHALL BE OUTSIDE SCREW AND YOKE TYPE.
      - II. BUTTERFLY VALVES AND OPERATORS SHALL CONFORM TO ANSI/AWWA C504-00 STANDARD FOR RUBBER SEATED BUTTERFLY VALVES, OR LATEST REVISIONS. VALVES SHALL BE CLASS 150 A OR B.
      - III. PLUG VALVES SHALL BE SEMI-STEEL BODY, NON-LUBRICATED, ECCENTRIC TYPE, WITH RESILIENT FACED PLUGS, AND CAPABLE OF DRIP-TIGHT SHUT OFF AT THE RATED PRESSURE. THEY SHALL BE APPLIED TO EITHER PORTAL VALVES TO BE EQUIPPED WITH ACTUATING NUTS, CAST IRON HANDWHEELS OR CHAIN OPERATORS, WITH GALVANIZED STEEL CHAINS, AS APPROPRIATE FOR THE INSTALLATION AND TYPE OF OPERATOR.
    - B. AIR RELEASE VALVES
      - I. SEWER FORCE MAIN AIR RELEASE VALVES - SYSTEM SHALL BE A COMBINATION OF ONE SEWAGE AIR RELEASE VALVE AND ONE SEWAGE AIR/VACUUM VALVE WITH DUAL ISOLATION PLUG VALVES. BOTH VALVE BODIES AND COVERS SHALL BE OF CAST IRON CONSTRUCTION. ASTM A128-B. ALL INTERNAL PARTS SHALL BE STAINLESS STEEL, ASTM A-240 - TYPE 304 AND ASTM A276 - TYPE 303. THE VENTING ORIFICE SHALL BE 5/16" IN DIAMETER WITH STAINLESS STEEL SEAT. THE INLET OPENINGS SHALL BE A MINIMUM OF 2" NPT SCREWED CONNECTION FOR BOTH VALVES. THE VALVES SHALL HAVE FULLY CAPABLE OF OPERATION IN SEWAGE FORCE MAIN. BOTH VALVES SHALL INCLUDE A BACK-FLUSHING FEATURE FOR PERIODIC CLEANING OF THE INTERNAL MECHANISM. THE OVERALL HEIGHT SHALL NOT EXCEED 22-1/2 INCHES.
      - II. WATER MAIN AIR RELEASE VALVES - VALVE BODY AND COVER SHALL BE OF CAST IRON CONSTRUCTION, ASTM A128-B. ALL INTERNAL WORKING PARTS SHALL BE OF STAINLESS STEEL ASTM A240, TYPE 303 FOR THE FLOAT AND ASTM A296 TYPE 316 FOR THE LINKAGE. THE VENTING ORIFICE SHALL BE 3/16" IN DIAMETER WITH BRASS SEAT. THE INLET OPENING SHALL BE A 2" NPT SCREWED CONNECTION. THE OVERALL HEIGHT SHALL NOT EXCEED 13 INCHES.

- A. A REFLECTIVE PAVEMENT MARKER SHALL BE INSTALLED IN THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT ADJACENT TO ALL VALVE LOCATIONS OUTSIDE THE ROAD PAVEMENT. WATER MARKERS SHALL BE WHITE, SEWER MARKERS SHALL BE GREEN.
4. FIRE HYDRANTS:
- A. FIRE HYDRANTS SHALL HAVE A MINIMUM 5 1/4" VALVE OPENING AND SHALL OPEN AGAINST THE PRESSURE AND CLOSE WITH THE FLOW. HYDRANTS SHALL MEET OR EXCEED ANSI/AWWA C502-94, C503-97 OR LATEST REVISION, AND SHALL COMPLY WITH FACTORY MUTUAL RESEARCH CORPORATION AND UNDERWRITERS LABORATORIES UL246 STANDARD.
  - B. A BLUE REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED IN THE CENTER OF THE NEAREST LANES OF ROAD PAVEMENT ADJACENT TO ALL FIRE HYDRANT LOCATIONS.
5. DETECTOR TAPE:
- DETECTOR TAPE SHALL BE 3" WIDE - BLUE TAPE FOR WATER MAIN AND BROWN TAPE FOR FORCE MAIN, WITH A METALLIC FOIL CORE LAMINATED BETWEEN 2 LAYERS OF PLASTIC FILM. THE WORDS "CAUTION WATER LINE BURIED BELOW" OR "CAUTION FORCE MAIN BURIED BELOW" SHALL BE PRINTED AT 30"INTERVALS ALONG THE TAPE. TAPE SHALL BE PLACED 18" BELOW GRADE ABOVE ALL PVC MAINS AND SERVICES OR AS RECOMMENDED BY MANUFACTURER. NONMETALLIC TAPE SHALL BE USED ABOVE DUCTILE IRON PIPE. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320, FAC.
6. SERVICE CONNECTIONS:
- A. SERVICE SADDLES SHALL BE DUCTILE IRON EPOXY OR NYLON COATED WITH DOUBLE STAINLESS STEEL STRAPS OR SINGLE WIDE STRAP. SADDLES SHALL CONFORM TO ANSI/AWWA C111/21.11-00 AND ASTM A-588 OR LATEST REVISION.
  - B. SERVICE LINES SHALL BE POLYETHYLENE (PE) TUBING AS DESCRIBED IN ANSI/AWWA C901-02 OR LATEST REVISION, WITH A WORKING PRESSURE OF 200 PSI (OR 9'). PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE, TOTALLY CONFINED GRIP SEAL AND COUPLING NUT. POLYETHYLENE SHALL BE EXTRUDED FROM PE 3408 HIGH MOLECULAR WEIGHT MATERIAL AND MUST CONFORM TO ASTM D-2737.
  - C. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE ASTM B-62 WITH THREADED ENDS.
  - D. METER STOPS SHALL BE THE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH ASTM B-62. METER STOPS SHALL BE CLOSED BUTTON DESIGN AND RESILIENT "O" RING, SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES.
  - E. METER AND METER BOXES 2" OR LESS ARE SUPPLIED BY THE CITY OF PEMBROKE PINES AT THE OWNER'S EXPENSE.
7. TAPPING SLEEVES:
- TAPPING SLEEVES SHALL BE DUCTILE IRON, ASTM GRADE 65-45-12, MECHANICAL JOINT.
8. VALVE BOXES:
- A. VALVE BOXES FOR WATER MAINS AND SEWER FORCE MAINS SHALL BE ADJUSTABLE SCREW TYPE WITH 5-1/4" SHAFT, 18" TO 24 INCH EXTENSION, CAST IRON ASTM-A48 CLASS 30 MARKED "WATER" OR "SEWER".
  - B. VALVE BOXES FOR BLOW-OFF ASSEMBLY SHALL BE CAST IRON ASTM A-48 CLASS 30 MARKED "W".
9. RETAINER GLANDS:
- RETAINER GLANDS SHALL CONFORM TO ANSI/AWWA C111/A21.11-00 OR LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING.
10. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY:
- THE ASSEMBLY SHALL CONFORM TO ANSI/AWWA C510-97, OR LATEST REVISION, AND CAPABLE OF WITHSTANDING A WORKING PRESSURE OF AT LEAST 150 PSI WITHOUT DAMAGE TO WORKING PARTS OR IMPAIRMENT OF FUNCTION. IT SHALL CONSIST OF TWO INTERNALLY LOADED, INDEPENDENTLY OPERATING CHECK VALVES, LOCATED BETWEEN TWO TIGHTLY CLOSING RESILIENT-SEALED SHUT OFF VALVES, WITH FOUR PROPERLY PLACED RESILIENT-SEALED TEST COCKS.
- C. INSTALLATION:
1. GENERAL:

CONNECTION OF ALL NEW SYSTEMS TO EXISTING MAINS SHALL BE DONE USING ONE OF THE THREE FOLLOWING METHODS:

    - A. METHOD "A" PER BROWARD COUNTY PUBLIC HEALTH UNIT STANDARDS, WHICH INVOLVES A SIZE TEMPORARY CONNECTION BETWEEN THE EXISTING MAIN AND THE NEW MAIN.
    - B. METHOD "B" PER BROWARD COUNTY PUBLIC HEALTH UNIT STANDARDS, WHICH INVOLVES A DIRECT CONNECTION BETWEEN THE NEW AND EXISTING MAINS USING TWO GATE VALVES SEPARATED BY A SLEEVE WITH A VENT PIPE.
    - C. METHOD "C" APPROVED BY THE BROWARD COUNTY PUBLIC HEALTH UNIT, WHICH INVOLVES A TAP WITH ONE GATE VALVE REQUIRING DISINFECTION OF THE NEW SYSTEM PRIOR TO CONDUCTING THE PRESSURE TEST.
  2. BEDDING:

BEDDING AND INITIAL BACKFILL (12 INCHES ABOVE PIPE) FOR ALL PIPES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. FOR 3/4" WASHED ROCK WILL BE IN WATER OR WHERE UNSUITABLE BEDDING EXISTS AT THE DISCRETION OF THE CITY OF PEMBROKE PINES. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
  3. PVC PIPE:
    - A. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION'S GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEMS.
    - B. PVC PIPE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER.
  4. DETECTOR TAPE SHALL BE INSTALLED THE FULL LENGTH OF ALL PVC MAINS APPROXIMATELY 18" BELOW GRADE, COLOR SIDE UP.
  5. DUCTILE IRON PIPE:
    - A. DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-99 OR LATEST REVISION.
    - B. DIP SHALL BE INSTALLED WITH A MINIMUM OF 30" COVER.
    - C. IDENTIFICATION TAPE SHALL BE INSTALLED THE FULL LENGTH OF ALL DIP MAINS APPROXIMATELY 18" ABOVE THE MAIN, COLOR SIDE UP.
  5. VALVES:
    - A. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER" CAST IN THE COVER.
    - B. MAIN VALVES SHALL BE LOCATED ON AN EXTENSION OF THE RIGHT-OF-WAY LINE UNLESS DIMENSIONED OTHERWISE.
    - C. MAIN VALVES SHALL BE INSTALLED AWAY FROM PARKING AREAS. IF THIS IS UNAVOIDABLE, PROPER MEASURES SHALL BE TAKEN TO AVOID THE PARKING OF VEHICLES OVER THE HYDRANT VALVES. THE VALVES SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE. VALVES LOCATED IN NON-PAVED AREAS OR IN PARKING STALLS REQUIRE A REFLECTIVE PAVEMENT MARKER ON THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT. WHITE REFLECTORS FOR WATER MAIN VALVES, GREEN REFLECTORS FOR SEWER MAIN VALVES.
    - D. THE DISTANCE FROM THE TOP OF THE VALVE ACTUATOR NUT TO FINAL GRADE SHALL BE A MINIMUM OF 12 INCHES AND A MAXIMUM OF 18 INCHES.
  6. SERVICE:
    - A. COVER OVER SERVICE LINES SHALL BE 18 INCHES MINIMUM, 24 INCHES MAXIMUM BELOW FINISHED GRADE AND 24 INCHES UNDER PAVEMENT.
    - B. POLYETHYLENE SHALL BE BEDDED IN BACKFILL OF SAND WITH NO ROCK GREATER THAN 1 INCH IN DIAMETER.
    - C. METER STOPS SHALL HAVE 8 INCHES TO 10 INCHES COVER OR AS REQUIRED FOR PROPER METER/BOX INSTALLATION.
    - D. WATER SERVICES UNDER PAVEMENT SHALL BE ENCASED IN A SCHEDULE 80 PVC SLEEVE FOR THE FULL LENGTH OF THE PAVEMENT AND FOR 2 FEET BEYOND THE EDGE.
    - E. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2" X 4" TREATED STAKE, PAINTED BLUE, EXTENDING 18 INCHES (MINIMUM) ABOVE GRADE UNLESS INDICATED OTHERWISE.
  7. TESTING:
    1. THE PHYSICAL CONNECTION OF THE NEW SYSTEM TO THE EXISTING SYSTEM SHALL BE DONE IN ACCORDANCE WITH SECTION "C-1." (THIS DOCUMENT) WHICH WILL DICTATE THE ORDER OF THE PRESSURE TESTING AND DISINFECTION.

## VIII. GRAVITY SEWAGE COLLECTION SYSTEM

- A. MATERIALS:
1. SEWER PIPE AND FITTINGS:
    - A. PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE PIPE CONFORMING TO ASTM D-3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS UNLESS OTHERWISE NOTED.
    - B. DUCTILE IRON PIPE (DIP) SHALL BE DOUBLE CEMENT CONFORMING TO ANSI/AWWA C104/A21.4-95, OR LATEST REVISION, OR POLYETHYLENE LINED INSIDE CONFORMING TO ANSI/AWWA C105/A21.5-93, OR APPROVED EQUAL AND SHALL HAVE A COATED TAP END IN ACCORDANCE WITH ANSI/AWWA C151/A21.51-96, OR LATEST REVISION, MINIMUM WALL THICKNESS CLASS 350 (UNLESS OTHERWISE SPECIFIED).
    - C. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER.
  2. MANHOLES:
    - A. MANHOLES SHALL BE PRECAST PER ASTM C-478 TYPE II WITH 4000 PSI CONCRETE AND GRADE 40 STEEL. MONOTHOLICALLY POURED BASES ONLY.
    - B. MANHOLE OPENINGS ARE TO BE SEALED WITH ANTI-HYDRO CEMENT OR APPROVED EQUAL. NO MOLDING PLASTER WILL BE ALLOWED.
    - C. MANHOLE JOINTS SHALL BE SEALED WITH "RAMNEK" GASKETS OR APPROVED EQUAL AND WITH ANTI-HYDRO CEMENT ON THE INSIDE AND OUTSIDE.
- B. INSTALLATION
1. PIPE AND FITTINGS:
    - A. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321, AND THE UNI-BELL PLASTIC PIPE ASSOCIATION'S RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE.
    - B. DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-93, OR LATEST REVISION.
    - C. BEDDING AND INITIAL BACKFILL 12 INCHES OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1 INCH IN DIAMETER. FOR 3/4" WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS AT THE DISCRETION OF THE CITY OF PEMBROKE PINES. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6 INCH IN DIAMETER.
    - D. PIPE CONNECTION INTO MANHOLE WALL SHALL BE DUCTILE IRON PIPE, GROUTED IN PLACE, OR CAST-IN NEOPRENE RUBBER BOOT, OR EQUAL AS APPROVED BY THE CITY OF PEMBROKE PINES.
    - E. GRAVITY SEWER MAINS INSTALLED DEEPER THAN TWELVE (12) FEET SHALL BE D.I.P. AND SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-93 OR LATEST REVISION.
  2. MANHOLES:
    - A. MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
    - B. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
    - C. THE ENTIRE INSIDE OF THE MANHOLES SHALL BE PAINTED WITH TWO COATS (8 MILS EACH) OF COPPER'S 300-M BITUMASTIC COATING, OR APPROVED EQUAL. FIRST COAT RED, SECOND COAT BLACK. THE OUTSIDE OF EACH MANHOLE REQUIRES ONLY ONE COAT (8 MILS, DRY) OF THE SAME TYPE OF COATING.
    - D. MANHOLES SHALL BE INSTALLED AWAY FROM PARKING AREAS ON THE CENTERLINE OF THE ROADWAY. IF THIS IS UNAVOIDABLE, PROPER MEASURES SHALL BE TAKEN TO PROHIBIT THE PARKING OF VEHICLES OVER MANHOLES.
    - E. ORANGE REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED ON THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT ADJACENT TO ALL MANHOLE LOCATIONS OUTSIDE THE ROAD PAVEMENT.
    - F. ALL LIDS SHALL BE PROVIDED WITH A POLYETHYLENE WATER TIGHT MANHOLE INSERT. THE COVER BODY SHALL BE MANUFACTURED TO THE DIMENSIONS AS SHOWN ON THE CONTRACT DRAWINGS TO ALLOW EASY INSTALLATION IN THE MANHOLE FRAM. THE INSERT SHALL BE PROVIDED WITH A LIFT STRAP ATTACHED TO THE COVER BODY.
  3. SERVICE:
    - A. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE AS INDICATED IN THE "SOUTH FLORIDA BUILDING CODE" BROWARD COUNTY EDITION.
    - B. SERVICE LATERALS SHALL TERMINATE AT A DEPTH 30" BELOW FINISHED GRADE.
    - C. EACH SERVICE CONNECTION SHALL BE PLUGGED WATERTIGHT WITH AN APPROVED PLUG.
    - D. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2" X 4" TREATED STAKE PAINTED RED, EXTENDING 18 INCHES (MINIMUM) ABOVE GRADE.
    - E. CONTRACTOR SHALL ROUGH IN RISER TO 1 FOOT ABOVE FINISHED GRADE AND PLUG. AT PROJECT COMPLETION, CUT BACK TO FINISHED GRADE.
    - F. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE CITY'S BUILDING AND ZONING DEPARTMENT, PLUMBING SECTION.
- C. TESTING:
1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENTIRE SYSTEM SHALL BE LAMPED. SEWER LAMPING SHALL BE WITNESSED BY THE ENGINEER OF RECORD AND A REPRESENTATIVE FROM THE CITY OF PEMBROKE PINES ENGINEERING DIVISION.
  2. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE CITY OF PEMBROKE PINES OR THE ENGINEER OF RECORD MAY REQUIRE A VIDEO INFLATATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
  3. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE CITY OF PEMBROKE PINES.
  4. MANHOLE EXFILTRATION LEAKAGE SHALL NOT EXCEED 4 GALLONS PER DAY PER UNIT.
  5. SEWER PIPE EXFILTRATION LEAKAGE SHALL NOT EXCEED 10 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED.
  6. VISIBLE MANHOLE AND SEWER PIPE INFILTRATION LEAKAGE SHALL NOT BE PERMITTED.
  7. SANITARY SEWER SHALL BE TELEMSED, AT DEVELOPER'S EXPENSE, PRIOR TO FINAL APPROVAL OF CONSTRUCTION. VIDEO TAPE AND REPORT SHALL BE EXAMINED BY THE CITY OF PEMBROKE PINES ENGINEERING DIVISION. OWNER / CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING OF ANY DEFICIENCIES PRIOR TO THE CITY'S CERTIFICATION OF COMPLETION TO ANY AGENCY.

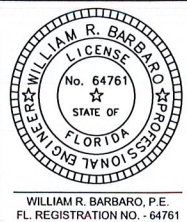
BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES



CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (954) 972-8559 FAX: (954) 972-4778

SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

GN-1



WILLIAM R. BARBARO, P.E.  
FL REGISTRATION NO. - 64761

FILE NO. 190411

REVISIONS

APPR

BY

DATE

NO

GENERAL NOTES & SPECIFICATIONS

FILE NO. 190411



6/20/19 P:\Projects\_2019\90411 - Copart Auto Auction\cad\id\Planset\GN.dwg

BROWARD COUNTY DEPARTMENT OF PLANNING AND ENVIRONMENTAL PROTECTION

1. NOTES ON WATER SEWER SEPARATION:

- A. SANITARY SEWERS AND FORCE MAINS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS AND FORCE MAINS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE. WHERE SANITARY SEWERS OR FORCE MAINS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES OF VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (D.I.P.) AT THE CROSSING. SUFFICIENT LENGTHS OF D.I.P. MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS WHEN THE WATER MAIN IS ABOVE THE SEWER MAIN. A MINIMUM VERTICAL CLEARANCE OF 12 INCHES MUST BE MAINTAINED AT ALL CROSSINGS WHEN THE WATER MAIN IS BELOW THE SEWER MAIN.

ALL CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUAL DISTANCE FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

- B. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELFL OCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF D.I.P. AND THE SANITARY SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF D.I.P. WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. IN THAT CASE THE WATER MAIN SHOULD BE ABOVE THE SEWER. JOINTS ON THE WATER SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

- C. ALL D.I.P. SHALL BE CLASS 50 OR HIGHER. ADEQUATE PROTECTIVE MEASURE AGAINST CORROSION SHALL BE USED AS DETERMINED BY DESIGN.

GENERAL NOTE:

THE CONTRACTOR SHALL CONFORM TO THE MOST CURRENT AND MOST STRINGENT STANDARDS AND SPECIFICATION REQUIREMENTS FOR THE BROWARD COUNTY DEPARTMENT OF PLANNING AND ENVIRONMENTAL REGULATION AND THE CITY OF PEMBROKE PINES, PERTAINING TO ALL UTILITY PIPE SEPARATIONS.

X. EARTHWORK AND COMPACTION

A. GENERAL

- NONE OF THE EXISTING MATERIAL IS TO BE INCORPORATED IN THE LIMEROCK BASE.
- ALL SUBGRADE UNDER PAVED AREAS SHALL HAVE A MINIMUM LBR VALUE OF 40 AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED.
- SOD SHALL BE ST. AUGUSTINE, BITTER BLUE OR FLORATAM AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.
- WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS OR LAKES, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED.

A. ON-SITE:

- ALL ORGANIC AND OTHER UNSUITABLE MATERIAL WITHIN THREE FEET OF AREAS TO BE PAVED SHALL BE REMOVED.
- SUITABLE BACKFILL SHALL BE MINIMUM LBR 40 MATERIAL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 FOR THREE (3) FEET BEYOND THE PERIMETER OF THE PAVING.

XI. STORM DRAINAGE

A. CONTRACTOR MAY UTILIZE ONE OF THE FOLLOWING MATERIALS.

1. ALUMINUM:

- A. PIPE SHALL BE ALUMINUM, MANUFACTURED IN CONFORMANCE WITH ASTM B209.
- B. PIPE SHALL BE SPIRAL RIB DRAINAGE PIPE WITH 3/4" BY 3/4" RIBS, APPROXIMATELY 7-1/2" ON CENTER. GAUGE THICKNESS SHALL MEET FDOT STANDARD 945-1.
- C. PIPE COUPLING BANDS SHALL BE 12" WIDE STANDARD SPLIT BANDS OF THE SAME ALLOY AS THE PIPE AND MAY BE ONE GAUGE LIGHTER THAN THE PIPE.
- D. POLYURETHANE OR OTHER SEALANT SHALL BE USED WITH COUPLING BANDS ON ALL NON-PERFORATED PIPE.

2. REINFORCED CONCRETE PIPE (RCP):

CONCRETE PIPE FOR STORM SEWERS SHALL CONFORM TO ASTM L70-79, TABLE III, WALL B, OR LATEST REVISION. ALL PIPE SHALL HAVE MODIFIED TONGUE AND GROOVE JOINTS, AND HAVE RUBBER GASKETS, UNLESS OTHERWISE SPECIFIED.

3. POLYPROPYLENE PIPE (PPP):

POLYPROPYLENE PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS. MANNING'S "N" VALUE FOR USE IN DESIGN SHALL BE 0.012. POLYPROPYLENE PIPE MEETS OR EXCEEDS AASHTO M330 OR ASTM F2881 (12"-60"). PIPE SHALL BE JOINED BY WATERTIGHT, GASKETED INTEGRAL BELL, REINFORCED BY A POLYMER COMPOSITE BAND & SPIGOT. THE JOINT SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. POLYPROPYLENE COMPOUND SHALL BE IMPACT MODIFIED COPOLYMER MEETING AASHTO M330 OR ASTM F2881 (12"-60"). INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321.

4. MISCELLANEOUS:

- A. BEDDING AND INITIAL BACKFILL OVER DRAINAGE PIPES SHALL BE SAND WITH NO ROCK LARGER THAN 1" DIAMETER.
- B. BACKFILL MATERIAL UNDER PAVED AREAS SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY ASSHTO T-180.
- C. BACKFILL MATERIAL UNDER AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- D. CATCH BASINS SHALL BE PRECAST MINIMUM 3000 PSI CONCRETE AND GRADE 40 REINFORCED STEEL.

5. INSTALLATION:

- A. PIPE SHALL BE PLACED ON STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO UNIFORM GRADE AND LINE.
- B. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL WELL TAMPED IN LAYERS NOT TO EXCEED SIX INCHES (6").
- C. PROVIDE A MINIMUM PROTECTIVE COVER OF 18 INCHES OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.
- D. THE CONTRACTOR SHALL NOTIFY THE LOCAL WATER CONTROL DISTRICT AT LEAST 24 HOURS PRIOR TO THE START OF THE CONSTRUCTION AND INSPECTION.

XII. STORM DRAINAGE PRE-TREATMENT/EXFILTRATION SYSTEM

- A. ANY CONFLICT WITH EXISTING OR PROPOSED UTILITIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER. ANY IMPERMEABLE MATERIAL ENCOUNTERED IN THE EXCAVATION FOR THE DRAIN FIELD SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
- B. THE TRENCH LINER SHALL BE TYPAR SPUN BONDED POLYPROPYLENE FILTER FABRIC AS MANUFACTURED BY THE DUPONT COMPANY, OR APPROVED EQUAL. IT SHALL BE USED ON THE SIDES AND TOP OF DRAIN FIELD DITCH. THE TOP SECTION OF THE MATERIAL SHALL BE LAPPED A MINIMUM OF 24 INCHES AND THE CONTRACTOR SHALL TAKE EXTREME CARE IN BACKFILLING TO AVOID BUNCHING OF THE FABRIC.
- C. PERFORATED PIPE WITHIN THE DRAIN FIELD SHALL HAVE 3/8 INCH PERFORATIONS 360° AROUND THE PIPE WITH APPROXIMATELY 120 PERFORATIONS PER FOOT OF PIPE.
- D. PERFORATED PIPE SHALL TERMINATE FIVE FEET (5') FROM THE DRAINAGE STRUCTURE. THE REMAINING FIVE FEET (5') SHALL BE NON-PERFORATED PIPE.
- E. PIPES SHALL TERMINATE TWO FEET (2') FROM THE END OF THE TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS.

XIII. PAVING

A. GENERAL:

- ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF THE PAVEMENT.
- ALL EXISTING PAVEMENT CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
- WHERE PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.
- ALL STREET CORNER PAVEMENT RADII SHALL BE 25 FEET UNLESS OTHERWISE NOTED ON THE PLANS.
- UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AND BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD AND THE CITY OF PEMBROKE PINES "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND THE PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGE OF PAVEMENT AT 50 FEET INTERVALS. THESE "AS-BUILTS" SHALL BE APPROVED BY THE CITY PRIOR TO THE PLACEMENT OF ASPHALT.
- REFER TO ARCHITECTURAL PLANS FOR BRICK PAVERS DESIGN.

B. MATERIALS:

- BASE COURSE SHALL BE CRUSHED LIMEROCK MIAMI OOLITE WITH A MINIMUM OF 70% CARBONATES OF CALCIUM AND MAGNESIUM (BOX FOR LOCAL STREETS AND PARKING AREAS) AND A MINIMUM LIMEROCK BEARING RATIO 100.
- PRIME COAT AND TACK COAT SHALL MEET F.D.O.T. STANDARDS.
- SURFACE COURSE SHALL BE EQUAL TO F.D.O.T. TYPE S-3 ASPHALT.
- REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" X 6" NO. 6 GAUGE WIRE MESH.
- REFER TO ARCHITECTURAL PLANS FOR BRICK PAVERS DESIGN.

C. INSTALLATION:

- LIMEROCK BASE MATERIAL SHALL BE 8 INCHES THICK AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T80-C.
- LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS.
- ASPHALTIC CONCRETE SHALL BE A MINIMUM OF 1 1/2" THICK AND SHALL BE PLACED TWO 3/4" LIFTS. (NOTE: SECOND LIFT TO BE PLACED AFTER A MINIMUM OF 80% OF THE HOUSES HAVE BEEN COMPLETED OR AS DIRECTED BY THE CITY ENGINEER..
- PRIME COAT SHALL BE PLACED ON ALL LIMEROCK BASES IN ACCORDANCE WITH F.D.O.T. STANDARDS.
- TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH F.D.O.T. STANDARDS.
- REFER TO ARCHITECTURAL PLANS FOR BRICK PAVERS DESIGN.

D. TESTING:

ALL SUBGRADE, LIMEROCK AND ASPHALT TESTS REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER AND/OR THE CITY OF PEMBROKE PINES.

- THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
- DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA, AND TAKEN AS DIRECTED BY THE ENGINEER AND THE CITY OF PEMBROKE PINES.
- ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE OWNER EXCEPT THOSE TESTS FAILING TO MEET THE SPECIFIED REQUIREMENTS, WHICH ARE TO BE PAID BY THE CONTRACTOR.

XIV. SIGNING AND MARKING

- A. ALL PAVEMENT MARKINGS SHALL BE HOT APPLIED THERMOPLASTIC MANUFACTURED AND APPLIED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATION'S SECTION 711 AND BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS WHERE APPLICABLE.
- B. ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS.
- C. REFLECTIVE PAVEMENT MARKERS SHALL BE CLASS B MARKERS MANUFACTURED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS 706 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.

BERGERON PARK OF COMMERCE SOUTH

15.25 ACRE PARCEL

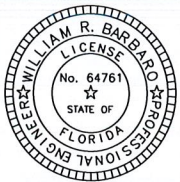
CITY OF PEMBROKE PINES

GENERAL NOTES & SPECIFICATIONS



SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

GN-2

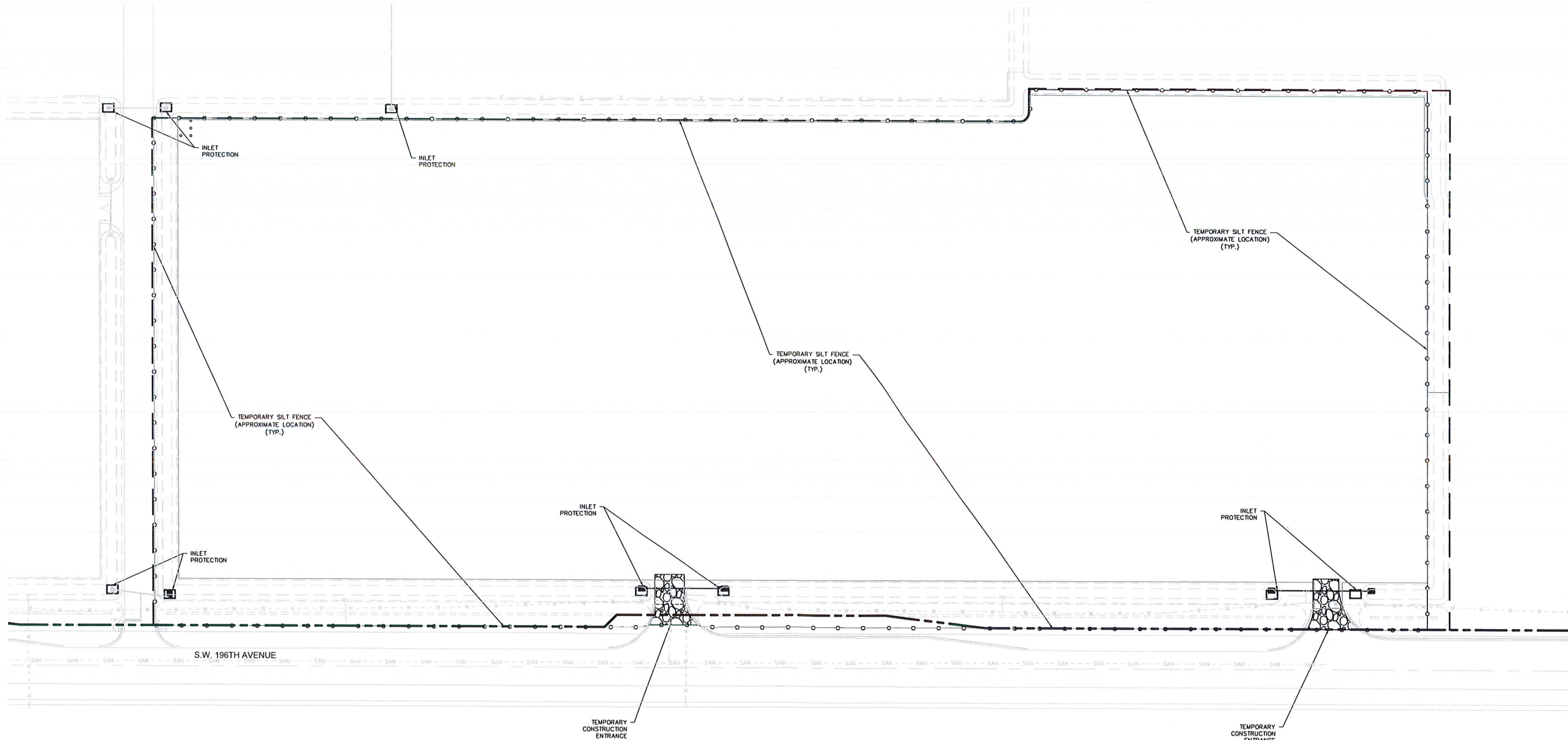


WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761

FILE NO. 190411



6/20/19 P:\Projects\_2019\190411 - Coport Auto Auction\cad\c\PlanSet\ESCP.dwg



LEGEND

- TEMPORARY SILT FENCE
- INLET PROTECTION
- TEMPORARY CONSTRUCTION ENTRANCE
- TURBIDITY BARRIER
- RIGHT OF WAY
- PARCEL BOUNDARY

GRAPHIC SCALE

( IN FEET )

1 inch = 50 ft.

NOTE:  
1. AREA AT PROPOSED DEMUCK IDENTIFIED BY THE BOUNDARIES OF SILT FENCE

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES  
EROSION & SEDIMENT CONTROL PLAN

**CPS**  
CARNAHAN PROCTOR & CROSS  
CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (561) 972-3559 FAX: (561) 972-4178  
FILE NO. 190411

SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

EC-1

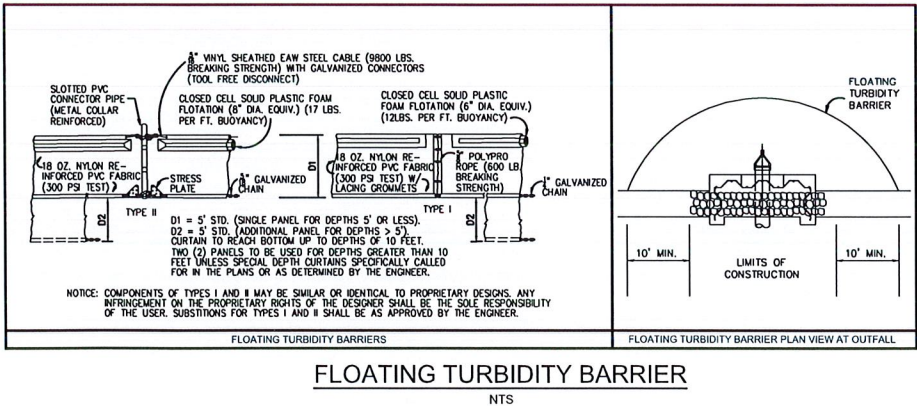
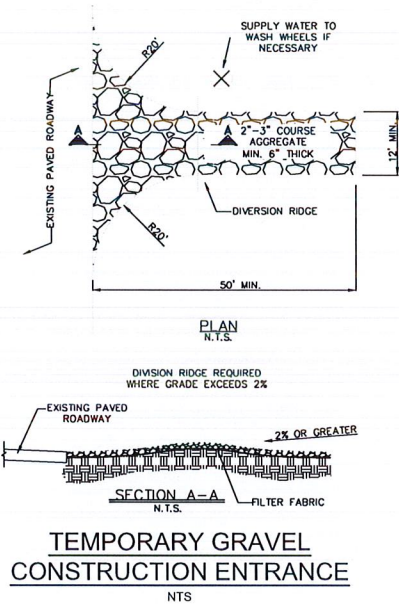
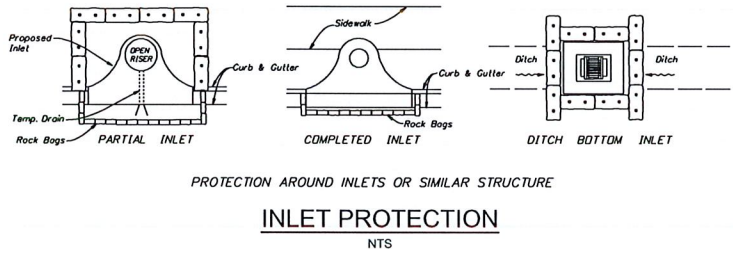
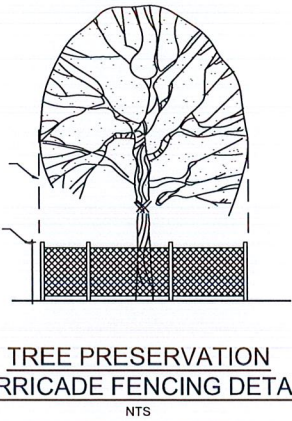
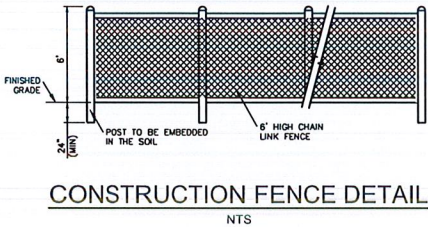
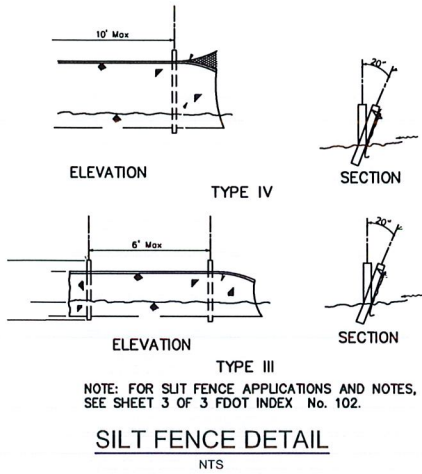
WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761



6/20/19 P:\Projects\_2019\190411 - Coport Auto Auction\cadd\Planset\ESCP.dwg

EROSION ANS SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND APPLICABLE WATER MANAGEMENT DISTRICT PERMIT(S) FOR THIS PROJECT.
2. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWERS MANUAL" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (FDER).
3. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THTS PROJECT THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
4. ALL EXCAVATIONS AND EARTHWORK SHALL BE DONE IN A MANNER TO MINIMIZE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND REROUTED THROUGH FILTERS, SILTATION DIAPERS AND SUMPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CORRECTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH CHAPTER 62-302, FLORIDA ADMINISTRATIVE CODE.
5. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS FROM ANY AGENCY THAT RESULTS IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO ELIMINATE TURBID RUNOFF FROM LEAVING THE SITE AND RAISING BACKGROUND LEVELS ABOVE EXISTING BACKGROUND LEVEL.
6. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
7. ADDITIONAL PROTECTION - ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DO TO UNFORESEEN CONDITIONS OR ACCIDENTS.
8. SILT FENCES SHALL BE USED ALONG THE PROPERTY LINES TO MINIMIZE OFFSITE SILTATION MITGRATION.
9. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEASE DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
10. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
11. FILER FABRIC SHALL BE INSTALL UNDER INLET GRATES AND EXTEND A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. IF MORE THAN ONE STRIP OF FABRIC IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED 1 FOOT.
12. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL AND AS NEEDED.
13. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
14. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE APPLICABLE WATER MANAGEMENT DISTRICT.
15. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
16. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER BARRIER ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
18. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
19. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION AND SHALL BE REMOVED WHEN AREAS HAVE BEEN STABILIZED.



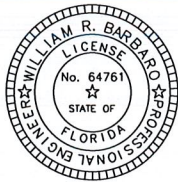
BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

EROSION & SEDIMENT CONTROL DETAILS



SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

EC-2



WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761





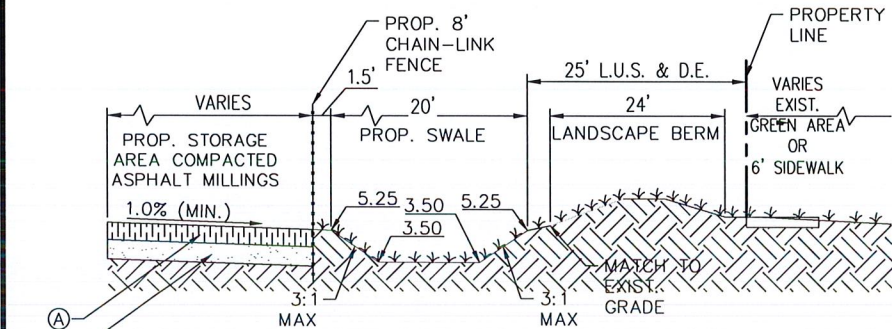


6/20/19 P:\projects\2019\190411 - report auto auction\cad\va\planset\PGD.dwg

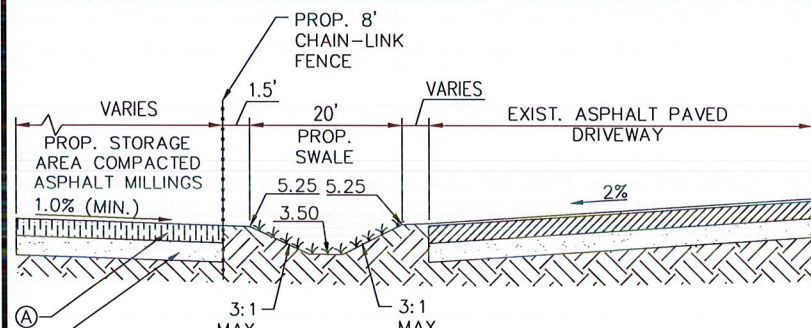
## LEGEND

- (A) 10" COMPACTED ASPHALT MILLINGS MIN. LBR 40, 98% MAX. DENSITY PER AASHTO T-180. TOP OF SURFACE TO BE COATED WITH ASPHALT EMULSION AND SANDED.
- (B) 12" STABILIZED SUBGRADE MIN. LBR 40, 98% MAX. DENSITY PER AASHTO T-180. STABILIZED SUBGRADE TO BE A MINIMUM OF 18" ABOVE THE SEASONAL HIGH GROUNDWATER TABLE.
- ① 1 1/2" TYPE S-3 ASPHALT PAVEMENT IN TWO 3/4" LIFTS.
- ② 8" LIMEROCK BASE MIN. LBR 100, 98% MAX. DENSITY PER AASHTO T-180.
- ③ 12" STABILIZED SUBGRADE MIN. LBR 40, 98% MAX. DENSITY PER AASHTO T-180.

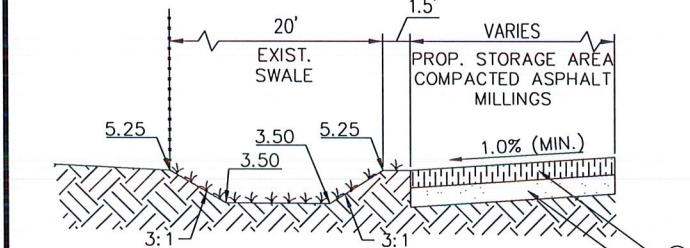
NOTE: ALL SWALES & NON PAVED AREAS TO BE SODDED UNLESS OTHERWISE NOTED.



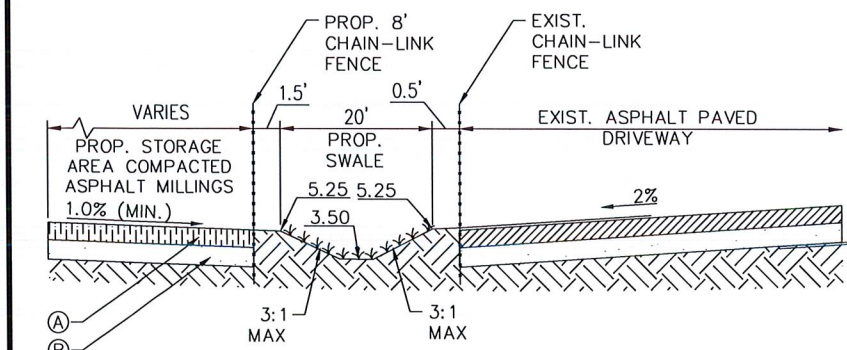
SECTION A-A  
NTS



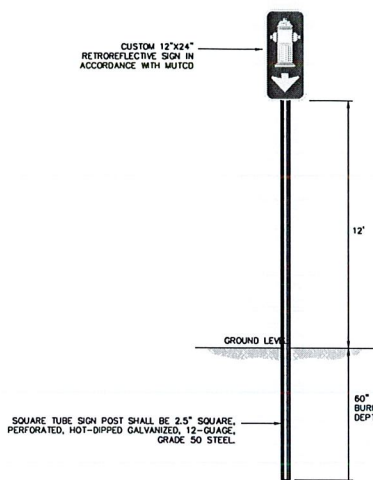
SECTION B-B  
NTS



SECTION C-C  
NTS



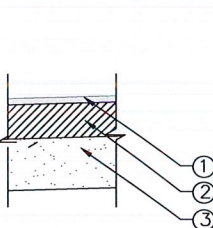
SECTION D-D  
NTS



TYPICAL HANDICAPPED PARKING  
SPACE  
NTS

## FIRE HYDRANT SIGN DETAIL

NOTE: SIGN TO BE INSTALLED BEHIND HYDRANT IN LINE WITH REAR BOLLARDS, MINIMUM 3' SEPARATION FROM HYDRANT AND 180" FROM NOZZLE.



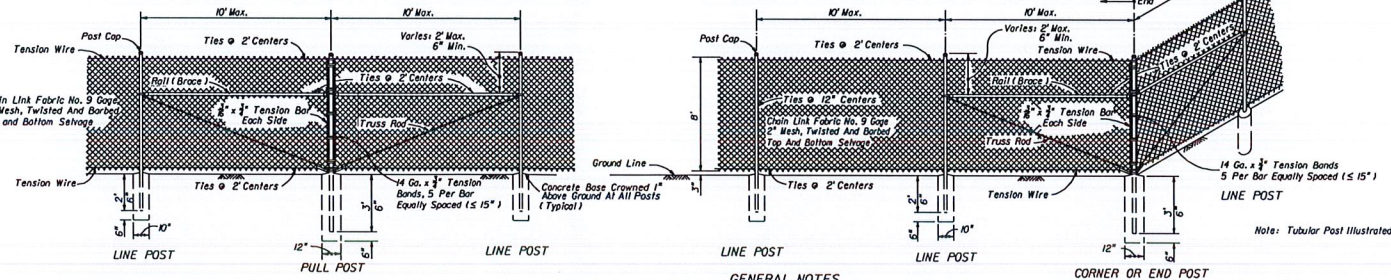
TYPICAL PAVING  
SECTION  
NTS

## SAWCUT & MATCH EXISTING PAVEMENT DETAIL

NTS

## PRECAST CONCRETE WHEEL STOP

NTS

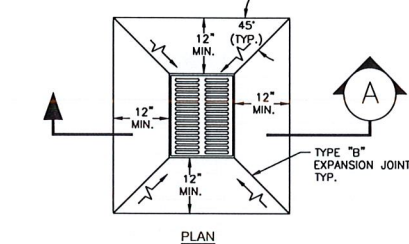


1. This fence to be used generally in urban areas.
2. For supplemental information refer to Section 550 of FDOT Standard Specifications.
3. Chain link fabric, posts, rails, truss rods, tension wires, tie wires, stretcher bars, gates and all miscellaneous fittings and hardware shall meet the requirements of AASHTO M81 unless otherwise specified by this index. Stipulated AASHTO and ASTM signify current reference.
4. Fence Component Options:
- A. Line post options:
- (1) Galvanized steel pipe, Schedule 40, 1/2" nominal dia, zinc galvanized at the rate of 1.8 oz/sf; ASTM A53 Table 2, ASTM F403, and AASHTO M81.
  - (2) Aluminum coated steel pipe, ASTM A53, 1/2" nominal dia, 1.90" OD; coated at the rate of 0.40 oz/sf; AASHTO M81.
  - (3) Aluminum alloy pipe, 2 1/2" nominal dia, ASTM B241 or B221, Alloy 6063, T6.
  - (4) Steel H-Beam, 12" x 12", 1/2" thick, 1.8 oz/sf; AASHTO M81 and Detail.
  - (5) Aluminum alloy H-Beam, 12" x 12", 1/2" thick, 1.8 oz/sf; AASHTO M81 and Detail.
  - (6) Steel C, 12" x 12", 1/2" thick, 1.8 oz/sf; AASHTO M81 and Detail.
  - (7) Resistance welded steel pipe, 50,000 psi min. yield strength ASTM A569/A569M, A553/A553M or uncoated stock of discontinued A446/A446M base materials; ASTM F669 Group IX (Alternative Design) fence industry 2" OD, 1/2" NPS, 1,900" dec. equiv., 0.100" min. wall thick, and min. wt. 2.28 lb/ft; with ASTM F643 metric equivalent internal coating Types A, B, C or D and external coating Types A, B, or C; the chrome conversion coating of external Type B shall have a thickness of 15 µg/in<sup>2</sup> min. and the polymer film topcoat shall have a thickness of 0.0003" min.; internal and external coatings are not restricted to the combinations of Table 2, ASTM F643.
- B. Corner, end, and pull post options:
- (1) Galvanized steel pipe, Schedule 40, 2" nominal dia, zinc galvanized at the rate of 1.8 oz/sf; ASTM A53 Table 2, ASTM F403, and AASHTO M81.
  - (2) Aluminum coated steel pipe, ASTM A53, 2" nominal dia, 2.175" OD; coated at the rate of 0.40 oz/sf; AASHTO M81.
  - (3) Aluminum alloy pipe, 2 1/2" nominal dia, ASTM B241 or B221, Alloy 6063, T6.
  - (4) Resistance welded steel pipe, 50,000 psi min. yield strength ASTM A569/A569M, A553/A553M or uncoated stock of discontinued A446/A446M base materials; ASTM F669 Group IX (Alternative Design) fence industry 2 1/2" OD, 1 1/2" NPS, 1,600" dec. equiv., 0.100" min. wall thick, and min. wt. 3.17 lb/ft; with ASTM F643 metric equivalent internal coating Types A, B, C or D and external coating Types A, B, or C; the chrome conversion coating of external Type B shall have a thickness of 15 µg/in<sup>2</sup> min. and the polymer film topcoat shall have a thickness of 0.0003" min.; internal and external coatings are not restricted to the combinations of Table 2, ASTM F643.
- C. Rail options:
- (1) Galvanized steel pipe, Schedule 40, 1/2" nominal dia, zinc galvanized at the rate of 1.8 oz/sf; ASTM A53 Table 2, ASTM F403, and AASHTO M81.
  - (2) Aluminum coated steel pipe, ASTM A53, 1/2" nominal dia, 1.90" OD; coated at the rate of 0.40 oz/sf; AASHTO M81.
  - (3) Aluminum alloy pipe, 1/2" nominal dia, ASTM B241 or B221, Alloy 6063, T6.
  - (4) Resistance welded steel pipe, 50,000 psi min. yield strength ASTM A569/A569M, A553/A553M or uncoated stock of discontinued A446/A446M base materials; ASTM F669 Group IX (Alternative Design) fence industry 1/2" OD, 1/2" NPS, 1,600" dec. equiv., 0.100" min. wall thick, and min. wt. 1.83 lb/ft; with ASTM F643 metric equivalent internal coating Types A, B, C or D and external coating Types A, B, or C; the chrome conversion coating of external Type B shall have a thickness of 15 µg/in<sup>2</sup> min. and the polymer film topcoat shall have a thickness of 0.0003" min.; internal and external coatings are not restricted to the combinations of Table 2, ASTM F643.

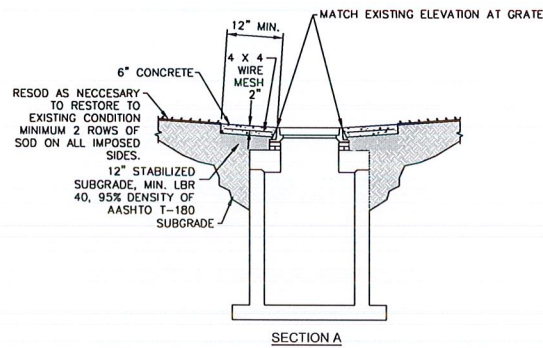
cont. ....

## CHAIN-LINK FENCE DETAIL

NTS



CONCRETE APRON DETAIL  
NTS



Notes:

1. CHAIN LINK FABRIC FOR GATES TO BE THE SAME AS REQUIRED FOR FENCE.
2. GATE POST BASE-PORTLAND CEMENT CONCRETE (3000 PSI).
3. FENCE FABRIC, POSTS, FRAMEWORKS, AND HARDWARE SHALL BE GALVANIZED STEEL PER SPECIFICATIONS.
4. GATE POSTS TO BE USED ON EACH SIDE OF SINGLE AND DOUBLE GATE OPENINGS.

## CHAIN-LINK FENCE GATE

NTS

TYPE III VINYL COATED FABRIC							
AASHTO M81 Table 4 Redefined As Follows							
Specified Diameter Of Metallic Coated Core Wire	In.	mm	g/sf	g/m <sup>2</sup>	PVC Thickness Range		
					Minimum Weight Of Zinc Coating (Estimated Or Extruded And Bonded Coating)	M81 Class A (Extruded Or Extruded And Bonded Coating)	M81 Class B (Bonded Coating)
In.	mm	g/sf	g/m <sup>2</sup>	In.	mm	In.	mm
0.188	3.77	9	0.30	92	0.015 to 0.025	0.38 to 0.64	0.006 to 0.25

8. Pull posts shall be used at breaks in vertical grades of 15' or more, or at approximately 350' centers except that this maximum interval may be reduced by the Engineer on curves where the curve is greater than 3'.
9. Corner posts are to be installed at all horizontal breaks in fence at 15' or more and as required at vertical breaks over 15' as determined by the Engineer.
10. When fence has an installed top of fabric height less than 6', knuckled top and bottom selvages shall be used unless the plans specifically identify locations for twisted selvage fabrics.
11. Unless sliding gates or special gates are called for in the plans, all gates shall be chain link swing gates meeting the material requirements described above as approved by the Engineer. Payment shall include the gates, single or double, all necessary hardware for installation and any additional length and/or size for posts at the opening. Gates shall be paid for under the contract unit price for Fence Gates, EA.
12. For construction purposes corner post assemblies shall consist of one corner post, two braces, two truss rods, and all necessary fittings and hardware as detailed above.
- End post assemblies shall consist of one end post, one brace, one truss rod and all necessary fittings and hardware as detailed above.
13. All posts, tension wires, chain link fabric, tie wires, Class I concrete, and all miscellaneous fittings and hardware to be included in the cost for Fencing, LF.
4. Chain link fabric options (12" mesh with twisted and barbed selvage top and bottom for all options except as described in Note No. 10):
- (1) AASHTO M81 Type I - Zinc Coated Steel, No. 9 gage (coated wire diameter), coated at the rate of 1.8 oz/sf; M81 Class A (1.8 oz/sf modified to 1.8 oz/sf).
  - (2) AASHTO M81 Type II - Aluminum Coated Steel, No. 9 gage (coated wire diameter), coated at the rate of 0.40 oz/sf.
  - (3) AASHTO M81 Type III - Polyvinyl Chloride (PVC) Coated Steel, No. 9 gage (coated core wire diameter), core wire zinc coated steel, PVC coating M81 Class A (either extruded or extruded and bonded) or Class B (bonded). See table right. Unless the plans call for M81 standard colors medium green, dark green or black the coating color shall be soft gray matching that of No. 3622 of Federal Standard 595a.
- E. Tension wire options:
- (1) Steel wire No. 7 gage zinc galvanized at the rate of 1.2 oz/sf; AASHTO M81.
  - (2) Aluminum alloy wire with a diameter of 0.1875" or larger conforming to the requirements of ASTM B241, Alloy 5052 Temper H36, or Alclad Alloy 5056 Temper H92.
  - (3) Aluminum coated steel wire No. 7 gage coated at the rate of 0.40 oz/sf; AASHTO M81.
- F. Tie wire and log ring options:
- (1) Steel wire No. 9 gage zinc galvanized at the rate of 1.2 oz/sf.
  - (2) Aluminum alloy wire with a diameter of 0.1875" or larger conforming to the requirements of ASTM B241, Alloy 5052 Temper H36, or Alclad Alloy 5056 Temper H92.
  - (3) Aluminum coated steel wire No. 7 gage coated at the rate of 0.40 oz/sf.
5. Unless a specific material is called for in the plans the Contractor may elect to use either a single type of material or a combination of material types from the component options listed above. Combinations of optional materials are restricted as follows: (a) Only one fabric optional material will be permitted between corner and/or end post assemblies. (b) Only one line post optional material will be permitted between corner and/or end post assemblies. (c) Pull post assemblies shall be optional materials identical to either the line post optional material or the corner and end post optional material, but pull post assemblies shall be the same optional material between any set of corner and/or end post assemblies.
6. Concrete for bases shall be Class I concrete as specified in Section 347 of the Standard Specifications or a packaged, dry material meeting the requirements of a concrete under ASTM C-387. Materials for Class I concrete may be proportioned by volume and/or by weight.
7. Line posts are to be set in concrete as detailed above or by the following methods:
- (a) In accordance with special details and/or as specifically described in the contract plans and specifications.
  - (b) In accordance with ASTM F561 Subsections 5.4 through 5.7 and 5.9 and 5.10 as approved by the Engineer.
  - (c) Posts mounted on concrete structure or solid rock shall be mounted in accordance with the base plate detail "Fence Mounting On Concrete Endwalls And Retaining Wall", Sheet E2 or, by embedment in accordance with ASTM F561 Subsection 5.5.
- End, pull and corner post assemblies shall be set in concrete as detailed above for all soil conditions other than solid rock. Posts within assemblies that are located on concrete structures or solid rock shall be set or base plate or by embedment as prescribed under (b) above for line posts.
- Line and assembly posts set in concrete bases shall be set an additional 3" in depth for each 1' of fence height greater than 6'.

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

## PAVING GRADING & DRAINAGE DETAILS



CAPRIAN PROCTOR & CROSS, INC.  
CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (561) 972-3959 FAX: (561) 972-4178

SCALE: AS SHOWN

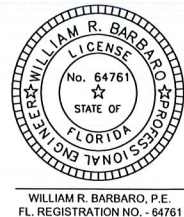
DATE: 6/20/2019

DRAWN BY: M.T.

CHECKED BY: W.R.B.

DESIGNED BY: M.T.

PGD-2



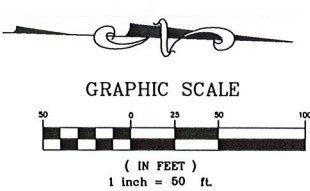
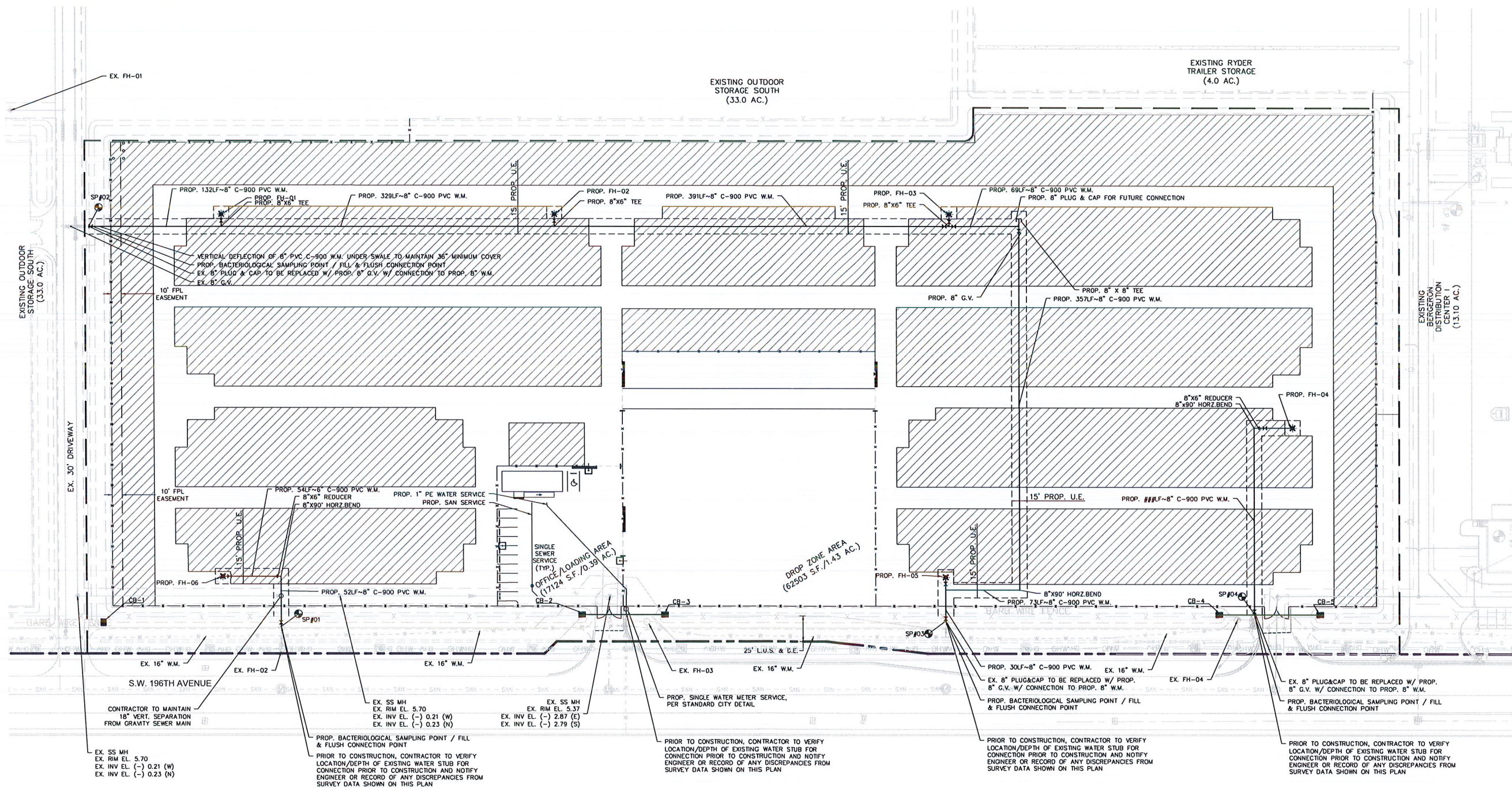
WILLIAM R. BARBATO, P.E.  
FL. REGISTRATION NO. - 64761



NOTE:

- CONTRACTOR TO FIELD VERIFY THE INVERT ELEVATIONS OF THE EXISTING SANITARY SEWER MAINS BEFORE THE BEGINNING OF CONSTRUCTION. IF THERE ARE ANY DEVIATIONS FROM THE ENGINEERING PLANS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD.
- ALL PROPOSED FIRE HYDRANTS TO HAVE 7.5' CLEAR RADIUS FROM ANY OBSTRUCTION AND PROTECTED BY BOLLARDS AT 3' RADIUS, PER STANDARD CITY DETAIL (SEE DETAIL ON SHEET PGD-2).
- CONTRACTOR TO MAINTAIN 36" OF COVER (MIN) OVER PVC PIPE FOR ALL WATER IMPROVEMENTS DEPICTED ON THESE PLANS. COVER REQUIREMENTS MAY BE REDUCED TO 30" OF COVER (MIN.) WITH THE MATERIAL SELECTION OF D.I.P.
- CONTRACTOR TO MAINTAIN 12" OF VERTICAL SEPARATION (MIN.) WHEN W.M. CROSSES OVER OTHER PIPES. CONTRACTOR TO MAINTAIN 18" OF VERTICAL SEPARATION (MIN.) WHEN W.M. CROSSES UNDER OTHER PIPES. W.M. CROSSING OVER OTHER PIPES IS THE PREFERRED METHOD, HOWEVER COVER REQUIREMENTS SHALL BE MAINTAINED.
- FOR W.M. CROSSINGS, BOTH WATER MAIN PIPE AND THE CROSSING PIPE SHALL BE OF A FULL PIPE LENGTH AND CENTERED UPON THE CROSSING WHERE THE VERTICAL SEPARATION SHALL BE MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL OF PIPE.

LEGEND			
	PROPOSED WATER MAIN TEE		PROPOSED VERTICAL BENDS
	PROPOSED GATE VALVE		PROPOSED SANITARY SEWER MANHOLE
	PROPOSED D.O.C.V.		PROPOSED SEWER DIRECTION OF FLOW
	PROPOSED WATER METER WITH B.F.P.		PROPOSED CLEAN OUT
	PROPOSED WATER MAIN PLUG		PROPOSED BACTERIOLOGICAL SAMPLING POINT
	PROPOSED FIRE HYDRANT ASSEMBLY		UTILITY CONFLICT
			UTILITY EASEMENT
			RIGHT OF WAY
			PARCEL BOUNDARY
			PROPOSED CHAIN-LINK FENCE
			PROP. TENANT INVENTORY STORAGE

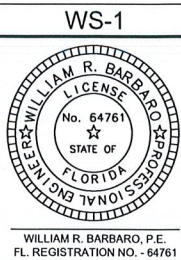


BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

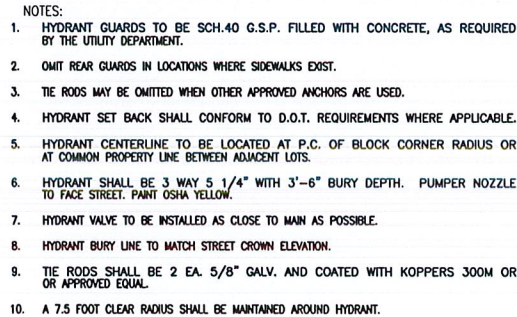
WATER AND SEWER PLAN



SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.







The diagram illustrates two types of utility service plans: Double Service Plan and Single Service Plan.

**DOUBLE SERVICE PLAN:** This plan shows a "U. BRANCH CONNECTION" from a "LOT LINE" to a "DOUBLE METER BOX". The connection is made using a "1\" x 5/8\" ANGLE METER STOP (MIN.)". The distance from the "LOT LINE" to the "DOUBLE METER BOX" is labeled as "1. 1/2\" OR 1\" P.E. (MIN.)". The distance from the "DOUBLE METER BOX" to the "RIGHT-OF-WAY OR BACK OF SIDEWALK" is labeled as "2' MIN.".

**SINGLE SERVICE PLAN:** This plan shows a "SINGLE METER BOX" connected to the "LOT LINE" via a "1\" x 5/8\" ANGLE METER STOP (MIN.)". The distance from the "LOT LINE" to the "SINGLE METER BOX" is labeled as "1\" DIA. P.E. (MIN.)". The distance from the "SINGLE METER BOX" to the "RIGHT-OF-WAY OR BACK OF SIDEWALK" is labeled as "2' MIN.".

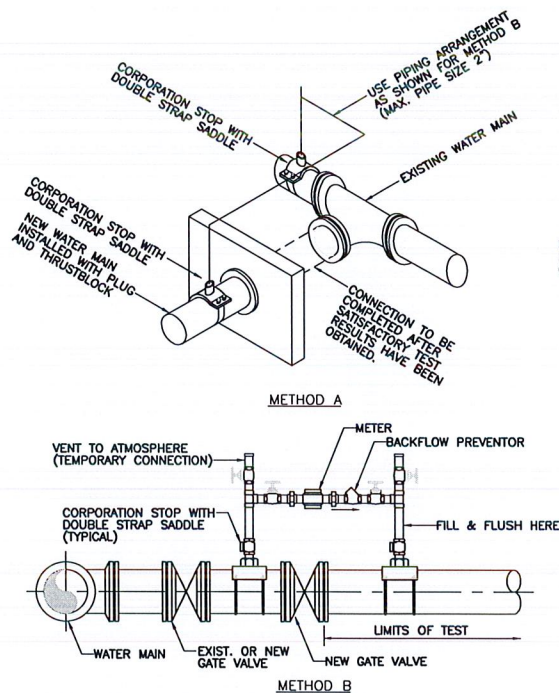
Other labels include "RIGHT-OF-WAY OR BACK OF SIDEWALK", "LOT LINE", "U. BRANCH CONNECTION", "DOUBLE METER BOX", "SINGLE METER BOX", "SIDE LOT LINE", and "TEMPORARY BLUE STAKE (TYP.)".

[illegible]

The image shows three types of pipe fittings: a Tee (T-junction), an Elbow (90-degree bend), and a Cross (four-way junction). Each fitting is shown with a cross-section of a pipe connected to it.

RESTRAINED PIPE LENGTH (LINEAL FEET)					
PIPE SIZE	TEE & WYE	90°BEND	45°BEND	22 1/2°BEND	11 1/4°BEND
6"	27	27	16	9	5
8"	34	34	20	11	6
10"	41	41	24	14	7
12"	48	48	28	16	8
14"	55	55	32	18	10
16"	62	62	35	20	11
18"	69	69	39	22	12
20"	75	75	42	24	13
24"	87	87	49	27	14
30"	104	104	57	31	17
36"	120	120	65	35	19
42"	134	134	72	39	21
48"	147	147	79	42	22
54"	160	160	85	45	24

## RESTRAINED JOINT DETAIL



1. WATER MAIN TO BE PRESSURE TESTED AND DISINFECTED ACCORDING TO BROWARD COUNTY PUBLIC HEALTH UNIT REGULATIONS, AWWA, AND MUNICIPAL SPECIFICATIONS SPECIFICATIONS IN EFFECT.
2. BACTERIOLOGICAL TESTS ARE TO BE PERFORMED BY THE CONTRACTOR AND AN APPROVED TESTING LABORATORY.
3. REMOVE TEMPORARY CONNECTION AT SADDLE ON NEW MAINS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED AND REPLACE WITH BRASS PLUG.
4. PROVIDE ALL NECESSARY THRUST BLOCKS OR OTHER RESTRAINTS.
5. FILLING AND FLUSHING LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR, ENGINEER, AND CITY.
6. VENT TO ATMOSPHERE SHALL REMAIN OPEN DURING ALL PHASES OF PRESSURE TESTING.

1. A WATER MAIN SHOULD CROSS OVER PIPES WHEREVER POSSIBLE MAINTAINING A 36 INCH COVER FOR PVC, 30 INCH COVER FOR D.I.P. AND 18 INCH SEPARATION AS MINIMUMS.
2. WHEREVER A WATER MAIN CROSSES UNDER A SEWER MAIN, OR CROSSES OVER WITH LESS THAN 18 INCHES VERTICAL SEPARATION, THEN D.I.P. SHALL BE USED FOR BOTH PIPES FOR A DISTANCE OF 20 FEET CENTERED ON CROSSING WITH NO JOINTS WITHIN 10 FEET OF THE CROSSING.
3. 18 INCH SEPARATION SHOULD BE MAINTAINED BETWEEN ALL PIPES (STORM, SEWER, WATER) WHENEVER POSSIBLE. 12 INCHES IS THE ABSOLUTE MINIMUM SEPARATION WITH D.I.P. REQUIRED FOR ANY SEPARATION LESS THAN 18 INCHES.
4. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN WATER AND SEWER AS A MINIMUM.
5. 3 FOOT HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN UTILITIES AND ANY OBSTRUCTIONS (CATCH BASINS, CONCRETE POLES, ETC.)
6. 5 FOOT HORIZONTAL CLEARANCE SHALL BE PROVIDED BETWEEN UTILITIES AND TREES.

Diagram illustrating the crossing of a pipe over a road. The pipe is shown with joints and is labeled "SLOPE UP TO MINIMUM COVER". The road surface is labeled "FINISHED GRADE". A note points to the pipe: "SEE NOTE NO.3 FOR ACCEPTABLE DEFLECTION". Another note points to the crossing: "CENTER A FULL LENGTH OF PIPE THE POINT OF CROSSING".

1. (1) 18" MINIMUM CLEARANCE REQUIRED FOR WATER AND SEWER MAIN CROSSINGS, 12" MINIMUM CLEARANCE REQUIRED FOR OTHER UTILITY CROSSINGS.
2. THE DEFLECTION TYPE CROSSING SHALL BE USED WHENEVER POSSIBLE. ONLY UNDER SPECIFIC ORDERS BY THE ENGINEER SHALL THE FITTING TYPE CROSSING BE ALLOWED.
3. CONSTRUCT CROSSING USING 75% OF MANUFACTURES MAXIMUM JOINT DEFLECTION (MAXIMUM).

1. (1) 18" MINIMUM CLEARANCE REQUIRED FOR WATER AND SEWER MAIN CROSSINGS, 12" MINIMUM CLEARANCE REQUIRED FOR OTHER UTILITY CROSSINGS.
2. COAT THE ROOFS WITH A COAL TAR ENAMEL AFTER ASSEMBLY (2 COATS MIN.).
3. THE ROOFS MAY BE OMITTED WHEN OTHER APPROVED METHODS OF RESTRAINING ARE UTILIZED.

8" WATER MAIN  
8" x 4" TEE  
4" GATE VALVE  
18" MINIMUM SEPARATION (TYP.)  
" WATER METER PER UNIT WITHIN METERED AREA  
" DOUBLE WATER SERVICE CONNECTION  
4" PLUG WITH 2" TERMINAL BLOW-OFF (SEE DETAIL)  
VARIES  
15' UTILITY EASEMENT

METER BANK DETAIL

Diagram illustrating the construction of a 6" O.D. manhole structure, showing the following layers and materials:

- FINISHED PAVEMENT GRADE** (Top surface)
- BACKFILL, NOT LARGER THAN 6" PLACED IN 6" LAYERS COMPACTED WITH MECHANICAL VIBRATION TO 100% COMPACTION** (Upper backfill layer)
- BACKFILL, NOT LARGER THAN 1" PLACED IN 6" LAYERS & THOROUGHLY TAMPED TO 98% COMPACTION** (Middle backfill layer)
- 3/4" CRUSHED STONE GRAVEL** (Lower backfill layer)
- MANUALLY EXCAVATE 6" MIN.** (Bottom excavation)
- UNDISTURBED STABLE ROCK OR MATERIAL** (Base material)
- MAX. WATER LEVEL PERMITTED DURING CONSTRUCTION** (Indicated by a horizontal line at the top of the manhole structure)
- 18" MIN. (O.L.P.)** (Overall length of the manhole structure)
- 24" MIN. (P.V.C.)** (Minimum depth of the manhole structure)
- 6" O.D., 12"** (Manhole diameter and height)

1. MAXIMUM DENSITY DETERMINED BY AASHTO T-99.
2. MAXIMUM DEPTH TO BOTTOM OF PRESSURE MAINS SHALL NOT EXCEED SIX (6) FEET UNLESS OTHERWISE APPROVED BY THE CITY OF PEMBROKE PINES UTILITY DEPARTMENT.

[illegible]

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

## WATER & SEWER DETAILS

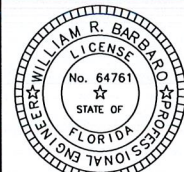


CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (954) 972-3959 FAX: (954) 972-4178

FILE NO. 190411

SCALE:	N.T.S.
DATE:	6/20/2019
DRAWN BY:	M.T.
CHECKED BY:	W.R.B
DESIGNED BY:	M.T.

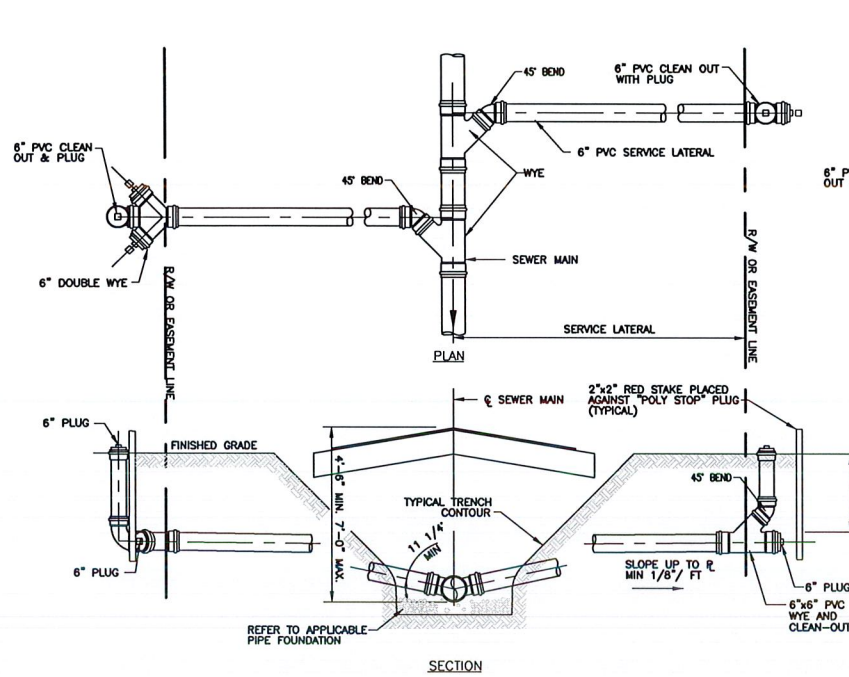
WS-2



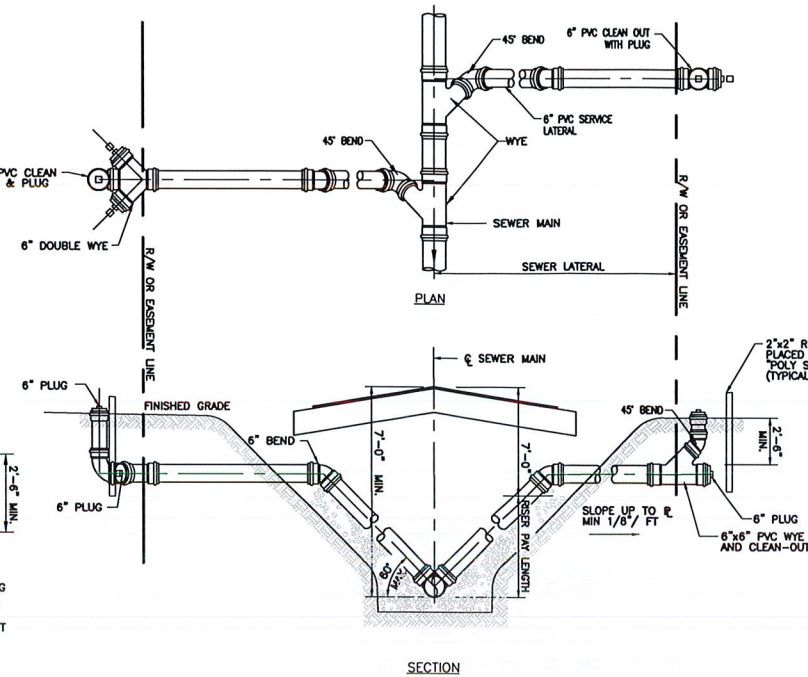
WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761



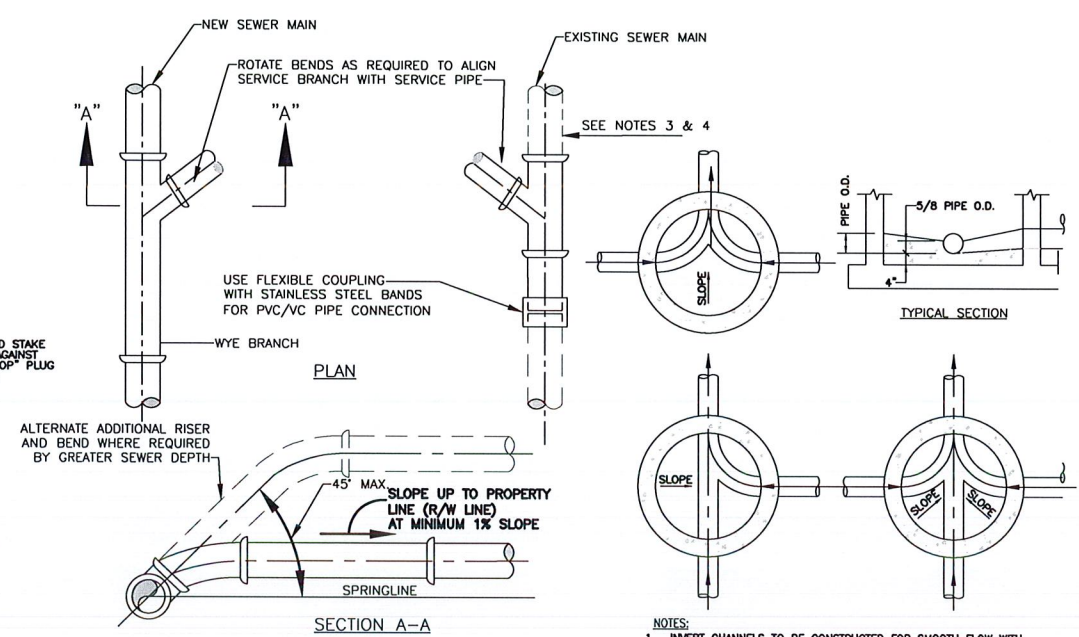
6/20/19 P:\Projects\_2019\90411 - Copart Auto Auction\cod\vd\Planeset\WSD.dwg



SHALLOW SERVICE LATERAL

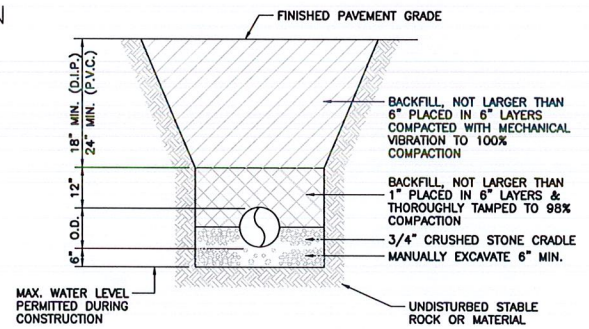


DEEP SERVICE LATERAL

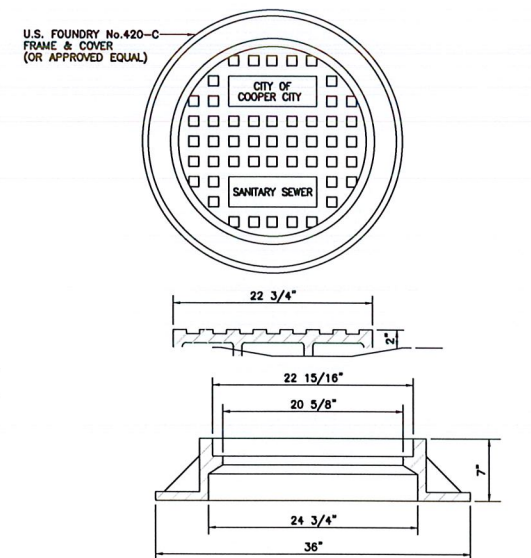


WYE SEWER SERVICE CONNECTION

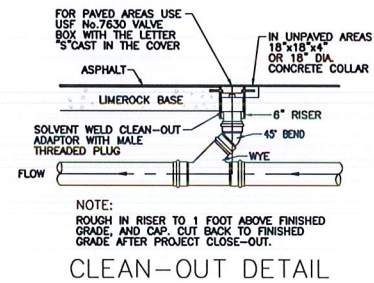
MANHOLE FLOW CHANNELS



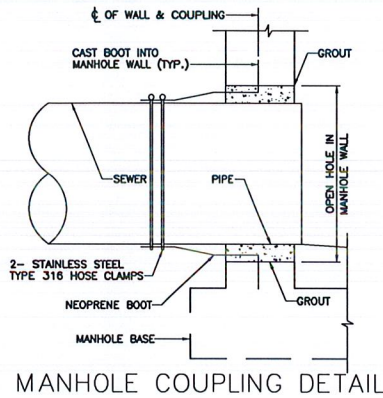
TYPICAL TRENCH



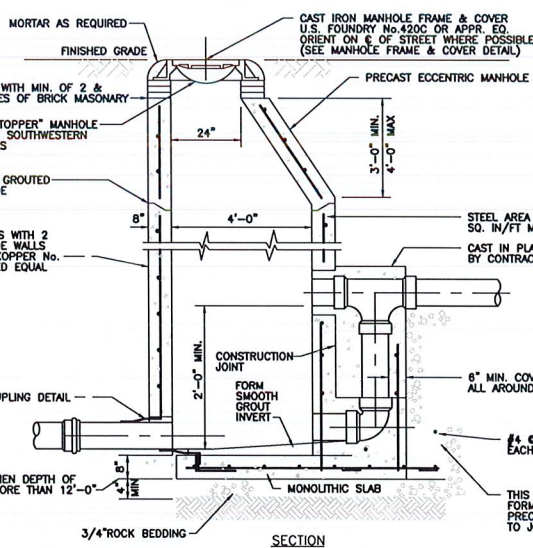
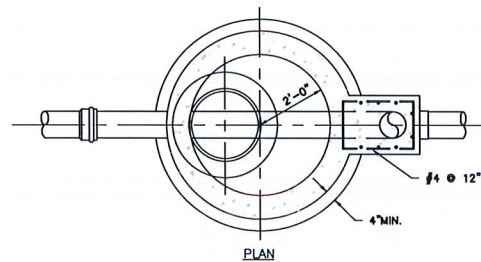
MANHOLE FRAME AND COVER



CLEAN-OUT DETAIL

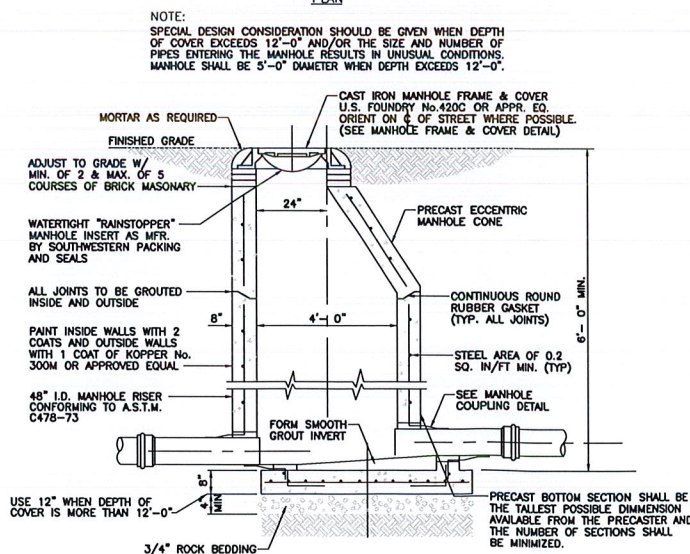


MANHOLE COUPLING DETAIL

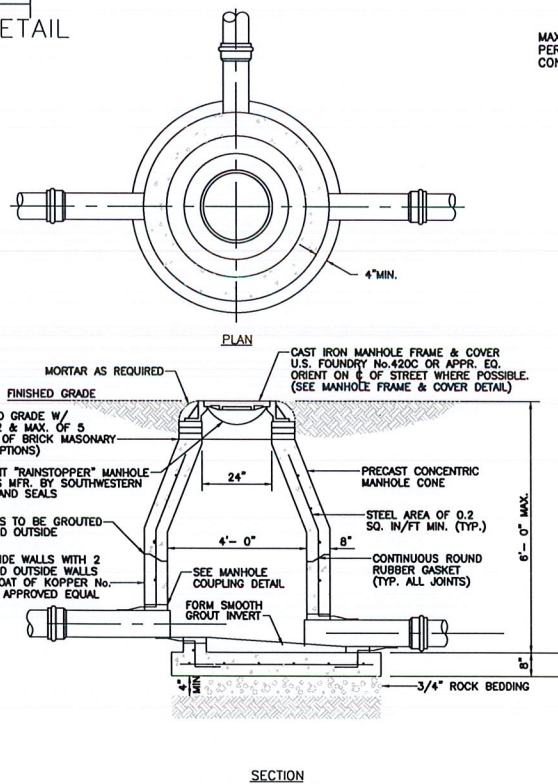


- NOTES:
1. SPECIAL DESIGN CONSIDERATION SHOULD BE GIVEN WHEN DEPTH OF COVER EXCEEDS 12'-0" AND/OR THE SIZE AND NUMBER OF PIPES ENTERING THE MANHOLE RESULTS IN UNUSUAL CONDITIONS. MANHOLE SHALL BE 5'-0" DIA. WHEN DEPTH EXCEEDS 12'-0".
  2. ALL REQUIREMENTS FOR ECCENTRIC PRECAST MANHOLES APPLY TO PRECAST OUTSIDE DROP MANHOLES.

PRECAST OUTSIDE DROP MANHOLE



ECCENTRIC PRECAST MANHOLE  
(6'-0" DEPTH & GREATER)



CONCENTRIC PRECAST MANHOLE  
(6'-0" & UNDER)

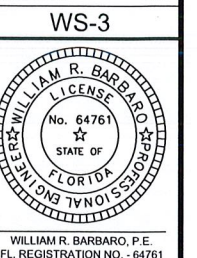
ALL REQUIREMENTS FOR ECCENTRIC PRECAST MANHOLES APPLY TO CONCENTRIC PRECAST MANHOLES

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

WATER & SEWER DETAILS



SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

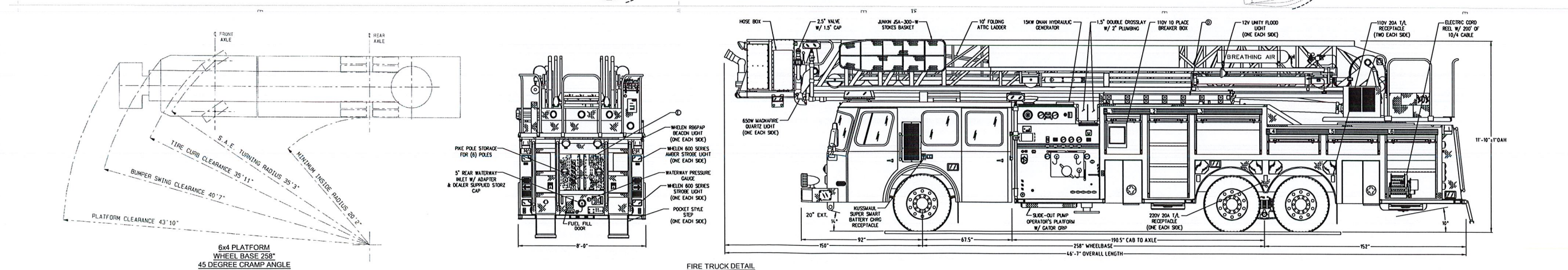


FILE NO. 180411

RESPONSE TO 5/29/2019 DRC COMMENTS  
WB  
APRV  
BY  
DATE  
NO



1. THE ENTIRE LENGTH OF THE FIRE ACCESS ROAD WILL BE ABLE TO SUPPORT 32 TONS. SEE PAVEMENT SECTION DETAIL ON SHEET PGD-2.
2. KNOX PAD LOCKS SHALL BE PROVIDED FOR ALL MANUAL GATES AS INDICATED ON THIS PLAN.

[illegible]

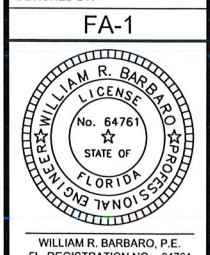
BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

FIRE ACCESS PLAN



CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (954) 972-3959 FAX: (954) 972-4178

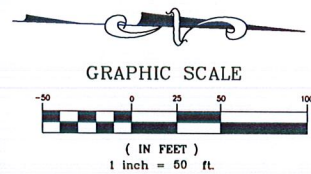
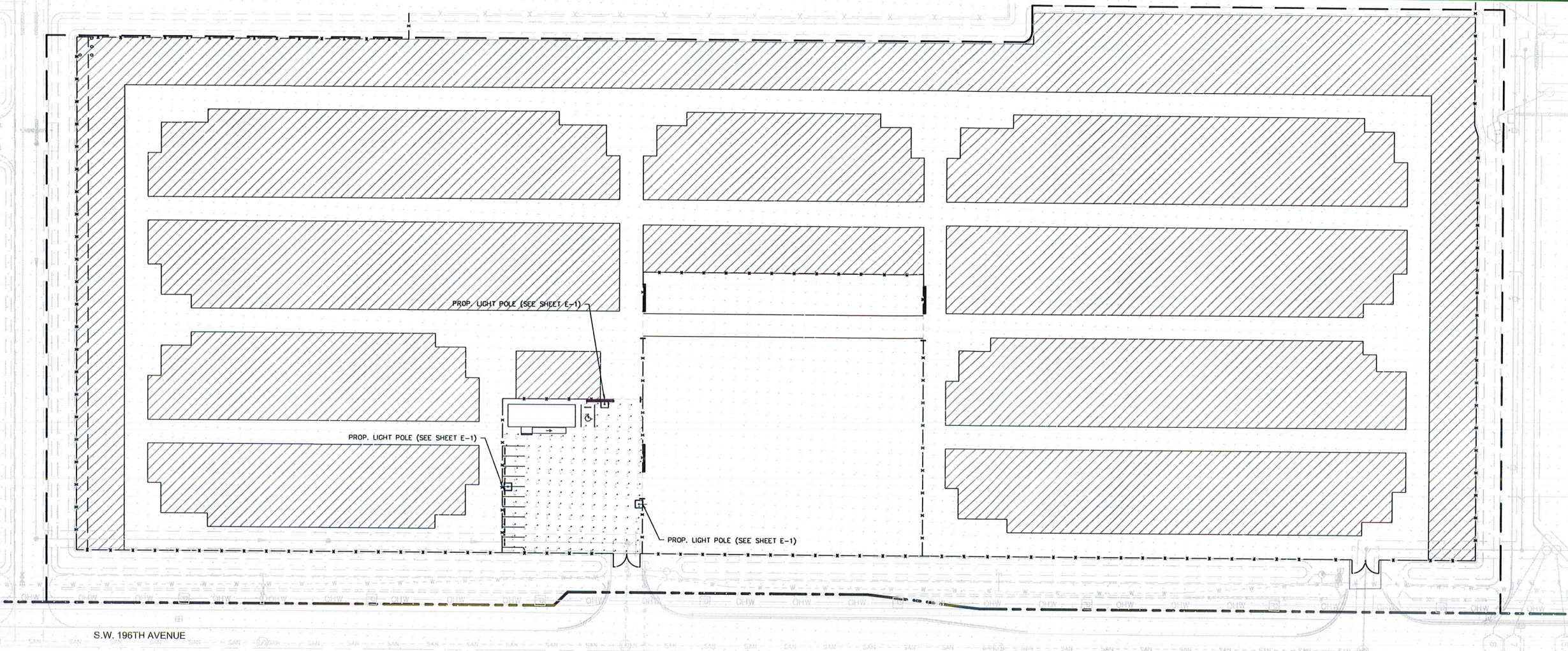
SCALE:	AS SHOWN
DATE:	6/20/2019
DRAWN BY:	M.T.
CHECKED BY:	W.R.B
DESIGNED BY:	M.T.



WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761

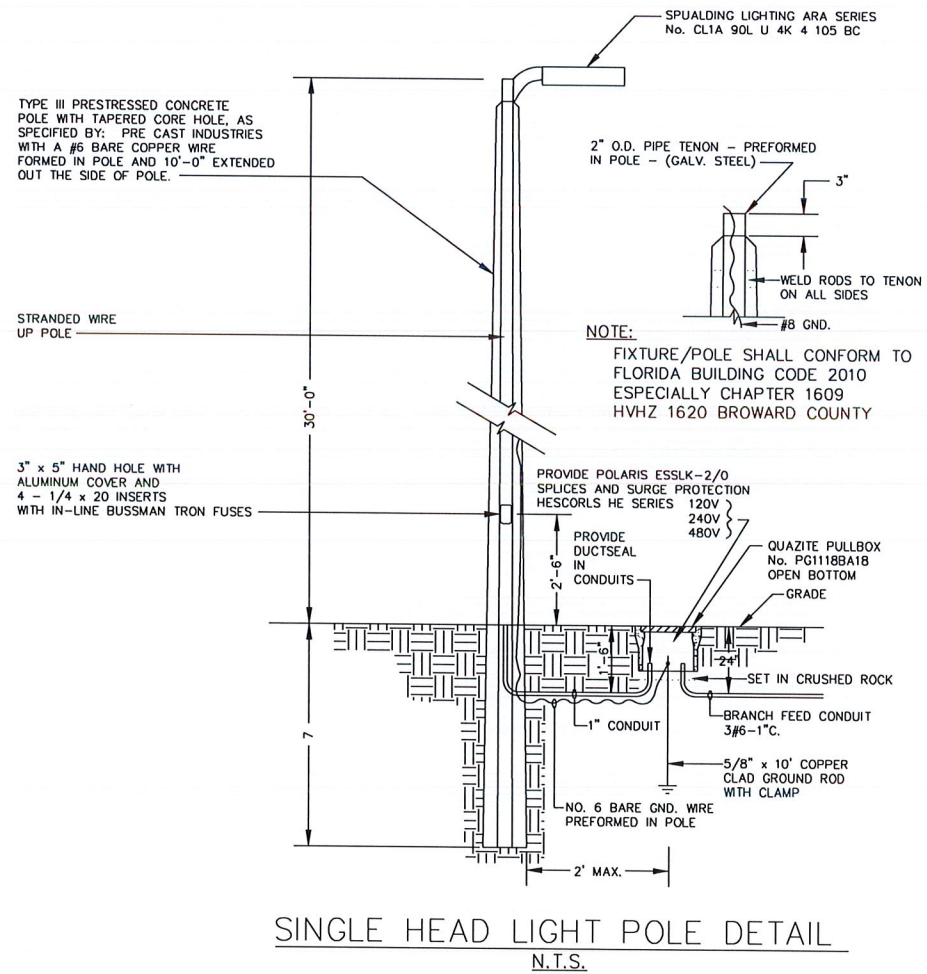


6/20/19 P:\Projects\_2019\190411 - Copart Auto Auction\Lead\PlanSet\DRG PlanSet\PHOTOMETRIC.dwg



Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Lum. Watts
	3	SA	SINGLE	N.A.	0.900	SPAULDING CL1-90L-4K-4-105-BC POLE MTD - 30' A.G.	325

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
LOADING & PARKING	Illuminance	Fc	2.88	4.7	1.1	2.62	4.27	
OVERALL & BEYOND PROP LINE	Illuminance	Fc	0.01	2.8	0.0	N.A.	N.A.	



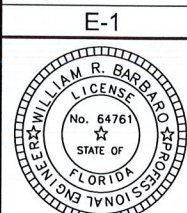
SINGLE HEAD LIGHT POLE DETAIL  
N.T.S.

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES  
PHOTOMETRIC PLAN



CIVIL ENGINEERING | CONSTRUCTION SERVICES | GEOMATICS  
814 S. WILLOW AVE. SUITE 100  
PENSACOLA, FL 32506  
PHONE: (904) 976-3893 FAX: (904) 976-4178

SCALE: AS SHOWN  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.



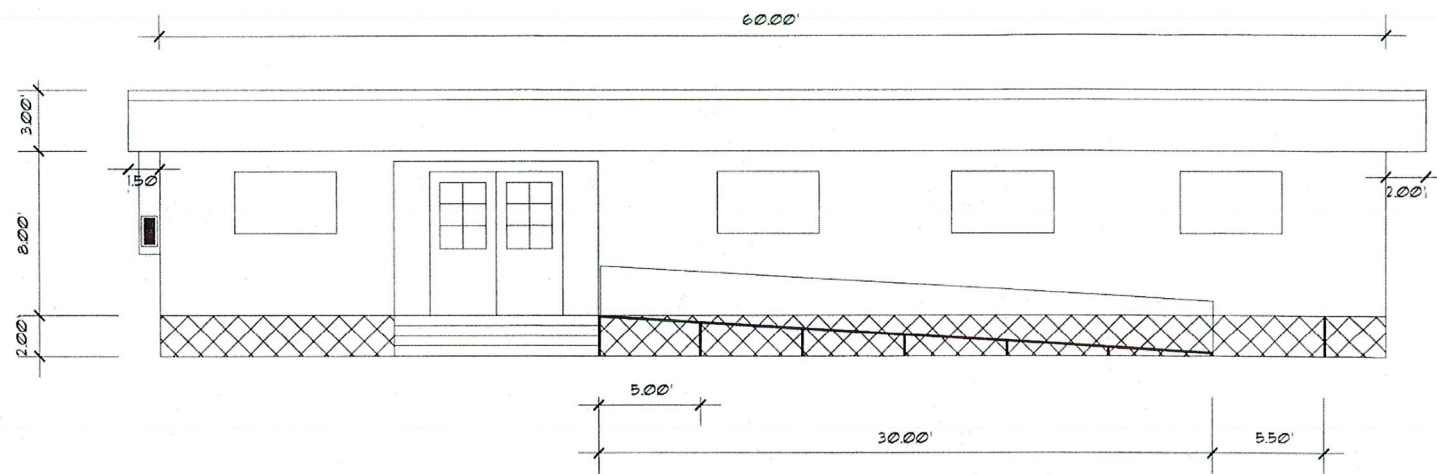
WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761

FILE NO. 190411

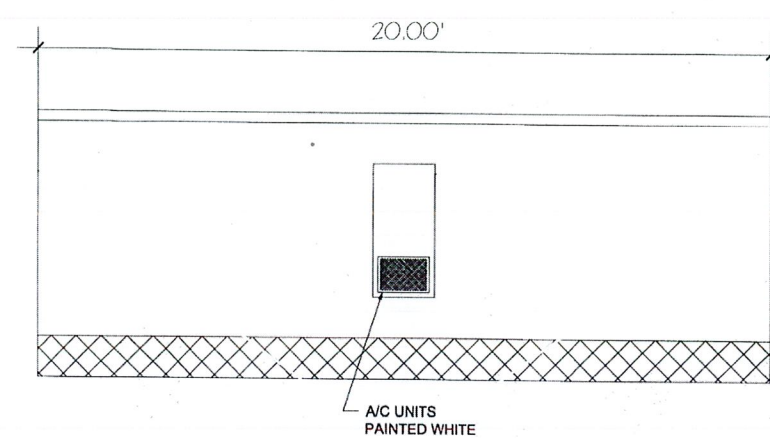
NO.	DATE	BY	APPRV	REVISIONS
1	6/17/2019	MT	WRB	RESPONSE TO 5/29/2019 DRC COMMENTS



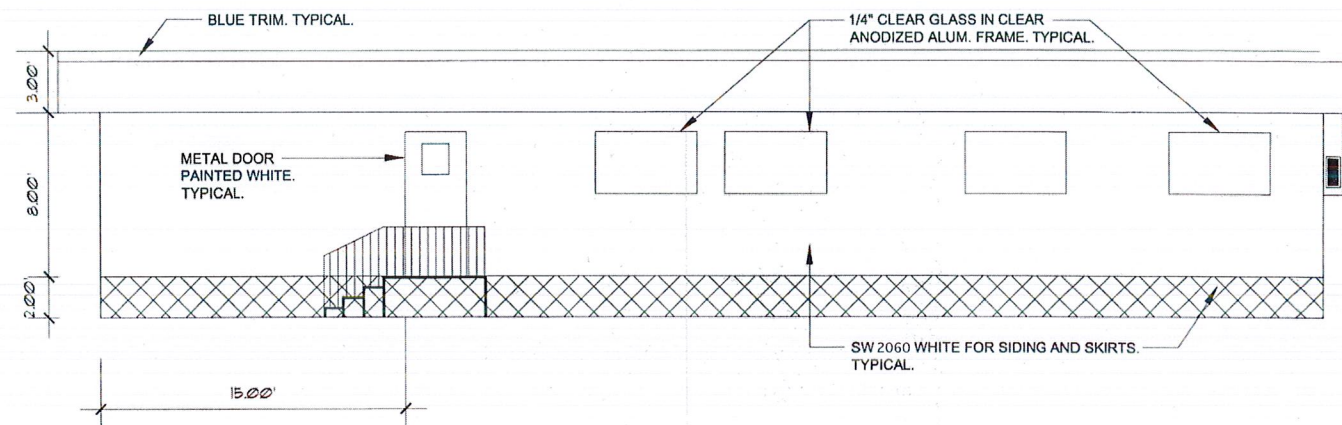
6/20/19 P:\Projects\_2019\190411 - Copart Auto Auction\cad\dwg\PlanSet\DRG PlanSet\TRAILER.dwg



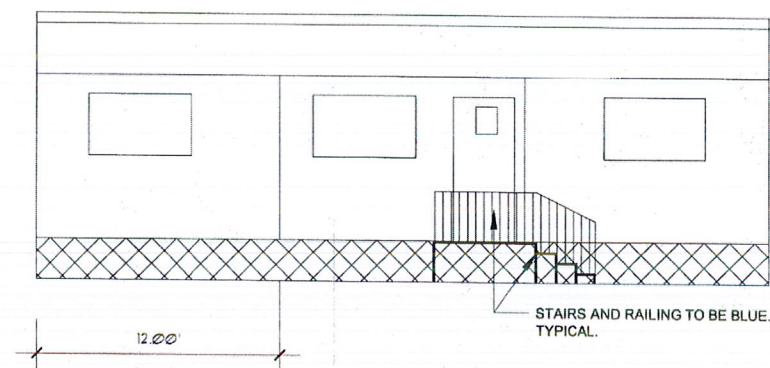
FRONT ELEVATION 1/4"



LEFT ELEVATION 1/4"



REAR ELEVATION 1/4"



RIGHT ELEVATION 1/4"

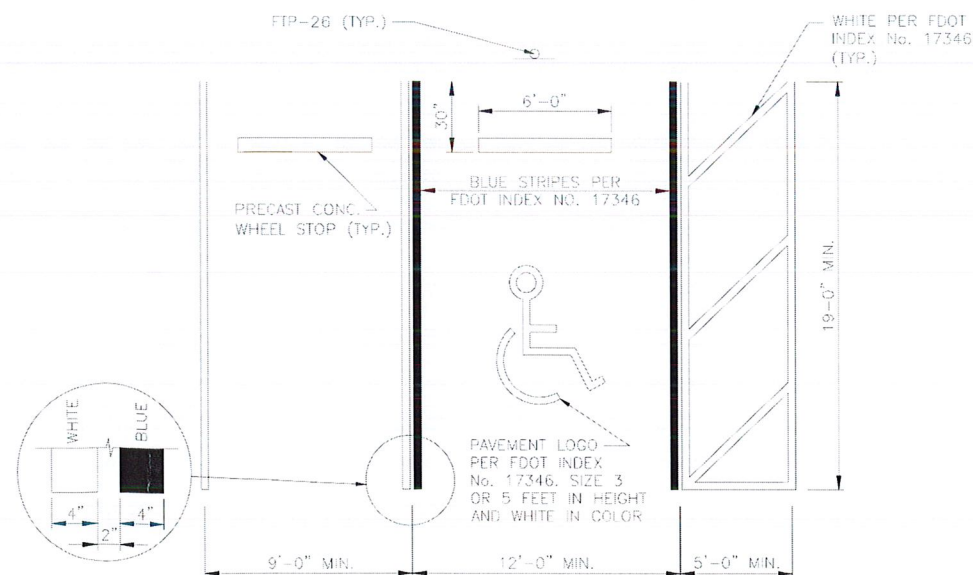
(20'X60') OFFICE TRAILER

**NOTE:**

\*ALL SIDING AND SKIRT SHOULD BE COLOR WHITE, SHERWIN WILLIAMS PAINT #2060.

\*ALL TRIM AND STAIRS SHOULD BE BLUE, SHERWIN WILLIAMS PAINT, WITH THE FOLLOWING DESCRIPTION:

5 GAL. FORMULA: L1- 30 OZ. 30/ 32  
G2- 2 OZ. 26/ 32  
R4- 14 OZ. 41/ 32  
W1- 2 OZ. 6/ 32



TYPICAL HANDICAPPED PARKING SPACE

BERGERON PARK OF COMMERCE SOUTH  
15.25 ACRE PARCEL  
CITY OF PEMBROKE PINES

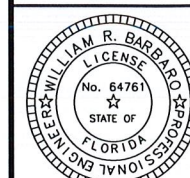
OFFICE TRAILER DETAILS



CIVIL ENGINEERING & CONSTRUCTION SERVICES | GEOMATICS  
814 S. MILITARY TRAIL, DEERFIELD BEACH, FLORIDA 33442  
PHONE: (561) 972-3869 FAX: (561) 972-4178  
FILE NO. 190411

SCALE: NTS  
DATE: 6/20/2019  
DRAWN BY: M.T.  
CHECKED BY: W.R.B.  
DESIGNED BY: M.T.

A-1



WILLIAM R. BARBARO, P.E.  
FL. REGISTRATION NO. - 64761