

## RaceTrac

## Site Plan & Special Exception Application Submittal Date: October 1, 2020

, Inc.
3410
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Applicant: RaceTrac Petroleum Inc.

Agent/Planner: Brian Terry Insite Studio, Inc. 8144 Okeechobee Blvd, Suite West Palm Beach, FL 33411

Engineer: Thomas Engineering 6300 NW 31 Ave Ft. Lauderdale, FL 33309

## Property Location

The property is located on the northwest corner of the intersection of Bee Line Hwy and N Military Trail. It is identified by property control number's 56-42-42-25-41-000-0060 and 56-42-42-25-41-000-0050 and consists of 2.8 acres.

## Property History

The subject property currently has Future Land Use designations of Commercial (C) and is within the Commercial General (CG) Zoning District, under the City of Riviera Beach jurisdiction. Currently, the properties are vacant.

The triangular shaped block (less the subject parcel) is the Triangle Commerce Center located north of the subject site, consisting of a small-scale private hospital, Medical & Professional offices, and gas station. The subject site is adjacent to two vacant parcels. The Triangle Commerce Center Plat (PB 108/PG 99) consists of the properties located north of the site within the block, excluding the small northeast parcel. The applicant intends on incorporating the subject parcels into the Plat after site plan approval for the site.

## Application Request

The petitioner has submitted this application to request Site Plan (Major) and Special Exception approval, to allow a 5,411 SF convenience store with 22 fuel pumps and outdoor seating area. The property is located on the northwest corner of Bee Line Hwy and Military Trail, surrounded by primarily Commercial uses to the north and Industrial uses to the south.

After approval, the applicant intends to submit a Re-plat application to incorporate the subject site into the Triangle Commerce Center Plat (PB 108/PG 99) and propose minor modifications.

## Surrounding Uses

Below are descriptions of the zoning and land uses of the adjacent properties:

**North:** Identified by PCN: 56-42-42-25-41-000-0020, located in the City of Riviera Beach. The property directly north of subject site is comprised of 6.36 acres and is currently a medical office facility. The property has a Commercial FLU designation and is within the General Commercial (CG) Zoning District.

**South:** Identified by PCN: 56-42-42-36-39-000-0010, located in the City of Riviera Beach. The properties consist of 2.92 acres and currently operates as an industrial use, a welding supply store. The property has an Industrial FLU designation and is within the General Industrial (IG) Zoning District.

**East:** Identified by PCN(s): 56-42-42-25-02-000-0010, 56-42-42-25-02-001-0000 & 56-42-42-25-02-000-0100, located in the City of Riviera Beach. Currently, the properties contain a self-storage business

and other commercial businesses. The property has an Industrial (I) FLU designation and is within the Limited Industrial (IL) Zoning District.

**West:** Identified by PCN: 56-42-42-25-41-000-0070, located in the City of Riviera Beach and is currently vacant. The property has a Commercial FLU designation and is within the General Commercial (CG) Zoning District.

## Site Plan Review Standards

The proposed plan will comply with the development regulations outlined in the City of Riviera Beach Land Development Code, as shown below.

## Proposed Development

The subject site is the existing Triangle Commerce Center, with an existing Medical/Professional office building and a private hospital. The proposed development includes construction of a Convenience Store with Fuel pump, the proposed plan includes:

- o 5,411 SF Convenience Store with outdoor seating area.
- o 22 Pump Filling Station

As shown below, the proposed plan adheres to the property development regulations for the General Commercial (CG) Zoning District, outlined in Section 31-323 of the City of Riviera Code of Ordinances.

## 1) Minimum property size: 10,000 square feet.

The subject property adheres to this requirement, as the total lot size is 121,968 SF.

## 2) Minimum property width: 100 feet.

The width of the subject property is 443 feet.

## 3) Maximum building height: On mainland (west of Lake Worth) not to exceed 65 feet (for bonus on mainland, see chapter 26).

The proposed plan adheres to this requirement by providing a 23 feet tall Convenience Store building.

## 4) Minimum building setbacks:

- a. Front: 20 feet; however, if the lot is on a block where more than 50 percent of the frontage is already developed, this may be reduced to five feet.
- b. Side: 20 feet when abutting residential district; 15 feet on side street.

c. Rear: 20 feet when abutting residential district.

Setbacks							
Required Proposed							
Front	20'	48'					
Side	15'	99'					
		91'					
Rear	N/A	94'					

5) Privacy wall: there shall be a six-foot high finished masonry or concrete wall on the rear and side property lines that are adjacent to residential districts. Such wall may be required adjacent to residential uses as determined by planning board and council.

This requirement does not apply to the subject site, as it is not adjacent to a residential district or use.

As outlined in Section 31-566, the plan adheres to the parking requirements for the proposed Convenience Store use.

Parking Standards							
Required							
Convenience Store w/Fuel Pumps	1 spaces per 200 sf	27 spaces					
Total Required		27 spaces					
		·					
Provided							
Standard Parking		27 spaces					
HC Parking		2 spaces					
Total Provided		29 spaces					

## Demonstrate that proposed use is appropriate to the site

The proposed convenience store with fueling pumps is an appropriate use for the subject site. The surrounding area is primarily commercial and industrial uses. Specifically, the properties to the south contain primarily heavy industrial uses, experiencing a flux of semi-trucks and larger vehicles circulation. The subject site's location directly off Bee Line Hwy, near Interstate 95, provides readily accessible access from these vehicles, as well as a convenient and logical placement of a fueling station.

## Demonstrate how drainage and paving requirement will be met

Although, the two parcels are vacant with no existing buildings, the existing commercial development of the Triangle Commerce Center is served with potable water and sewer. The applicant has submitted

a drainage statement with preliminary civil drawings which show the proposed methods and systems to provide sufficient drainage and paving for the proposed development.

## Demonstrate any landscaping techniques to visually screen use from adjacent uses

The proposed plan includes landscape buffers along the exterior of the property, as well as along the north property boundary. The proposed landscape buffers include trees and shrubs that will provide sufficient screening from adjacent uses.

## Demonstrate what is proposed to reduce the impact of any potential hazards, problems, public nuisances generated by use

The proposed development will not have a negative impact on the surrounding area or create public nuisances. The fuel storage will ensure safe containment and management, consistent with the applicant's other fueling stations in the area.

## Demonstrate how utilities and other service requirements of the use can be met

The subject site is developed and part of a Commerce Center which is currently served by local utilities. The proposed development will connect to existing services and ensure sufficient and compatible infrastructure to tie into the existing lines. The preliminary engineering plans submitted with this application depict the proposed construction.

## Special Exception Standards

## **Section 31-62**

Pursuant to Section 31-62, the applicant shall demonstrate that the requested Special Exception to allow a Convenience Store with Filling Station is consistent with the County's standards.

a. Ingress to and egress from the property and the proposed structures thereon, if any, including such considerations as automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe.

Existing ingress and egress driveways are located to the northwest corner of the subject site, as well as along the north property line. The plan has proposed an additional ingress/egress driveway off Military Trail and an ingress-only driveway along Beeline Highway.

b. Off-street parking and loading areas, where required, including consideration of relevant factors in subsection (2)a. of this section, and the economic, noise, glare or odor effects of the location of such areas on adjacent and nearby properties and properties generally in the district.

The proposed off-street parking and loading areas will not have any further negative impact to adjacent or nearby properties, in regard to noise, glare or odor effects. The subject site is vacant but has existing driveways and paved areas and although the development proposed additional driveways and parking area, the adverse impact is minimal. In addition, the surrounding area and adjacent properties are fully developed and operate with commercial uses along two major roadways, Military Trail and Beeline Hwy.

c. Refuse and service areas, including consideration of relevant factors in subsections (2) a. and b. of this section.

Refuse and service areas have been located in the most logical manner for the site.

d. Utilities, including such consideration as hooking locations and availability and compatibility of utilities for the proposed use or structure.

The applicant will ensure compatibility with utilities for the proposed convenience store with fueling station pumps.

e. Screening, buffering and landscaping, including consideration of such relevant factors as type, dimensions and character to preserve and improve compatibility and harmony of use and structures between the proposed special exception and the uses and structures of adjacent and nearby properties and properties generally in the district.

The applicant has provided a landscape plan with this application, which demonstrates adequate and effective screening and buffering with trees and additional vegetation.

f. Signs, or outside displays, if any, and proposed exterior lighting, if any, with reference to glare, traffic safety and economic effects of same on properties in the district.

The signage and exterior lighting for the proposed uses, shall be constructed to not have adverse impact on traffic safety or have negative economic effects on properties in the district.

g. Required yards and open spaces. The board shall make such recommendations as it deems necessary, guided by the factors that may be described in this zoning district, based on the nature of the request and its effect.

The applicant acknowledges this standard.

h. Other applicable requirements such as those found in sections 31-481 et seq., 31-566 et seq. and 31-596 et seq.

Section 31-481 is not applicable to the proposed development. The proposed plan shall adhere to the off-street parking and loading requirements outlined in Section 31-566, as shown above. In addition, the proposed plan shall adhere to Florida Friendly Landscape Regulations, outlined in Section 31-596.

The following provisions outlined in Section 31-596 are applicable to the subject site:

(c) All landscapes must be designed, planted and maintained in accordance with Florida Friendly landscaping principles. The percentage of landscaped area, excluding turfgrass areas, incorporating the use of high water use hydrozones shall be minimized to no more than 20 percent of the total non-turfgrass landscaped area.

The proposed landscape plan for the subject site will adhere to the requirement above.

(j) Landscaped areas shall be located on a site in such manner as to maximize preservation of existing trees with priority given to specimen trees and native shade tree species.

The applicant will ensure landscaped areas be located on site in such a manner to maximize preservation of existing trees with priority given to specimen trees and native shade tree species, to the best of their ability. A Tree Disposition plan has also been provided with this application, which shows existing trees to be preserved, relocated or removed.

(o) An opaque, minimum six-foot high masonry wall or fence shall screen the storage area for all trash receptacles, including dumpsters. A hedge shall be installed around the perimeter of this screen. Dumpsters shall be sited so as not to be visible from the public right-of-way. Metal gates or similar, shall be used to screen trash receptacles from view from the public right-of-way. All dumpsters must be screened (to greatest extent possible) within one year after the adoption of this code.

The proposed plan includes a 6' fence and hedge located around the trash receptacle storage area to provide adequate screening.

(s) Landscaped areas shall be protected from vehicular encroachment by curbing and/or wheel stops.

The proposed plan includes curbing along landscape areas to provide protection from vehicular encroachment.

(t) The base of each permitted freestanding sign shall be surrounded by a five-foot plant bed around the perimeter of the sign. This five-foot area shall be planted with lowgrowing plant material in a manner that will present a full and finished appearance within a six month period from planting. Completion of this requirement is mandatory prior to the final inspection and approval of any new freestanding sign or

## freestanding sign face change.

A five-foot plant bed shall be placed around the perimeter of proposed freestanding signs for the development.



November 4, 2022

City of Riviera Beach Development Services Department 600 W. Blue Heron Blvd. Riviera Beach, FL 33404

Re: RaceTrac Riviera Beach Project Number – SP-20-23

The following is a response to staff and consultant comments which were provided to our office on September 8, 2021.

## SITE PLAN REDLINES PROVIDED TO CLIENTS

1) Delineate wheel stop as required per code sec.31-610(c)(4)

Response: Bollards are being proposed in place of wheel stops along the parking areas that line the building. Other parking areas on site provide a 2-foot overhang and curb to act as a wheel stop.

2) Width of this access drive aisle cannot exceed 35 feet pursuant to code sec. 29-35(c).

Response: Please refer to the turning radius exhibit, which shows the driveway widths are at the minimum width requirement to accommodate for safe circulation of the semi-trailers on the property. The width exceeds 35 feet to assure that the semi-trailers do not cross into oncoming traffic ways.

## <u>ZONING</u>

3) Provide a line drawing (b/w) of the elevation plans.

Response: Updated b/w elevation plans have been included with this submittal.

4) Dimension the height, length, and width of the building and its elements on the elevation plans.

*Response: The updated elevations include dimensions for the height, length, and width of the building.* 

5) Dimension the height, length, and width of the gas canopies on the elevation plans.

*Response: The updated elevation plans include dimensions for the height, length, and width of the gas canopies.* 

#### BUILDING

1) In Landscape schedule indicate if plant is native or non-native, growth rate, drought tolerance, salt tolerance, light requirement, nutritional requirement, wind resistance, and ecological importance.

## Response: The landscape plan has been updated to include a plant information table detailing all the important plant information listed above.

2) Conditions of approval should make clear maintenance responsibilities for bus shelter and landscape in median.

## Response: Acknowledged.

3) Is bus shelter to have lighting, if so is lighting to be solar powered?

## *Response: The bus shelter will not have any lighting. See photometrics plan for more information.*

Thanks for your consideration of our comment response letter. Please don't hesitate to contact our office if you have any questions or need further clarification.

Sincerely,

Brian Terry, PLA Principal Insite Studio, Inc.

## AGENT AUTHORIZATION FORM

Owner(s) of Record: Pointe West Riviera Beach Inc.

2872 Old Cypress North Palm Beach Gardens, FL 33410

## STATE OF FLORIDA COUNTY OF PALM BEACH

BEFORE ME, the undersigned authority personally appeared Darbara as President of Pointe West Riviera Beach.

who, being first duly sworn upon oath and personal knowledge say(s) that they are the owner(s) of record of the following described real property:

TRIANGLE COMMERCE CENTER LT 5 (56-42-42-25-41-000-0050) TRIANGLE COMMERCE CENTER LT 6 (56-42-42-25-41-000-0060)

the street address of which is: No address assigned for either parcel

and that we hereby appoint:

Name:	Brian Terry - Insite Studio, Inc.	
Address:	8144 Okeechobee Blvd, Suite A	
	West Palm Beach, FL 33411	11
Telephone:	561-365-5131	

as our authorized agent, to file applications and papers with the City of Riviera Beach, and to represent me (us) at any Hearing regarding my (our) interest.

Wo st Seal) (Seal) Darbard Gaeta res. (Seal) Hu\_day of Sworn to and subscribed before me this who peared (Seto 850. me ALYS NAGLER DANIELS MY COMMISSION # GG 269885 EXPIRES: February 21, 2023 Bonded Thru Notary Public Underwriters

Uniform Land Use Application

4

CFN 20220143724 OR BK 33440 PG 859 RECORDED 04/04/2022 08:49:57 Palm Beach County, Florida AMT 2,000,000.00 DEED DOC 14,000.00 Joseph Abruzzo Clerk Pgs 0859-0862; (4Pgs)

This instrument prepared by Philip F. West, Esq. RaceTrac, Inc. 200 Galleria Pkwy., SE Suite 900 Atlanta, Georgia 30339

#### Return To:

Ronda Alley Southern Title Holding Company, LLC 555 W. Granada Blvd., Suite H-12 Ormond Beach, FL 32174 File: CM201020

This space reserved for Recorder's use only.

 Tax ID Number
 56-42-42-25-41-000-0050

 Tax ID Number
 56-42-42-25-41-000-0060

## SPECIAL WARRANTY DEED

THIS INDENTURE is made as of the  $23^{++}$  day of 222, between POINTE WEST RIVIERA BEACH, INC., a Florida corporation (hereinafter designated as "Grantor"), and RACETRAC, INC., a Georgia corporation (hereinafter designated as "Grantee"), whose address is 200 Galleria Parkway SE, Suite 900, Atlanta, Georgia 30339 (the words "Grantor" and "Grantee" include their respective successors, successors-in-title, assigns, legal representatives, personal representatives, and heirs where the context requires or permits).

#### WITNESSETH:

THAT Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration paid to Grantor, the receipt and sufficiency of which are hereby acknowledged, has granted, bargained, sold, transferred, conveyed and confirmed and by these presents does grant, bargain, sell and convey unto Grantee in fee simple, all that certain tract or parcel of land lying and being in Palm Beach County, Florida, being more particularly described on Exhibit "A" attached hereto and incorporated herein by this reference (hereinafter referred to as the "Property").

TOGETHER with all of the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances pertaining thereto, including all of Grantor's right, title and interest, if any (but without warranty whether statutory, express or implied), in and to any land situated in any adjacent strips, street, road, highway or other right of way, public or private, open or proposed, including rights of ingress and egress, all other easements, privileges and hereditaments, minerals, oil, gas and other same in fee simple forever, subject only to those matters listed on Exhibit "B" attached hereto and incorporated by this reference (the "Permitted Exceptions").

Page 1 of 4

CFN 20220143724 BOOK 33440 PAGE 860 2 OF 4

AND Grantor hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey the Property, and hereby warrants the title to the Property and will defend the same against the lawful claims of all persons whomsoever arising by, through or under Grantor, but not otherwise, subject to the Permitted Exceptions.

IN WITNESS WHEREOF, Grantor has caused this deed to be signed, sealed and delivered as of the day and year first above written.

	GRANTOR:
Witness: Adi Jarell. Print Name: Robin Jarrell	POINTE WEST RIVIERA BEACH, INC., a Florida corporation
Witness:	By: <u>Sabara Res</u> Barbara A. Gaeta, as President '
STATE OF FLORIDA COUNTY OF PALM BEACH	COS
The foregoing instrument was acknowledge	ed before me by means of physical presence of 2022 by Barbara A. Gaeta as Presiden

or 🗆 \_, 2022 by Barbara A. Gaeta, as President of online notarization, this  $\propto \gamma$ day of march POINTE WEST RIVIERA BEACH, INC., a Florida corporation, who is personally known to me or whohas produced as identification and who did (did not) take an oath.

Notary ublic ALYS NAGLER DANIELS MY COMMUSSION # GG 269885 EXPIRES: February 21, 2023 Sonoco Thru Notery Public Lintervel

Printed Name

CFN 20220143724 BOOK 33440 PAGE 861 3 OF 4

#### Exhibit "A" Page 1 of 1 PROPERTY DESCRIPTION

LOTS 5 AND 6, OF TRIANGLE COMMERCE CENTER, A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED AT PLAT BOOK 108, PAGES 99 AND 100, IN THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

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CFN 20220143724 BOOK 33440 PAGE 862 4 OF 4

#### Exhibit "B"

#### PERMITTED ENCUMBRANCES

- 1. Taxes for the year 2022 and subsequent years, not yet due and payable.
- 2. Zoning and other use restrictions, conditions or requirements to the extent such items are now or hereafter imposed by governmental authorities.
- 3. All matters contained on the Plat of Triangle Commerce Center, as recorded in Plat Book 108, Pages 99 and 100, Public Records of Palm Beach County, Florida.
- 4. Terms and conditions contained in Declaration of Covenants, Conditions and Restrictions for Triangle Commerce Center, and all exhibits attached thereto, recorded in Official Records Book 20867, Page 131, and Amendment recorded in instrument recorded in Official Records Book 21283, Page 391, and Release and Waiver recorded in Official Records Book 24152, page 664, and all amendments thereto. Such Declaration, as amended, establishes and provides without limitation for easements, liens, charges, assessments, an option to purchase, a right of first refusal, and/or the prior approval of a future purchaser or occupant.
- 5. Setback requirements for State Road 809 recorded in Deed Book 1145, Page 510, Public Records of Palm Beach County, Florida.
- 6. Ordinance No. 2256 by the City of Riviera Beach recorded in Official Records Book 4415, Page 1851, Public Records of Palm Beach County, Florida.
- 7. Easement Deeds to City of Riviera Beach, a Florida municipal corporation, recorded in Official Records Book 20867, Page 193, Public Records of Palm Beach County, Florida.
- Easements to Florida Power & Light Company recorded in Official Records Book 22098, Page 1571, and Official Records Book 22098, Page 1574, Public Records of Palm Beach County, Florida.
- Easement Deeds to Triangle Commerce Center Property Owners Association, Inc., a Florida corporation not for profit, recorded in Official Records Book 22692, Page 1119, Public Records of Palm Beach County, Florida.
- Road Easement as shown on plat recorded in Plat Book 100, page 99, Public Records of Palm Beach County, Florida.
- 15-foot Limited Access Easement and Limited Buffer Easement as shown on plat recorded in Plat Book 100, page 99, Public Records of Palm Beach County, Florida.



CHECKED BY: J.F.P. SURVEY DATE: 3/2/120 OKDER NO.: 66953	
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FULCE LAND SURVEYORS, INC. 5381 NOB HILL ROAD	20 BY PULICE LAND SURVEYORS
BOUNDARY AND TOPOGRAPHIC SURVEY	Date: 2020.04.0
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<ul> <li>□ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691</li> <li>□ BETH BURNS, PROFESSIONAL SURVEYOR AND MAPPER LS6136</li> <li>□ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274</li> <li>STATE OF FLORIDA</li> </ul>	
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AL DATUM OF 1988. PALM BEACH COUNTY BENCHMARK PELTON; ELEVATION: 15.609 FEET. AL DATUM OF 1988. PALM BEACH COUNTY BENCHMARK PELTON; ELEVATION: 15.609 FEET. MMUNITY 125142; PANEL 12099C0386F AND 12099C0388F; MAP DATE: 10/05/17. RANGE 42 EAST, PALM BEACH COUNTY, FLORIDA. H THE NORTH RIGHT-OF-WAY LINE OF BEE LINE HIGHWAY (STATE ROAD NO.710) BEING N53'17'33"W. XISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT AVATION OR CONSTRUCTION CONTACT THE APPROPRIATE UTILITY COMPANIES FOR FIELD VERIFICATION. INED IMPROVEMENTS ON THIS SURVEY IS ±0.07'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED	AS 145,456 SQUARE FEET (3.3392 A BASED ON NORTH AMERICAN VERTIC BASE FLOOD ELEVATION: NONE; CON SECTION 25, TOWNSHIP 42 SOUTH, SECTION 25, TOWNSHIP 42 SOUTH, SECTION AN ASSUMED MERIDIAN WIT SECTION AN ASSUMED MERIDIAN WIT OR THIS INFORMATION. BEFORE EXC/ POSITIONAL ACCURACY OF WELL DEF POSITIONAL ACCURACY OF WELL DEF A THIS SURVEY IS ±0.07'.
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ADD NO 809)	E POINT (FOR FIELD ATION ONLY)
OYAL PALM TREE	ROUND STORM SEWER LINE ROUND SANITARY SEWER LINE ROUND ELECTRIC LINE
ABBAGE PALM TREE BLUE HERON BOULEVARD	FE • PAVEMENT • PAVEMENT

DEDICATION AND RESERVATIONS:

KNOW ALL MEN BY THESE PRESENTS: THAT POINTE WEST RIVIERA BEACH, INC., A FLORIDA CORPORATION, AND ST. LUCIE BATTERY & TIRE COMPANY, A FLORIDA CORPORATION, OWNERS OF THE LAND SHOWN HEREON AS "RACETRAC BEELINE", BEING A REPLAT AND SUBDIVISION OF THE FOLLOWING DESCRIBED PROPERTY:

LOTS 5 AND 6, "TRIANGLE COMMERCE CENTER", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 108. PAGES 99 AND 100. OF THE PUBLIC RECORDS OF PALM BEACH COUNTY. FLORIDA.

TOGETHER WITH A PARCEL OF LAND IN THE SW 1/4 OF SECTION 25, TOWNSHIP 42 SOUTH, RANGE 42 EAST, PALM BEACH COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WESTERLY RIGHT OF WAY LINE OF MILITARY TRAIL (STATE ROAD 809), WITH THE NORTHEASTERLY RIGHT OF WAY LINE OF THE BEELINE HIGHWAY (STATE ROAD 710); THENCE NORTH 57'39'10" WEST. ALONG THE SAID RIGHT OF WAY LINE OF SAID BEELINE HIGHWAY. A DISTANCE OF 250 FEET: THENCE NORTH 60'04'05" EAST, A DISTANCE OF 232.58 FEET TO A POINT IN THE WESTERLY RIGHT OF WAY LINE OF MILITARY TRAIL, AT A DISTANCE OF 250 FEET NORTH 0212'40" WEST FROM THE POINT OF BEGINNING; THENCE SOUTH 212'40" EAST ALONG SAID WESTERLY RIGHT OF WAY LINE A DISTANCE OF 250 FEET TO THE POINT OF BEGINNING; LESS THE EASTERLY 10 FEET CONVEYED TO THE COUNTY OF PALM BEACH FOR MILITARY TRAIL IN OFFICIAL RECORDS BOOK 3163, PAGE 1682.

SAID LANDS LYING AND BEING IN THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, AND CONTAINING 3.339 ACRES, MORE OR LESS.

HAVE CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON AND DO HEREBY DEDICATE AND RESERVE AS FOLLOWS:

- 1. PARCEL "RW" AS SHOWN HEREON IIS HEREBY DEDICATED TO THE CITY OF RIVIERA BEACH, FLORIDA, IN FEE SIMPLE FOR THE PERPETUAL USE OF THE PUBLIC FOR PUBLIC STREET PURPOSES.
- 2. THE LIMITED ACCESS EASEMENTS, AS SHOWN HEREON, ARE HEREBY DEDICATED TO THE CITY OF RIVIERA BEACH, FLORIDA, FOR THE PURPOSE OF CONTROL AND JURISDICTION OVER ACCESS RIGHTS.
- 3. IT IS AN EXPRESS PURPOSE OF THIS PLAT TO RELEASE ALL EASEMENTS WITHIN THE LIMITS OF THIS PLAT THAT WERE DEDICATED BY THE PLAT OF TRIANGLE COMMERCE CENTER AS RECORDED IN PLAT BOOK 108. PAGE 99 THAT ARE NOT SHOWN HEREON.

IN WITNESS WHEREOF. POINTE WEST RIVIERA BEACH, INC., A FLORIDA CORPORATION, HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS VICE PRESIDENT. BY AND WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS. THIS \_\_\_\_\_, 202\_\_\_,

WITNESS: PRINT NAME: \_\_\_\_\_ WITNESS: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_

POINTE WEST RIVIERA BEACH, INC., A FLORIDA CORPORATION

BY: \_\_\_\_\_ PRINT NAME: VICE PRESIDENT

ACKNOWLEDGMENT: STATE OF { SS COUNTY OF

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF [ ] PHYSICAL PRESENCE OR [ ] ONLINE NOTARIZATION, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 202\_\_, \_\_\_\_, 202\_\_, \_\_\_\_, AS VIČE PRESIDENT OF POINTE WEST RIVIERA BEACH, INC., A FLORIDA CORPORATION, WHO IS [] PERSONALLY KNOWN TO ME OR [] HAS PRODUCED \_\_\_\_\_ AS IDENTIFICATION.

MY COMMISSION EXPIRES: \_\_\_\_\_

SIGNATURE -	NOTARY	PUBLIC
PRINT NAME:		

IN WITNESS WHEREOF, ST. LUCIE BATTERY & TIRE COMPAN PRESENTS TO BE SIGNED BY ITS VICE PRESIDENT, BY AND THIS DAY OF, 202	Y, A FLORIDA CORPORATION, HAS CAUSED THESE WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS,
WITNESS:	ST. LUCIE BATTERY & TIRE COMPANY, A FLORIDA CORPORATION
PRINT NAME:	BY:

PRINT	NAME:
VICE	PRESIDENT

ACKNOWLEDGMENT: STATE OF

PRINT NAME: \_\_\_\_\_

WITNESS: \_\_\_\_\_

{ ss COUNTY OF

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF [] PHYSICAL PRESENCE OR [] ONLINE NOTARIZATION, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 202\_\_, \_\_\_\_ PRESIDENT OF ST. LUCIE BATTERY & TIRE COMPANY, A FLORIDA CORPORATION, WHO IS [ ] PERSONALLY KNOWN TO ME OR [ ] HAS PRODUCED \_\_\_\_\_ AS IDENTIFICATION.

MY COMMISSION EXPIRES: \_\_\_\_\_

SIGNATURE – NOTARY PUBLIC PRINT NAME: \_\_\_\_\_

# **RACETRAC BEELINE**

A REPLAT OF LOTS 5 & 6, TRIANGLE COMMERCE CENTER (P.B. 108, PG. 99, P.B.C.R.) TOGETHER WITH A PORTION OF THE SOUTHWEST 1/4 OF SECTION 25, TOWNSHIP 42 SOUTH, RANGE 42 EAST, ALL BEING IN SECTION 25, TOWNSHIP 42 SOUTH, RANGE 42 EAST, CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA





UTILITY EASEMENTS SHALL HAVE SECOND PRIORITY, ACCESS EASEMENTS SHALL HAVE THIRD PRIORITY, AND ALL OTHER EASEMENTS SHALL BE SUBORDINATE TO THESE WITH THEIR PRIORITIES BEING DETERMINED BY USE RIGHTS GRANTED. BUILDING SETBACK LINES SHALL BE AS REQUIRED BY CURRENT CITY OF RIVIERA BEACH ZONING AND LAND DEVELOPMENT REGULATIONS. ALL RECORDED DOCUMENTS ARE PER PALM BEACH COUNTY RECORDS, FLORIDA. NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. BEARINGS SHOWN HEREON ARE BASED ON THE NORTHEASTERLY RIGHT-OF-WAY LINE OF BEELINE HIGHWAY (STATE ROAD NO. 710) HAVING AN ASSUMED BEARING OF N53'17'33"W, AS SHOWN ON THE PLAT OF "TRIANGLE COMMERCE CENTER" (P.B. 108, PG. 99-100).	CLERK OF THE CIRCUIT COURT & COMPTROLLEF
TY OF RIVIERA BEACH APPROVAL: S HEREBY CERTIFIED THAT THIS PLAT OF RACETRAC BEELINE HAS BEEN OFFICIALLY AP THE CITY OF RIVIERA BEACH, FLORIDA, THIS DAY OF	PROVED FOR RECORD , 202
RONNIE L. FELDER, MAYOR	
CLAUDINE L. ANTHONY, CMC, CITY CLERK	
TERRENCE N. BAILEY, P.E., CITY ENGINEER	
EVIEWING SURVEYOR BEHALF OF THE CITY OF RIVIERA BEACH, IN ACCORDANCE WITH CHAPTER 177.081(1) T HAS BEEN REVIEWED FOR CONFORMITY TO CHAPTER 177, PART 1, FLORIDA STATUTE THE CITY OF RIVIERA BEACH. THIS REVIEW DOES NOT INCLUDE THE VERIFICATION OF FIELD VERIFICATION OF MONUMENTS AT PARCEL CORNERS.	FLORIDA STATUTES, THIS S AND THE ORDINANCES GEOMETRIC DATA OR
DONALD A. SPICER DATE PROFESSIONAL SURVEYOR AND MAPPER LICENSE NO. LS4677 STATE OF FLORIDA	
LE CERTIFICATION: E OF FLORIDA ) NTY OF PALM BEACH ) SS NTY OF PALM BEACH )	
E EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY; THAT I FIND THE TITLE TED IN POINTE WEST RIVIERA BEACH, INC., A FLORIDA CORPORATION, AND ST. LUCIE F PANY, A FLORIDA CORPORATION; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT A SFIED OR RELEASED OF RECORD NOR OTHERWISE TERMINATED BY LAW ARE SHOWN HE RE ARE ENCUMBRANCES OF RECORD BUT THOSE ENCUMBRANCES DO NOT PROHIBIT TH DIVISION DEPICTED BY THIS PLAT.	TO THE PROPERTY IS ATTERY & TIRE ALL MORTGAGES NOT EREON; AND THAT HE CREATION OF THE
E: DATE ATTORNEY AT LAW LICENSED IN FLORIDA, FBN	
JRVEYOR AND MAPPER'S CERTIFICATE: S IS TO CERTIFY THAT THE PLAT SHOWN HEREON IS A TRUE AND CORRECT REPRESE DE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION; THAT SAID SURVEY IS ACCU KNOWLEDGE AND BELIEF; THAT PERMANENT REFERENCE MONUMENTS ("P.R.M.'S") HAVE DUIRED BY LAW; AND FURTHER THAT THE SURVEY DATA COMPLIES WITH ALL THE REQU , FLORIDA STATUTES, AS AMENDED, AND ORDINANCES OF THE CITY OF RIVIERA BEACH,	NTATION OF A SURVEY RATE TO THE BEST OF E BEEN PLACED AS IREMENTS OF CHAPTER , FLORIDA.

STATE OF FLORIDA COUNTY OF PALM BEACH

DEPUTY CLERK

THIS PLAT WAS FILED FOR RECORD AT

DAY OF

\_, ON

20\_\_\_\_, AND DULY

\_M., THIS \_\_

RECORDED IN PLAT BOOK

PAGES \_\_\_\_\_ THROUGH \_

JOSEPH ABRUZZO, CLERK OF THE CIRCUIT COURT & COMPTROLLER

SHEET 1 OF 2 SHEETS

## **REVIEWING SURVEYOR**

## TITLE CERTIFICATION:

STATE OF FLORIDA SS COUNTY OF PALM BEACH

## SURVEYOR AND MAPPER'S CER

DATE DONNA C. WEST PROFESSIONAL SURVEYOR AND MAPPER NO. LS4290 STATE OF FLORIDA



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 18 of 95



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 19 of 95

APPLICATI APPLICATI PROPERTY	ON NAME ON # 7 CONTROL	NUMBER (S)	SITE DA R S	ATA ACETRAC PETROLE P-20-23 / SE-20-0 C 42 42 25 4 1 0	UM, INC. 02			ch, FL 33411 Io.com
			5	56-42-42-25-41-000-0050				
EXISTING 2 EXISTING 1	ZONING FLU		(C (C	(CG) GENERAL COMMERCIAL / (C) COMMERCIAL				
GROSS SI	TE AREA ZONE		2   P	22,155.7 SF/2.8 RINCIPAL ARTERIAL	O AC DESIGN S	TANDA	RDS	
PROPOSE PROPOSE MPERVIO PERVIOUS	D FLOOR AF D BUILDING US SURFAC SURFACE A	LEA RATIO COVERAGE E AREA AREA		.04 4% 93,939.7 SF (77%) 28,216 SE (23%)			Vd. Suite 0940 Lem	
FILLING / G STATION \	GAS MITH CONVE	ENIENCE STORE (C-ST	ORE) 5	,4   SF				<ul> <li>ng + lo</li> <li>561-249-</li> <li>w.insitestu</li> </ul>
PROPOSE	D BUILDING OPY (EAST)	HEIGHT	2.	3' ,880 SF / 16 FUEL	ING POSIT	IONS		Okee ww
EUEL CAN	OPY (WEST) PARKING (	PER 200 SF)	۱, 2	460 SF / 3 FUELIN 7	IG POSITIC	DNS		
HANDI PROVIDED	CAP PARKIN PARKING	IG	2	OF 27 9				Consultants:
DUTDOOF	CAF FARRING A	rea	6	73 SF				j
		CONCUR	RRENCY R	RESERVATION		1		
		-				5	5,411 SF	
FUEL CAN	OPY (EAST)					6	460 SF	
							,100 01	Revisions: 10/28/21: Per Comments
	ZONING	F.L.U.	DEVELOPI MINIMUM LO	MENT STANDA	ARDS	SETB	ACKS	03/15/22: Per Comments 07/07/22: Per Comments
EQUIRED	DISTRICT (CG)	DESIGNATIONS (C) COMMERCIAL	SIZE 1 0,000 SF	WIDTH I OO LF	FRONT 20'	SIDE	SIDE REAR	11/04/22: Per Comments
KUVIDED	(UG)		22,155.7 SF		48'	39'	94'	
ACADE:	LENGTH:	FOUNI WIDTH REQUIRED:	S.F. REQL	IANTINGS JIRED:	S.F. PR	OVIDED	):	
BOUTH	55 L.F. 55 L.F.	5 FEE1 3 FEET	275 S.F. 165 S.F.		347 S. 474 S.	F. F. =		
WEST	100 L.F.	3 FEET	300 S.F.	0 – 1 240 S F	260 S.I	=. PROV -	- 1 460 S F	
			IN MAP:	N.T.S. BLUE HERON BOUL LOT 1 LOT 7 "TRIANGLE COMMERCE C SUME HORMAY, STATE ROAD No. 710	EVARD CENTER" LOT 2 LOT 2 LOT 4 SITE UN CENTER LOT LOT LOT LOT LOT LOT LOT LOT	AT OF 1 T BOOK 3 4 4 9 9 8 8 9 9 8 9 9 9 9 9 9 9 9 9 9 9	LOT 10 "7200 MULTARY FRAIL PLAT BOOK 48, PACE 194 LOT 3 LOT 2	RACETRAC Riviera Beach, Flo
NT				NG				NORTH O $20'$ $40'$ $80'SCALE:  " = 40'-0"Drawn By: SMTDrawing #: 1146$
								SITE PLAN SHEET # SP.1



Engineering & Planning, Inc. 1172 SW 30<sup>th</sup> Street, Suite 500 • Palm City • Florida • 34990 (772) 286-8030 • <u>www.mackenzieengineeringinc.com</u>

February 18, 2022

City of Rivera Beach Planning and Zoning Department 600 West Blue Heron Blvd. Rivera Beach, FL 33404

Re: RaceTrac Beeline Traffic Impact Analysis Reduction in Intensity

To whom it may concern,

The applicant requests a reduction in intensity of RaceTrac – Beeline. The current Palm Beach County TPS approved intensity is for demolishing a 1,372 SF tire store and constructing a 5,411 SF of convenience market with 22 fueling positions.

The proposed intensity will include an existing 1,372 SF tire store and constructing a 5,411 SF convenience market with 19 fueling positions.

The proposed change results in a reduction of external and driveway trips as shown in Exhibit 1. The net change in external trips is a decrease of 145 daily, 8 AM peak hour (3 in/5 out), and 7 PM peak hour (5 in/2 out) trips.

The revised proposed external and driveway trips, which are a decrease from the approved trips are as follows:

- External trips 1,802 daily, 127 AM peak hour (64 in/ 63 out), 127 AM peak hour (63 in/ 64 out).
- Driveway trips 4,587 daily, 322 AM peak hour (162 in/ 160 out), 323 AM peak hour (161 in/ 162 out).

The revised trip generation, driveway volumes and site plan are attached.

If you have any questions, please do not hesitate to contact Shaun Mackenzie at (772) 834-8909

Sincerely,

haun Mackenzie

Shaun G. MacKenzie, P.E. MacKenzie Engineering & Planning, Inc. Florida Registration Number 61751 Engineering Business Number 29013



Digitally signed by Shaun G MacKenzie Date: 2022.02.18 11:14:30 -05'00'

EXHIBIT 1 RaceTrac - Beeline & Military										
Trip Generation Comparison										
Land Use Intensity					AN	I Peak H	our	]	PM Peak H	our
			-	Trips	Total	In	Out	Total	In	Out
Approved Site Traffic										
Conv. Mrkt w/ Gas Pumps	5.411	22	5.411 ksf + 22 f.p.	5,063	354	177	177	354	177	177
Tire Store *		C1-4-4-1	(1.372) 1000 SF	(39)	(4)	(3)	(1)	(5)	(2)	(3)
		Subtotal		5,024	350	1/4	1/6	349	1/5	1/4
Pass-By Traffic										
Conv. Mrkt w/ Gas Pumps			61.0%	3,088	216	108	108	216	108	108
Tire Store *			28.0%	(11)	(1)	(1)	0	(1)	(1)	0
		Subtotal		3,077	215	107	108	215	107	108
NET EXISTING TRIPS				1,947	135	67	68	134	68	66
		Total Exi	sting Driveway Volumes	5,024	350	174	176	349	175	174
Proposed Site Traffic										
Conv. Mrkt w/ Gas Pumps	5.411	19	5.411 ksf + 19 f.p.	4,548	318	159	159	318	159	159
Tire Store			1.372 1000 SF	39	4	3	1	5	2	3
		Subtotal		4,587	322	162	160	323	161	162
Pass-By Traffic										
Conv. Mrkt w/ Gas Pumps			61.0%	2,774	194	97	97	194	97	97
Tire Store			28.0%	11	1	1	0	1	1	1
		Subtotal		2,785	195	98	97	195	98	98
NET PRO	POSE	D TRIPS		1,802	127	64	63	127	63	64
Total Proposed Dri	veway	Volumes		4,587	322	162	160	323	161	162
(FOR 1	THE PU	N URPOSES	ET CHANGE IN TRIPS S OF CONCURRENCY)	(145)	(8)	(3)	(5)	(7)	(5)	(2)
NET CHANGE IN DRIVEWAY VOLUMES					(28)	(12)	(16)	(26)	(14)	(12)
Note: Trip generation was calculated using the following data:										
			Pass-by	A	M Peak Ho	bur		PM Peak Ho	our	
Land Use Code Unit Daily Rate					in/out	R	ate	in/out	Equ	ation
Conv. Mrkt w/ Gas Pumps FDOT 1000 SF 4.3 x PM Trips				61%	50/50	useo inforr	d PM nation	50/50	12.3 x Fue 15.5 x 1	el Pumps + ,000 SF
Tire Store	28%	64/36	2.	72	43/57	3.	98			

\* Existing Tire Store - Demolish

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# Master Plan

N.T.S.



Stephen Boruff, AIA Architects + Planners, Inc. AAC 002226 Architecture Planning

901 Northpoint Parkway Suite 101 West Palm Beach Florida 33407

Interior Architecture



477 South Rosemary Ave. The Offices at CityPlace North Suite 225 West Palm Beach Florida 33401 UDKS Projectit: 10-044.000



MASTER PLAN FOR AFFECTED AREA AT POINTE WEST -PARCELS 2, 3 + 4 FOR EJ HEALEY REPLACEMENT FACILITY

Pointe West Riviera Beach, Florida

Stephen Boruff AR007995



7-7-22 MASTER PLAN SUBMITTAL 11-4-22 MASTER PLAN SUBMITTAL







CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 23 of 95

TREE #	SPECIES	SIZE	DISPOSITION
1	ROYAL PALM	25' G.W.	REMOVE
2	ROYAL PALM	25' G.W.	PRESERVE
3	ROYAL PALM	25' G.W.	PRESERVE
4	GUMBO LIMBO	9"	PRESERVE
5	LIVE OAK	13"	PRESERVE
6	SILVER BUTTONWOOD	3"	PRESERVE
7	SILVER BUTTONWOOD	3"	PRESERVE
8	SILVER BUTTONWOOD	3"	PRESERVE
9	GUMBO LIMBO	12"	PRESERVE
10	LIVE OAK	8"	PRESERVE
11	GUMBO LIMBO	13"	PRESERVE
12		11"	PRESERVE
13		3" 0"	PRESERVE
14		<u>১</u> ৫	
16	GUMBOLIMBO	10"	PRESERVE
17		17"	PRESERVE
18	GUMBO LIMBO	10"	PRESERVE
10	LIVE OAK	14"	PRESERVE
20	GUMBO LIMBO	11"	PRESERVE
21	LIVE OAK	9"	PRESERVE
22	GUMBO LIMBO	13"	PRESERVE
23	LIVE OAK	12"	REMOVE
24	GUMBO LIMBO	8"	PRESERVE
25	SILVER BUTTONWOOD	3"	PRESERVE
26	SILVER BUTTONWOOD	3"	PRESERVE
27	SILVER BUTTONWOOD	3"	PRESERVE
28	LIVE OAK	14"	REMOVE
29	GUMBO LIMBO	10"	PRESERVE
30	LIVE OAK	13"	REMOVE
31		9"	PRESERVE
32	SILVER BUITONWOOD	3"	PRESERVE
33	SILVER BUTTONWOOD	3"	PRESERVE
34		3	
36		10	
37		8'GW	REMOVE
38	GUMBO LIMBO	11"	REMOVE
39	SILVER BUTTONWOOD	3"	REMOVE
40	SILVER BUTTONWOOD	3"	REMOVE
41	SILVER BUTTONWOOD	3"	REMOVE
42	GUMBO LIMBO	10"	REMOVE
43	ROYAL PALM	25' G.W.	REMOVE
44	ROYAL PALM	25' G.W.	REMOVE
45	ROYAL PALM	25' G.W.	REMOVE
46	ROYAL PALM	25' G.W.	REMOVE
47	ROYAL PALM	25' G.W.	REMOVE
48	ROYAL PALM	20' G.W.	PRESERVE
49	ROYAL PALM	25' G.W.	PRESERVE
50	ROYAL PALM	20' G.W.	PRESERVE
51	ROYAL PALM	25 G.W.	PRESERVE
52		25 G.W.	PRESERVE
53		20 G.VV.	
55		25 G.W.	
56		25 G.W.	PRESERVE
57		25 G.W.	RFMOVF
58	ROYAL PALM	25' G.W	REMOVE
59	ROYAL PALM	25' G.W	REMOVE
60	ROYAL PALM	25' G.W.	PRESERVE
61	CRAPE MYRTLE	6"	PRESERVE
62	ROYAL PALM	25' G.W.	PRESERVE
63	ROYAL PALM	25' G.W.	PRESERVE
64	ROYAL PALM	25' G.W.	PRESERVE
65	ROYAL PALM	25' G.W.	PRESERVE
66	ROYAL PALM	25' G.W.	PRESERVE
67	ROYAL PALM	25' G.W.	PRESERVE
60			
00	CRAPE MYRTLE	6"	PRESERVE
69	CRAPE MYRTLE SABAL PALM	6" 8' G.W.	PRESERVE REMOVE
69 70	CRAPE MYRTLE SABAL PALM SABAL PALM	6" 8' G.W. 10' G.W.	PRESERVE REMOVE REMOVE

TREE DISPOSITION TOTAL		
DISPOSITION	QTY	
PRESERVE	49	
REMOVE	22	
PRESERVED TOTAL		
TYPE	QTY	
TREE	31	
DALM	10	

	MAP	NTS
	101/11	N. I. J.



Course BVd. Suite A. West Palm Beach, FL 33411 phone: 561-249-0940 1 email: info@insitestudio.com www.insitestudio.com 1 License#:1C2600606
Revisions:         10/28/2021 - Per Comments         03/15/2022 - Per Site Plan         07/07/2022 - Per Comments         11/04/2022 - Per Comments
<b>RACETRAC</b> Riviera Beach, Florida
Brian Terry LA 6666978 Digitally signed by Brian Terry LA 6666978 Date: 2022.11.04 11:53:09 -04'00'



CASE: SP-20-23 and SE-20-02

PZB Exhibit 1 Page 24 of 95

# LANDSCAPE REQL LOCATION/ AREA TOTAL SITE AREA: 122,155.7 SF REQUIRED SHADE TREES: REQUIRED NATIVE ACCEN TREES: MAXIMUM PALM **REQUIREMENTS:** REQUIRED SHADE TREE SPECIES MIX: REQUIRED NATIVE SPECIES REQUIRED ECOLOGICAL SIGNIFICANT FOOD PLANT SIGNAGE PLANTINGS: MILITARY TRAIL LA LOCATION/ AREA MILITARY TRAIL R.O.W: 223 LF MILITARY TRAIL R.O.W: 223 LF

PLANT SCH	IEDU	LE		
TREES	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CD*	3	Coccoloba diversifolia	Pigeon Plum	I 2` HT. x 5` SPR. / 2.5" CAL. / 6` C.T. 25' HT. X 20' SPR. @ MATURITY
CE *	12	Conocarpus erectus `Sericeus`	Silver Buttonwood	I 2` HT. x 5` SPR. / 2.5" CAL. / 6` C.T. 40' HT. X 20' SPR. @ MATURITY
CS *	9	Cordia sebestena	Orange Geiger Tree	I 2` HT. x 5` SPR. / 2.5" Cal. / 6` C.T. 30' HT. X 25' SPR. @ MATURITY
IC*	10	llex cassine	Dahoon Holly	I 2` HT. x 5` SPR. / 2.5" CAL. / 6` C.T. 20' HT. X 8' SPR. @ MATURITY
PE		Ptychosperma elegans	Alexander Palm	I 4` OA HT. 8` CT MIN. SINGLE TRUNK, MATCHED 25' HT. @ MATURITY
SHRUBS	QTY			REMARKS
CAP	43	Capparıs cynophallophora	Jamaica Caper	36" HT. X 30" SPR. @ 36" O.C.
CLU	40	Clusia guttifera	Small Leaf Clusia	6` HT. X 3` SPR. @ 36" O.C.
CON*	69	Conocarpus erectus `Sericeus`	Silver Buttonwood	36" HT. X 30" SPR. @ 36" O.C.
CRI	9	Crinum augustum `Queen Emma`	`Queen Emma` Crinum	36" HT. X 36" SPR. @ 48" O.C.
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CAR	39	Carıssa macrocarpa `Emerald Blanket`	Emerald Blanket Carıssa	2" HT. X   2" SPR. @ 24" O.C.
CHR*	279	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	36" HT. MIN. X 30" SPR. @ 36" O.C.
FIC	56	Ficus microcarpa `Green Island`	Green Island Ficus	18" HT. X 18" SPR. @ 24" O.C.
HAM*	197	Hamelia nodosa	Dwarf Firebush	18" HT. X 24" SPR. @ 30" O.C.
HYM*	184	Hymenocallıs latıfolia	Spider Lily	18" HT X 18" SPR. @ 24" O.C.
ILE*	182	Ilex vomitoria 'Nana'	Dwarf Yaupon Holly	12" HT. X 12" SPR. @ 18" O.C.
MUH*	75	Muhlenbergia capillaris	Pink Muhly	24" HT. MIN. X 18" SPR. @ 24" O.C.
TRI*	112	Tripsacum dactyloides	Fakahatchee Grass	24" HT. X 30" SPR. @ 48" O.C.
		BOTANICAL NAME		PENAADKG
FVO	80			
	02	LVOIVUIUS GIOMERATUS DIVE DAZE		
NEL <sup>*</sup>	426	nelianthus debilis	Dune Suntlower	р" пі. х б" SPK. @ 12" U.C.

NOTE: \* = FLORIDA NATIVE TREE/PALM/PLANT TOTAL PROVIDED TREES = 65 (31 EXISTING + 34 NEW) TOTAL PROVIDED PALMS = 28(17 EXISTING + 11 NEW)

JIREMENT CHART				
	CODE REQUIREMENT	REQUIRED	PROVIDED	
	I TREE OR PALM PER 1,500 SF OF TOTAL SITE AREA	82 TREES OR PALMS	82 TREES -29 EXISTING SHADE -17 EX. ROYAL PALM -2 EX. CRAPE MYRTLE -34 NEW	
	60% OF REQUIRED TREES	50 TREES	5   TREES	
IT	10% OF REQUIRED TREES	9 TREES	9 TREES	
	20% MAX. OF REQUIRED TREES	17 PALMS MAX	I 7 EXISTING ROYAL PALMS	
	6 SPECIES FOR OVER 75 REQUIRED SHADE TREES	6 SPECIES	6 SPECIES -2 EXISTING -4 NEW	
5:	70% OF ALL SPECIES	70%	88%	
TS:	25% OF REQUIRED PLANTINGS	25%	44%	
	5' WIDE AROUND SIGNAGE	5' WIDE AREA	5' WIDE AREA	

NDSCAPE REQUIREMENT CHART				
	CODE REQUIREMENT	REQUIRED	PROVIDED	
	I TREE OR PALM PER 20 LF	I 2 TREES	12 TREES	
	I LARGE SHRUB PER	5G LARGE	62 LARGE	
	4 LF	SHRUBS	SHRUBS	
	I MEDIUM SHRUB PER	56 MEDIUM	75 MEDIUM	
	4 LF	SHRUBS	SHRUBS	
	I SMALL SHRUB PER	I I 2 SMALL	I 24 SMALL	
	2 LF	SHRUBS	SHRUBS	
	2 GROUNDCOVER PER	446	476	
	I LF	GROUNDCOVER	GROUNDCOVER	



<b>RACETRAC</b> Riviera Beach, Florida
Brian Terry
LA 6666978
Digitally signed by Brian Terry LA 6666978
Date: 2022.11.04 11:54:35 -04'00'
ALWAYS CALL & I I TWO FULL BUSINESS DAYS BEFORE YOU DIG TO HAVE UNDERGROUND UTILITIES LOCATED AND MARKED.
Sunshine 811.com
Drawn By: SMT Drawing #: 1146
Date: 07/16/2021 LANDSCAPF
PLAN
SHEET # LP.2

Consultants:

Revisions:

10/28/2021 - Per Comments

07/07/2022 - Per Comments

1/04/2022 - Per Comments

03/15/2022 - Per Site Plan

• - EXISTING TREES ≰ PALMS TO BE PRESERVED

EXISTING TREE/PALM LEGEND:



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## LANDSCAPE NOTES:

- PLANTS, UNLESS OTHERWISE NOTED.

- 5

- CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.

I. ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSEY

2. ALL PLANTING AND SOD AREAS SHALL RECEIVE 1 10% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR. 3. ALL PLANTING BEDS/ ISLANDS SHALL BE FREE OF SHELLROCK, CONSTRUCTION DEBRIS, OR OTHER MISCELLANEOUS DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE.

4. ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION. 6. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE

PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT.

ALL TREES PLANTED UNDER OR NEAR OVERHEAD POWER LINES SHALL COMPLY WITH FPL RIGHT TREE, RIGHT PLACE REQUIREMENTS 8. CONTRACTOR IS REQUIRED TO CALL SUNSHINE & I TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY

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Revisions: 10/28/2021 - Per Comments 03/15/2022 - Per Site Plan 07/07/2022 - Per Comments 11/04/2022 - Per Comments 
orida
RACETRAC Riviera Beach, Flo
Brian Terry LA 6666978 Digitally signed by Brian Terry LA 6666978 Date: 2022.11.04 11:55:03 -04'00'
Drawn By: SMT Drawing #: 1146 Date: 07/16/2021 LANDSCAPE DETAILS

## GENERAL CONDITIONS

- CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and Α. the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his/her work, he/she shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his/her failure to observe these instructions.
- MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his/her work.
- D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he/she shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.
- E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- CHANGES IN THE WORK: The owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.
- CORRECTION OF WORK: The Contractor shall re-execute any work that fails to G. conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.
- Owner's Authorized Representative: The Owner's authorized representative acts as the H. authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.
- CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his/her bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.
- SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.
- PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

#### 015639 Tree and Plant Protection

## PART 1 GENERAL

1.1 SUMMARY

The scope of work includes all labor, materials, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with protection of existing trees and other plants as shown on the drawings and as specified herein.

- Provide preconstruction evaluation:
- Provide tree and plant protection fencing.
- 3. Provide protection of root zones and above ground tree and plants Provide pruning of existing trees and plants.
- 5. Coordinate with the requirements of Section Planting Soil for modifications to the soil within the root zone of existing trees and plants.
- Provide all insect and disease control.
- 7. Provide maintenance of existing trees and plants including irrigation during the construction period as recommended by the arborist report.
- 8. Provide maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
- 9. Remove tree protection fencing and other protection from around and under trees and plants. 10. Clean up and disposal of all excess and surplus material.

## 1.2 CONTRACT DOCUMENTS

A. Shall consist of specifications and general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

B. It is the intent of this section that the requirements apply to all sections of the project specification such that any subcontractor must comply with the restrictions on work within designated Tree and Plant Protection Areas. 1.3 RELATED DOCUMENTS AND REFERENCES

A. Related Documents:

1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.

Section - Planting

References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references thereto. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.

1. ANSI A 300 (Part 5) - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.

2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide For The Green Industry"; Published by Urban Tree Foundation, Visalia, California; most current edition.

3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition. 1.4 VERIFICATION

A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

## 1.5 PERMITS AND REGULATIONS

A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work

B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth

C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern. 1.6 PROTECTION OF WORK, PROPERTY AND PERSON

A. The Contractor shall protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

## 1.7 CHANGES IN THE WORK

A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.

1.8 CORRECTION OF WORK

A. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest possible time that can be coordinated with other work and seasonal weather demands.

1.9 DEFINITIONS

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All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modifi Owner's Representative: The person appointed by the Owner to represent their interest in the review and ap and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may a persons to review and approve any aspects of the work, such as the landscape architect who prepared the Reasonable and reasonably: When used in this specification is intended to mean that the conditions affect the establishment or long term stability, health or growth of the plant. This specification recognizes that free of defects, and that plant conditions change with time. This specification also recognizes that some deci

totally based on measured findings and that profession judgment is required. In cases of differing opinion, the Representative expert shall determine when conditions within the plant are judged as reasonable. Shrub: Woody plants with mature height approximately less than 25 feet.

Tree and Plant Protection Area: Area surrounding individual trees, groups of trees, shrubs, or other protected during construction, and defined by a circle centered on the trunk with each tree with a radius equa dripline unless otherwise indicated by the owner's representative. Tree: Single and multi-stemmed plants, including palms with anticipated mature height approximate

feet or any plant identified on the plans as a tree.

## 1.10 SUBMITTALS

## PRODUCT DATA: Submit manufacturer product data and literature describing all products require the Owner's Representative for approval. Provide submittal four weeks before the start of any work at the si

1.11 OBSERVATION of the work

A. The Owner's Representative may inspect the work at any time.

1.12 PRE-CONSTRUCTION CONFERENCE

A. Schedule a pre - construction meeting with the Owner's Representative at least seven (7) days before to review any questions the Contractor may have regarding the work, administrative procedures during cons work schedule.

- 1. The following Contractors shall attend the preconstruction conference:
- a. General Contractor.
- b. Consulting Arborist. c. Subcontractor assigned to install Tree and Plant Protection measures.
- d. Earthwork Contractor
- e. All site utility Contractors that may be required to dig or trench into the soil.
- f. Landscape subcontractor.
- g. Irrigation subcontractor

Prior to this meeting, mark all trees and plants to remain and or be removed as described in this spe review and approval by the Owner's Representative.

- 1.13 QUALITY ASSURANCE A. Contractor qualifications:
  - 1. All pruning, branch tie back, tree removal, root pruning, and fertilizing required by this section s
  - by or under the direct supervision of ISA Certified Arborist Submit aforementioned individual's approval by the Owner's Representative.
- 2. All applications of pesticide or herbicide shall be performed by a person maintaining a current s apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all required st
- certificates including applicable chemical applicator licenses.

## PART 2 PRODUCTS

2.3 TREE PROTECTION FENCING: B. PLASTIC MESH FENCE: Heavy - duty orange plastic mesh fencing fabric 48 inches wide. Fencing to metal "U" or "T" post or wooden post driven into the ground of sufficient depth to hold the fabric solidly in sagging. The fabric shall be attached to the post using attachment ties of sufficient number and strength to without sagging. The Owner's Representative may request, at any time, additional post, deeper post depths fabric attachments if the fabric begins to sag, lean or otherwise not present a sufficient barrier to access. C. GATES: For each fence type and in each separate fenced area, provide a minimum of one 3 foot y shall be lockable. The location of the gates shall be approved by the Owner's Representative. Submit suppliers product data that product meets the requirements for approval. 2.4 tree protection sign: A. Heavy-duty cardboard signs, 8.5 inches x 11 inches, white colored background with black 2 inch hid block letters. The signs shall be attached to the tree protection fence every 50 feet o.c. The tree protection s and Plant Protection Area- Keep Out" 2.5 TREE GROWTH REGULATOR (TGR) A. Cambistat 25C. B. Submit suppliers product data that product meets the requirements for approval. 2.6 MATTING A. Matting for vehicle and work protection shall be heavy duty matting designed for vehicle loading over Alturnamats as manufactured by Alturnamats, Inc. Franklin, PA 16323 or approved equal. B. Submit suppliers product data that product meets the requirements for approval. 2.7 GEOGRID A. Geogrid shall be woven polyester fabric with PVC coating, Uni-axial or biaxial geogrid, inert to biolo resistant to naturally occurring chemicals, alkalis, acids. 1. Geogrid shall be Miragrid 2XT as manufactured by Ten Cate Nicolon, Norcross, GA. http://ww B. Submit suppliers product data that product meets the requirements for approval. 2.8 FILTER FABRIC A. Filter Fabric shall be nonwoven polypropylene fibers, inert to biological degradation and resistant of

chemicals, alkalis and acids. 1. Mirafi 135 N as manufactured by Ten Cate Nicolon, Norcross, GA. http://www.tencate.com or a Β. Submit suppliers product data that product meets the requirements for approval.

## PART 3 EXECUTION

3.1 SITE EXAMINATION

A. Examine the site, tree, plant and soil conditions. Notify the Owner's Representative in writing of any may impact the successful Tree and Plant Protections that is the intent of this section.

3.2 COORDINATION WITH PROJECT WORK

The Contractor shall coordinate with all other work that may impact the completion of the work.

Prior to the start of Work, prepare a detailed schedule of the work for coordination with other trades Coordinate the relocation of any irrigation lines currently present on the irrigation plan, heads or the utility lines or structures that are in conflict with tree locations. Root balls shall not be altered to fit around line Owner's Representative of any conflicts encountered.

3.3 TREE AND PLANT PROTECTION AREA: The Tree and Plant Protection Area is defined as all areas tree protection plan. Where no limit of the Tree and Plant Protection area is defined on the drawings, drip line (outer edge of the branch crown) of each tree.

3.4 Preparation:

A. Prior to the preconstruction meeting, layout the limits of the Tree and Plant Protection Area and ther required Tree and Plant Protection Fencing and root pruning. Obtain the Owner's Representative's approval protection area and the alignment of all fencing and root pruning.

B. Flag all trees and shrubs to be removed by wrapping orange plastic ribbon around the trunk and obt Representative's approval of all trees and shrubs to be removed prior to the start of tree and shrub removal. mark all trees and shrubs to be removed with orange paint in a band completely around the base of the tree above the ground.

C. Flag all trees and shrubs to remain with white plastic ribbon tied completely around the trunk or eacl prominent branch for each shrub. Obtain the Owner's Representative's approval of all trees and shrubs to be start of tree and shrub removal

Prior to any construction activity at the site including utility work, grading, storage of materials, or ins temporary construction facilities, install all tree protection fencing, Filter Fabric, silt fence, tree protection sigr and or Wood Chips as shown on the drawings.

3.5 SOIL MOISTURE

A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintai permanent wilt point to a depth of at least 8 inches. No soil work or other activity shall be permitted within the Protection Area when the volumetric soil moisture is above field capacity. The permanent wilt point and field type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture).

Soil type	Permanent wilt point v/v	Field capaci
Sand, Loamy sand, Sandy loam	5 - 8%	12 -
Loam, Sandy clay, Sandy clay loar	m 14 - 25%	27 -
Clay loam, Silt loam	11 - 22%	31 -
Silty clay, Silty clay loam	22 - 27%	38 -

1. Volumetric soil moisture shall be measured with a digital, electric conductivity meter. The mete Soil Moisture Meter, DSMM500 by General Specialty Tools and Instruments, or approved equi The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high operations until the soil moisture drains to below field capacity.

## 3.6 ROOT PRUNING:

A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Pr trees to remain, root prune all existing trees to a depth of 24 inches below existing grade in alignments follow the Tree and Plant Protection Area or as directed by the Owner's Representative. Root pruning shall be in co ANSI A300 (part 8) latest edition.

- 1. Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet o
- grading
- 2. After completion of the cut, make clean cuts with a lopper, saw or pruner to remove all torn roo
- side of the excavation, and backfill the trench immediately with existing soil, filling all voids. 3.7 INSTALLATION OF GEOGRIDS, FILTER FABRIC, MATTING, WOOD CHIPS AND OR MULCH

Install Geogrids, Filter Fabric, matting, Wood Chips and or Mulch in areas and depths shown on the Α. or as directed by the Owner's representative. In general it is the intent of this specification to provide the follo protection

1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chi 2. Areas where foot traffic or storage of lightweight materials is anticipated to be unavoidable prov

- Fabric under the 5 inches of Wood Chips or Mulch.
- 3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8

fied below. pproval of the work	<ul> <li>inches of Wood Chips or Mulch.</li> <li>4. Areas where heavy vehicle traffic is unavoidable provide a layer of Geogrids under 8 - 12 inches of Wood Chips or Mulch and a layer of matting over the Wood Chips or Mulch.</li> </ul>	Contractor. 3.17 Removal of fencing and other Tree and plant protection
plans.	<ul> <li>B. The Owner's Representative shall approve the appropriate level of protection.</li> <li>C. In the abuve protection is the abuve protection in the appropriate level of protection.</li> </ul>	A. At the end of the construction period of when requested by the Owner's Representative remove all fencing, we Chips or Mulch, Geogrids and Filter Fabric, trunk protection and or any other Tree and Plant Protection material.
at plants are not	C. In the above requirements, light vehicle is defined as a track skid steer with a ground pressure of 4 psi of lighter. A heavy vehicle is any vehicle with a tire or track pressure of greater than 4 psi. Lightweight materials are any packaged metricle that can be physically metricle that can be physically and the location.	<ul><li>3.18 DAMAGE OR LOSS TO EXISTING Plants TO REMAIN</li><li>B. Any trees or plants designated to remain and which are damaged by the Contractor shall be replaced in kind</li></ul>
cisions cannot de he Owner's	<ul> <li>materials that can be physically moved by hand into the location. Bulk materials such as soil, or aggregate shall never be stored within the Tree and Plant Protection Area.</li> <li>3.8 PROTECTION:</li> <li>A Protect the Tree and Plant Protection Area at all times from compaction of the soil: damage of any kind to trunks, bark</li> </ul>	Contractor at their own expense. Trees shall be replaced with a tree of similar species and of equal size or 6 inch cali ever is less. Shrubs shall be replaced with a plant of similar species and equal size or the largest size plants reasonal available which ever is less. Where replacement plants are to be less than the size of the plant that is damaged, the C Representative shall approve the size and quality of the replacement plant.
r vegetation to be ual to the clown	branches, leaves and roots of all plants; and contamination of the soil, bark or leaves with construction materials, debris, silt, fuels, oils, and any chemicals substance. Notify the Owner's Representative of any spills, compaction or damage and take	1. All trees and plants shall be installed per the requirements of Specification Section Planting.
elv greater than 25	corrective action immediately using methods approved by the Owner's Representative.	C. Plants that are damaged shall be considered as requiring replacement or appraisal in the event that the damaged affects more than 25 % of the crown, 25% of the trunk circumference, or root protection area, or the tree is damaged to the trunk circumference of the trunk to the trunk of the trunk circumference.
ery greater than 20	3.9 GENERAL REQUIREMENTS AND LIMITATIONS FOR OPERATIONS WITHIN THE TREE AND PLANT PROTECTION AREA:	manner that the tree could develop into a potential hazard. Trees and shrubs to be replaced shall be removed by the Contractor at his own expense.
	A. The Contractor shall not engage in any construction activity within the Tree and Plant Protection Area without the approval of the Owner's Representative including: operating, moving or storing equipment; storing supplies or materials;	<ol> <li>The Owner's Representative may engage an independent arborist to assess any tree or plant that appea been damaged to determine their health or condition.</li> </ol>
d by this section to	locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree and	C. Any tree that is determined to be dead, damaged or potentially hazardous by the Owner's arborist and upon request of the Owner's Representative shall be immediately removed by the Contractor at no additional expense to the Contractor at the
ite.	Plant Protection Area maybe indicated on the drawings along with any required remedial activity as listed below. B. In the event that construction activity is unavoidable within the Tree and Plant Protection Area, notify the Owner's	Tree removal shall include all clean up of all wood parts and grinding of the stump to a depth sufficient to plant the rep tree or plant, removal of all chips from the stump site and filling the resulting hole with topsoil.
	Representative and submit a detailed written plan of action for approval. The plan shall include: a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time period for the	D. Any remedial work on damaged existing plants recommended by the consulting arborist shall be completed to contractor at no cost to the owner. Remedial work shall include but is not limited to soil compaction remediation and
	activity, and a list of remedial actions that will reduce the impact on the Tree and Plant Protection Area from the activity. Remedial actions shall include but shall not be limited to the following:	mulching, pruning and or cabling, insect and disease control including injections, compensatory watering, additional n and could include application tree growth regulators (TGR)
fore beginning work	1. In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care	E. Remedial work may extend up to two years following the completion of construction to allow for any requirem
struction and project	impact equipment that will not cause damage to the tree, roots or soil.	multiple applications or the need to undertake applications at required seasons of the year.
	<ol><li>When encountered, exposed roots, 1 inches and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in Wood Chips and shall be</li></ol>	END OF SECTION 015639
	maintained above permanent wilt point at all times. Roots one inch and larger in diameter shall not be cut with out the approval of the owners representative. Excavation shall be tunneled under these roots without cutting them. In	SECTION 32 9300
	the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.	PLANTING
	<ol><li>Tree branches that interfere with the construction may be tied back or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the Owner's</li></ol>	1.1 SUMMARY
pecification for	Representative. Tying back or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI A300, part 8) and be performed under supervision of the arborist.	A. The scope of work includes all labor, materials, appliances, tools, equipment, facilities, transportation and set necessary for and incidental to performing all operations in connection with furnishing, delivery, and installation of pla
	4. Matting: Install temporary matting over the Wood Chips or Mulch to the extent indicated. Do not permit foot traffic,	known as "landscaping") complete as shown on the drawings and as specified herein.
	scatiologing of the storage of materials within the Tree and Plant Protection Area to occur off of the temporary matting.	<ul> <li>B. The scope of work in this section includes, but is not limited to, the following:</li> <li>1 Locate nurchase deliver and install all specified plants</li> </ul>
shall be performed qualifications for	5. Trunk Protection: Protect the trunk of each tree to remain by covering it with a ring of 8 foot long 2 inch x 6 - inch planks loosely banded onto the tree with 3 steel bands. Staple the bands to the planks as necessary to hold them	<ol> <li>Water all specified plants.</li> </ol>
	securely in place. Trunk protection must by kept in place no longer than 12 months. If construction requires work near a particular tree to continue longer than 12 months, the steel bands shall be inspected every six months and	3. Mulch, fertilize, stake, and prune all specified plants.
state license to tate licensing	loosened if they are found to have become tight.	<ol> <li>Maintenance of all specified plants until the beginning of the warranty period.</li> </ol>
	excavation tool techniques shall be used where practical or as designed on the drawings.	<ol> <li>Plant warranty.</li> <li>Clean up and disposal of all excess and surplus material.</li> </ol>
	a. Remove the Wood Chips from an area approximately 18 inches beyond the limits of the hole or trench to be excavated. Cover the Wood Chips for a distance of not less than 15 feet around the limit of the excavation area	7. Maintenance of all specified plants during the warranty period.
g shall be attached	with Filter Fabric or plastic sheeting to protect the Wood Chips from slit. Mound the Wood Chips so that the plastic slopes towards the excavation.	1.2 CONTRACT DOCUMENTS
n place with out hold up the fabric	b. Using a sprinkler or soaker hose, apply water slowly to the area of the excavation for a period of at least 4 hours, approximately 12 hours prior to the work so that the ground water level is at or near field capacity at the	A. Shall consist of specifications and general conditions and the construction drawings. The intent of these doct to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as an Whatsure is called for the one parts shall be as highling as if called for in all parts.
s and or additional	beginning of the work. For excavations that go beyond the damp soil, rewet the soil as necessary to keep soil moisture near field capacity.	1.3 RELATED DOCUMENTS AND REFERENCES
vide gate. Gates	c. Using an air excavation tool specifically designed and manufactured for the intended purpose, and at pressures recommended by the manufacturer of the equipment, fracture the existing soil to the shape and the depths	A. Related Documents:
	required. Work at rates and using techniques that do not harm tree roots. Air pressure shall be a maximum of 90-100 psi.	<ol> <li>Drawings and general provisions of contract including general and supplementary conditions and Divisio specifications apply to work of this section</li> </ol>
igh or larger letters	1.) The air excavation tool shall be "Air-Spade" as manufactured by Concept Engineering Group, Inc., Verona, PA (412) 826-8800, or Air Knife as manufactured by Easy Lise Air Tools, Inc. Allison Park, Pa (866)	2. Related Specification Sections
sign shall read "Tree	328-5723 or approved equal.	<ul> <li>a. Section - Tree Protection and Plant Protection</li> <li>B. References: The following specifications and standards of the organizations and documents listed in this para</li> </ul>
	d. Using a commercial, high-powered vacuum truck if required, remove the soil from the excavation produced by the Air Knife excavation. The vacuum truck should generally operate simultaneously with the hose operator,	form a part of the specification to the extent required by the references thereto. In the event that the requirements of the specification conflict with this specification section the requirements of this specification.
	such that the soil produced is picked up from the excavation hole, and the exposed roots can be observed and not damaged by the ongoing operation. Do not drive the vacuum truck into the Tree and Plant Protection Area	shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflic
ver tree roots	unless the area is protected from compaction as approved in advance by the Owner's Representative. e. Remove all excavated soil and excavated Wood Chips, and contaminated soil at the end of the excavation.	1. State of California, Department of Food and Agriculture, Regulations for Nursery Inspections, Rules and
,	f. Schedule the work so that foundations or utility work is completed immediately after the excavation. Do not let the roots dry out. Mist the roots several times during the day. If the excavated area must remain open over	2. ANSI Z60.1 American Standard for Nursery Stock, most current edition.
	night, mist the roots and cover the excavation with black plastic. g. Dispose of all soil in a manner that meets local laws and regulations.	<ol> <li>ANSI A 300 - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current edit parts.</li> </ol>
ogical degradation,	h. Restore soil within the trench as soon as the work is completed. Utilize soil of similar texture to the removed soil and lightly compact with hand tools. Leave soil mounded over the trench to a height of approximately 10%	4. Florida Grades and Standards for Nursery Stock, current edition (Florida Department of Agriculture, Talla
w.tencate.com or	of the trench depth to account for settlement.	<ul> <li>L).</li> <li>5. Interpretation of plant names and descriptions shall reference the following documents. Where the name</li> </ul>
	i. Restore any Geogras, Filter Fabric, wood Chips or Mulch and or mailing that was previously required for the area.	descriptions disagree between the several documents, the most current document shall prevail.
of naturally occurring	<ul><li>3.10 TREE REMOVAL:</li><li>A. Remove all trees indicated by the drawings and specifications, as requiring removal, in a manner that will not damage</li></ul>	b. Manual of Woody Landscape Plants; Michael Dirr; Stipes Publishing, Champaign, Illinois; Most Curre
approved equal.	adjacent trees or structures or compacts the soil. B. Remove trees that are adjacent to trees or structures to remain, in sections, to limit the opportunity of damage to	c. The New Sunset Western Garden Book, Oxmoor House, most current edition.
	adjacent crowns, trunks, ground plane elements and structures.	current edition; published by Urban Tree Foundation, Visalia, California.
	Area. No tree to be removed within 50 feet of the Tree and Plant Protection Area shall be pushed over or up-rooted using a piece of grading equipment	7. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current editi
y conditions that	D. Protect adjacent paving, soil, trees, shrubs, ground cover plantings and understory plants to remain from damage	<ul> <li>VERIFICATION</li> <li>All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shares a structure of the drawings are approximate. Before proceeding with any work, the Contractor shares a structure of the drawings are approximate.</li> </ul>
	during all tree removal operations, and from construction operations. Protection shall include the root system, trunk, limbs, and crown from breakage or scarring, and the soil from compaction.	carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of a discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in s
S.	E. Remove stumps and immediate root plate from existing trees to be removed. Grind trunk bases and large buttress roots to a depth of the largest buttress root or at least 18 inches below the top most roots which ever is less and over the area	until given approval to do so by the Owner's Representative.
e conduits of other	of three times the diameter of the trunk (DBH). 1 For trees where the stump will fall under new payed areas, grind roots to a total depth of 18 inches below the	schedule, the number of plants or square footage of the planting bed actually drawn on the plant drawings shall be de
	existing grade. If the sides of the stump hole still have greater than approximately 20% wood visible, continue grinding operation deeper and or wider until the resulting hole has less than 20% wood. Remove all wood chips	1.5 PERMITS AND REGULATIONS
s indicated on the the limit shall be the	produced by the grinding operation and back fill in 8 inch layers with controlled fill of a quality acceptable to the site engineer for fill material under structures, compacted to 95% of the maximum dry density standard proctor	A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously exclud provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances beging on the
	The Owner's Representative shall approve each hole at the end of the grinding operation.	operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between per requirements and the work outlined in the contract opuments, the Contractor shall promotly promitly the Contract opuments and the work of the contract opuments.
en alignments of I of the limits of the	<ol><li>In areas where the tree location is to be a planting bed or lawn, remove all woodchips and backfill stump holes with planting soil as defined in Specification Section Planting Soil, in maximum of 12 inch layers and compact to</li></ol>	in writing including a description of any necessary changes and changes to the contract price resulting from changes
atain the Owner's	80 - 85% of the maximum dry density standard proctor. 3.11 PRUNING:	B. Wherever references are made to standards or codes in accordance with which work is to be performed or te
. After approval,	A. Within six months of the estimated date of substantial completion, prune all dead or hazardous branches larger than 2 inch in diameter from all trees to remain	edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwis expressly set forth.
	B. Implement all pruning recommendations found in the arborist report.	C. In case of conflict among any referenced standards or codes or between any referenced standards and code specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern
ch tree and on a be remain prior to the	C. Prune any low, hanging branches and vines from existing trees and shrubs that overhang walks, streets and drives, or parking areas as follows:	1.6 PROTECTION OF WORK, PROPERTY AND PERSON
nstallation of	<ol> <li>Walks - within 8 feet vertically of the proposed walk elevation.</li> <li>Deriving space, within 12 feet vertically of the proposed participant surface elevation.</li> </ol>	A. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible damages or injury due to his/her actions.
gns, Geogrid, Mulch	<ol> <li>Parking areas - within 12 reet ventically of the proposed parking surface elevation.</li> <li>Streets and drives - within 14 feet vertically of the proposed driving surface elevation.</li> </ol>	1.7 CHANGES IN THE WORK
inad above	D. All pruning shall be done in accordance with ANSI A300 (part 1), ISA BMP Tree Pruning (latest edition, and the "Structural Pruning: A Guide for the Green Industry", Edward Gilman, Brian Kempf, Nelda Matheny and Jim Clark, 2013 Urban	A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accor such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in wi
ned above ne Tree and Plant	Tree Foundation, Visalia CA.	before executing the work involved.
	F. Where tree specific disease vectors require, sterilize all pruning tools between the work in individual trees.	general condition requirements.
city v∕v	<ul><li>3.13 WATERING</li><li>A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants to be preserved during</li></ul>	1.8 CORRECTION OF WORK
- 18% - 36%	the entire construction period. Adequate water is defined to be maintaining soil moisture above the permanent wilt point to a depth of 8 inches or greater.	and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative
- 36% - 41%	B. The Contractor shall adjust the automatic irrigation system, if available, and apply additional water, using hoses or water tanks as required	1.9 DEFINITIONS
er shall be the Digital ivalent meter	C. Periodically test the moisture content in the soil within the root zone to determine the water content.	All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
gh, suspend	<ul> <li>Automatic irrigation system covering 110% of all landscape area is provided.</li> <li>3.14 WEED REMOVAL</li> </ul>	<ul> <li>A. Boxed trees: A container root ball package made of wood in the shape of a four-sided box.</li> <li>B. Container plant: Plants that are grown in and/or are currently in a container including boxed trees.</li> </ul>
	A. During the construction period, control any plants that seed in and around the fenced Tree and Plant Protection area at least three times a year	C. Defective plant: Any plant that fails to meet the plant quality requirement of this specification.
Protection Area or owing the edges of	1. All plants that are not shown on the planting plan or on the Tree and Plant Protection Plan to remain shall be	D. End of Warranty Final Acceptance: The date when the Owner's Representative accepts that the plants and w section meet all the requirements of the warranty. It is intended that the materials and workmanship warranty for Plan
conformance with	considered as weeds. B. At the end of the construction period provide one final weeding of the Tree and Plant Protection Area.	Planting Soil, and Irrigation work run concurrent with each other.
of the limit of	3.15 INSECT AND DISEASE CONTROLLER	<ul> <li>Freid grown nees (дод): Trees growing in field son for at least 12 months prior to harvest.</li> <li>F. Healthy: Plants that are growing in a condition that expresses leaf size, crown density, color; and with annual</li> </ul>
ot ends on the tree	disease and insect control required to keep the plants in a healthy state using the principles of Integrated Plant Management (IPM). All posticides aboli to applied hus posticide are finite and function	rates typical of the species and cultivar's horticultural description, adjusted for the planting site soil, drainage and wea conditions.
-	(IPM). All pesucides shall be applied by a certified pesticide applicator. 3.16 CLEAN-UP	G. Kinked root: A root within the root package that bends more than 90 degrees.
e plans and details	A. During tree and plant protection work, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week	<ul> <li>H. Maintenance: Actions that preserve the health of plants after installation and as defined in this specification.</li> <li>I. Maintenance period: The time period, as defined in this specification, which the Contractor is to provide main</li> </ul>
iowing levels of	<ol> <li>Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of work and point being and point to be and the surfaces.</li> </ol>	J. Normal: the prevailing protocol of industry standard(s).
nips or Mulch. Wide a laver of Filter	B. Once tree protection work is complete, wash all soil from pavements and other structures. Ensure that Mulch is	K. Owner's Representative: The person appointed by the Owner to represent their interest in the review and ap the work and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may ap
	commento planting beds.	other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plan

Make all repairs to grades, ruts, and damage to the work or other work at the site. Remove and dispose of all excess Mulch, Wood Chips, packaging, and other material brought to the site by the

er to represent their interest in the review and ap . The Owner's Representative or Owner may ap as the landscape architect who prepared the plan Reasonable and reasonably: When used in this specification relative to plant quality, it is intended to mean

conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification

	recognizes that it is not possible to produce plants free of all defects, but that some accepted industry protocols and standards result in plants unacceptable to this project.	
the Owner's Representative remove all fencing, Wood ny other Tree and Plant Protection material.	When reasonable or reasonably is used in relation to other issues such as weeds, diseased, insects, it shall mean at levels low enough that no treatment would be required when applying recognized Integrated Plant Management practices.	
naged by the Contractor shall be replaced in kind by the of similar species and of equal size or 6 inch caliper which	This specification recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative's expert shall determine when	
and equal size or the largest size plants reasonably s than the size of the plant that is damaged, the Owner's t plant. nts of Specification Section Planting.	<ul> <li>conditions are judged as reasonable.</li> <li>M. Root ball: The mass of roots including any soil or substrate that is shipped with the tree within the root ball package.</li> <li>N. Root ball package. The material that surrounds the root ball during shipping. The root package may include the material in which the plant was grown, or new packaging placed around the root ball for shipping.</li> </ul>	
placement or appraisal in the event that the damage e, or root protection area, or the tree is damaged in such a d shrubs to be replaced shall be removed by the	<ul> <li>Root collar (root crown, root flare, trunk flare, flare): The region at the base of the trunk where the majority of the structural roots join the plant stem, usually at or near ground level.</li> <li>P. Shrub: Woody plants with mature height approximately less than 15 feet.</li> </ul>	
ent arborist to assess any tree or plant that appears to have	Q. Spade harvested and transplanted: Field grown trees that are mechanically harvested and immediately transplanted to the final growing site without being removed from the digging machine.	
ally hazardous by the Owner's arborist and upon the d by the Contractor at no additional expense to the owner.	<ul><li>R. Stem: The trunk of the tree.</li><li>S. Substantial Completion Acceptance: The date at the end of the Planting, Planting Soil, and Irrigation installation where</li></ul>	bee
g of the stump to a depth sufficient to plant the replacement esulting hole with topsoil. ed by the consulting arborist shall be completed by the s not limited to: soil compaction remediation and vertical	<ul> <li>the Owner's Representative accepts that all work in these sections is complete and the Warranty period has begun. This date may be different than the date of substantial completion for the other sections of the project.</li> <li>T. Stem girdling root: Any root more than ¼ inch diameter currently touching the trunk, or with the potential to touch the trunk, above the root collar approximately tangent to the trunk circumference or circling the trunk. Roots shall be considered as</li> </ul>	Dine: 56
g injections, compensatory watering, additional mulching,	Stem Girdling that have, or are likely to have in the future, root to trunk bark contact. U. Structural root: One of the largest roots emerging from the root collar.	
d seasons of the year.	<ul> <li>V. Tree: Single and multi-stemmed plants with mature height approximately greater than 15 feet.</li> <li>1.10 SUBMITTALS</li> </ul>	Consultants:
	<ul> <li>A. See contract general conditions for policy and procedure related to submittals.</li> <li>B. Submit all product submittals 4 weeks prior to installation of plantings.</li> </ul>	
9300 G	<ul> <li>C. Product data: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the installation of plants.</li> </ul>	
	<ul> <li>D. Plant growers' certificates: Submit plant growers' certificates for all plants indicating that each meets the requirements of the specification, including the requirements of tree quality, to the Owner's Representative for approval. Provide submittal</li> </ul>	
tools, equipment, facilities, transportation and services	four weeks before the installation of plants. E. Samples: Submit samples of each product and material where required by the specification to the Owner's	
on with furnishing, delivery, and installation of plant (also specified herein.	Representative for approval. Label samples to indicate product, characteristics, and locations in the work. Samples will be reviewed for appearance only. Compliance with all other requirements is the exclusive responsibility of the Contractor.	
to, the following:	F. Plant sources: Submit sources of all plants as required by Article - "Selection of Plants" to the Owner's Representative for approval.	
	<ul> <li>G. Close out submittals: Submit to the Owner's Representative for approval.</li> <li>1. Plant maintenance data and requirements.</li> </ul>	Revisions: 10/28/2021 - Per Comments
f the warranty period.	<ul> <li>Hant mannenance data and requirements.</li> <li>H. Warranty period site visit record: If there is no maintenance during the warranty period, after each site visit during the warranty period, by the Contractor, as required by this specification, submit a written record of the visit, including any problems</li> </ul>	03/15/2022 - Per Site Plan
al	potential problems, and any recommended corrective action to the Owner's Representative for approval.	07/07/2022 - Per Comments
period.	<ul> <li>A. The Owner's Representative may observe the work at any time. They may remove samples of materials for conformity</li> <li>to consider the Section Representative may observe the work at any time. They may remove samples of materials for conformity</li> </ul>	11/04/2022 - Per Comments
e construction drawings. The intent of these documents is	cost of testing materials not meeting specifications shall be paid by the Contractor.	
execution of the work. The documents are to be nding as if called for in all parts.	following key times in the construction process. The Owner's Representative shall be afforded sufficient time to schedule visit to the site. Failure of the Owner's Representative to make field observations shall not relieve the Contractor from meeting all the	
	requirements of this specification. 1. SITE CONDITIONS PRIOR TO THE START OF PLANTING: review the soil and drainage conditions.	
eneral and supplementary conditions and Division I	<ol> <li>COMPLETION OF THE PLANT LAYOUT STAKING: Review of the plant layout.</li> <li>PLANT OUAL ITY: Review of plant quality at the time of delivery and prior to installation. Review tree quality prior.</li> </ol>	
	<ol> <li>PLANT QUALITY: Review of plant quality at the time of delivery and prior to installation. Review tree quality prior to unloading where possible, but in all cases prior to planting.</li> <li>COMPLETION OF THE PLANTING PLANT ROOM of the time of delivery and prior to installation. Review tree quality prior</li> </ol>	
ne organizations and documents listed in this paragraph	4. COMPLETION OF THE PLANTING: Review the completed planting. 1.12 PRE-CONSTRUCTION CONFERENCE	
ecification section the requirements of this specification g referenced standards and specifications conflict with	A. Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work to review any questions the Contractor may have regarding the work, administrative procedures during construction and project	
ined by the Owners Representative. , Regulations for Nursery Inspections, Rules and Grading.	work schedule. 1.13 QUALITY ASSURANCE	
t current edition.	<ul> <li>A. Substantial Completion Acceptance - Acceptance of the work prior to the start of the warranty period:</li> <li>1. Once the Contractor completes the instellation of all items in this section, the Ourper's Representative will show to all the section.</li> </ul>	
ther Woody Plant Maintenance, most current edition and	all work for Substantial Completes the installation of an terms in this section, the Owner's Representative will observe received at least ten calendar days before the anticipated date of the observation.	
nt edition (Florida Department of Agriculture, Tallahassee	<ol> <li>Substantial Completion Acceptance by the Owner's Representative shall be for general conformance to specified size, character and quality and not relieve the Contractor of responsibility for full conformance to the contract</li> </ol>	
erence the following documents. Where the names or plant the most current document shall prevail.	documents, including correct species.	
work ( <u>GRIN</u> ) <u>http://www.ars-grin.gov/npgs/searchgrin.html</u> :tipes Publishing, Champaign, Illinois; Most Current Edition.	<ul> <li>B. The Owner's Representative will provide the Contractor with written acknowledgment of the date of Substantial</li> <li>Completion Acceptance and the beginning of the warranty period and plant maintenance period (if plant maintenance is</li> </ul>	Li.
ouse, most current edition. Structural Pruning: A Guide For The Green Industry" most	included). C. Contractor's Quality Assurance Responsibilities: The Contractor is solely responsible for quality control of the work.	<u> </u>
of Arboriculture, Champaign IL, most current edition.	D. Installer Qualifications: The installer shall be a firm having at least 5 years of successful experience of a scope similar to that required for the work, including the handling and planting of large specimen trees in urban areas. The same firm shall install planting soil (where applicable) and plant material.	
fore proceeding with any work, the Contractor shall mediately inform the Owner's Representative of any	<ol> <li>The bidders list for work under this section shall be approved by the Owner's Representative.</li> <li>Installer Field Supervision: When any planting work is in progress, installer shall maintain, on site, a full-time</li> </ol>	
al conditions, refraining from doing any work in said areas the plan drawings and the plant call outs, list or plant	supervisor who can communicate in English with the Owner's Representative. 3. Installer's field supervisor shall have a minimum of five years experience as a field supervisor installing plants and trees of the quality and scale of the proposed project, and can communicate in English with the Owner's Representative	
	<ol> <li>The installer's crew shall have a minimum of 3 years experienced in the installation of Planting Soil, Plantings, and Irrigation (where applicable) and interpretation of soil plans, planting plans and irrigation plans.</li> </ol>	
o this section of the work unless previously excluded under comply with all laws and ordinances bearing on the	E. 1.14 PLANT WARRANTY:	
ractor observes that a conflict exists between permit contractor shall promptly notify the Owner's Representative ages to the contract price resulting from changes in the	<ol> <li>The Contractor agrees to replace defective work and defective plants. The Owner's Representative shall make the final determination if plants meet these specifications or that plants are defective.</li> <li>Plants warranty shall begin on the date of Substantial Completion Acceptance and continue for the following periods, classed by plant type:</li> </ol>	ie.
cordance with which work is to be performed or tested, the e date of this contract shall apply, unless otherwise	d. Trees - 1 Year(s).	
s or between any referenced standards and codes and the	<ul> <li>f. Ground cover and perennial flower plants -1 Year(s).</li> <li>g. Bulks, ensuel flower and seasonal color plants, for the period of expected bloom or primary display.</li> </ul>	
Representative shall determine which shall govern. property, and the public, and shall be responsible for any	<ul> <li>g. Bubs, annual nower and seasonal color plants - for the period of expected bloch of plantaly display.</li> <li>When the work is accepted in parts, the warranty periods shall extend from each of the partial Substantial Completion Acceptances to the terminal date of the last warranty period. Thus, all warranty periods for each class of plant warranty, shall terminate at one time.</li> </ul>	
	<ol> <li>All plants shall be warrantied to meet all the requirements for plant quality at installation in this specification.</li> <li>Defective plants shall be defined as plants not meeting these requirements. The Owner's representative shall</li> </ol>	
c, and the contract sum should be adjusted accordingly. All compensation must be made and approved in writing	make the final determination that plants are defective. 2. Plants determined to be defective shall be removed immediately upon notification by the Owner's Representative	Brian Torry
st for information (RFI) shall conform to the contract	<ul><li>and replaced without cost to the Owner, as soon as weather conditions permit and within the specified planting period.</li><li>3. Any work required by this specification or the Owner's Representative during the progress of the work, to correct</li></ul>	Dilairieny
that fails to conform to the requirements of the contract	plant defects including the removal of roots or branches, or planting plants that have been bare rooted during installation to observe for or correct root defects shall not be considered as grounds to void any conditions of the	LA 6666978
on written notice from the Owner's Representative, at the d seasonal weather demands.	warranty. In the event that the Contractor decides that such remediation work may compromise the future health of the plant, the plant or plants in question shall be rejected and replaced with plants that do not contain defects that require remediation or correction.	
ary of Arboricultural Terms" or as modified below. I the shape of a four-sided box.	He contractor is exempt from replacing plants, after Substantial Completion Acceptance and during the warranty period, that are removed by others, lost or damaged due to occupancy of project, lost or damaged by a third party, vandalism, or any natural disaster.	Digitally signed by Brian Terry
y in a container including boxed trees.	5. Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this specification. Make all necessary repairs due to plant replacements. Such repairs shall	Date: 2022.11.04 11:55:31 -04'00
er's Representative accepts that the plants and work in this the materials and workmanship warranty for Planting	be done at no extra cost to the Owner. 6. The warranty of all replacement plants shall extend for an additional one-year period from the date of their	
ast 12 months prior to harvest.	acceptance after replacement. In the event that a replacement plant is not acceptable during or at the end of the said extended warranty period, the Owner's Representative may elect one more replacement items or credit for	ALWAYS CALL & I I TWO FULL BUSINESS DAYS BEFORE YOU DIG T HAVE UNDERGROUND UTILITIES LOCATED AND MARKED.
es leaf size, crown density, color; and with annual growth justed for the planting site soil, drainade and weather	each item. These tertiary replacement items are not protected under a warranty period. 7. During and by the end of the warranty period, remove all tree wrap, ties, and guying unless agreed to by the	Sunshine®11.com
than 90 degrees.	Owner's Representative to remain in place. All trees that do not have sufficient caliper to remain upright, or those requiring additional anchorage in windy locations, shall be staked or remain staked, if required by the Owner's Representative	
r installation and as defined in this specification.	B. End of Warranty Final Acceptance - Acceptance of plants at the end of the warranty period.	Drawn By: SMT Drawing #: 1146
	<ol> <li>At the end of the warranty period, the Owner's Representative shall observe all warranted work, upon written request of the Contractor. The request shall be received at least ten calendar days before the anticipated date for final observation.</li> </ol>	Date: 07/16/2021
er to represent their interest in the review and approval of r. The Owner's Representative or Owner may appoint as the landscape architect who prepared the plans	<ul> <li>Infair observation.</li> <li>2. End of Warranty Final Acceptance will be given only when all the requirements of the work under this specification and is appeification continue. Deliver a believe the second sec</li></ul>	
n relative to plant quality, it is intended to mean that the , health or growth of the plant. This specification	and in specification sections Planting Soil and Irrigation have been met.	
		SHEET # LM.4

## 1.15 SELECTION AND OBSERVATION OF PLANTS

- A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.
- B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to reject plants that do not meet specifications as set forth in this specification. If a particular defect or substandard element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.
- 1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the guality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant. 2. Corrections are to be undertaken at the nursery prior to shipping.
- C. The Contractor shall bear all cost related to plant corrections.
- D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.
- E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.
- F. The Contractor shall require the grower or re-wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.
- G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material while on site.
- 1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE
- A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall be accompanied with a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.
- 1.17 SITE CONDITIONS
- A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.
- 1. Should subsurface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of corrections. If the Contractor fails to notify the Owner's Representative of such
- conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications. B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will
- be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative. C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.
- 1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the **Owner's Representative**
- D. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.
- 1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.
- 1.18 PLANTING AROUND UTILITIES
- A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing
- underground conditions before digging. B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand
- excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.
- C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planting areas: The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

## PART 2 PRODUCTS

CASE: SP-20-23 and SE-20-02

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- 2.1 PLANTS: GENERAL
- A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.
- . All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 "American Standard for Nursery Stock" latest edition, unless modified by provisions in this specification. When
- there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct. 2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z-60.1. Larger plants may not be acceptable if the resulting root ball cannot be fit into the required planting space.
- 3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.
- B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.
- C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants. D. Plant Quality:
- 1. General: Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, bores, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant
- 2. Plant quality above the soil line:
- a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following: 1.) Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar
- pruned to a central and dominant leader. a.) Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary,
- espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars. 2.) Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress or over watering as
- indicated by wilted, shriveled, or dead leaves 3.) Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured
- a.) Main branches shall be distributed along the central leader not clustered together. They shall form a
- balanced crown appropriate for the cultivar/species b.) Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central
- leader measured 1 inch above the branch union.
- c.) The attachment of the largest branches (scaffold branches) shall be free of included bark. 4.) Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds). sunburned areas, conks (fungal fruiting bodies), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).
- 3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning cut shall be present. 1.) All trees are assumed to have one central leader trees unless a different form is specified in the plant list or
- drawings. 4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall
- be visible above the soil line. 5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake.
- Auxiliary stake may be used to maintain a straight leader in the upper half of the tree. 3. Plant quality at or below the soil line:
- a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:
- 1.) The roots shall be reasonably free of scrapes, broken or split wood.
- 2.) The root system shall be reasonably free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Wounds resulting from root pruning used to produce a high quality root system are not considered injuries.
- A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.
- a.) Plants with structural roots on only one side of the trunk (J roots) shall be rejected.
- 4.) The root collar shall be within the upper 2 inches of the substrate/soil. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly descend, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.

- 5.) The root system shall be reasonably free of stem girdling roots over the root collar or ki from nursery production practices
- 6.) At time of observations and delivery, the root ball shall be moist throughout. Roots signs of excess soil moisture conditions as indicated by stunted discolored distorted E. Submittals: Submit for approval the required plant quality certifications from the grower where plants are
- purchased, for each plant type. The certification must state that each plant meets all the above plant qua requirements. 1. The grower's certification of plant quality does not prohibit the Owner's Representative from observir
- rejecting the plant if it is found to not meet the specification requirements. 2.2 ROOT BALL PACKAGE OPTIONS: The following root ball packages are permitted. Specific root ball packages
- required where indicated on the plant list or in this specification. Any type of root ball packages that is not defined in this specification shall not be permitted. A. BALLED AND BURLAPPED PLANTS
- 2. All Balled and Burlapped Plants shall be field grown, and the root ball packaged in a burlap and twin burlap and wire basket package
- 3. Plants shall be harvested with the following modifications to standard nursery practices.
- a. Prior to digging any tree that fails to meet the requirement for maximum soil and roots above carefully removed the soil from the top of the root ball of each plant using hand tools, water or locate the root collar and attain the soil depth over the structural roots requirements. Remove a roots above the root collar. Care must be exercised not to damage the surface of the root collar the structural roots.
- b. Trees shall be dug for a minimum of 4 weeks and a maximum of 52 weeks prior to shipping. Tr weeks prior to shipping are defined as hardened-off. Digging is defined as cutting all roots and out of the ground and either moving it to a new location in the nursery or placing it back into Tress that are stored out of the ground shall be placed in a holding area protected from extrem sun with the root ball protected by covering with mulch or straw and irrigated sufficiently to keep root ball above wilt point and below saturation
- c. If wire baskets are used to support the root ball, a "low profile" basket shall be used. A low p defined as having the top of the highest loops on the basket no less than 4 inches and no greate below the shoulder of the root ball package. The basket shall be removed completely at time of p 1.) At nurseries where sandy soils prevent the use of "low profile baskets", baskets that support
- ball, including the top, are allowable. d. Twine and burlap used for wrapping the root ball package shall be natural, biodegradable materi decomposes after digging the tree then the root ball shall be re-wrapped prior to shipping if root grown to keep root ball intact during shipping.

## SPADE HARVESTED AND TRANSPLANTED

- 1. Spade Harvested and Transplanted Plants shall meet all the requirements for field grown trees. Roo diameters shall be of similar size as the ANSI Z60.1 requirements for Balled and Burlapped plants. 2. Trees shall be harvested prior to leafing out (bud break) in the spring or during the fall planting perio plants know to be considered as fall planting hazards. Plants that are fall planting hazards shall only prior to leafing out in the spring.
- 3. Trees shall be moved and planted within 48 hours of the initial harvesting and shall remain in the spa until planted.
- C. CONTAINER (INCLUDING ABOVE-GROUND FABRIC CONTAINERS AND BOXES) PLANTS 4. Container plants may be permitted only when indicated on the drawing, in this specification, or appro Owner's Representative
- 5. Provide plants shall be established and well rooted in removable containers 6. Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant
- D. BARE ROOT PLANTS
- 7. Harvest bare root plants while the plant is dormant and a minimum of 4 weeks prior to leaf out (bud l 8. The root spread dimensions of the harvested plants shall conform to ANSI Z60.1 for nursery grown l plants for each size and type of plant. Just prior to shipping to the job site, dip the root system into a hydrogel (cross linked polyacrylamide) and water mixed at a rate of 15 oz. of hydrogel in 25 gallons not shake off the excess hydrogel. Place the root system in a pleated black plastic bag and tie the ba around the trunk. Bundle and tie the upper branches together.
- 9. Keep the trees in a cool dark space for storage and delivery. If daytime outside temperatures exceed F, utilize a refrigerated storage area with temperature between 35 and 50 degrees. 10. Where possible, plan time of planting to be before bud break. For trees to be planted after bud break
- trees before bud break in an irrigated bed of pea gravel.
- a. The pea gravel bed shall be 18 inches deep over a sheet of plastic.
- b. Space trees to allow the unbundled branches to grow without shading each other. c. Once stored in pea gravel, allow the trees sufficient time for the new root system to flush and si
- leaves to fully develop before planting. d. Pea gravel stored trees may be kept for up to one growing season.
- e. Pea gravel stored trees shall be dipped, packaged and shipped similar to the requirements for fr
- root trees above.
- 2.3 ANNUAL FLOWERING AND SEASONAL COLOR PLANTS
- E. Container or flat-grown plants should be sized as noted in the planting plan. Plants shall be well-rooted 2.4 PALMS
- F. Except as modified below or where the requirements are not appropriate to the specification of palms, p meet all the requirements of the plant quality section above.
- G. Defronding, tying, and hedging:
- 5. In preparing palm trees for relocation, all dead fronds shall be removed.
- 6. All remaining fronds above horizontal shall be lifted up and tied together around the crown in an uprig Do not tie too tightly, bind or injure the bud. Jute binder twine shall be used in tying up the fronds; wir permitted. Fronds shall be untied immediately after planting
- C. Digging the root ball:
- 1. When digging out the root ball, no evacuation shall be done closer than 24 Inches to the trunk at gro the excavation shall extend below the major root system to a minimum depth of 3.5 feet. The bottor ball shall be cut off square and perpendicular to the trunk below the major root system.
- D. The Contractor shall not free-fall, drag, roll or abuse the tree or put a strain on the crown (bud area) at a protective device shall be used around the trunk of the tree while lifting and relocating so as not to injure scar or skin the trunk in any way.

## 2.5 PLANTING SOIL

Planting Soil shall contain a mixture of 1/3 sand,  $\frac{1}{3}$  topsoil and  $\frac{1}{3}$  peat humus. Sand shill be clean, salt-free and con extraneous matter. Topsoil shall be friable fertile soil with representative characteristics of area soils. it should be silt, stone, excess lime, shell rock, plant roots, debris or other foreign matter. It shall not contain noxious plant gr bermuda, torpedo or nut grass). it shall test between the ph range of 5.0 to 7.0 unless otherwise specified and co residue or substances that would endanger plant growth. if topsoil is not available on site, it shall be imported fror sources with similar soil characteristics to that found at project site, obtain topsoil only from naturally, well-draine topsoil occurs in a depth not less than 4". Peat humus shall be decomposed peat with no identifiable fibers or if a muck may be substituted and shall be free from stones, excessive plant roots, debris or other foreign matter. muc overly saturated with water.

## 2.6 MULCH

## 2.7 TREE STAKING AND GUYING MATERIAL

- A. Tree guying to be flat woven polypropylene material, 3/4 inch wide, and 900 lb. break strength. Color to Product to be ArborTie manufactured by Deep Root Partners, L.P. or approved equal.
- B. Stakes shall be lodge pole stakes free of knots and of diameters and lengths appropriate to the size of required to adequately support the plant.
- C. Below ground anchorage systems to be constructed of 2 x 2 dimensional untreated wood securing (usin screws) horizontal portions to 4 feet long vertical stakes driven straight into the ground outside the root
- D. Submit manufacturer's product data for approval.

## 2.9 WATERING BAGS

PART 3 EXECUTION

- E. Plastic tree watering bags holding a minimum of 15 gallons of water and with a slow drip hole(s) water r system, specifically designed to water establishing trees. Water should release over a several day period few hours
- F. Watering bags shall be:
- 1. Treegator Irrigation Bags sized to the appropriate model for the requirements of the plant, manufacture Spectrum Products, Inc., Youngsville, NC 27596. 2. Ooze Tube sized to the appropriate model for the requirements of the plant, manufactured by Engine

of roots to sun, wind or extremes of heat and cold temperatures. If planting is delayed more than 24 hours after

3.1 DELIVERY, STORAGE AND HANDLING

5.) The root system shall be reasonably free of stem girdling roots over the root collar or kinked roots from nursery production practices.		delivery, set plants in a location protected from sun and wind. Provide adequate water to the root ball package during the shipping and storage period.
6.) At time of observations and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by stunted, discolored, distorted, or dead roots.		<ol> <li>All plant materials must be available for observation prior to planting.</li> <li>Using a soil mainture mater, periodically sheek the soil mainture in the root halls of all plants to essure that the</li> </ol>
E. Submittals: Submit for approval the required plant quality certifications from the grower where plants are to be purchased, for each plant type. The certification must state that each plant meets all the above plant quality.		<ol><li>Using a soil moisture meter, periodically check the soil moisture in the root balls of all plants to assure that the plants are being adequately watered. Volumetric soil moisture shall be maintained above wilting point and below field capacity for the root ball substrate or soil</li></ol>
requirements.		<ul> <li>B. Do not deliver more plants to the site than there is space with adequate storage conditions. Provide a suitable remote</li> </ul>
<ol> <li>The grower's certification of plant quality does not prohibit the Owner's Representative from observing any plant or rejecting the plant if it is found to not meet the specification requirements.</li> </ol>		staging area for plants and other supplies. 1. The Owner's Representative or Contractor shall approve the duration, method and location of storage of plants.
ROOT BALL PACKAGE OPTIONS: The following root ball packages are permitted. Specific root ball packages shall be required where indicated on the plant list or in this specification. Any type of root ball packages that is not specifically		C. Provide protective covering over all plants during transporting.
A. BALLED AND BURLAPPED PLANTS	3.2	ADVERSE WEATHER CONDITIONS A. No planting shall take place during extremely hot, dry, windy or freezing weather.
<ol><li>All Balled and Burlapped Plants shall be field grown, and the root ball packaged in a burlap and twine and/or burlap and wire basket package.</li></ol>	3.3	COORDINATION WITH PROJECT WORK
3. Plants shall be harvested with the following modifications to standard nursery practices.		<ul> <li>A. The Contractor shall coordinate with all other work that may impact the completion of the work.</li> <li>B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.</li> </ul>
a. Prior to digging any tree that fails to meet the requirement for maximum soil and roots above the root collar, carefully removed the soil from the top of the root ball of each plant, using hand tools, water or an air spade, to least the next set of the root set of the root ball of each plant.		C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root halls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts.
roots above the root collar. Care must be exercised not to damage the surface of the root collar and the top of the structural roots	2.4	
<ul> <li>b. Trees shall be dug for a minimum of 4 weeks and a maximum of 52 weeks prior to shipping. Trees dug 4 to 52 weeks prior to shipping are defined as bardened-off. Diaging is defined as cutting all roots and lifting the tree</li> </ul>	5.4	A. Relative positions of all plants and trees are subject to approval of the Owner's Representative.
out of the ground and either moving it to a new location in the nursery or placing it back into the same hole. Tress that are stored out of the ground shall be placed in a holding area protected from extremes of wind and		B. Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for
sun with the root ball protected by covering with mulch or straw and irrigated sufficiently to keep moisture in the root ball above wilt point and below saturation		the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.
c. If wire baskets are used to support the root ball, a "low profile" basket shall be used. A low profile basket is defined as having the top of the highest loops on the basket no less than 4 inches and no greater than 8 inches		C. When applicable, plant trees before other plants are installed.
below the shoulder of the root ball package. The basket shall be removed completely at time of planting. 1.) At nurseries where sandy soils prevent the use of "low profile baskets", baskets that support the entire root		planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.
ball, including the top, are allowable. d. Twine and burlap used for wrapping the root ball package shall be natural, biodegradable material. If the burlap	3.5	SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION
decomposes after digging the tree then the root ball shall be re-wrapped prior to shipping if roots have not yet grown to keep root ball intact during shipping.		A. Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.
		<ol> <li>Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and tilling. Where possible, restrict the driving lanes to one area instead of driving over and</li> </ol>
<ol> <li>Spade Harvested and Transplanted Plants shall meet all the requirements for field grown trees. Root ball</li> </ol>		compacting a large area of soil. 2. Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.
diameters shall be of similar size as the ANSI Z60.1 requirements for Balled and Burlapped plants. 2. Trees shall be harvested prior to leafing out (bud break) in the spring or during the fall planting period except for	3.6	SOIL MOISTURE
plants know to be considered as fall planting hazards. Plants that are fall planting hazards shall only be harvested prior to leafing out in the spring.		A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following
<ol><li>Trees shall be moved and planted within 48 hours of the initial harvesting and shall remain in the spade machine until planted.</li></ol>		ranges.
C. CONTAINER (INCLUDING ABOVE-GROUND FABRIC CONTAINERS AND BOXES) PLANTS		Soil type Permanent wilting point Field capacity
<ol><li>Container plants may be permitted only when indicated on the drawing, in this specification, or approved by the Owner's Representative.</li></ol>		Loam, Sandy clay, Sandy loam 14 - 25% 27-36% Clay loam Silt loam 11 - 22% 31 - 36%
<ol> <li>5. Provide plants shall be established and well rooted in removable containers.</li> <li>6. Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant.</li> </ol>		Silty clay, Silty clay loam 22 - 27% 38 - 41%
D. BARE ROOT PLANTS		Moisture Meter, DSMM500 by General Specialty Tools and Instruments, or approved equivalent.
<ol> <li>Harvest bare root plants while the plant is dormant and a minimum of 4 weeks prior to leaf out (bud break).</li> <li>The root spread dimensions of the harvested plants shall conform to ANSI Z60.1 for nursery grown bare root</li> </ol>		B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.
plants for each size and type of plant. Just prior to shipping to the job site, dip the root system into a slurry of hydrogel (cross linked polyacrylamide) and water mixed at a rate of 15 oz. of hydrogel in 25 gallons of water. Do	3.7	INSTALLATION OF PLANTS: GENERAL C. Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection
not shake off the excess hydrogel. Place the root system in a pleated black plastic bag and tie the bag snugly around the trunk. Bundle and tie the upper branches together.		of the plant. Notify the Owner's Representative of any condition observed.
<ol> <li>Keep the trees in a cool dark space for storage and delivery. If daytime outside temperatures exceeds 70 degrees</li> <li>F, utilize a refrigerated storage area with temperature between 35 and 50 degrees.</li> </ol>		<ul> <li>E. The not system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time</li> </ul>
10. Where possible, plan time of planting to be before bud break. For trees to be planted after bud break, place the trees before bud break in an irrigated bed of pea gravel.		Planting to commit that the roots meet the requirements for plantinot quality in Part 2 Products. Plants General. Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.
a. The pea gravel bed shall be 18 inches deep over a sheet of plastic.		1. Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem
<ul> <li>c. Once stored in pea gravel, allow the trees sufficient time for the new root system to flush and spring growth of leaves to fully develop before planting</li> </ul>		Representative may choose to reject the plant rather than permitting the modification.
<ul> <li>d. Pea gravel stored trees may be kept for up to one growing season.</li> </ul>		<ol> <li>Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2 Products: Plants General: Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or yoid the plant warranty.</li> </ol>
<ul> <li>Pea gravel stored trees shall be dipped, packaged and shipped similar to the requirements for freshly dug bare root trees above.</li> </ul>		<ol> <li>The resulting root ball may need additional staking and water after planting. The Owner's Representative may</li> </ol>
ANNUAL FLOWERING AND SEASONAL COLOR PLANTS E. Container or flat-grown plants should be sized as noted in the planting plan. Plants shall be well-rooted and healthy.		reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty
PALMS		<ol><li>The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.</li></ol>
F. Except as modified below or where the requirements are not appropriate to the specification of palms, palms shall meet all the requirements of the plant quality section above.		F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, sides and bottom of the root ball shall be shaved to remove all circling, descending, and matted roots. Shaving shall be shaved to remove all circling descending and matted roots. Shaving shall be shaved to remove all circling descending and matted roots. Shaving shall be shaved to remove all circling descending and matted roots. Shaving shall be shaved to remove all circling descending.
<ul><li>G. Defronding, tying, and hedging:</li><li>5. In preparing palm trees for relocation, all dead fronds shall be removed.</li></ul>		the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.
<ol> <li>All remaining fronds above horizontal shall be lifted up and tied together around the crown in an upright position.</li> <li>Do not tie too tightly, bind or injure the bud, but binder twing shall be used in tying up the fronds; wire will not be</li> </ol>		G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not
permitted. Fronds shall be untied immediately after planting.		a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if not removed.
<ol> <li>Digging the root ball.</li> <li>When digging out the root ball, no evacuation shall be done closer than 24 Inches to the trunk at ground level and the evacuation shall extend below the main root surface to a minimum donth of 2.5 fact. The bettern of the root</li> </ol>		<ul> <li>H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, excavate the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide</li> </ul>
ball shall be cut off square and perpendicular to the trunk below the major root system.		enough for working room around the root ball or to the size indicated on the drawing or as noted below. 1. For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches
D. The contractor shall not nee-fail, drag, roll of abuse the tree of put a shall of the crown (bud area) at any time. A protective device shall be used around the trunk of the tree while lifting and relocating so as not to injure the bud, or scar or skin the trunk in any way.		over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.
		a. The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.
PLANTING SOIL ing Soil shall contain a mixture of 1/3 sand, $\frac{1}{3}$ topsoil and $\frac{1}{3}$ peat humus. Sand shill be clean, salt-free and containing no		b. Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a
neous matter. Topsoil shall be friable fertile soil with representative characteristics of area soils. it should be free of heacy tone, excess lime, shell rock, plant roots, debris or other foreign matter. It shall not contain noxious plant growth (such as		tracked mini excavator, or hand shovels. 2. If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined
ue or substances that would endanger plant growth. if topsoil is not available on site, it shall be imported from local se with similar soil characteristics to that found at project site, obtain topsoil only from naturally, well-drained sites where		above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified. 3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any
il occurs in a depth not less than 4". Peat humus shall be decomposed peat with no identifiable fibers or if available, may be substituted and shall be free from stones, excessive plant roots, debris or other foreign matter. muck shall not be		required root ball modification.  4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen
y saturated with water.		the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6 inches. H. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the
MULCH		root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.
A. Mulch shall be Melaleuca of Eucalyptus and shall cover all landscape bed areas in a 5 minimum layer. Do not let mulch pile up on root ball or around trunks of trees plants. Submit supplier's product specification data sheet and a one callon sample for approval		I. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree graft if applicable, shall be visible above the grade. Do not place soil on top
TREE STAKING AND GUYING MATERIAL		of the root ball.
A. Tree guying to be flat woven polypropylene material, 3/4 inch wide, and 900 lb. break strength. Color to be Green. Product to be ArborTie manufactured by Deep Root Partners, L.P. or approved equal.		plant.
B. Stakes shall be lodge pole stakes free of knots and of diameters and lengths appropriate to the size of plant as required to adequately support the plant.		K. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section Planting Soil, for requirements to modify the soil within the planting bed.
C. Below ground anchorage systems to be constructed of 2 x 2 dimensional untreated wood securing (using 3 inch long screws) horizontal portions to 4 feet long vertical stakes driven straight into the ground outside the root ball.		L. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six-inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the trace and aliminate uside DO NOT support the backfill or use machinical or provided to the trace and aliminate uside DO NOT support the backfill or use machinical or provided to the trace and aliminate uside DO NOT support the backfill or use machinical or provided to the trace and aliminate uside DO NOT support the backfill or use machinical or provided to the trace and aliminate uside DO NOT support to backfill or use machinical or provided to the trace and aliminate uside DO NOT support to backfill or use machinical or provided to the trace and aliminate uside DO NOT support to backfill or use machinical or provided to the trace and aliminate uside DO NOT support to backfill or use machinical or provided to the trace and aliminate uside DO NOT support to backfill or use machinical or provided to the trace and aliminate uside DO NOT support to the trace and aliminate uside DO NOT support to the trace and aliminate uside DO NOT support to the trace and aliminate uside DO NOT support to the trace and the trace and aliminate uside DO NOT support to the trace and the
D. Submit manufacturer's product data for approval.		equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field
E. Plastic tree watering bags holding a minimum of 15 gallons of water and with a slow drip hole(s) water release		capacity.
system, specifically designed to water establishing trees. Water should release over a several day period, not within a few hours		ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated
<ul><li>F. Watering bags shall be:</li><li>1. Treegator Irrigation Bags sized to the appropriate model for the requirements of the plant manufactured by</li></ul>		and backfill continued until the planting soil is brought to grade level. M. Where indicated on the drawings, build a 4 inch high. level berm of Planting Soil around the outside of the root ball to
Spectrum Products, Inc., Youngsville, NC 27596.		retain water. Tamp the berm to reduce leaking and erosion of the saucer.
<ol> <li>Solutions, Atlanta, GA.</li> <li>Or approved equal</li> </ol>		<ul> <li>O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative instructions. The Owner's Representative instructions.</li> </ul>
C. Submit manufacturer's product data for approval.		P. Remove corrugated cardboard trunk protection after planting.
T 3 EXECUTION	3 Q	Q. Follow additional requirements for the permitted root ball packages.
	0.0	A. The following are permitted root ball packages and special planting requirements that shall be followed during the planting process in addition to the above General planting requirements.
DELIVERY, STORAGE AND HANDLING A. Protect materials from deterioration during delivery and storage. Adequately protect plants from drving out, exposure		B. BALLED AND BURLAPPED PLANTS

away; do not fold down onto the Planting Soil.	
--	--

- 2. If the plant is shipped with a wire basket that does not meet the requirements of a "Low Rise" basket, i top 6 - 8 inches of the basket wires just before the final backfilling of the tree. 3. Earth root balls shall be kept intact except for any modifications required by the Owner's Representativ
- root package comply with the requirement in Part 2 Products.
- C. SPADE HARVESTED AND TRANSPLANTED PLANTS
- 1. After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil of radius from the root ball edge equal to the diameter of the root ball to a depth of 8 - 10 inches by hand disturb the soil interface.
- 2. Fill any gaps below this level with loose soil.
- D. CONTAINER (INCLUDES BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS 1. This specification assumes that most container plants have significant stem girdling and circling roots, root collar is too low in the root ball.
- 2. Remove the container.
- 3. Perform root ball shaving as defined in Installation of Plants: General above.
- 4. Remove all roots and substrate above the root collar and the main structural roots according to root co details so root system conforms to root observations detail.
- 5. Remove all substrate at the bottom of the root ball that does not contain roots.
- 6. Using a hose, power washer or air excavation device, wash out the substrate from around the trunk and remaining root ball and find and remove all stem girdling roots within the root ball above the top of the

## E. BARE ROOT PLANTS

- 1. Dig the planting hole to the diameter of the spread of the roots to a depth in the center that maintains t collar at the elevation of the surrounding finished grade and slightly deeper along the edges of the hole 2. Spread all roots out radial to the trunk in the prepared hole making the hole wider where needed to acc long roots. Root tips shall be directed away from the trunk. Prune any broken roots removing the least tissue possible.
- 3. Maintain the trunk plumb while backfilling soil around the roots.
- 4. Lightly tamp the soil around the roots to eliminate voids and reduce settlement. .9 GROUND COVER, PERENNIAL AND ANNUAL PLANTS
- A. Assure that soil moisture is within the required levels prior to planting. Irrigation, if required, shall be applied 12 hours prior to planting to avoid planting in muddy soils.
- B. Assure that soil grades in the beds are smooth and as shown on the plans.
- C. Plants shall be planted in even, triangularly spaced rows, at the intervals called out for on the drawings, ur otherwise noted. The first row of Annual flower plants shall be 6 inches from the bed edge unless otherwis
- D. Dig planting holes sufficiently large enough to insert the root system without deforming the roots. Set the t root system at the grade of the soil. E. Schedule the planting to occur prior to application of the mulch. If the bed is already mulched, pull the mul
- around the hole and plant into the soil. Do not plant the root system in the mulch. Pull mulch back so it is r root ball surface.
- F. Press soil to bring the root system in contact with the soil.
- G. Spread any excess soil around in the spaces between plants.
- H. Apply mulch to the bed being sure not to cover the tops of the plants with or the tops of the root ball with n I. Water each planting area as soon as the planting is completed. Apply additional water to keep the soil mo required levels. Do not over water.
- .10 PALM PLANTING
- A. Palm trees shall be placed at grade making sure not to plant the tree any deeper in the ground than the pa originally stood.
- B. The trees shall be placed with their vertical axis in a plumb position.
- C. All backfill shall be native soil except in cases where planting in rock. Water-settle the back fill.
- D. Do not cover root ball with mulch or topsoil. E. Provide a watering berm at each palm. Berms shall extend a minimum of 18 inches out from the trunk all a
- shall be a minimum of (6) inches high F. Remove twine which ties fronds together after placing palm in planting hole and securing it in the upright p
- 11 STAKING AND GUYING
- A. Do not stake or guy trees unless specifically required by the Contract Documents, or in the event that the feels that staking is the only alternative way to keep particular trees plumb. 6. The Owner's Representative shall have the authority to require that trees are staked or to reject staking alternative way to stabilize the tree
- 7. Trees that required heavily modified root balls to meet the root quality standards may become unstabl Owner's Representative may choose to reject these trees rather than utilize staking to temporarily sup B. Trees that are gived shall have their gives and stakes removed after one full growing season or at other
- required by the Owner's Representative C. Tree guying shall utilize the tree staking and guying materials specified. Guying to be tied in such a manne create a minimum 12-inch loop to prevent girdling. Refer to manufacturer's recommendations and the plan
- for installation
- 1. Plants shall stand plumb after staking or guying. 2. Stakes shall be driven to sufficient depth to hold the tree rigid.
- D. For trees planted in planting mix over waterproofed membrane, use dead men buried 24 inches to the top man, in the soil. Tie the guy to the dead man with a double wrap of line around the dead man followed by half hitch. When guys are removed, leave the dead men in place and cut the guy tape 12 inches above the leaving the tape end covered in mulch.
- .12 STRAIGHTENING PLANTS
- A. Maintain all plants in a plumb position throughout the warranty period. Straighten all trees that move out o including those not staked. Plants to be straightened shall be excavated and the root ball moved to a plum and then re-backfilled
- B. Do not straighten plants by pulling the trunk with guys.
- .13 INSTALLATION OF FERTILIZER AND OTHER CHEMICAL ADDITIVES
- A. Do not apply any soluble fertilizer to plantings during the first year after transplanting unless soil test deter fertilizer or other chemical additives is required. Apply chemical additives only upon the approval of the Ov Representative
- B. Controlled release fertilizers shall be applied according to the manufacturer's instructions and standard ho practices.
- .14 PRUNING OF TREES AND SHRUBS
- A. Prune plants as directed by the Owner's Representative. Pruning trees shall be limited to addressing stru defects as shown in details: follow recommendations in "Structural Pruning: A Guide For The Green Indus published by Urban Tree Foundation, Visalia CA.
- B. All pruning shall be performed by a person experienced in structural tree pruning.
- C. Except for plants specified as multi-stemmed or as otherwise instructed by the Owner's Representative, p create a central leader
- D. Pruning of large trees shall be done using pole pruners or if needed, from a ladder or hydraulic lift to gain the top of the tree. Do not climb in newly planted trees. Small trees can be structurally pruned by laying th before planting. Pruning may also be performed at the nursery prior to shipping.
- E. Remove and replace excessively pruned or malformed stock resulting from improper pruning that occurred nursery or after.
- F. Pruning shall be done with clean, sharp tools.
- G. No tree paint or sealants shall be used.
- .15 MULCHING OF PLANTS
- A. Apply 3 inches of mulch before settlement, covering the entire planting bed area. Install no more than 1 in over the top of the root balls of all plants. Taper to 2 inches when abutting pavement B. For trees planted in lawn areas the mulch shall extend to a 5 foot radius around the tree or to the extent in
- the plans. C. Lift all leaves, low hanging stems and other green portions of small plants out of the mulch if covered.
- .16 PLANTING BED FINISHING
- A. After planting, smooth out all grades between plants before mulching.
- B. Separate the edges of planting beds and lawn areas with a smooth, formed edge cut into the turf with the level slightly lower, 1 and 2 inches, than the adjacent turf sod or as directed by the Owner's Representativ lines shall be a depicted on the drawings.
- .17 WATERING
- A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants from the p installation until the date of Substantial Completion Acceptance. The Contractor shall adjust the automatic system, if available, and apply additional or adjust for less water using hoses as required
- B. Hand water root balls of all plants to assure that the root balls have moisture above wilt point and below fi Test the moisture content in each root ball and the soil outside the root ball to determine the water content
- .18 CLEAN-UP
- A. During installation, keep the site free of trash, pavements reasonably clean and work area in an orderly co the end of each day. Remove trash and debris in containers from the site no less than once a week.
- 1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor fro surfaces within the project or on public right of ways and neighboring property.
- 1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap

		B. Once installation is complete, wash all soil from payements and other structures. Ensure that mulch is confined to	
remove the		planting beds and that all tags and flagging tape are removed from the site. The Owner's Representative's seals are to remain on the trees and removed at the end of the warranty period.	
ve to make		<ul><li>C. Make all repairs to grades, ruts, and damage by the plant installer to the work or other work at the site.</li><li>D. Remove and dispose of all excess planting soil, subsoil, mulch, plants, packaging, and other material brought to the</li></ul>	
out to a	3.19	site by the Contractor. PROTECTION DURING CONSTRUCTION	
i algging to		A. The Contractor shall protect planting and related work and other site work from damage due to planting operations, operations by other Contractors or trespassers. Maintain protection during installation until Substantial Completion Acceptance. Treat, repair or replace damaged work immediately.	V. West
, and that the		B. Damage done by the Contractor, or any of their sub-contractors to existing or installed plants, or any other parts of the work or existing features to remain, including roots, trunk or branches of large existing trees, soil, paving, utilities, lighting, irrigation, other finished work and surfaces including those on adjacent property, shall be cleaned, repaired or	
	3.20	replaced by the Contractor at no expense to the Owner. The Owner's Representative shall determine when such cleaning, replacement or repair is satisfactory. PLANT MAINTENANCE PRIOR TO SUBSTANTIAL COMPLETION ACCEPTANCE	P-094C
orrection	0.20	<ul> <li>A. During the project work period and prior to Substantial Completion Acceptance, the Contractor shall maintain all plants.</li> </ul>	odee
nd top of the structural		B. Maintenance during the period prior to Substantial Completion Acceptance shall consist of pruning, watering, cultivating, weeding, mulching, removal of dead material, repairing and replacing of tree stakes, tightening and repairing of guys, repairing and replacing of damaged tree wrap material, resetting plants to proper grades and upright position, and furnishing and applying such sprays as are necessary to keep plantings reasonably free of damaging insects and disease, and in healthy condition. The threshold for applying insecticides and herbicide shall follow established Integrated Pest Management (IPM) procedures. Mulch areas shall be kept reasonably free of	plannin phone: { www.
the root e.	3.21	weeds, grass. SUBSTANTIAL COMPLETION ACCEPTANCE	Consultants:
commodate amount of		A. Upon written notice from the Contractor, the Owners Representative shall review the work and make a determination if the work is substantially complete.	
		<ol> <li>Notification shall be at least 7 days prior to the date the contractor is requesting the review.</li> <li>The date of substantial completion of the planting shall be the date when the Owner's Representative accepts that all</li> </ol>	
		<ul> <li>work in Planting, Planting Soil, and Irrigation installation sections is complete.</li> <li>C. The Plant Warranty period begins at date of written notification of substantial completion from the Owner's</li> <li>Percentative The date of substantial completion may be different than the date of substantial completion for the owner's</li> </ul>	
ed at least	3.22	other sections of the project. MAINTENANCE DURING THE WARRANTY PERIOD by others	
Inless		A. After Substantial Completion Acceptance, the Contractor shall make sufficient site visits to observe the Owner's maintenance and become aware of problems with the maintenance in time to request changes, until the date of End	
top of the		of Warranty Final Acceptance. 1. Notify the Owner's Representative in writing if maintenance, including watering, is not sufficient to maintain plants	Revisions: 10/28/2021 - Per Comments
Ilch from not on the		in a healthy condition. Such notification must be made in a timely period so that the Owner's Representative may take corrective action. a. Notification must define the maintenance needs and describe any corrective action required.	03/15/2022 - Per Site Plan
		<ol> <li>In the event that the Contractor fails to visit the site and or notify, in writing, the Owner's Representative of maintenance needs, lack of maintenance shall not be used as grounds for voiding or modifying the provisions of</li> </ol>	11/04/2022 - Per Comments
mulch.	3.23	the warranty. MAINTENANCE DURING THE WARRANTY PERIOD by the plant installer	
oisture at the		A. During the warranty period, provide all maintenance for all plantings to keep the plants in a healthy state and the planting areas clean and neat.	
alm trees		<ul> <li>B. General requirements:</li> <li>1. All work shall be undertaken by trained planting crews under the supervision of a foreman with a minimum of 5</li> </ul>	
		years experience supervising commercial plant maintenance crews. 2. All chemical and fertilizer applications shall be made by licensed applicators for the type of chemicals to be used. All work and chemical use shall comply with all applicable local, provincial and federal requirements.	
		<ol> <li>Assure that hoses and watering equipment and other maintenance equipment does not block paths or be placed in a manner that may create tripping hazards. Use standard safety warning barriers and other procedures to maintain</li> </ol>	
around and		the site in a safe manner for visitors at all times. 4. All workers shall wear required safety equipment and apparel appropriate for the tasks being undertaken.	
position.		<ol><li>The Contractor shall not store maintenance equipment at the site at times when they are not in use unless authorized in writing by the Owner's Representative.</li></ol>	
Contractor		<ol><li>Maintenance vehicles shall not park on the site including walks and lawn areas at any time without the Owner's Representative's written permission.</li></ol>	
ng as an		7. Maintain a detailed log of all maintenance activities including types of tasks, date of task, types and quantities of materials and products used, watering times and amounts, and number of each crew. Periodically review the logs with the Owner's Representative, and submit a copy of the logs at the end of each year of the maintenance	
e. The port the tree.		agreement. 8. Meet with the Owner's Representative a minimum of three times a year to review the progress and discuss any	
ner as to		changes that are needed in the maintenance program. At the end of the warranty period attend a hand over meeting to formally transfer the responsibilities of maintenance to the Owner's Representative. Provide all information on past maintenance activities and provide a list of critical tasks that will be needed over the next 12 months. Provide all maintenance logs and soil test data. Make the Contractor's supervisor available for a minimum	
5		of one year after the end of the warranty period to answer questions about past maintenance. C. Provide the following maintenance tasks:	D D
o of the dead		1. Watering; Provide all water required to keep soil within and around the root balls at optimum moisture content for plant growth.	
a double ne ground,		<ul> <li>a. Maintain all watering systems and equipment and keep them operational.</li> <li>b. Monitor soil moisture to provide sufficient water. Check soil moisture and root ball moisture with a soil moisture meter on a regular basis and record moisture readings. Do not over water.</li> </ul>	
<b>f</b> a baach		<ol><li>Soil nutrient levels: Take a minimum of 4 soil samples from around the site in the spring and fall and have them tested by an accredited agricultural soil testing lab for chemical composition of plant required nutrients, pH, salt</li></ol>	
nb position,		and % organic matter. Test results shall include laboratory recommendations for nutrient applications. Apply fertilizers at rates recommended by the soil test. a. Make any other soil test and/or plant tissue test that may be indicated by plant conditions that may not be	
		related to soil nutrient levels such as soil contaminated by other chemicals or lack of chemical uptake by the plant.	
rmines that wner's		<ol><li>Plant pruning: Remove cross over branching, shorten or remove developing co dominant leaders, dead wood and winter-damaged branches. Unless directed by the Owner's Representative, do not shear plants or make heading cuts.</li></ol>	
orticultural		<ol> <li>Restore plants: Reset any plants that have settled or are leaning as soon as the condition is noticed.</li> <li>Guying and staking: Maintain plant guys in a taught position. Remove tree guys and staking after the first full growing access unlose directed by Ouror's Representative.</li> </ol>	
ctural stry"		<ol> <li>Weed control: Keep all beds free of weeds. Hand-remove all weeds and any plants that do not appear on the planting plan. Chemical weed control is permitted only with the approval of the Owner's Representative. Schedule</li> </ol>	Ri-
		<ol> <li>Trash removal: Remove all trash and debris from all planting beds and maintain the beds in a neat and tidy appearance.</li> </ol>	
preserve or		8. Plant pest control: Maintain disease, insects and other pests at manageable levels. Manageable levels shall be defined as damage to plants that may be noticeable to a professional but not to the average person. Use least	
access to nem over		a. The Owner's Representative must approve in advance the use of all chemical pesticide applications.	
ed in the		<ol> <li>Plant replacement: Replace all plants that are defective as defined in the warranty provisions, as soon as the plant decline is obvious and in suitable weather and season for planting as outlined in above sections. Plants that become defective during the maintenance period shall be covered and replaced under the warranty provisions.</li> <li>Mulch: Refresh mulch are a year to maintain complete coverage but do not over mulch. At no time shall the</li> </ol>	Brian Terry
		overall mulch thickness be greater that 3 inches. Do not apply mulch within 6 inches of the trunks or stems of any plants. Replacement mulch shall meet the requirements of the original approved material. Mulch shall be no more	LA 6666978
nch of mulch		11.Bed edging: Check and maintain edges between mulch and lawn areas in smooth neat lines as originally shown on the drawings.	Digitally signed by
ndicated on		12.Leaf, fruit and other plant debris removal: Remove fall leaf, spent flowers, fruit and plant part accumulations from beds and paved surfaces. Maintain all surface water drains free of debris. Debris removal shall be undertaken at	Brian Terry LA 6666978
		each visit to weed or pick up trash in beds. 13.Damage from site use: Repair of damage by site visitors and events, beyond normal wear, are not part of this maintenance. The Owner's Representative may request that the Contractor repair damage beds or plantings for an additional cost. All additional work shall be approved in advance by the Owner's Representative	Date: 2022.11.04
e bed mulch ve. Bed edge	3.27	END OF WARRANTY FINAL ACCEPTANCE / MAINTENANCE OBSERVATION	Always CALL & LI TWO FULL RUGINESS DAVE REFORE YOU DID TO
		<ul> <li>A. At the end of the warranty and Maintenance period the Owner's Representative shall observe the work and establish that all provisions of the contract are complete and the work is satisfactory.</li> <li>If the work is satisfactory, the maintenance period will end on the date of the final observation.</li> </ul>	
point of c irrigation		<ol> <li>If the work is deemed unsatisfactory, the maintenance period will continue at no additional expense to the Owner until the work has been completed, observed, and approved by the Owner's Representative.</li> </ol>	DUULSUUU HOU LUU
ield capacity. nt.		B. FAILURE TO PASS OBSERVATION: If the work fails to pass final observation, any subsequent observations must be rescheduled as per above. The cost to the Owner for additional observations will be charged to the Contractor at the providing house value of the Owner of Provide the Contractor.	Drawn By: SMT Drawing #: 1146
ondition at	END	prevailing nourly rate of the Owners Representative. OF SECTION 32 9300	Date: 07/16/2021
rom all			SPECIFICATIONS
			$  \mathbf{J} \mathbf{H} \mathbf{E} \mathbf{I} \mathbf{H} \mathbf{H} \mathbf{I} \mathbf{I} \mathbf{J} \mathbf{J} \mathbf{H} \mathbf{E} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} I$







# HATCH LEGEND





EASEMENT TO BE VACATED

EASEMENT TO BE REDEDICATED

ALL ELEVATIONS PROVIDED REFLECT THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD88)





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LUMIN	AIRE	SCH	EDULE						
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	705	24	701948- 5W-WT-M150 -P2-601106	SLOAN MODUS PDL3 PETROLEUM CANOPY LED LUMINAIRE WHITE FINISH	LEDS.	701948-5WT WT3-M150.IES	Absolute	0.70	118.5
	705B	9	701948- 5W-BZ-M150 -P2-601106	SLOAN MODUS PDL3 PETROLEUM CANOPY LED LUMINAIRE BRONZE FINISH	LEDS.	701948-5BZ WT3-M150.IES	Absolute	0.70	118.5
0	101EM	4	A2/B1-05	WITH BLACK TRIM AND RECESSED WHITE PLASTIC LENS	LEDS. LUMEN RATING = 648 LMS.	LR6.IES	647	1.00	11.5
$\bigcirc$	507	9	RADPTLED-P3 -40K-SYM-MVOLT -RADPT20-FAO -DDBXD	RADEAN POST TOP LED AREA LUMINAIRE FROSTED GLASS DIFFUSER;	LEDS.	RADPT_P3_40K _SYM.IES	7303	1.00	54
Ô	702	10	RSX2 LED-P6 -40K-R4-MVOLT -RPA-DDBXD	LITHONIA - RSX2 OUTDOOR LED AREA LIGHT (SHIELDED)	LEDS.	RSX2_LED_ P6_40K_R4.IES	Absolute	1.00	244
Û	501	3	ARC2-LED-P5-40K -MVOLT-DDBXD	LITHONIA WALL LUMINAIRE (ARC2)	LEDS.	ARC2_LED_P4 _40K.IES	Absolute	1.00	51
Â	502	4	ARC2-LED-P4-40K -MVOLT-DDBXD	LITHONIA WALL LUMINAIRE (ARC2)	LEDS.	LSI XWM-FT-LED -04-50.IES	Absolute	1.00	30

## STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Beyond Property Line	+	0.5 fc	2.1 fc	0.0 fc	N / A	N / A
Non-EDO Canopy 1	+	31.4 fc	37.5 fc	18.7 fc	2.0:1	1.7:1
Site	+	4.3 fc	37.5 fc	0.1 fc	375.0:1	43.0:1
Vehicle	ж	4.7 fc	26.5 fc	0.1 fc	265.0:1	47.0:1
Property Line	+	0.9 fc	2.5 fc	0.1 fc	25.0:1	9.0:1
EDO Canopy	+	39.5 fc	51.3 fc	25.8 fc	2.0:1	1.5:1





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## GENERAL NOTES

- ALL FIXTURES UTILIZED IN THIS SITE PHOTOMETRIC PLAN ARE FULL CUTOFF.
- 2. MOUNT AREA LUMINAIRE TYPE '702' AT 28'-0" AFG (INCLUDING POLE BASE)
- . MOUNT AREA LUMINAIRE TYPE '702 IN EDO AREA AT 33'-0" AFG (INCLUDING POLE BASE)
- FILE NUMBERS PROVIDED FOR PHOTOMETRY REFERENCE ONLY. CATALOG NUMBERS SHALL BE UTILIZED FOR ORDERING FIXTURES.
- 5. COLOR TEMPERATURE OF FIXTURES SHALL BE PROVIDED AS FOLLOWS
- 5.1. AREA LIGHTING 5700K 5.2. BUILDING MOUNTED 5700K 5.3. DECORATIVE POLE 5000K
- GHTS 4000K

5.4. 5.5.	CANOPY - 5700K CANOPY DOWNLIG

	۵. (4. (4. (4. (4. (4. (4. (4. (4. (4. (4		ISSUE/REVISION RECORD DATE DESCRIPTION
	+ + + + + + + <u>MATCHLINE SP-2</u> + + + + + <u>MATCHLINE SP-2</u> + + + + + + + + + + + + + + + + + + +	+ • · · · + +	10/14/21 PHOTOMETRIC PLAN 02/08/22 PHOTOMETRIC UPDATE
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+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ 0.3 0.2 _0.2 _0.2	
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$ \begin{array}{c} + + + + + + + + + + + + + + + + + + +$	+7.9 $+6.9$ $+5.5$ $+2.8$ $+2.4$ $+2.2$ $+1.6$ $+12$ $+0.9$ $+0.7$ $+0.5$ $+0.4$	-0.3 + 0.2 + 0.2	
+ 3.7 + 3.6 + 3.5 + 3.3 + 2.7 + 2.6 + 2.6 + 2.8 + 3.4 + 4.0 + 4.2 + 3.4 + 2.7 + 5.0 + 5.4 + 6.0 + 6.7 + 7.2 + 7.2 + 7.4 + 7	+7.0 $+5.8$ $+4.7$ $+3.4$ $+2.8$ $+2.3$ $+1.8$ $+14$ $+1.0$ $+0.8$ $+0.6$ $+0.4$		
$+ \frac{3.8}{4} + \frac{3.6}{4} + \frac{3.6}{4} + \frac{3.4}{4} + \frac{3.4}{4} + \frac{3.4}{4} + \frac{3.9}{4} + $	$+\frac{5.9}{4.9}$ $+\frac{3.9}{4.9}$ $+^{3.4}$ $+^{2.9}$ $+^{2.4}$ $+^{1.8}$ $+^{1.3}$ $+^{1.0}$ $+^{0.8}$ $+^{0.6}$ $+^{0.5}$	<sup>0.4</sup> 0.3 + <sup>0.3</sup> + <sup>0.2</sup>	
$ + \frac{4.0}{7.1} + \frac{3.6}{4} + \frac{7.5}{7.5} + \frac{3.1}{4} + \frac{2.9}{2.7} + \frac{2.7}{1.4} + \frac{1.6}{1.6} + \frac{1.8}{2.7} + \frac{3.1}{5.7} + \frac{5.4}{5.4} + \frac{3.1}{5.7} + \frac{5.4}{5.7} + \frac$	$^{\prime}$ + <sup>5.0</sup> + <sup>4.3</sup> + <sup>3.7</sup> + <sup>3.5</sup> + <sup>3.0</sup> + <sup>2.4</sup> + <sup>1.7</sup> + <sup>1.2</sup> + <sup>0.9</sup> + <sup>0.7</sup> + <sup>0.6</sup> + <sup>0.4</sup>	<sup>0.4</sup> 0.3 + <sup>0.3</sup> + <sup>0.2</sup>	
$+^{4.2} +^{3.6} +^{3.3} +^{3.2} +^{3.0} +^{7.7} +^{7.6} +^{3.1} +^{7.7} +^{7.6} +^{7.7} +^{7.7} +^{7.6} +^{7.7} +^{7.7} +^{7.6} +^{7.7} +^{7.7} +^{7.6} +^{7.7} +^{7$	$+ \frac{4.4}{4} + \frac{4.1}{4} + \frac{3.9}{4} + \frac{3.7}{4} + \frac{3.1}{4} + \frac{2.3}{4} + \frac{1.5}{4} + \frac{11}{4} + \frac{0.9}{4} + \frac{0.7}{4} + \frac{0.6}{4} + \frac{0.4}{4}$	-10.4 $0.3$ $+0.3$ $+0.2$	RaceTrac.
$+^{4.4} +^{3.7} +^{3.2} +^{2.9} +^{2.7} +^{7.2} +^{6.7} +^{5.9} +^{5.2} +^{4.8} +^{4.5} +^{4.5} +^{4.6} +^{4.7} +^{4.6} +^{4.4} +^{4.6} +^{4.7} +^{4.6} +^{4$	+ + 4.2 + 4.2 + 4.3 + 4.1 + 3.3 + 2.3 + 1.3 + 10 + 0.9 + 0.7 + 0.6 + 0.4	$+^{0.4}$ $+^{0.3}$ $+^{0.3}$ $+^{0.2}$	RACETRAC PETROLEUM, INC.
$+^{4.4} +^{3.7} +^{3.1} +^{2.7} +^{2.5}$	3 + 4.3 + 4.7 + 4.9 $+ 4.7 + 3.6 + 2.3 + 1.4 + 10 + 0.9 + 0.7 + 0.6 + 0.5$	<sup>0.4</sup> 0.4 + <sup>0.3</sup> + <sup>0.3</sup>	200 GALLERIA PARKWAY SOUTHEAST SUITE 900
$+^{4.3} +^{3.6} +^{3.0} +^{2.6} +^{2.4} +^{9.3} +^{10.3} +^{9.3} +^{10.3} +^{9.2} +^{9.4} +^$	5 + 4.9 + 5.4 + 5.6 + 5.4 + 3.9 + 2.5 + 1.3 + 1.1 + 0.9 + 0.8 + 0.6 + 0.5	-+ <sup>0.5</sup> 0.4 + <sup>0.3</sup> + <sup>0.3</sup>	ATLANTA, GEORGIA 30339 (770) 431-7600
$ + ^{4.1} + ^{3.4} + ^{3.0} + ^{2.7} + ^{2.5} + ^{2.0} + ^{2.0} + ^{2.1} + ^{2.4} + ^{2.9} + ^{4.7} + ^{8.2} + ^{9.5} + ^{8.2} + ^{7.9} + ^{7.8} + ^{8.1} + ^{7.9} + ^{8.0} + ^{8.4} + ^{8.4} + ^{7.9} + ^{9.1} + ^{7.9} $	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	-+ <sup>0.5</sup> _0.4 + <sup>0.4</sup> + <sup>0.3</sup>	
+ <sup>3.9</sup> + <sup>3.3</sup> + <sup>3.0</sup> + <sup>2.7</sup> + <sup>2.5</sup> + <sup>2.5</sup> + <sup>2.5</sup> + <sup>2.5</sup> + <sup>2.5</sup> + <sup>2.5</sup> + <sup>3.0</sup> + <sup>4.5</sup> + <sup>6.8</sup> + <sup>7.6</sup> + <sup>6.5</sup> + <sup>6.4</sup> + <sup>8.8</sup> + <sup>9.0</sup> + <sup>7.2</sup> + <sup>6.9</sup> + <sup>6.9</sup> + <sup>8.9</sup> + <sup>9.0</sup> + <sup>7.1</sup> + <sup>6.4</sup> + <sup>8.2</sup> + <sup>8.6</sup> + <sup>8.2</sup> + <sup>8.6</sup> + <sup>8.3</sup> + <sup>6.7</sup> + <sup>6.6</sup> + <sup>8.8</sup> + <sup>8.9</sup> + <sup>7.1</sup> + <sup>6.9</sup> + <sup>6.8</sup> + <sup>8.9</sup> + <sup>6.7</sup> + <sup>5.7</sup> + <sup>6.9</sup> + <sup>6.4</sup> + <sup>4.5</sup>	6.5 + 6.5 + 7.3 + 7.5 + 6.6 + 4.6 + 3.0 + 1.7 + 1.4 + 1.2 + 1.1 + 0.9 + 0.7	$+^{0.5}$ $+^{0.4}$ $+^{0.3}$	RECINE &
+ 3.6 + 3.2 + 3.0 + 2.7 + 2.6 + 2.5 + 2.2 + 2.3 + 2.5 + 3.1 + 4.0 + 5.4 + 6.4 + 6.4 + 6.4 + 6.9 + 8.6 + 8.9 + 7.8 + 7.5 + 8.9 + 8.9 + 7.5 + 8.9 + 8.1 + 8.5 + 8.2 + 7.1 + 7.1 + 8.7 + 8.9 + 7.8 + 7.4 + 8.8 + 8.7 + 7.0 + 6.0 + 5.1 + 4.3 + 3.8 + 3.7	2 + 7.4 + 8.3 + 8.3 + 7.2 + 5.0 + 3.2 + 1.9 + 1.6 + 1.4 + 1.2 + 1.0 + 0.7	$+^{0.5}$	
+3.4 $+3.1$ $+2.9$ $+2.7$ $+2.6$ $+2.5$ $+2.3$ $+2.3$ $+2.3$ $+2.5$ $+3.0$ $+3.7$ $+3.6$ $+3.7$ $+3.6$ $+5.6$ $+6.5$ $+7.2$ $+7.7$ $+8.0$ $+8.0$ $+8.0$ $+7.7$ $+7.4$ $+7.4$ $+7.4$ $+7.4$ $+7.4$ $+7.6$ $+8.0$ $+8.1$ $+8.0$ $+7.8$ $+7.2$ $+6.0$ $+5.3$ $+4.6$ $+4.0$ $+3.6$ $+3.5$ $+3.6$ $+3.7$ $+$	+7.8 $+8.7$ $+8.7$ $+8.7$ $+2.9$ $+2.6$ $+2.0$ $+1.6$ $+1.5$ $+1.3$ $+1.0$ $+0.7$	$+^{0.5}$	
+32 + 30 + 28 + 2.7 + 2.5 + 2.5 + 2.5 + 2.5 + 2.3 + 2.5 + 2.8 + 3.3 + 3.9 + 4.6 + 5.4 + 5.9 + 6.3 + 6.4 + 6.5 + 6.5 + 6.4 + 6.5 +	$\begin{array}{c} +7.5 +8.4 +8.4 \\ +7.5 +8.4 +8.4 \\ +7.5 +5.1 +3.2 +1.9 +1.5 \\ +7.5 +1.4 +1.2 +0.9 +0.7 \\ -7.5 +1.4 +1.2 +0.9 +0.7 \\ -7.5 +1.4 +1.2 +0.9 \\ +7.5 +1.4 \\ +7.5 +$	$+^{0.5}_{-0.5}$ $+^{0.4}_{-0.3}$ $+^{0.3}_{-0.5}$	
+ 2.9 + 2.8 + 2.7 + 2.6 + 2.5 + 2.4 + 2.6 + 2.9 + 3.3 + 2.4 + 2.6 + 2.9 + 3.3 + 3.7 + 4.3 + 4.6 + 4.8 + 4.9 + 5.0 + 5.1 + 5.0 + 4.9 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.8 + 4.9 + 5.0 + 5.1 + 5	$+^{6.9}$ + <sup>7.6</sup> + <sup>7.8</sup> + <sup>6.9</sup> + <sup>4.9</sup> + <sup>3.0</sup> + <sup>1.7</sup> + <sup>1.3</sup> + <sup>1.2</sup> + <sup>1.0</sup> + <sup>0.8</sup> + <sup>0.6</sup>	-10.5 0.4 $+0.3$ $+0.3$	<b>RIVIERA BEACH</b>
+ <sup>2.7</sup> + <sup>2.6</sup> + <sup>2.6</sup> + <sup>2.5</sup> + <sup>2.4</sup> + <sup>2.4</sup> + <sup>2.4</sup> + <sup>2.4</sup> + <sup>2.4</sup> + <sup>2.5</sup> + <sup>2.7</sup> + <sup>2.9</sup> + <sup>3.2</sup> + <sup>3.4</sup> + <sup>3.6</sup> + <sup>3.8</sup> + <sup>3.8</sup> + <sup>3.9</sup> + <sup>4.1</sup> + <sup>4.2</sup> + <sup>4.2</sup> + <sup>4.2</sup> + <sup>4.2</sup> + <sup>4.2</sup> + <sup>4.1</sup> + <sup>4.1</sup> + <sup>4.2</sup> + <sup>4.3</sup> + <sup>4.4</sup> + <sup></sup>	$ \begin{array}{c} 5 \\ +6.3 \\ +6.9 \\ +7.1 \\ +6.5 \\ +6.5 \\ +6.6 \\ +2.8 \\ +1.5 \\ +1.1 \\ +0.9 \\ +0.8 \\ +0.7 \\ +0.6 \\ +0.6 \\ +0.7 \\ +0.6 \\ +0.6 \\ +0.7 \\ +0.6 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.8 \\ +0.7 \\ +0.8 \\ +0.8 \\ +0.8 \\ +0.7 \\ +0.8$	$+^{0.5}$	FLORIDA 33418
+2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.4 + 2.5 + 2.6 + 2.8 + 3.0 + 3.2 + 3.4 + 3.7 + 3.9 + 4.1 + 4.2 + 4.3 + 4.3 + 4.3 + 4.4 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.6	$+^{5.9}$ $+^{6.3}$ $+^{6.3}$ $+^{6.5}$ $+^{6.1}$ $+^{4.4}$ $+^{2.7}$ $+^{1.3}$ $+^{0.9}$ $+^{0.8}$ $+^{0.6}$ $+^{0.6}$ $+^{0.5}$	$+^{0.4}$ $+^{0.3}$ $+^{0.2}$	
+ + + + + + + + + + + + + + + + + + +	2 + 5.6 + 5.9 + 6.0 $+ 5.7 + 4.2 + 2.6 + 1.3 + 0.9$ $+ 0.7 + 0.6 + 0.5 + 0.4$	-10.3 + 0.3 + 0.2 + 0.2	
$ \begin{array}{c} \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $	$+^{5.5}$ $+^{5.8}$ $+^{5.4}$ $+^{5.4}$ $+^{4.1}$ $+^{2.5}$ $+^{1.2}$ $+^{0.8}$ $+^{0.6}$ $+^{0.5}$ $+^{0.4}$ $+^{0.3}$	$+^{0.3}$ $^{0.3}$ $+^{0.2}$ $+^{0.2}$	HINC N
+ 17 + 17 + 24 + 25 + 25 + 25 + 25 + 25 + 25 + 25	$+ \frac{1}{2} + $		#1404
+10 + 11 + 11 + 10 + 10 + 10 + 10 + 10	+ .5.6 .5.8 .5.8 .5.4 .4.1 .2.5 .1.2 .0.8 .0.6 .0.5 .0.4 .0.3	0.3 0.3 + +	PROTOTYPE SERIES 5.5K 2.0
+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	-10.3 0.3 + 0.3 + 0.2	
$\begin{array}{c} + + + + + + + + + + + + + + + + + + +$	$ \begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & $	+ 0.3 + 0.3 + 0.3 + 0.2	SPB NO. 0113 DATE 02/18/20
$+^{0.7}$	0 6.5 7.0 7.2 $+6.6$ $+4.7$ $+2.8$ $+1.4$ $+1.1$ $+0.9$ $+0.8$ $+0.7$ $+0.5$	$+0.4_{1}0.4$ $+^{0.3}$ $+^{0.2}$	STANDARD PLAN BULLETINS (SPB) MODIFY THE
$+^{0.5} + ^{9}_{+^{1.3}} + ^{2.3} + ^{3.5} + ^{4.6} + ^{5.1} + ^{5.3} + ^{5.2} + ^{4.9} + ^{4.6} + ^{4.5} + ^{4.9} + ^{6.3} + ^{8.8} + ^{13.0} + ^{19.2}$	5 + 7.2 + 7.8 + 7.9 + 7.0 + 4.9 + 3.0 + 1.6 + 1.3 + 1.1 + 1.0 + 0.8 + 0.6	-+ <sup>0.5</sup> ∎ <sup>0.4</sup> + <sup>0.3</sup> + <sup>0.2</sup>	PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS
$+^{0.5} +^{0.7} \times^{1.2}_{1.2}^{1.9} +^{3.1} +^{4.7} +^{5.7} +^{6.3} +^{6.4} +^{6.3} +^{5.9} +^{5.3} +^{5.0} +^{5.2} +^{6.4} +^{8.8} +^{13.0} +^{19.2}$	$3$ 7.8 8.5 8.5 $+^{7.3}$ $+^{5.1}$ $+^{3.2}$ $+^{1.8}$ $+^{1.5}$ $+^{1.3}$ $+^{1.1}$ $+^{0.9}$ $+^{0.7}$	$+^{0.5}$ 0.4 $+^{0.3}$ $+^{0.2}$	PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/REVISION RECORD COLUMN ABOVE
$+^{0.5}$ $+^{0.7}$ $+^{0.14}$ $+^{2.7}$ $+^{4.2}$ $+^{6.0}$ $+^{7.5}$ $+^{7.4}$ $+^{6.8}$ $+^{6.0}$ $+^{5.5}$ $+^{5.5}$ $+^{6.4}$ $+^{8.8}$ $+^{12.8}$ $+^{13.5}$ $+^{35.0}$ $+^{34.1}$ $+^{35.7}$ $+^{36.4}$ $+^{36.5}$ $+^{36.0}$	$+^{7.9}$ + $+^{8.8}$ + $+^{8.8}$ + $+^{2.9}$ + $+^{2.5}$ + $+^{1.9}$ + $+^{1.5}$ + $+^{1.4}$ + $+^{1.2}$ + $+^{0.9}$ + $+^{0.7}$	$+^{0.5}$ 0.4 $+^{0.3}$ $+^{0.2}$	LISTS ANY REVISIONS OR SPB INCORPORATED IN This set after the original release.
$+^{0.6}$ $+^{0.7}$ $+^{1.0}$ $+^{1.4}$ $+^{2.1}$ $+^{3.6}$ $+^{5.5}$ $+^{7.2}$ $+^{8.2}$ $+^{7.5}$ $+^{6.5}$ $+^{5.8}$ $+^{5.6}$ $+^{6.4}$ $+^{8.6}$ $+^{12.5}$ $+^{13.1}$ $+^{24.8}$ $+^{29.6}$ $+^{33.5}$ $+^{33.5}$ $+^{33.5}$ $+^{33.5}$ $+^{33.6}$ $+^{33.7}$ $+^{33.0}$ $+^{33.7}$ $+^{33.6}$ $+^{33.7}$ $+^{33.6}$ $+^{33.5}$ $+^{32.4}$ $+^{32.5}$ $+^{31.3}$ $+^{28.2}$ $+^{23.0}$ $+^{17.0}$ $+^{11.7}$ $+^{8.1}$ $+^{6.0}$ $+^{5.3}$ $+^{5.6}$ $+^{6.5}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$+^{0.5}$ 0.4 $+^{0.3}$ $+^{0.2}$	CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.
$+^{0.6}$ $+^{0.8}$ $+^{1.0}$ $+^{31.6}$ $+^{3.1}$ $+^{4.7}$ $+^{6.8}$ $+^{8.0}$ $+^{8.2}$ $+^{7.5}$ $+^{6.5}$ $+^{5.8}$ $+^{5.6}$ $+^{6.3}$ $+^{8.3}$ $+^{12.1}$ $+^{1.8}$ $+^{24.8}$ $+^{29.8}$ $+^{32.4}$ $+^{33.6}$ $+^{33.5}$ $+^{32.8}$ $+^{33.1}$ $+^{34.4}$ $+^{35.0}$ $+^{33.7}$ $+^{33.0}$ $+^{33.7}$ $+^{34.4}$ $+^{35.0}$ $+^{34.3}$ $+^{33.3}$ $+^{32.2}$ $+^{32.3}$ $+^{33.1}$ $+^{32.6}$ $+^{31.3}$ $+^{28.2}$ $+^{22.9}$ $+^{16.6}$ $+^{11.1}$ $+^{7.6}$ $+^{5.6}$ $+^{4.9}$ $+^{5.1}$ $+^{5.8}$	$+^{6.6}$ + <sup>7.2</sup> + <sup>7.4</sup> + <sup>6.5</sup> + <sup>4.5</sup> + <sup>2.8</sup> + <sup>1.5</sup> + <sup>1.3</sup> + <sup>1.1</sup> + <sup>1.0</sup> + <sup>0.8</sup> + <sup>0.6</sup>	$+^{0.4}$ $+^{0.3}$ $+^{0.2}$	
$+^{0.7}$ $+^{0.9}$ $+^{1.2}$ $+^{1.4}$ $+^{1.4}$ $+^{1.2}$ $+^{2.0}$ $+^{500}$ $+^{7.5}$ $+^{7.0}$ $+^{6.1}$ $+^{5.5}$ $+^{5.4}$ $+^{6.0}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{11.1}$ $+^{16.4}$ $+^{7.8}$ $+^{12.7}$ $+^{7.6}$ $+^{7.8}$ $+^{7.8}$ $+^{7.1}$ $+^{7.8}$ $+^{7.8}$ $+^{7.1}$ $+^{7.8}$ $+^{7.8}$ $+^{7.1}$ $+^{7.8}$ $+^{7.$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$-10.4$ 0.3 $+^{0.3}$ $+^{0.2}$	CENS ALL
$+^{0.8}$ $+^{1.1}$ $+^{1.3}$ $+^{1.5}$ $+^{1.5}$ $+^{1.5}$ $+^{2.9}$ $+^{4.2}$ $+^{5.8}$ $+^{6.6}$ $+^{6.4}$ $+^{5.7}$ $+^{5.2}$ $+^{5.0}$ $+^{5.5}$ $+^{6.9}$ $+^{9.6}$ $+^{13.5}$ $+^{13.1}$ $+^{21.7}$ $+^{23.5}$ $+^{24.4}$ $+^{23.9}$ $+^{24.2}$ $+^{25.7}$ $+^{24.8}$ $+^{24.2}$ $+^{24.6}$ $+^{25.0}$ $+^{24.8}$ $+^{24.7}$ $+^{24.1}$ $+^{23.2}$ $+^{23.2}$ $+^{23.5}$ $+^{24.8}$ $+^{24.7}$ $+^{24.8}$ $+^{24.4}$ $+^{23.9}$ $+^{24.2}$ $+^{24.6}$ $+^{25.7}$ $+^{24.8}$ $+^{24.8}$ $+^{24.8}$ $+^{2$	$^{3}$ + <sup>4.7</sup> + <sup>5.2</sup> + <sup>5.4</sup> + <sup>5.0</sup> + <sup>3.5</sup> + <sup>2.1</sup> + <sup>1.0</sup> + <sup>0.8</sup> + <sup>0.7</sup> + <sup>0.5</sup> + <sup>0.5</sup> + <sup>0.4</sup>	.+ <sup>0.3</sup> .0.3 + <sup>0.2</sup> + <sup>0.2</sup>	No 75207
$+^{0.8}$ $+^{1.0}$ $+^{1.3}$ $+^{1.4}$ $+^{1.4}$ $+^{1.4}$ $+^{5.6}$ $+^{5.2}$ $+^{4.8}$ $+^{4.7}$ $+^{5.0}$ $+^{6.0}$ $+^{7.7}$ $+^{10.2}$ $+^{12.9}$ $+^{15.2}$ $+^{16.5}$ $+^{17.1}$ $+^{17.2}$ $+^{17.5}$ $+^{18.1}$ $+^{18.3}$ $+^{17.7}$ $+^{17.5}$ $+^{17.5}$ $+^{16.9}$ $+^{16.4}$ $+^{16.3}$ $+^{16.4}$ $+^{16.1}$ $+^{15.2}$ $+^{13.8}$ $+^{11.5}$ $+^{8.8}$ $+^{6.4}$ $+^{4.8}$ $+^{3.8}$ $+^{3.5}$ $+^{3$	$4.1$ $4.4$ $4.5$ $4.3$ $4^{3.1}$ $4^{1.8}$ $4^{0.9}$ $4^{0.6}$ $4^{0.5}$ $4^{0.4}$ $4^{0.3}$ $4^{0.3}$	+ <sup>0.3</sup> , 0. + <sup>0.2</sup> + <sup>0.2</sup>	
$+^{0.7}$ $+^{0.9}$ $+^{1.1}$ $+^{1.2}$ $+^{1.2}$ $+^{1.2}$ $+^{1.2}$ $+^{2.1}$ $+^{3.2}$ $+^{4.4}$ $+^{4.8}$ $+^{4.7}$ $+^{4.4}$ $+^{4.3}$ $+^{4.5}$ $+^{5.1}$ $+^{6.1}$ $+^{7.5}$ $+^{8.9}$ $+^{10.2}$ $+^{11.1}$ $+^{11.9}$ $+^{12.3}$ $+^{12.8}$ $+^{13.4}$ $+^{13.4}$ $+^{13.6}$ $+^{13.6}$ $+^{12.5}$ $+^{11.9}$ $+^{11.6}$ $+^{11.8}$ $+^{10.8}$ $+^{10.6}$ $+^{10.8}$ $+^{10.6}$ $+^{0.4}$ $+^{8.9}$ $+^{7.6}$ $+^{6.1}$ $+^{4.8}$ $+^{3.8}$ $+^{3.3}$ $+^{3.1}$ $+^{3.1}$ $+^{3.3}$	$+^{3.5}$ $+^{3.7}$ $+^{3.8}$ $+^{3.6}$ $+^{2.7}$ $+^{1.6}$ $+^{0.7}$ $+^{0.5}$ $+^{0.4}$ $+^{0.4}$ $+^{0.3}$ $+^{0.2}$	$+ \frac{0.2}{2} = 0.2 + \frac{0.2}{2} + \frac{0.1}{2}$	CORIDA CONTRACT
$+^{0.8} +^{0.9} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{1.0} +^{4.0} +^{4.1} +^{4.0} +^{4.0} +^{4.1} +^{4.4} +^{4.9} +^{5.6} +^{6.4} +^{7.1} +^{7.7} +^{8.0} +^{8.3} +^{8.6} +^{9.1} +^{9.7} +^{10.5} +^{11.1} +^{11.3} +^{11.0} +^{10.4} +^{9.6} +^{9.0} +^{8.5} +^{8.1} +^{7.5} +^{7.3} +^{7} +^{7} +^{6.3} +^{5.8} +^{5.1} +^{4.3} +^{3.6} +^{3.1} +^{2.9} +^{2.8} +^{2.8} +^{3.0} +^{3.0} +^{3.1} +^{1.0} +^{10.5} +^{11.1} +^{11.3} +^{11.0} +^{10.4} +^{9.6} +^{9.0} +^{8.5} +^{8.1} +^{7.5} +^{7.3} +^{7} +^{7} +^{7.5} +^{7.3} +^{7} +^{7} +^{10.5} +^{10.5} +^{10.5} +^{11.1} +^{11.3} +^{11.0} +^{10.4} +^{9.6} +^{9.0} +^{8.5} +^{8.1} +^{7.5} +^{7.3} +^{7} +^{7} +^{10.5} +^{1$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$+^{0.2}$ 0.2 $+^{0.1}$ $+^{0.1}$	SIONAL ENILITY
$+^{0.6} +^{0.7} +^{0.7} +^{0.7} +^{0.8} +^{0.1} +^{0.8} +^{0.4} +^{0.4} +^{1.5} +^{2.4} +^{3.1} +^{3.5} +^{3.5} +^{3.6} +^{3.7} +^{3.8} +^{4.1} +^{4.5} +^{4.9} +^{5.4} +^{5.8} +^{6.1} +^{6.4} +^{6.9} +^{7.5} +^{8.2} +^{9.1} +^{10.0} +^{91} +^{8.2} +^{7.4} +^{6.8} +^{6.3} +^{5.9} +^{5.6} +^{5.3} +^{50} +^{4.4} +^{4.1} +^{3.7} +^{3.2} +^{2.9} +^{2.7} +^{2.5} +^{2.5} +^{2.6} +^{2.7} +^{2.5} +^{2.5} +^{2.6} +^{2.7} +^{2.5} +^{2.$	$+^{2.8}+^{2.8}+^{2.8}+^{2.8}+^{2.5}+^{1.9}+^{1.2}+^{0.7}+^{0.4}+^{0.3}+^{0.2}+^{0.2}+^{0.2}$	$+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$	11/02/22
$+^{0.5}$ $+^{0.6}$ $+^{0.6}$ $+^{0.6}$ $+^{0.7}$ $+^{0.81.0}$ $+^{1.7}$ $+^{2.3}$ $+^{2.8}$ $+^{3.1}$ $+^{3.2}$ $+^{3.2}$ $+^{3.3}$ $+^{3.5}$ $+^{3.7}$ $+^{4.0}$ $+^{4.7}$ $+^{5.1}$ $+^{5.5}$ $+^{6.1}$ $+^{6.7}$ $+^{7.6}$ $+^{9.5}$ $+$	$+^{2.4}$ $+^{2.4}$ $+^{2.7}$ $+^{2.1}$ $+^{1.6}$ $+^{1.0}$ $+^{0.6}$ $+^{0.3}$ $+^{0.2}$ $+^{0.2}$ $+^{0.2}$ $+^{0.2}$ $+^{0.1}$	$-\mu^{0.1}$	PROJECT NUMBER
$+^{0.4} +^{0.4} +^{0.4} +^{0.5} +^{0.5} +^{0.5} +^{0.5} +^{0.5} +^{1.2} +^{1.7} +^{2.2} +^{2.5} +^{2.7} +^{2.5} +^{2.7} +^{2.8} +^{3.0} +^{3.1} +^{3.7} +^{4.0} +^{4.4} +^{4.9} +^{5.5} +^{6.2} +^{7.0} +^{7.8} +^{8.4} +^{8.8} +^{8.5} +^{7.9} +^{7.1} +^{6.2} +^{5.5} +^{4.8} +^{4.3} +^{3.9} +^{3.6} +^{3.3} +^{3.1} +^{2.2} +^{2.5} +^{2.3} +^{2.7} +^{2.5} +^{2.3} +^{2.7} +^{2.5} +^{2.3} +^{2.7} +^{2.6} +^{2.7} +^{2.6} +^{2$	$+^{2.0}$ $+^{2.0}$ $+^{1.0}$ $+^{1.7}$ $+^{1.3}$ $+^{0.8}$ $+^{0.4}$ $+^{0.3}$ $+^{0.2}$ $+^{0.2}$ $+^{0.2}$ $+^{0.1}$ $+^{0.1}$	$+ \frac{0.4}{4}$	2020157.17
+ - + - + - + - + - + - + - + - + - + -	$+^{1.7}$ $+^{1.0}$ $+^{1.4}$ $+^{1.1}$ $+^{0.7}$ $+^{0.3}$ $+^{0.2}$ $+^{0.2}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$		SHEET TITLE
+ + + + + + + + + + + + + + + + + + +	$+ \cdots + \cdots$	+ <sup>•••</sup> + <sup>•••</sup> + <sup>•••</sup>	SITE
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		PHOTOMETRY
+ 0.1 + 0.2 + 0.2 + 0.2 + 0.2 + 0.4 + 0.5 + 0.6 + 0.7 + 0.8 + 0.8 + 0.7 + 0.7 + 0.7 + 0.7 + 0.7 + 0.8 + 1.0 + 1.2 + 1.4 + 1.6 + 1.6 + 1.5 + 1.3 + 1.0 + 0.9 + 0.8 + 0.7 + 0.7 + 0.6 + 0.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		PLAN
$+^{0.1} +^{0.1} +^{0.1} +^{0.2} +^{0.2} +^{0.3} +^{0.4} +^{0.5} +^{0.5} +^{0.6} +^{0.6} +^{0.6} +^{0.5} +^{0.5} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{0.6} +^{1.3} +^{1.4} +^{1.5} +^{1.3} +^{1.1} +^{0.9} +^{0.7} +^{0.6} +^{0.6} +^{0.5} +^{0.5} +^{0.5} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.4} +^{0.5} +^{0$	$+^{0.5}$ $+^{0.5}$ $+^{0.5}$ $+^{0.4}$ $+^{0.3}$ $+^{0.2}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$	<b>↓</b> <sup>0.0</sup> <b>↓</b> <sup>0.0</sup> <b>↓</b> <sup>0.0</sup>	
$+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.2}$ $+^{0.3}$ $+^{0.4}$ $+^{0.5}$ $+^{0$	$+^{0.4}$ $+^{0.4}$ $+^{0.4}$ $+^{0.3}$ $+^{0.3}$ $+^{0.2}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.1}$ $+^{0.0}$	▶ <sup>0.0</sup> <b>+</b> <sup>0.0</sup> <b>+</b> <sup>0.0</sup> <b>+</b> <sup>0.0</sup>	SHEET NUMBER
		-	CD 4
			32-1

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DESIGN PROFESSIONALS



520 S. MAIN STREET, STE 2531 AKRON, OH 44311

STEVEN P. SCHAUB LICENSE No. 75207

		SCH							
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	705	24	701948- 5W-WT-M150 -P2-601106	SLOAN MODUS PDL3 PETROLEUM CANOPY LED LUMINAIRE WHITE FINISH	LEDS.	701948-5WT WT3-M150.IES	Absolute	0.70	118.5
	705B	9	701948- 5W-BZ-M150 -P2-601106	SLOAN MODUS PDL3 PETROLEUM CANOPY LED LUMINAIRE BRONZE FINISH	LEDS.	701948-5BZ WT3-M150.IES	Absolute	0.70	118.5
$\bigcirc$	101EM	4	A2/B1-05	WITH BLACK TRIM AND RECESSED WHITE PLASTIC LENS	LEDS. LUMEN RATING = 648 LMS.	LR6.IES	647	1.00	11.5
0	507	9	RADPTLED-P3 -40K-SYM-MVOLT -RADPT20-FAO -DDBXD	RADEAN POST TOP LED AREA LUMINAIRE FROSTED GLASS DIFFUSER;	LEDS.	RADPT_P3_40K _SYM.IES	7303	1.00	54
Â	702	10	RSX2 LED-P6 -40K-R4-MVOLT -RPA-DDBXD	LITHONIA - RSX2 OUTDOOR LED AREA LIGHT (SHIELDED)	LEDS.	RSX2_LED_ P6_40K_R4.IES	Absolute	1.00	244
Ô	501	3	ARC2-LED-P5-40K -MVOLT-DDBXD	LITHONIA WALL LUMINAIRE (ARC2)	LEDS.	ARC2_LED_P4 _40K.IES	Absolute	1.00	51
Ô	502	4	ARC2-LED-P4-40K -MVOLT-DDBXD	LITHONIA WALL LUMINAIRE (ARC2)	LEDS.	LSI XWM-FT-LED -04-50.IES	Absolute	1.00	30

STATISTICS
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STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
eyond Property Line	+	0.5 fc	2.1 fc	0.0 fc	N / A	N / A
Ion-EDO Canopy 1	+	31.4 fc	37.5 fc	18.7 fc	2.0:1	1.7:1
Site	+	4.3 fc	37.5 fc	0.1 fc	375.0:1	43.0:1
/ehicle	ж	4.7 fc	26.5 fc	0.1 fc	265.0:1	47.0:1
Property Line	+	0.9 fc	2.5 fc	0.1 fc	25.0:1	9.0:1
DO Canopy	+	39.5 fc	51.3 fc	25.8 fc	2.0:1	1.5:1



 $+^{0.9}$   $+^{1.0}$   $+^{1.1}$   $+^{1.2}$   $+^{1.4.2}$ 



SITE PHOTOMETRY PLAN

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 32 of 95

## GENERAL NOTES

- ALL FIXTURES UTILIZED IN THIS SITE PHOTOMETRIC PLAN ARE FULL CUTOFF.
- MOUNT AREA LUMINAIRE TYPE '702' AT 28'-0" AFG (INCLUDING POLE BASE) MOUNT AREA LUMINAIRE TYPE '702 IN EDO AREA AT 33'-0" AFG (INCLUDING
- POLE BASE) . FILE NUMBERS PROVIDED FOR PHOTOMETRY REFERENCE ONLY. CATALOG
- NUMBERS SHALL BE UTILIZED FOR ORDERING FIXTURES.
- 5. COLOR TEMPERATURE OF FIXTURES SHALL BE PROVIDED AS FOLLOWS 5.1. AREA LIGHTING - 5700K 5.2. BUILDING MOUNTED - 5700K
- 5.3. DECORATIVE POLE 5000K
- 5.4. CANOPY 5700K 5.5. CANOPY DOWNLIGHTS - 4000K

+0.0 +0.0 +  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.3}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.4}$   $+^{0.5}$   $+^{0.5}$  $+^{0.1}$   $+^{0.2}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.7}$   $+^{0.7}$   $+^{0.7}$ +0.2 +0.2 +0.2 +0.2 +0.2 +0.2 +0.2 +0.2 +0.2 +0.3 +0.4 +0.6 +0.8 +0.8 +0.9 +0.9 +0.8 +0.8 +0.9 +0.8 +0.8 +0.9 +0.8 +0.8 +0.9 +0.8 +0.8 +0.8 +0.9 +0.8  $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$ 0.7 + 0.9 + 1.0 + 1.1 + 1.1 + 1.0 + 0.9 + 0.8 + 0.8 + 0.8 $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.7}$   $+^{0.9}$   $+^{1.3}$   $+^{1.3}$   $+^{1.3}$   $+^{1.3}$   $+^{1.2}$   $+^{1.1}$   $+^{1.0}$   $+^{0.9}$   $+^{0.8}$   $+^{0.6}$   $+^{0.6}$  $+^{0.3}$   $+^{0.4}$   $+^{0.4}$   $+^{0.4}$   $+^{0.4}$   $+^{0.4}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{1.0}$   $+^{1.3}$   $+^{1.6}$   $+^{1.7}$   $+^{1.6}$   $+^{1.5}$   $+^{1.4}$   $+^{1.2}$   $+^{1.1}$   $+^{1.0}$   $+^{0.9}$   $+^{0.7}$   $+^{0.6}$   $+^{0.6}$ A  $+^{0.2}$   $+^{0.3}$   $+^{0.4}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.6}$   $+^{0.5}$ +1.7 +1.5 +1.4 +1.2 +1.1 +0.9 +0.8 +0.71.5 + 0.5 + 0.5 + 0.7 + 1.0 + 1.5 + 1.8 $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.7}$   $+^{0.7}$   $+^{0.7}$   $+^{0.7}$   $+^{1.1}$   $+^{1.6}$   $+^{2.1}$   $+^{2.4}$   $+^{2.5}$   $+^{2.3}$   $+^{2.1}$   $+^{1.9}$   $+^{1.9}$   $+^{1.5}$   $+^{1.3}$   $+^{1.2}$   $+^{1.1}$   $+^{0.9}$   $+^{0.8}$   $+^{0.7}$   $+^{0.7}$  $+^{0.2}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.8}$   $+^{0.9}$   $+^{0.9}$   $+^{0.9}$   $+^{1.1}$   $+^{1.7}$   $+^{2.2}$   $+^{2.8}$   $+^{3.0}$   $+^{2.8}$   $+^{2.5}$   $+^{2.3}$   $+^{2.0}$   $+^{1.9}$   $+^{1.7}$  $\mathbf{4}^{1.9}$  + 1.4 + 1.3 + 1.1 + 1.0 + 0.9 + 0.8 + 0.1 $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.7}$   $+^{0.9}$   $+^{1.0}$   $+^{1.0}$   $+^{1.2}$   $+^{1.8}$   $+^{2.4}$   $+^{3.1}$   $+^{3.5}$   $+^{3.4}$   $+^{3.1}$   $+^{2.7}$   $+^{2.4}$   $+^{2.1}$   $+^{1.9}$   $+^{1.7}$   $+^{1.6}$   $+^{1.2}$   $+^{1.1}$   $+^{0.9}$   $+^{0.8}$   $+^{0.1}$  $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.6}$   $+^{0.7}$   $+^{0.9}$   $+^{1.0}$   $+^{1.1}$   $+^{1.2}$   $+^{1.8}$   $+^{2.5}$   $+^{2.5}$   $+^{2.4}$   $+^{3.8}$   $+^{3.4}$   $+^{2.9}$   $+^{2.5}$   $+^{2.2}$   $+^{1.9}$   $+^{1.7}$   $+^{1.6}$   $+^{1.3}$   $+^{1.3}$  $-1^{1}$  +  $0^{10}$  +  $0^{0.9}$  +  $0^{10}$  $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.8}$   $+^{0.9}$   $+^{1.0}$   $+^{1.2}$   $+^{1.3}$   $+^{1.9}$   $+^{3.3}$   $+^{4.2}$   $+^{4.6}$   $+^{4.2}$   $+^{3.6}$   $+^{3.1}$   $+^{2.6}$   $+^{2.2}$   $+^{1.9}$   $+^{1.7}$   $+^{1.5}$   $+^{1.4}$   $+^{1.3}$   $+^{2.2}$   $+^{1.5}$  $+^{0.1} +^{0.1} +^{0.2} +^{0.2} +^{0.3} +^{0.4} +^{0.5} +^{0.6} +^{0.7} +^{0.8} +^{1.0} +^{1.4} +^{2.3} +^{1.6} +^{4.3} +^{50} +^{5.3} +^{5.0} +^{4.4} +^{3.8} +^{3.2} +^{2.7} +^{2.3} +^{1.9} +^{1.7} +^{1.5} +^{1.4} +^{1.3} +^{1.2} +^{1.1} +^{10} +^{0.9$  $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.6}$   $+^{0.8}$   $+^{1.1}$   $+^{1.9}$   $+^{2.8}$   $+^{3.9}$   $+^{3.6}$   $+^{5.6}$   $+^{5.8}$   $+^{5.4}$   $+^{4.6}$   $+^{3.9}$   $+^{3.2}$   $+^{2.7}$   $+^{2.3}$   $+^{1.9}$   $+^{1.7}$   $+^{1.5}$   $+^{1.4}$   $+^{1.3}$   $+^{1.2}$   $+^{1.1}$   $+^{1.0}$   $+^{1.9}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$  $+^{0.6} +^{0.8} +^{1.5} +^{2.3} +^{3.3} +^{4.4} +^{5.8} +^{5.8} +^{5.9} +^{5.3} +^{4.7} +^{3.9} +^{3.2} +^{2.7} +^{2.3} +^{2.0} +^{1.8} +^{1.6} +^{1.5} +^{1.4} +^{1.3} +^{1.2} +^{1.1} +^{1.0}$  $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.3}$   $+^{0.5}$   $+^{0.7}$   $+^{1.2}$   $+^{1.9}$   $+^{2.8}$   $+^{3.9}$   $+^{5.6}$   $+^{5.2}$   $+^{5.5}$   $+^{5.4}$   $+^{5.0}$   $+^{4.4}$   $+^{3.7}$   $+^{3.1}$   $+^{2.6}$   $+^{2.3}$   $+^{2.0}$   $+^{1.8}$   $+^{1.5}$   $+^{1.4}$   $+^{1.2}$   $+^{1.1}$   $+^{1.0}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.5}$   $+^{0.9}$   $+^{1.5}$   $+^{2.3}$   $+^{3.2}$   $+^{3.9}$   $+^{4.4}$   $+^{4.7}$   $+^{4.8}$   $+^{4.7}$   $+^{4.4}$   $+^{3.9}$   $+^{3.3}$   $+^{2.9}$   $+^{2.5}$   $+^{2.2}$   $+^{2.1}$   $+^{2.0}$   $+^{1.8}$   $+^{1.7}$   $+^{1.6}$   $+^{1.4}$   $+^{1.3}$   $+^{1.1}$   $+^{1.0}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$  $+^{0.4}$   $+^{0.8}$   $+^{1.2}$   $+^{1.8}$   $+^{2.6}$   $+^{3.2}$   $+^{3.6}$   $+^{3.9}$   $+^{4.1}$   $+^{4.1}$   $+^{4.0}$   $+^{3.8}$   $+^{3.4}$   $+^{3.0}$   $+^{2.6}$   $+^{2.4}$   $+^{2.3}$   $+^{2.2}$   $+^{2.4}$   $+^{2.0}$   $+^{1.8}$   $+^{1.6}$   $+^{1.4}$   $+^{1.3}$   $+^{1.7}$   $+^{0.9}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.4}$   $+^{0.6}$   $+^{1.0}$   $+^{1.4}$   $+^{2.0}$   $+^{2.6}$   $+^{3.2}$   $+^{3.4}$   $+^{3.5}$   $+^{3.4}$   $+^{3.2}$   $+^{2.9}$   $+^{2.6}$   $+^{2.4}$   $+^{2.3}$   $+^{2.3}$   $+^{2.2}$   $+^{2.1}$   $+^{1.9}$   $+^{1.7}$   $+^{1.5}$   $+^{1.3}$   $+^{1.1}$   $+^{0.9}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.5}$   $+^{0.7}$   $+^{1/1}$   $+^{1.6}$   $+^{2.1}$   $+^{2.7}$   $+^{2.9}$   $+^{2.9}$   $+^{2.9}$   $+^{2.8}$   $+^{2.7}$   $+^{2.5}$   $+^{2.4}$   $+^{2.2}$   $+^{2.3}$   $+^{2.3}$   $+^{2.2}$   $+^{2.1}$   $+^{1.9}$   $+^{1.7}$   $+^{1.5}$   $+^{1.3}$   $+^{1.1}$   $+^{1.0}$  $+^{0.1} +^{0.2} +^{0.2} +^{0.3} +^{0.6} +^{0.9} +^{1.3} +^{1.7} +^{2.0} +^{2.3} +^{2.5} +^{2.5} +^{2.6} +^{2.6} +^{2.5} +^{2.4} +^{2.3} +^{2.2} +^{2.2} +^{2.2} +^{2.2} +^{2.3} +^{2.3} +^{2.3} +^{2.3} +^{2.1} +^{2.0} +^{1.7} +^{1.5} +^{1.3} +^{1.1} +^{1.0} +^{1$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.5}$   $+^{0.7}$   $+^{1.0}$   $+^{1.4}$   $+^{1.7}$ + 2.1 + 2.3 + 2.3 + 2.3 + 2.3 + 2.3 + 2.2 + 2.1 + 2.1 + 2.0 + 2.0 + 2.1 + 2.2 + 2.2 + 2.2 + 2.2 + 2.2 + 2.1 + 1.9 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.7 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.2 + 1.0 + 1.5 + 1.3 + 1.5 + 1.3 + 1.5 + 1.3 + 1.5 + 1.3 + 1.5 + 1.3 + 1.5 + 1.5 + 1.3 + 1.5 + 1 $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.4}$   $+^{0.6}$   $+^{0.9}$   $+^{1.2}$   $+^{1.4}$   $+^{1.7}$ +1.9 +2.0 +2.1 +2.2 +2.2 +2.2 +2.1 +2.0 +1.9 +1.9 +2.0 +2.1 +2.2 +2.2 +2.2 +2.1 +1.9 +1.8 +1.6 +1.4 +1.2 +1.1 $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$  $+^{0.3}$   $+^{0.5}$   $+^{0.7}$   $+^{1.0}$   $+^{1.2}$   $+^{1.5}$   $+^{1.7}$   $+^{1.9}$   $+^{2.0}$   $+^{2.1}$   $+^{2.2}$   $+^{2.2}$   $+^{2.1}$   $+^{2.1}$   $+^{2.1}$   $+^{2.1}$   $+^{2.3}$   $+^{2.3}$   $+^{2.4}$   $+^{2.3}$   $+^{2.4}$   $+^{2.3}$   $+^{2.2}$   $+^{2.0}$   $+^{1.8}$   $+^{1.6}$   $+^{1.5}$   $+^{1.4}$  $+ \underbrace{0.8}_{0.3} + \underbrace{0.3}_{0.3} + \underbrace{0.3}_{0.4} + \underbrace{0.6}_{0.9} + \underbrace{1.1}_{1.1} + \underbrace{1.3}_{1.5} + \underbrace{1.7}_{1.7} + \underbrace{1.9}_{1.9} + \underbrace{2.0}_{2.1} + \underbrace{2.2}_{2.2} + \underbrace{2.3}_{12} + \underbrace{2.4}_{2.4} + \underbrace{2.5}_{2.5} + \underbrace{2.5}_{2.7} + \underbrace{2.9}_{2.9} + \underbrace{3.0}_{3.0} + \underbrace{3.3}_{3.2} + \underbrace{3.3}_{3.3} + \underbrace{3.3}_{3.2} + \underbrace{3.0}_{2.8} + \underbrace{2.5}_{2.5} + \underbrace{2.3}_{2.4} + \underbrace{2.4}_{2.4} + \underbrace{2.5}_{2.5} + \underbrace{2.5}_{2.7} + \underbrace{2.9}_{2.9} + \underbrace{3.0}_{3.0} + \underbrace{3.3}_{3.2} + \underbrace{3.3}_{3.3} + \underbrace{3.3}_{3.2} + \underbrace{3.0}_{2.8} + \underbrace{2.5}_{2.5} + \underbrace{2.3}_{2.4} + \underbrace{2.5}_{2.4} + \underbrace{2.5}_{2.5} + \underbrace{2.5}_{2.7} + \underbrace{2.9}_{2.9} + \underbrace{2.5}_{2.9} + \underbrace{2$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$  $+^{0.1}$   $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.4}$  $+^{1.9}$   $+^{2.0}$   $+^{2.2}$   $+^{2.3}$   $+^{2.4}$   $+^{2.5}$   $+^{2.6}$   $+^{2.7}$   $+^{2.9}$   $+^{3.1}$   $+^{3.4}$   $+^{3.7}$   $+^{3.9}$   $+^{4.1}$   $+^{4.2}$   $+^{4.4}$   $+^{3.6}$   $+^{4.3}$   $+^{4.1}$   $+^{3.8}$   $+^{3.5}$   $+^{3.3}$   $+^{3.0}$  $+^{0.1}$   $+^{0.1}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.9}$   $+^{1.1}$   $+^{1.3}$  $+^{2.8}$   $+^{3.0}$   $+^{3.3}$   $+^{3.6}$   $+^{4.0}$   $+^{4.4}$   $+^{4.8}$   $+^{5.2}$   $+^{5.4}$   $+^{5.7}$   $+^{5.7}$   $+^{5.8}$   $+^{5.5}$   $+^{5.2}$   $+^{4.9}$   $+^{4.5}$   $+^{4.1}$  $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$  $+^{2.7}$   $+^{2.9}$   $+^{3.1}$   $+^{3.4}$   $+^{3.7}$   $+^{4.1}$   $+^{4.5}$   $+^{5.1}$   $+^{5.6}$   $+^{6.1}$   $+^{6.5}$   $+^{6.9}$   $+^{6.8}$   $+^{6.6}$   $+^{6.3}$   $+^{6.0}$   $+^{5.5}$   $+^{5.1}$ +0.8 +0.3 +0.3 +0.5 +0.6 +0.8 +1.0 +1.3 +1.4 +1.5 +1.7 $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.2}$   $+^{0.3}$   $+^{0.2}$ +0.3 +0.4 +0.6 +0.7 +1.0 +1.2 +1.4 +1.5 +1.6 +1.7 +1.8  $+^{2.3}+^{2.5}+^{2.7}+^{2.9}+^{3.1}+^{3.3}+^{3.6}+^{3.9}+^{4.4}+^{5.0}+^{5.6}+^{6.3}+^{7.0}+^{7.4}+^{7.6}+^{7.3}+^{7.5}+^{7.4}+^{7.2}+^{6.7}$  $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.4}$   $+^{0.4}$   $+^{0.5}$   $+^{0.7}$   $+^{1.0}$   $+^{1.2}$   $+^{1.6}$   $+^{1.6}$   $+^{1.7}$   $+^{1.8}$   $+^{1.9}$   $+^{2.0}$   $+^{2.1}$   $+^{2.2}$   $+^{2.4}$   $+^{2.6}$   $+^{2.8}$   $+^{2.9}$   $+^{3.1}$   $+^{3.4}$   $+^{3.7}$   $+^{4.1}$   $+^{0.7}$   $+^{5.3}$   $+^{6.0}$   $+^{6.8}$   $+^{7.5}$   $+^{8.1}$   $+^{8.8}$   $+^{9.5}$   $+^{10.2}$   $+^{10.5}$   $+^{10.1}$  $+^{0.3}$   $+^{0.3}$   $+^{0.4}$   $+^{0.3}$   $+^{0.4}$  $+^{1.9} +^{2.0} +^{2.1} +^{2.2} +^{2.3} +^{2.5} +^{2.7} +^{2.8} +^{3.0} +^{3.2} +^{3.5} +^{3.8} +^{4.3} +^{4.9} +^{5.7} +^{6.6} +^{7.7} +^{9.1} +^{10.9} +^{13.2} +^{15.3} +^{16.5} +^{16.2} +^{16.2} +^{16.5} +^{16.2} +^{16.5} +^{16.2} +^{16.5} +$ 0.4 + 0.4 + 0.5 + 0.7 + 1.0 + 1.3 + 1.5 + 1.7 + 1.7 + 1.7 + 1.8 + 1.8 + 1.8 $+^{0.4}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{0.5}$   $+^{1.0}$   $+^{1.0}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{2.0}$   $+^{2.1}$   $+^{2.3}$   $+^{2.6}$   $+^{2.7}$   $+^{2.8}$   $+^{30}$   $+^{32}$   $+^{35}$   $+^{35}$   $+^{35}$   $+^{5.3}$   $+^{0.4}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.6}$   $+^{0.6}$   $+^{0.6}$   $+^{0.6}$   $+^{0.7}$   $+^{1.0}$   $+^{1.4}$   $+^{1.8}$   $+^{2.1}$   $+^{2.1}$   $+^{2.0}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{1.9}$   $+^{2.0}$   $+^{2.1}$   $+^{2.2}$   $+^{2.4}$   $+^{2.5}$   $+^{2.6}$   $+^{2.6}$   $+^{2.7}$   $+^{2.9}$   $+^{3.2}$   $+^{3.6}$   $+^{4.1}$   $+^{4.9}$   $+^{6.1}$   $+^{8.2}$   $+^{11.7}$   $+^{17.4}$   $+^{25.1}$   $+^{32.8}$   $+^{37.5}$   $+^{37.3}$  $+^{0.4} +^{0.6} +^{0.7} +^{0.8} +^{0.8} +^{0.7} +^{0.8} +^{0.7} +^{0.8} +^{1.0} +^{1.5} +^{2.0} +^{2.4} +^{2.3} +^{2.2} +^{2.1} +^{2.0} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{2.0} +^{2.1} +^{2.2} +^{2.3} +^{2.4} +^{2.4} +^{2.5} +^{2.6} +^{2.7} +^{3.0} +^{3.3} +^{3.8} +^{4.6} +^{5.9} +^{8.4} +^{12.7} +^{19.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{2.0} +^{2.1} +^{2.2} +^{2.3} +^{2.4} +^{2.4} +^{2.5} +^{2.6} +^{2.7} +^{3.0} +^{3.3} +^{3.8} +^{4.6} +^{5.9} +^{8.4} +^{12.7} +^{19.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{2.0} +^{2.1} +^{2.2} +^{2.3} +^{2.4} +^{2.4} +^{2.5} +^{2.6} +^{2.7} +^{3.0} +^{3.3} +^{3.8} +^{4.6} +^{5.9} +^{8.4} +^{12.7} +^{19.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{1.9} +^{2.0} +^{2.1$  $+^{0.4}$   $+^{0.5}$   $+^{0.7}$   $+^{0.8}$   $+^{0.9}$   $+^{1.0}$   $+^{0.9}$   $+^{1.1}$   $+^{1.6}$   $+^{2.1}$   $+^{2.7}$   $+^{2.9}$   $+^{2.7}$   $+^{2.5}$   $+^{2.3}$   $+^{2.2}$   $+^{2.1}$   $+^{2.0}$   $+^{1.9}$   $+^{2.0}$   $+^{2.0}$   $+^{2.0}$   $+^{2.1}$   $+^{2.2}$   $+^{2.3}$   $+^{2.4}$   $+^{2.5}$   $+^{2.6}$   $+^{2.8}$   $+^{3.1}$   $+^{3.6}$   $+^{4.4}$   $+^{5.8}$   $+^{8.6}$   $+^{13.3}$   $+^{21.0}$   $+^{41.6}$   $+^{47.5}$   $+^{46.9}$  $+^{0.5} +^{0.6} +^{0.8} +^{0.9} +^{1.1} +^{1.2} +^{1.4} +^{1.2} +^{1.6} +^{2.2} +^{2.9} +^{3.5} +^{3.5} +^{3.2} +^{2.9} +^{2.6} +^{2.4} +^{2.2} +^{2.1} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.1} +^{2.1} +^{2.2} +^{2.2} +^{2.3} +^{2.3} +^{2.3} +^{2.5} +^{2.7} +^{3.0} +^{3.5} +^{4.3} +^{5.9} +^{8.7} +^{13.7} +^{21.3} +^{41.6} +^{47.3} +^{46.8} +^{47.3} +^{46.8} +^{47.3} +^{40.8} +^{47.3} +^{4$  $+^{1.3} +^{1.4} +^{1.7} +^{2.4} +^{3.1} +^{3.8} +^{3.5} +^{3.1} +^{3.5} +^{3.1} +^{2.7} +^{2.4} +^{2.2} +^{2.1} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.1} +^{2.1} +^{2.2} +^{2.2} +^{2.3} +^{2.3} +^{2.3} +^{2.5} +^{2.7} +^{3.0} +^{3.5} +^{4.3} +^{5.9} +^{8.8} +^{13.9} +^{22.0} +^{42.6} +^{48.4} +^{47.9}$  $+^{1.2} +^{1.3} +^{1.4} +^{1.7} +^{2.5} +^{3.2} +^{4.0} +^{4.7} +^{4.7} +^{4.3} +^{3.7} +^{3.2} +^{2.8} +^{2.5} +^{2.3} +^{2.1} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.0} +^{2.1} +^{2.1} +^{2.2} +^{2.2} +^{2.3} +^{2.3} +^{2.3} +^{2.4} +^{2.5} +^{2.7} +^{3.0} +^{3.5} +^{4.3} +^{5.9} +^{8.7} +^{13.9} +^{22.2} +^{705B} +^{13.9} +$  $+^{0.3} +^{0.4} +^{0.6} +^{0.7} +^{0.8} +^{1.1} +^{1.3} +^{1.6} +^{2.4} +^{1.8} +^{4.2} +^{5.7} +^{5.4} +^{5.2} +^{4.6} +^{3.9} +^{3.4} +^{2.9} +^{2.5} +^{2.3} +^{2.4} +^{2.1} +^{2.1} +^{2.1} +^{2.2} +^{2.3} +^{2.3} +^{2.4} +^{2.4} +^{2.4} +^{2.5} +^{2.6} +^{2.8} +^{3.1} +^{3.5} +^{4.2} +^{5.7} +^{8.6} +^{13.7} +^{21.9} +^{1.9} +^{1.9} +^{1.1} +^{1.2} +^{1.1} +^$  $+^{0.3}$   $+^{0.4}$   $+^{0.5}$   $+^{0.6}$   $+^{0.7}$   $+^{0.9}$   $+^{1.2}$   $+^{1.4}$   $+^{2.1}$   $+^{3.0}$   $+^{4.0}$   $+^{5.6}$   $+^{4.9}$   $+^{4.2}$   $+^{3.5}$   $+^{3.0}$   $+^{2.6}$   $+^{2.4}$   $+^{2.2}$   $+^{2.1}$   $+^{2.2}$   $+^{2.3}$   $+^{2.4}$   $+^{2.5}$   $+^{2.6}$   $+^{2.6}$   $+^{2.6}$   $+^{2.7}$   $+^{2.8}$   $+^{2.9}$   $+^{3.1}$   $+^{3.5}$   $+^{4.1}$   $+^{5.5}$   $+^{8.4}$   $+^{13.3}$   $+^{21.1}$   $+^{42.4}$   $+^{48.3}$   $+^{47.9}$   $+^{48.3}$   $+^{47.9}$  $+^{0.4} +^{0.5} +^{0.6} +^{0.7} +^{0.8} +^{0.9} +^{1.1} +^{1.3} +^{1.8} +^{2.6} +^{3.6} +^{4.6} +^{5.6} +^{6.2} +^{6.3} +^{5.8} +^{5.1} +^{4.3} +^{3.6} +^{3.1} +^{2.7} +^{2.5} +^{2.4} +^{2.3} +^{2.4} +^{2.5} +^{2.6} +^{2.7} +^{2.8} +^{2.9} +^{2.9} +^{3.0} +^{3.1} +^{3$  $+^{3.6} +^{3.2} +^{2.9} +^{2.8} +^{2.7} +^{2.6} +^{2.7} +^{2.8} +^{2.9} +^{3.1} +^{3.2} +^{3.4} +^{3.4} +^{3.4} +^{3.4} +^{3.5} +^{3.6} +^{3.6} +^{3.6} +^{3.6} +^{3.7} +^{3.7} +^{4.2} +^{5.3} +^{7.7} +^{12.1} +^{19.4} +^{19.4} +^{19.4} +^{10.4}$  $+^{3.4}$   $+^{3.6}$   $+^{3.8}$   $+^{4.1}$   $+^{4.2}$   $+^{4.3}$   $+^{4.3}$   $+^{4.4}$   $+^{4.5}$   $+^{4.5}$   $+^{4.5}$   $+^{4.4}$   $+^{4.3}$   $+^{4.5}$   $+^{5.4}$   $+^{7.4}$   $+^{10.9}$   $+^{16.9}$  $+^{1.2}$   $+^{1.5}$   $+^{2.1}$   $+^{2.8}$   $+^{3.7}$   $+^{4.6}$   $+^{5.1}$   $+^{5.5}$   $+^{5.6}$   $+^{5.5}$  $+^{3.5}$   $+^{3.6}$   $+^{3.6}$   $+^{3.7}$   $+^{3.9}$   $+^{3.6}$   $+^{3.9}$   $+^{4.2}$   $+^{4.4}$   $+^{4.8}$   $+^{5.3}$   $+^{5.7}$   $+^{5.7}$   $+^{5.8}$   $+^{5.7}$   $+^{5.7}$   $+^{5.7}$   $+^{5.4}$   $+^{5.2}$   $+^{5.2}$   $+^{5.7}$   $+^{7.0}$   $+^{9.4}$   $+^{13.3}$   $+^{18.4}$   $+^{23.4}$   $+^{26.5}$   $+^{25.9}$  $+^{0.7}$   $+^{0.8}$   $+^{0.9}$   $+^{1.0}$   $+^{1.9}$   $+^{1.4}$   $+^{1.6}$   $+^{1.9}$   $+^{2.4}$   $+^{2.9}$   $+^{3.6}$   $+^{4.2}$   $+^{4.4}$   $+^{4.3}$   $+^{4.2}$   $+^{4.1}$   $+^{3.8}$   $+^{3.6}$   $+^{3.7}$   $+^{4.0}$   $+^{4.5}$   $+^{5.1}$   $+^{5.3}$   $+^{6.6}$   $+^{6.8}$   $+^{6.8}$   $+^{7.0}$   $+^{7.2}$   $+^{7.9}$   $+^{8.6}$   $+^{8.4}$   $+^{8.1}$   $+^{7.2}$   $+^{6.4}$   $+^{5.4}$   $+^{5.3}$   $+^{6.4}$   $+^{7.7}$   $+^{9.8}$   $+^{12.6}$   $+^{15.3}$   $+^{16.8}$   $+^{16.8}$   $+^{16.3}$   $+^{16.8}$   $+^{16.8}$   $+^{10.7}$   $+^{7.2}$   $+^{7.9}$   $+^{8.6}$   $+^{8.4}$   $+^{8.1}$   $+^{7.2}$   $+^{6.4}$   $+^{5.7}$   $+^{6.4}$   $+^{7.7}$   $+^{9.8}$   $+^{12.6}$   $+^{15.3}$   $+^{16.8}$   $+^{16.3}$   $+^{16.3}$   $+^{6.6}$   $+^{6.8}$   $+^{6.8}$   $+^{7.0}$   $+^{7.2}$   $+^{7.9}$ 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	ISSUE/REVISION RECORD DATE DESCRIPTION 10/14/21 PHOTOMETRIC PLAN 02/08/22 PHOTOMETRIC UPDATE 11/02/22 PHOTOMETRIC UPDATE
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+ + + + + + + + + + + + + + + + + + +	RACETRAC STORE NUMBER #1464 PROTOTYPE SERIES 5.5K 2.0 2020 RH MO 0113
$ \begin{array}{c} +0.9 \\ +0.9 \\ +0.9 \\ +0.9 \\ +1.0 \\ +1.0 \\ +1.0 \\ +1.0 \\ +1.1 \\ +1.1 \\ +1.1 \\ +1.2 \\ +1.2 \\ +1.2 \\ +1.4 \\ +1.4 \\ +1.4 \\ +1.4 \\ +1.5 \\ +1.5 \\ +1.5 \\ +1.5 \\ +2.2 \\ +3.8 \\ +4.9 \\ +$	PLAN MODIFICATION NOTICE SPB NO. 0113 DATE 02/18/20 STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST HODELOATION INCOMPATED TO THE
$ + 2.7 + 2.5 + 2.3 + 2.1 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.6 + 2.1 + 2.9 + 3.8 + 4.4 + 4.4 + 4.0 + 3.4 + 2.9 + 2.5 + 2.1 + 1.8 + 1.6 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 3.7 + 3.3 + 2.9 + 2.6 + 2.4 + 2.2 + 2.0 + 1.8 + 1.7 + 1.6 + 1.8 + 2.5 + 3.3 + 3.9 + 3.9 + 3.6 + 3.2 + 2.7 + 2.4 + 2.0 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 4.5 + 4.0 + 3.5 + 3.1 + 2.7 + 2.4 + 2.1 + 1.9 + 1.7 + 1.6 + 1.6 + 2.2 + 2.8 + 3.4 + 3.4 + 3.2 + 2.9 + 2.5 + 2.2 + 2.0 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 4.5 + 4.0 + 3.5 + 3.1 + 2.7 + 2.4 + 2.1 + 1.9 + 1.7 + 1.6 + 1.6 + 2.2 + 2.8 + 3.4 + 3.4 + 3.2 + 2.9 + 2.5 + 2.2 + 2.0 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 \\ + 6.0 + 5.2 + 4.4 + 3.7 + 3.1 + 2.6 + 2.2 + 1.9 + 1.7 + 1.6 + 1.5 + 1.9 + 2.4 + 2.9 + 3.1 + 2.9 + 2.6 + 2.4 + 2.1 + 1.9 + 1.7 + 1.5 + 1.4 + 1.1 + 1.4 + 1$	PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED IN THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.
+ 9.0 + 7.5 + 6.0 + 4.7 + 3.6 + 2.9 + 2.4 + 2.0 + 1.8 + 1.6 + 1.5 + 1.6 + 2.1 + 2.4 + 2.7 + 2.6 + 2.4 + 2.2 + 2.0 + 1.8 + 1.7 + 1.5 + 1.4 + 1.3 + 1.2 + 1.0 + 1.4 + 1.3 + 1.2 + 1.0 + 1.4 + 1.3 + 1.2 + 1.0 + 1.4 + 1.3 + 1.2 + 1.0 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 1.4 + 1.3 + 1.4 + 1.5 + 1.6 + 1.9 + 2.0 + 2.1 + 2.4 + 2.2 + 2.1 + 1.9 + 1.7 + 1.6 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 2.0 + 2.1 + 2.4 + 2.2 + 2.1 + 1.9 + 1.7 + 1.6 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 + 1.0 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 + 0.9 + 1.4 + 1.4 + 1.4 + 1.4 + 1.5 + 1.6 + 1.9 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 + 0.9 + 1.4 + 1.4 + 1.4 + 1.4 + 1.4 + 1.5 + 1.6 + 1.9 + 2.0 + 2.0 + 1.9 + 1.8 + 1.6 + 1.5 + 1.4 + 1.3 + 1.2 + 1.1 + 0.9 + 1.4 + 1	PROFESSIONAL SEAL
$\begin{array}{c} 36.0 \\ -705B \\ +70.0 \\ +70.0 \\ +29.5 \\ +40.0 \\ +29.5 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +40.2 \\ +30.1 \\ +20.9 \\ +32.2 \\ +20.4 \\ +12.7 \\ +7.8 \\ +5.0 \\ +3.5 \\ +2.7 \\ +2.3 \\ +3.5 \\ +2.7 \\ +2.3 \\ +1.9 \\ +1.7 \\ +1.6 \\ +1.6 \\ +1.5 \\ +1.6 \\ +1.5 \\ +1.6 \\ $	PROJECT NUMBER
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RaceTrac



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 33 of 95



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 34 of 95



# HATCH LEGEND





ALL ELEVATIONS PROVIDED REFLECT THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD88)





# Maxwell T Kaplan

Digitally signed by Maxwell T Kaplan DN: c=US, o=Florida, dnQualifier=A01410C0000017BEAA C643B000050D4, cn=Maxwell T Kaplan Date: 2022.11.04 14:19:12 -04'00'

HATCH LEGEND



EASEMENT TO BE VACATED

			DATE
			NO.
	MAXWELL T KAPI	PROFESSIONAL FNGINE	FLORIDA LICENSE No. 83366
		N 6300 NW 31ST AVE FORT LAUDERDALE, FL 33309 PH: (954) 202-7000 FX: (954) 202-7070	www.ThomasEngineeringGroup.com
THESE PLANS ARE SUBJECT TO FEDERA	COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THF	EXPRESSED WRITTEN PERMISSION OF RACETRAC	PETROLEUM, INC. IS PROHIBITED.
	Litegeniteg.	RACETRAC PETROLEUM, INC. 3225 CUMBERLAND BOULEVARD	SUITE TUU ATLANTA, GA 30339 (770) 431-7600
EASEMENT PLAN	RACETRAC MARKET	MILITARY TRAIL & BEELINE HIGHWAY	Riviera Beach, Florida
DATE SCAL DRAW FJ2000	E /N-BY NG NAM 12 EASE -2	08/21/20 JF\ E: MENT PLA	20 / N







RIGHT ELEVATION								
RY)	198 TOTAL SF							
<u>SQ. FOOT.</u>	% OF ELEVATION							
80	40%							
0	0%							
110	56%							
0	0%							
8	4%							
0	0%							
	VATION           XY)           SQ. FOOT.           80           0           110           0           8           0							



REAR ELE	ATION	252 TOTAL SF	
MATERIAL	<u>SQ. FOOT.</u>	% OF ELEVATION	
STONE	100	40%	
BRICK	0	0%	
EIFS	118	46%	
GLAZING	0	0%	
METAL	34	14%	
WOOD	0	0%	

		D	RaceTrac.		
	ID	MANUF.	MATERIAL	COMMENTS	THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN
	EIFS EF-1	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6105	PERMISSION OF RACETRAC PETROLEUM, INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.
	EF-2	STO	STO THERM CI	"DIVINE WHITE" "FINE FINISH" APPLICATION; COLOR TO MATCH SW #6107	DESIGN PROFESSIONALS
<u>M-1</u>	METAL M-1		PREFINISHED 4" 2-PIECE COMPRESSION METAL	METAL TO MATCH STOREFRONT COLOR DARK	
EF-1	PAINT			BRONZE	
EP-1	STONE	WILLIAMS	#7020 "BLACK FOX"		Mark S. Salopek, LLC
—	ST-1	BORAL	CORAL STONE - FOSSIL REEF	WET STACK APPLICATION. MORTAR COLOR "LIGHT BUFF"	701 W. LAKESIDE AVE APT #503 CLEVELAND, OH 44113
EF-2	TX-1	SELECT COMPOSITE	1/2" THICKNESS	WOODLAND BROWN	
ST-1					
					ISSUE/REVISION RECORD DATE DESCRIPTION 05/06/2022 PRELIM PACKAGE
— <u>M-1</u>					RaceTrac
M-3					RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SOUTHEAST SUITE 900 ATLANTA, GEORGIA 30339 (770) 431-7600
					PROJECT NAME
EF-2					BEELINE & MILITARY
ST-1					<b>RIVIERA BEACH</b> Florida 33418
					RACETRAC STORE NUMBER
					#1464
					PROTOTYPE SERIES 5.5K 2.0 2020 RH MO 0113
					PLAN MODIFICATION NOTICE SPB NO. 0113 DATE 02/18/20
					STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/ REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.
					PROFESSIONACSEAL OF FL 10/24/22
					<b>PROJECT NUMBER</b> 2020157.17
					SHEET TITLE DUMPSTER ENCLOSURE ELEVATIONS
"This sub	mittal is	for general in	formational purposes onl	y and is preliminary in	UIU-E

nature. As such, any other use or reliance is strictly prohibited."
CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 37 of 95





CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 38 of 95

		EXTERIOR MATERIAL	SCHEDULE	RaceTrac.
AWNI	NG			COPYRIGHT NOTICE THESE DI ANS ADE SUB IERT TO EEDEDAI
AW-1	-	ALUMINUM AWNING	SELECTED BY RACETRAC	COPYRIGHT LAWS: ANY USE OF SAME
CAST CS-1	STONE CONTINENTAL CAST STONE OR APPROVED OTHER	MATCH BORAL TUSCAN LINTEL CHAMPAGNE	COLOR 1102 NATURAL STONE; MORTAR COLOR "LIGHT BUFF". SEAL WITH (SL-5) SEALANT.	WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.
CEME				DESIGN PROFESSIONALS
HP-1	JAMES HARDIE	ARTISAN V-GROOVE SIDING	PAINT SHERWIN WILLIAMS SEALSKIN #7675. BLIND FASTEN AND STAGGER PLANKS PER MANUFACTURER'S RECOMMENDATION	
EIFS EF-1	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6105 "DIVINE WHITE"	
EF-2	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6107 "NOMADIC DESERT"	Mark S. Salopek, LLC
GLAZI	NG			
GL-1		1" NON-IMPACT RATED INSULATED GLAZING	CLIMATE ZONES 2 OR 3. IGU AT STOREFRONT 0.28 U-FACTOR, SHGC PF>0.25=0.27 (1/4" PPG SOLARBAN 70-XL LOW-E #2 +1/2" AIR +1/4" CLEAR) OR APPROVED ALTERNATE	701 W. LAKESIDE AVE APT #503 CLEVELAND, OH 44113
GL-2		1" NON-IMPACT RATED ACID ETCHED INSULATED GLAZING	CLIMATE ZONES 2 OR 3. IGU AT STOREFRONT 0.28 U-FACTOR, SHGC PF>0.25=0.27 (1/4" PPG SOLARBAN 70-XL LOW-E #2 +1/2" AIR +1/4" CLEAR SATIN ETCH #3) OR APPROVED ALTERNATE	
META	L	1		
M-1		PREFINISHED 4" 2-PIECE COMPRESSION METAL COVER	METAL TO MATCH STOREFRONT COLOR DARK BRONZE	
M-2		COLOR DARK BRONZE.	METAL TO MATCH STOREFRONT COLOR DARK BRONZE	ISSUE/REVISION RECORD
M-3	VISTAWALL (OR APPROVED ALTERNATE)	FG-3000 STOREFRONT SYSTEM (OR APPROVED ALTERNATE)	PREFINISHED DARK BRONZE ANODIZED ALUMINUM AA-MI2C22A44	DATE DESCRIPTION 05/06/2022 PRELIM PACKAGE
M-5	ALCOA	REYNOBOND PE	COLORWELD 500 "CLASSIC BRONZE"	
M-7	VERSATEX	WP4 TONGUE AND GROOVE	PAINT SOFTER TAN	
M-9		PREFINISHED 8" 2-PIECE COMPRESSION METAL COVER	METAL TO MATCH STOREFRONT COLOR DARK BRONZE	
M-10	ALCOA	REYNOBOND PE	DURAGLOSS 3000 "PROGRAM RED"	
PAINT EP-1	SHERWIN	EXTERIOR PAINT TO SW		
	WILLIAMS	#7020 "BLACK FOX"		
DURO		50 MIL MEMBRANE ROOFING SYSTEM	WHITE; MECHANICALLY FASTENED	
R-1		CLAY BARREL TILE ROOF	CLAY BARREL TILE ROOF	
STON	É			
ST-1	BORAL	CORAL STONE - FOSSIL REEF	WET STACK APPLICATION. MORTAR COLOR "LIGHT BUFF"	
STON	E BAND			
SB-1	BORAL	TUSCAN LINTEL CHAMPAGNE	MORTAR COLOR "LIGHT BUFF"	RacoTra
TREX				Παισιαί
		1/2" THICKNESS		RACETRAC PETROLEUM, INC. 200 Galleria Parkway Southeast
				SUITE 900
VV [-		70 SOLAR FILM		ATLANTA, GEORGIA 30339 (770) 431-7600
	1			· · ·

DUTHEAST PROJECT NAME **BEELINE &** MILITARY **RIVIERA BEACH** FLORIDA 33418 RACETRAC STORE NUMBER #1464 PROTOTYPE SERIES 5.5K 2.0 2020 RH MO 0113 PLAN MODIFICATION NOTICE SPB NO. 0113 DATE 02/18/20 STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/ REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED IN THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND **CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN** PROFESSIONALOS OFA AR91472 **PROJECT NUMBER** 2020157.17 SHEET TITLE EXTERIOR **ELEVATIONS** 

SHEET NUMBER 301



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					<b>RaceTrac.</b> COPYRIGHT NOTICE THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM, INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.
					DESIGN PROFESSIONALS
					Mark S. Salonek, U.C.
					701 W. LAKESIDE AVE
					APT #503 CLEVELAND, OH 44113
					ISSUE/REVISION RECORD
					DATEDESCRIPTION05/06/2022PRELIM PACKAGE
7					
					RaceTrac
					RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SOUTHEAST SUITE 900
					ATLANTA, GEORGIA 30339 (770) 431-7600
					PROJECT NAME BEELINE & MILITARY
					<b>RIVIERA BEACH</b> Florida 33418
					RACETRAC STORE NUMBER
					PROTOTYPE SERIES 5.5K 2.0
					2U2U KH MO 0113 Plan modification notice
					SPB NO. 0113 DATE 02/18/20 STANDARD PLAN BULLETINS (SPR) MODIFY THE
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Ĩ				APPLICATION; COLOR TO MATCH SW #6105 "DIVINE WHITE"	CUNTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.
	EF-2 S	ГО	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6107	PROFESSIONAL OF FL 10/24/22
	FASCIA BLUE -			"NOMADIC DESERT"	ARK S. SALODA
	RED -			REFER TO SPECIFICATION CHART ON SHEET C100	AR91472
	WHITE -	1999-1		8" WHITE STRIPE	A CONTRACTOR
	EP-1 SI W	HERWIN	EXTERIOR PAINT TO SW #7020 "BLACK FOX"		Que that XIX
	STONE ST-1 BO	ORAL	CORAL STONE - FOSSIL REEF	WET STACK APPLICATION. MORTAR	<b>PROJECT NUMBER</b> 2020157.17
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		MADI	SON CANOPIES CANOPIES	PUEBLO TAN FASCIA TRD RED FASCIA	
tional purposes only and is preliminary in e or reliance is strictly prohibited."	"RED"	McGE	E CANOPIES	TRD RED FASCIA - PROGRAM RED	
		MADI	SON CANOPIES	PROGRAM RED FASCIA	



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 41 of 95

					RanaTran
				¥	COPYRIGHT NOTICE THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM.
					INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.
					DESIGN PROFESSIONALS
					Mark S. Salopek, LLC
					701 W. LAKESIDE AVE
					CLEVELAND, OH 44113
<b>s</b>					
					ISSUE/REVISION RECORD DATE DESCRIPTION
					05/06/2022 PRELIM PACKAGE
					RaceTrac
					RACETRAC PETROLEUM, INC. 200 Galleria Parkway Southeast
					SUITE 900 ATLANTA, GEORGIA 30339 (770) 431-7600
					PROJECT NAME
					<b>BEELINE &amp;</b>
					MILITARY
					FLORIDA 33418
					RACETRAC STORE NUMBE
					#1464
					PROTOTYPE SERIES 5.5K 2.0 2020 RH MO 0112
					PLAN MODIFICATION NOTICE
					SPB NO. 0113 DATE 02/18/20
					STANUARU PLAN BULLETINS (SPB) MODIFY TH PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS
					PROTOTYPE SERIES SET AT ORIGINAL RELEASE THE ISSUE/ REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED
					THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BUILTETINS NOT INCORPORTED WITH
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					OF 520 10/24/2
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		FUEL (		SCHEDULE	AR91472
	ID	MANUF.	MATERIAL	COMMENTS	A RESERVENCE IX
	EIFS EF-1	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR	PROJECT NUMBER
	EF-2	STO	STO THERM CI	TO MATCH SW #6105 "DIVINE WHITE" "FINE FINISH"	2020157.17
				APPLICATION; COLOR TO MATCH SW #6107 "NOMADIC DESERT"	
	FASCIA BLUE	-		2" BLUE STRIPE	ELEVATIONS
	RED	-		REFER TO SPECIFICATION CHART ON SHEET C100	
	WHITE PAINT	-		8" WHITE STRIPE	
	EP-1	SHERWIN WILLIAMS	EXTERIOR PAINT TO SW #7020 "BLACK FOX"		
nal purposes only and is preliminary in r reliance is strictly prohibited."	STONE ST-1	BORAL	CORAL STONE - FOSSII REFE	WET STACK APPLICATION MORTAP	ΙυΙ
				COLOR "LIGHT BUFF"	

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 42 of 95



				<b>RaceTrac.</b> COPYRIGHT NOTICE THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM, INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.
				<b>Mark S. Salopek, LLC</b> 701 W. LAKESIDE AVE APT #503 CLEVELAND, OH 44113
				ISSUE/REVISION RECORD DATE DESCRIPTION 05/06/2022 PRELIM PACKAGE
				RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SOUTHEAST SUITE 900 ATLANTA, GEORGIA 30339 (770) 431-7600
				BEELINE & MILITARY RIVIERA BEACH FLORIDA 33418
				RACETRAC STORE NUMBER #1464 PROTOTYPE SERIES 5.5K 2.0 2020 PH MO 0112
				PLAN MODIFICATION NOTICE SPB NO. 0113 DATE 02/18/20 STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/ REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED IN THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT
	FUEL C	ANOPY FINISH	SCHEDULE	BULLETINS NOT INCORPORATED HEREIN.
<b>ID</b> EIFS	MANUF.	MATERIAL	COMMENTS	
EF-1	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6105 "DIVINE WHITE"	<b>PROJECT NUMBER</b> 2020157.17
EF-2	STO	STO THERM CI	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6107 "NOMADIC DESERT"	SHEET TITLE DIESEL FUEL
FASCIA BLUE RED	-		2" BLUE STRIPE REFER TO	CANOPY
	-		SPECIFICATION CHART ON SHEET C100 8" WHITE STRIPE	ELEVATIONS
PAINT EP-1	SHERWIN	EXTERIOR PAINT		SHEET NUMBER
STONF	WILLIAMS	TO SW #7020 "BLACK FOX"		102
ST-1	BORAL	CORAL STONE - FOSSIL REEF	WET STACK APPLICATION. MORTAR COLOR "LIGHT BUFF"	102

nature. As such, any other use or reliance is strictly prohibited."

EIFS EF-1 STO

EF-2 STO

FASCIA

BLUE RED

WHITE PAINT

STONE ST-1 BORAL

EP-1 SHERWIN EXTERIOR PAINT WILLIAMS TO SW #7020 "BLACK FOX"





CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 44 of 95





## Florida Department of Transportation

RON DESANTIS GOVERNOR 3400 West Commercial Boulevard Fort Lauderdale, FL 33309 KEVIN J. THIBAULT SECRETARY

June 17, 2021

Ryan Thomas Thomas Engineering Group 6300 NW 31st Avenue Fort Lauderdale, FL 33309

Dear Ryan Thomas,

RE: Variance Committee Review to allow for Category E Driveway Applicant/Property Owner: Laticrete International Inc. Palm Beach County, City of Riviera Beach State Road: 809, 710 Section: 93150, 93310 MP: 7.10, 20.50 Access Class: 5, 3 Posted Speed: 45, 55 mph SIS: Influence Area Site Acreage: 2.0 Acres Development Size: 22 FP Gas Station, 5,411 SF C. Store, 4,800 SF/3 Lanes Carwash Project Name & Address: RaceTrac - Beeline & Military - NWC of Beeline Highway & Military Trail, Riviera Beach Pre-application Review Meeting Date: July 16, 2020, AMRC Meeting Date: June 3, 2021

### **Request:**

- Driveway 1: Right-in/right-out driveway on the west side of SR 809 located approximately 200 feet south of the northern property line.
- Driveway 2: Use existing right-in/right-out driveway on the west side of SR 809, adjacent to the northern property line.
- Driveway 3: Right-in only driveway on the north side of SR 710 located approximately 290 feet west of the eastern property line.
- Driveway 4: Use existing right-in/left-in/right-out driveway on the north side of SR 710 located adjacent to the western property line.

This request is: Approved with Conditions

Conditions / Comments:

- A minimum driveway length of 25 feet, as measured from the ultimate right-of-way line of the State Road to the first conflict point, is required at Driveways 1, 3 and 4.
- □ A minimum driveway length of 85 feet, as measured from the ultimate right-of-way line of the State Road to the first conflict point, is required at Driveway 2.
- Driveway 3 shall have a maximum width of 20 feet, from inside face of curb to inside face of curb. Pavement markings shall be used to delineate a maximum driveway width of 16 feet.
- □ A right turn lane is required at driveway 1 and shall meet the minimum requirements in the Florida Design Manual (FDM) and shall provide a buffered bicycle lane.
- The existing westbound right turn lane along the SR 710 frontage of the site shall be extended to provide adequate deceleration before Driveway 3, per the minimum requirements in the Florida Design Manual (FDM).

### Ryan Thomas - RaceTrac - Beeline & Military Access Management Review Committee Letter

- Drainage mitigation is required for any impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage.
- A Storm Water Pollution Prevention Plan must be submitted with the application if there will be more than one acre of "disturbed area" (as defined by the Florida Department of Environmental Protection (FDEP)
- If additional right-of-way is required to implement the proposed improvements, the applicant shall donate the right-of-way to the Department.
- All existing driveways not approved in this letter must be fully removed and the area restored.

#### Comments:

Please note that the dimensions between driveways are measured from the near edge of pavement to near edge of pavement and dimensions between median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this letter is to document the conceptual review of the <u>approximate</u> location of driveway(s) to the State Highway system and to note any required improvements. Earlier Department decisions on this request shall be voided unless expressly approved herein. If the above concept is approved, the applicant may submit engineering plans to the Department for permitting. The Department's personnel shall review these plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Please note that this letter does not guarantee permit approval.** The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department.

Committee approvals and conditions which are at variance with Department rules or standards are not binding in the permitting process for more than **12 months**.

Please contact the Access Management Manager - Tel. # 954-777-4363 or e-mail: <u>D4AccessManagement@dot.state.fl.us</u> with any questions regarding the Pre-Approval Letter and Permits Office - Tel. # 954-777-4383 with any questions regarding permits.

For right-of-way dedication requirements go to: <u>https://osp.fdot.gov</u>: Click on Statewide Permit News. Scroll down to District 4. Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.

#### THE DISTRICT ACCESS MANAGEMENT REVIEW COMMITTEE

	With the above ruling I	Agree	Disagree	
John Olson, P.E. John Ølson, P.E.	r: 0N, P.E. 340E	<u> </u>		June 17, 2021
Mark Plass, P.E. Mark Plas District Traffic Operations Engin	r: 55, P.E. <sup>48D</sup> eer	X		June 17, 2021
Jonathan Overton, P.E. for:	-DocuSigned by: Ornatuan Ownton -D1128312655D45A	X		June 17, 2021

cc: Jerry Dean, Jonathan Overton P.E.

File \\DOTSD4HQFS\Share\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\AMRC Letter Template.docx

# **Stormwater Management Report**

for

# **RaceTrac Market**

Northwest Corner Beeline Highway & Military Trail Rivera Beach, FL

Prepared for:

# **RaceTrac Petroleum Inc.**

Prepared by:



6300 NW 31st Avenue Ft Lauderdale, FL 33309 (954) 202-7000

Maxwell T Kaplan Digitally signed by Maxwell T Kaplan DN: c=US, o=Florida, dnQualifier=A01410C0000017BEAAC 643B000050D4, cn=Maxwell T Kaplan Date: 2022.07.06 15:33:11 -04'00'

Maxwell T. Kaplan, P.E. Florida Professional Engineer License No. 83366 FL Business Cert of Authorization No. 27528

June 30, 2022

## Introduction:

The proposed RaceTrac Market site is generally located at the northwest corner of Beeline Highway and Military Trail in Riviera Beach, Florida. The site is currently comprised of two parcels (Lots 5 and 6 of Triangle Commerce Center plat) which feature an existing parking lot area. The proposed site will replat these two parcels into a single 2.804-acre parcel that will have a 5,411 SF convenience store with two fuel canopies.

The site is located within the South Florida Water Management District (SFWMD) C-17 Canal Basin and has an allowable runoff of 62.7 cubic feet per second per square mile (CSM). Additionally, the project is located within Northern Palm Beach County Improvement District (NPBID). The 2.804 acre site is currently permitted under ERP 50-07743-P issued in 2007 for the 18.25 acre Triangle Commerce Center. The conceptual master design featured several buildings including a 4-story hospital, three (3) medical office buildings, a general office building, two retail buildings, and a restaurant. The Kindred Hospital was built under ERP application 060918-15 in 2007 and the Ed Healey Nursing Facility was constructed under application 110929-3 in 2012. The remaining areas have yet to be developed. The plans approved under application 060918-15 show a 20,000 square foot office building and 7,000 square foot retail building within the limits of the 2.804 acre site. These buildings were included in the original design but were not constructed. A survey of the site area demonstrates that the drainage system was installed.

The overall drainage system has been modeled as two separate basins, each with a wet retention pond that discharge to the adjacent roadway swale area along the north side of Beeline Highway via control structures. A four (4) story hospital building was completed in 2007 and a modification (application 110929-3) was submitted for the construction of a 3-story medical center building in 2011. The proposed RaceTrac site is part of Basin 2, therefore Basin 2 has been analyzed in this report. The total area for Basin 2 under the previous modification (application 110929-3) was 10.99 acres. This area will be utilized for this modification with the areas updated to reflect the revised proposed condition with the RaceTrac site. The stormwater analysis for the 10, 25, and 100 year storm is provided for the new Basin 2 area in this report.

All elevations referenced in this report are in the North American Vertical Datum of 1988 (NAVD88). Conversion to NGVD is achieved by adding 1.50' to the NAVD elevations.

## Design:

The proposed on-site drainage system consists of a series of catch basins, manholes, and exfiltration trench which will remain interconnected to the Basin 2 drainage system via existing pipes. The Basin 2 pipe network outfalls to a 0.69 acre on-site lake. The drainage system will attenuate the 25-year 3-day storm runoff without exceeding 62.7 CSM (1.08 cfs for the 10.99-acre Basin 2) via the existing control structure located on the west side of the detention pond #2. The structure discharges to the swale along on the north side of Beeline Highway via an existing 24" pipe. The control structure has a 3" circular bleeder at invert elevation 13.59 NAVD and a 5" wide by 3" high rectangular weir at invert elevation 15.39 NAVD. The grate elevation is at elevation 17.20 NAVD.

<u>Component</u>	<u>Area (acres)</u>
Building	0.124
Pavement	2.017
Pervious	0.663
Total	2.804

Table 1 - Proposed RaceTrac Affected Area Summary

Fable 2 - Basin 2 Area Summa	y – Permitted and Proposed (	Conditions
------------------------------	------------------------------	------------

Component	Permitted Area	Proposed Area
	<u>(acres)</u>	<u>(acres)</u>
Building	1.230	1.040
Pavement	6.620	7.532
Pervious	2.450	1.728
Lake	0.690	0.690
Total	10.99	10.99

## Water Quality:

The master permit stipulates for all water quality treatment to be provided in the on-site lakes below the weir elevation. The water quality requirement for the proposed 10.99 acre Basin 2 area has been determined to be 1.78 acre-feet based on 2.5" over the percent impervious area. This volume is achieved at elevation of 15.32' NAVD based on

the total stage-storage calculation table in the calculations in the following pages, which is below the existing weir elevation of 15.39 NAVD. The water quality is being provided utilizing a combination of the existing on-site lake #2 and the proposed 425 linear feet of 4' deep by 8' wide exfiltration trench.

## Water Quantity:

Stage-storage tables have been compiled using the parameters permitted in the original calculations and incorporating the proposed RaceTrac site. An ICPR model has been created for the 10.99 acre Basin 2 area in the post development condition featuring the RaceTrac site. The model utilizes the existing control structure and routings for the post development 5-year 1-day and 25-year 3-day storm events are provided. The 100-year 3-day zero discharge analysis is providing using the total site stage-storage table. The peak stages for the storm events and discharge for the 25-year 3-day storm are provided in the table below. The permit parameters are provided for comparison.

Elevation (NAVD)	Permitted (ac-ft)	Proposed (ac-ft)
13.50	0.00	0.00
14.00	0.36	0.44
14.50	0.77	0.92
15.00	1.20	1.43
15.50	1.68	1.98
16.00	2.58	2.89
16.50	4.30	4.62
17.00	7.14	7.17
17.50	10.73	10.55
18.00	14.76	14.75
18.50	18.79	19.63
19.00	22.82	24.60

Table 3 - Basin 2 Permitted & Post Condition Stage-Storage Volumes

Storm Event	Peak Stage (NAVD)	Permit Parameter	Design (Proposed)
5-year 1-day	16.41	Minimum Parking Elevation = 16.85' NAVD	16.85' NAVD
25-year 3- day	17.21	Allowable Discharge = 1.08 cfs	1.07 CFS
100-year 3- day	17.81	Minimum FFE = 18.50' NAVD	18.50' NAVD

 Table 4 – Basin 2 Permit Parameters and Proposed Results

Table 5 – Flood Elevation Comparison – Permitted vs. Proposed

Storm Event	Permitted (NAVD)	Proposed (NAVD)
5-year 1-day	16.85	16.42
25-year 3-day	17.12	17.23
100-year 3-day	17.68	17.77

The stages in the proposed condition are slightly higher than the permitted stages for the 25 and 100 year storms, but the proposed condition results do not exceed to permit parameters for minimum building FFE (18.50' NAVD) and allowable discharge (1.08 cfs). All calculations and flood routings are provided in the following pages.

## **Conclusion:**

Based on the proposed design and analysis, the proposed site meets the required water quantity, water quality, and the allowable discharge requirements specified in the master permit and agency guidelines. Based on these findings, we respectively request approval for this project.

# **BASIN 2 BOUNDARY AERIAL**



CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 52 of 95



Department of Engineering and Public Works P.O. Box 21229 West Palm Beach, FL 33416-1229 (561) 684-4000 FAX: (561) 684-4050 www.pbcgov.com

Palm Beach County Board of County Commissioners

Dave Kerner, Mayor

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Maria G. Marino

Gregg K. Weiss

Maria Sachs

Melissa McKinlay

Mack Bernard

#### **County Administrator**

Verdenia C. Baker

"An Equal Opportunity Affirmative Action Employer"

printed on sustainable and recycled paper

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 53 of 95 November 9, 2021

Shaun G. MacKenzie, P.E. MacKenzie Engineering and Planning, Inc. 1172 SW 30<sup>th</sup> Street, Suite 500 Palm City, FL 34990

RE: RaceTrac Beeline Project #: 201004 Traffic Performance Standards (TPS) Review

Dear Mr. MacKenzie:

The Palm Beach County Traffic Division has reviewed the above referenced project Traffic Impact Statement, revised October 27, 2021, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County (PBC) Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality:	Riviera Beach
Location:	NWC of Bee Line Hwy and Military Trail
PCN:	56-42-42-25-41-000-0060 (additional PCNs in file)
Access:	One right-in-only and one right-in/left-in/right-out
	access driveway connections onto Bee Line Hwy, and,
	two right-in/right-out access driveway connections onto
	Military Trail
	(As used in the study and is NOT necessarily an
	approval by the County through this TPS letter)
Existing Uses:	Tire Store = $1,372$ SF
Proposed Uses:	Redevelop the site with:
	Convenience Store = $5,411$ SF
	Gas Station = 22 FP
New Daily Trips:	1,947
New Peak Hour Trips:	135 (67/68) AM; 134 (68/66) PM
Build-out:	December 31, 2023

Based on the review, the Traffic Division has determined that the proposed development <u>meets</u> the TPS of Palm Beach County.

The Property Owner is responsible for the following improvement:

1. Extend the existing westbound right turn lane on Beeline Hwy at Driveway #4 to provide adequate deceleration before Driveway #3, as approved by FDOT.

Please note an FDOT conceptual driveway pre-approval letter should be provided for the access connections onto Bee Line Hwy and Military Trail for the proposed land uses.



Shaun G. MacKenzie, P.E. November 9, 2021 Page 2

Please note the receipt of a TPS approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

No building permits are to be issued by the City after the build-out date specified above. The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email <u>QBari@pbcgov.org</u>.

Sincerely,

Kung Anmar beri

Quazi Bari, P.E., PTOE Manager - Growth Management Traffic Division

QB:HA:jc

ec: Addressee

Mary Savage Dunham, Assistant Director of Development Service, City of Rivera Beach Hanane Akif, P.E., Project Coordinator II, Traffic Division Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2021\201004 - RACETRAC BEELINE.DOCX



Date:	6/30/2022
Project:	RT - Beeline & Military
Project No:	FJ200012

6300 NW 31st Avenue, Fort Lauderdal, FL 33309 Tel: 954-202-7000 Fax: 954-202-7070

Calculated By:	CAS
Checked By:	MTK

#### PERMITTED CONDITION DRAINAGE CALCULATIONS

Control Elevation: FEMA Baseflood Elevation (FIRM Map):	13.50 N/A	13.50 NAVD (PER ERP) N/A NAVD (Zone X)			
Land Use Summary:					
Lake Areas (A <sub>L</sub> ):	30,056	sf o	0.690	ac	
Roof Areas (A <sub>R</sub> ):	53,579	sf o	1.230	ac	
Paved Areas (A <sub>P</sub> ):	288,367	sf o	6.620	ac	
Green Areas (A <sub>G</sub> ):	106,722	sf o	2.450	ac	
Total (A <sub>T</sub> ):	478,724	sf o	10.990	ac	

#### Compute Water Quality Volume:

1) Provide at least 1 inch over the developed project:

- $V_{PRE}$  = 1 inch x A<sub>T</sub> x 1 ft / 12 inches
  - = 1 x 10.99/ 12
  - = 0.916 ac-ft or 10.99 ac-in

2) Provide 2.5" over % impervious area:

a) Site Area for water quality pervious/impervious calculation:

- $A_{\rm S} = A_{\rm T} (A_{\rm L} + A_{\rm R})$ 
  - = 10.99 (1.23)
  - = 9.760 ac of site area for water quality pervious/impervious

b) Impervious area for water quality pervious/impervious calculation:

A<sub>IMP</sub>= A<sub>S</sub> - A<sub>G</sub>

=

- = 9.76 2.45
  - 7.31 ac of impervious area for water quality pervious/impervious

c) Percent of impervious for water quality calculation:

- = A<sub>IMP</sub> / A<sub>S</sub> x 100%
- = 7.31 / 9.76 x 100%
- = 74.9% impervious

d) For 2.5" times the percent impervious:

- = 2.5" x % impervious area
- = 2.5 x 0.749
- = 1.87 inches to be treated

e) Compute volume required volume for quality detention

- $V_{PRE}$  = inches to be treated x (  $A_T A_L$ )
  - = 1.87 x (10.99 1.23) x 1 foot / 12 inches)
  - = 1.52 ac-ft or 18.25 ac-in
- 3) Since the 18.25 ac-in is greater than the 10.99 ac-in computed for the first inch of runoff



Date: 7/29/2021 Project: RT Beeline & Military Project No: FJ200012

6300 NW 31st Avenue, Fort Lauderdal, FL 33309 Tel: 954-202-7000 Fax: 954-202-7070 Calculated By: CAS Checked By: MTK

#### PROPOSED POST-CONDITION DRAINAGE CALCULATIONS

Control Elevation: FEMA Baseflood Elevation (FIRM Map):	13.50 NAVD (PER ERP) N/A NAVD (Zone X)		
Land Use Summary:			
Lake Areas (A <sub>L</sub> ):	30,056 sf	or	0.690 ac
Roof Areas (A <sub>R</sub> ):	45,323 sf	or	1.040 ac
Paved Areas (A <sub>P</sub> ):	328,080 sf	or	7.532 ac
Green Areas (A <sub>G</sub> ):	75,265 sf	or	1.728 ac
Total (A <sub>T</sub> ):	478,724 sf	or	10.990 ac

Compute Water Quality Volume:

1) Provide at least 1 inch over the developed project:

- $V_{PRE}$  = 1 inch x A<sub>T</sub> x 1 ft / 12 inches
  - = 1 x 10.99 / 12
  - = 0.92 ac-ft or 10.99 ac-in

2) Provide 2.5" over % impervious area:

a) Site Area for water quality pervious/impervious calculation:

- $A_{\rm S} = A_{\rm T} (A_{\rm L} + A_{\rm R})$ 
  - = 10.99 (1.04)
  - = 9.950 ac of site area for water quality pervious/impervious

b) Impervious area for water quality pervious/impervious calculation:

A<sub>IMP</sub>= A<sub>S</sub> - A<sub>G</sub>

=

- = 9.95 1.728
  - 8.22 ac of impervious area for water quality pervious/impervious

c) Percent of impervious for water quality calculation:

- = A<sub>IMP</sub> / A<sub>S</sub> x 100%
- = 8.222 / 9.95 x 100%
- = 82.6% impervious

d) For 2.5" times the percent impervious:

- = 2.5" x % impervious area
- = 2.5 x 0.826
- = 2.07 inches to be treated

e) Compute volume required volume for quality detention

- $V_{PRE}$  = inches to be treated x (  $A_T A_L$ )
  - = 2.07 x (10.99 1.04) x 1 foot / 12 inches)
  - = 1.78 ac-ft or 21.32 ac-in
- 3) Since the 21.32 ac-in is greater than the 10.99 ac-in computed for the first inch of runoff



Date:6/30/2022Project:RT - Beeline & MilitaryProject No:FJ200012

### PROPOSED STAGE\STORAGE AREA CALCULATION (NAVD)

Exist. Grades	18.25 15.50	18.00 15.50	18.47 15.50	15.50 13.50	15.50 13.50	16.50 14.50				
	Pavement Area	Landscape Area	Sidewalk Area	Lake Bottom Area	Lake Bank Area				Building FF EL. 18.50 NAVD	Total Site
Stage	Area 6.975	Area 1.428	Area 0.557	Area 0.690 0.6900	Area 0.300	Area	Area	Area	Area 1.040	10.990
13.50	0.00	0.00	0.00	0.00			0.00	0.00		0.00
14.00	0.00	0.00	0.00	0.35	0.02	0.00	0.00	0.00	0.00	0.36
14.50	0.00	0.00	0.00	0.69	0.08	0.00	0.00	0.00	0.00	0.77
15.00	0.00	0.00	0.00	1.04	0.17	0.00	0.00	0.00	0.00	1.20
15.50	0.00	0.00	0.00	1.38	0.30	0.00	0.00	0.00	0.00	1.68
16.00	0.32	0.07	0.02	1.73	0.45	0.00	0.00	0.00	0.00	2.59
16.50	1.27	0.29	0.09	2.07	0.60	0.00	0.00	0.00	0.00	4.32
17.00	2.85	0.64	0.21	2.42	0.75	0.00	0.00	0.00	0.00	6.87
17.50	5.07	1.14	0.37	2.76	0.90	0.00	0.00	0.00	0.00	10.25
18.00	7.93	1.78	0.59	3.11	1.05	0.00	0.00	0.00	0.00	14.45
18.50	11.33	2.50	0.84	3.45	1.20	0.00	0.00	0.00	0.00	19.33
19.00	14.82	3.21	1.12	3.80	1.35	0.00	0.00	0.00	0.00	24.30
19.50	18.31	3.93	1.40	4.14	1.50	0.00	0.00	0.00	0.00	29.28
20.00	21.80	4.64	1.68	4.49	1.65	0.00	0.00	0.00	0.00	34.25



Date: 6/30/2022 Project: RT - Beeline & Military Project No: FJ200012





Date: 6/30/2022 Project: RT - Beeline & Military Project No: FJ200012

## **DESIGN CRITERIA**

### Control Elevation: FEMA Baseflood Elevation (FIRM Map):

13.50 NAVD (PER ERP) N/A NAVD (Zone X)

### STAGE\STORAGE AREA CALCULATION

Stage (NAVD)	Site Stage-Storage (previous page) (acft.)	Exfiltration Trench (acft.)	Total Storage Area (acft.)	
13.50	0.00	0.00	0.00	
14.00	0.36	0.08	0.44	
14.50	0.77	0.15	0.92	
15.00	1.20	0.23	1.43	WATER QUALITY ACHIEVED AT EL. <b>15.32</b> NAVD
15.50	1.68	0.30	1.98	
16.00	2.59	0.30	2.89	
16.50	4.32	0.30	4.62	
17.00	6.87	0.30	7.17	
17.50	10.25	0.30	10.55	
18.00	14.45	0.30	14.75	
18.50	19.33	0.30	19.63	
19.00	24.30	0.30	24.60	
19.50	29.28	0.30	29.58	
20.00	34.25	0.30	34.55	

Water Quality Elevation =	15.32	NAVD
Water Quality Volume=	1.78	acre-ft.



Soil Storage

\_

						Water Table E	Elev. (From Sl	FWMD Permit)
Land Use Summary	<i>'</i> :						12.25 ft NA	AVD
	Acres	Percent						
Lake Areas (A <sub>L</sub> ):	0.690	6.3%			<u>(</u>	Compacted Sc	il Storage per	<u>r</u>
Roof Areas (A <sub>R</sub> ):	1.040	9.5%			5	SFWMD Vol. I	V Page C-III-	<u>1</u>
Paved Areas (A <sub>P</sub> ):	7.532	68.5%			_			_
Green Areas (A <sub>G</sub> ):	1.728	15.7%				Depth to	Water	
Total (A <sub>T</sub> ):	10.990	100.0%	-			Water Table	Storage	
						(feet)	(inches)	
					li li	1	0.45	
						2	1.88	
Average Pervious G	Grade (Elev.)	: 16.75	ft			3	4.95	
Depth to Water Tab	le:	4.50	ft		[	4	8.18	
Soil Storage at Ave	rage Depth (	S <sub>S</sub> ): 8.18	inches		-			-
Weighted S value:								
= S <sub>S</sub> x % Pe	rvious							
0								
= 8.18 x 0.1	6 =							
= 1 29 in	ches							
1120								
Rainfalls (P)								
From Figure C-3, 5-	Year, 24-Ho	ur Storm =		7.00	<mark>0</mark> inche	es		
From Figure C-5, 25	5-Year, 72-H	our Storm =		12.80	<mark>0</mark> inche	es		
From Figure C-9, 10	00-Year, 72-	Hour Storm =		15.00	0 inche	es		
			(1)					
5-yr 1-day Storm E	vent (Refer	to ICPR Rou	ting)					
Stone for 5 Vees 4	day Otama E	vont		16.40	£4 N.			
Stage for 5-Year 1-0	day Storm E	vent		10.42	π. Ν/	4VD		
	Friend (D. f							
25-yr 3-day Storm	Event (Refe	er to ICPR R	buting)					
				47.00	£1			
Stage for 25-Year 3	-day Storm I	zvent		17.23	tt. N/			
400 mm 2 days 04 am	<b>F</b> uent /===							
Tou-yr 3-day Storn	i Event (zer	o discharge)						

Runnoff (Q) =  $(P - 0.2S)^2 / (P + 0.8S)$ =  $(15 - (0.2 \times 1.29))^2 / (15 + (0.8 \times 1.29))$ = 14.03 inches of total runnoff Runoff Volume = Q \* Project Area = 14.03 x 1.505 = 154.19 acre-inches = 12.85 acre-ft.

Stage for 100-Year 3-day Storm Event 17.77 ft. NAVD



Name: Basin 2 Group: BASE		Node: Type:	Basin 2 SCS Unit F	lydrograph C	Status: N	Onsite	
Unit Hydrograph: Rainfall File: Rainfall Amount(in): Area(ac): Curve Number: DCIA(%):	Uh256 0.000 11.525 87.80 0.00	Peaking Factor: 256.0 Storm Duration(hrs): 0.00 Time of Conc(min): 45.00 Time Shift(hrs): 0.00 Max Allowable Q(cfs): 999999.000					
= Nodes ==================							
Name: Basin 2 Group: BASE Type: Stage/Volume		Base Flow(cfs	): 0.000	Init Warn	Stage(ft) Stage(ft)	: 13.500 : 19.000	
Stage(ft) Vol 13.500 14.000 14.500 15.000 16.000 16.500 17.000 17.500 18.000 18.500 19.000 19.500 20.000	ume (af) 0.0000 0.4400 0.9200 1.4300 1.9800 2.8900 4.6200 7.1700 10.5500 14.7500 19.6300 24.6000 29.5800 34.5500						
Name: Offsite 2 Group: BASE Type: Time/Stage		Base Flow(cfs	): 0.000	Init Warn	Stage(ft) Stage(ft)	: 13.500 : 19.000	
Time(hrs) St	age(ft)						
0.00	13.500 13.500						
100.00							
100.00 							
100.00 = Drop Structures === Name: B2Off2-D Group: BASE		From Node: To Node:	Basin 2 Offsite 2	Le	ngth(ft): Count:	62.00 1	
100.00 The property of the pr	DC Ci 24 24 13 0. 0. 0.	From Node: To Node: WNSTREAM .cular .00 .500 012000 000 000	Basin 2 Offsite 2	Friction Solution A Entrance L Exit L Outlet C Solut	ngth(ft): Count: Equation: lgorithm: Flow: oss Coef: trl Spec: trl Spec: ion Incs:	62.00 1 Average Conveyar Automatic Both 0.000 1.000 Use dc or tw Use dn 10	
100.00 The property of the pr	DC Ci 24 13 0. 0. 0. Descrip e edge w	From Node: To Node: WNSTREAM .ccular .00 .500 012000 000 .coo .coo .coo .coo .coo .coo .c	Basin 2 Offsite 2	Friction Solution A Entrance L Exit L Outlet C Inlet C Solut	ngth(ft): Count: Equation: lgorithm: oss Coef: oss Coef: trl Spec: ion Incs:	62.00 1 Average Conveyan Automatic Both 0.000 1.000 Use dc or tw Use dn 10	
100.00 The property of the pr	DC Ci 24 13 0. 0. 0. Descrip e edge w ge Descr e edge w	From Node: To Node: To Node: WNSTREAM rcular .00 .500 012000 000 000 vtion: // headwall 'iption: // headwall	Basin 2 Offsite 2	Friction Solution A Entrance L Exit L Outlet C Inlet C Solut	ngth(ft): Count: Equation: lgorithm: oss Coef: oss Coef: trl Spec: trl Spec: ion Incs:	62.00 1 Average Conveya Automatic Both 0.000 1.000 Use dc or tw Use dn 10	
100.00 Drop Structures === Name: B2Off2-D Group: BASE UPSTREAM Geometry: Circular Span(in): 24.00 Rise(in): 24.00 Invert(ft): 13.500 Invert(ft): 13.500 Invirg's N: 0.012000 p Clip(in): 0.000 t Clip(in): 0.000 tream FHWA Inlet Edge cular Concrete: Squar nstream FHWA Inlet Edge cular Concrete: Squar Weir 1 of 2 for Drop	DC Ci 24 13 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	From Node: To Node: To Node: WNSTREAM rcular .00 .500 012000 000 000 wtion: // headwall iption: // headwall re B20ff2-D *	Basin 2 Offsite 2	Friction Solution A Entrance L Exit L Outlet C Inlet C Solut	ngth(ft): Count: Equation: Igorithm: Flow: oss Coef: oss Coef: trl Spec: trl Spec: ion Incs:	62.00 1 Average Conveyar Automatic Both 0.000 1.000 Use dc or tw Use dn 10	
100.00 The property of the pr	DC Ci 24 24 13 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	From Node: To Node: To Node: WNSTREAM .cular .00 .500 012000 000 .cular	** Bottom Weir E Orifice E	Clip(in): 0 Clip(in): 0 Clip(in): 0 Clip(in): 0 Clip(in): 0	.000 .000 .200 .600	62.00 1 Average Conveya Automatic Both 0.000 1.000 Use dc or tw Use dn 10 TABLE	

Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc. CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 62 of 95

Rise(in): 3.00 Control Elev(ft): 13.590 \*\*\* Weir 2 of 2 for Drop Structure B2Off2-D \*\*\* TABLE Bottom Clip(in): 0.000 Count: 1 Top Clip(in): 0.000 Weir Disc Coef: 3.200 Orifice Disc Coef: 0.600 Type: Vertical: Mavis Flow: Both Flow: Both Geometry: Rectangular Span(in): 5.00 Invert(ft): 15.390 Control Elev(ft): 15.390 Rise(in): 3.00 \_\_\_\_\_ Name: 25 year 3 day Filename: R:\RaceTrac\FJ200012 - Beeline & Military\Documents\Drainage\ICPR\Prop Routing\25 year 3 day.R32 Override Defaults: Yes Storm Duration(hrs): 72.00 Rainfall File: Sfwmd72 Rainfall Amount(in): 12.80 Time(hrs) Print Inc(min) \_\_\_\_\_ \_\_\_\_ 10.00 5.00 40.000 80.000 100.000 10.00 \_\_\_\_\_ Name: 5 year 1 day Filename: R:\RaceTrac\FJ200012 - Beeline & Military\Documents\Drainage\ICPR\Prop Routing\5 year 1 day.R32 Override Defaults: Yes Storm Duration(hrs): 24.00 Rainfall File: Flmod Rainfall Amount(in): 7.00 Time(hrs) Print Inc(min) \_\_\_\_\_ 10.00 8.000 16.000 5.00 30 000 10 00 \_\_\_\_\_ \_\_\_\_\_ Name: 25 year 3 day Hydrology Sim: 25 year 3 day Filename: R:\RaceTrac\FJ200012 - Beeline & Military\Documents\Drainage\ICPR\Prop Routing\25 year 3 day.I32 Execute: Yes Restart: No Patch: No Alternative: No Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500 Time Step Optimizer: 10.000 End Time(hrs): 100.00 Max Calc Time(sec): 60.0000 Start Time(hrs): 0.000 Min Calc Time(sec): 0.5000 Boundary Flows: Boundary Stages: Time(hrs) Print Inc(min) \_\_\_\_ 10.000 40.000 80.000 5.000 10 000 100.000 Group Run \_\_\_\_\_ BASE Yes ------------Name: 5 year 1 day Hydrology Sim: 5 year 1 day Filename: R: RaceTrac \FJ200012 - Beeline & Military \Documents \Drainage \ICPR \Prop Routing \5 year 1 day. I32 Execute: Yes Restart: No Patch: No Alternative: No Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500 Time Step Optimizer: 10.000 Start Time(hrs): 0.000 End Time(hrs): 30.00 Max Calc Time(sec): 60.0000 Min Calc Time(sec): 0.5000 Boundary Stages: Boundary Flows: 1

Time(hrs)	Print Inc(min)
8.000	10.000
16.000	5.000
30.000	10.000
Group	Run
BASE	Yes

Node Min-Max

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning M Stage ft	íax Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs	
Basin 2	BASE	25 year 3 day	72.35	17.23	19.00	0.0050	291708	60.33	31.29	72.35	1.07	
Offsite 2	BASE	25 year 3 day	0.00	13.50	19.00	0.0000	0	72.35	1.07	0.00	0.00	
Basin 2	BASE	5 year 1 day	24.30	16.42	19.00	0.0050	175084	12.42	20.92	24.30	0.84	
Offsite 2	BASE	5 year 1 day	0.00	13.50	19.00	0.0000	0	24.30	0.84	0.00	0.00	

Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.



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# ORIGINAL PERMIT REPORT

Last Date For Agency Action: 06-FEB-2007

#### GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Proi	iect	Name:	Triangle	Commerce	Center
		numo	rnangio	Commence	Venier

Permit No.: 50-07743-P

Application No.: 060918-15 Associated File: 061018-23 WU 061128-11 WU

Application Type: Environmental Resource (New General Permit)

Location: Palm Beach County, S25/T42S/R42E

Permittee : Point West Riviera Beach Inc

**Operating Entity :** Triangle Commerce Center P.O.A., Inc.

Project Area: 18.25 acres

Project Land Use: Commercial Institutional

Drainage Basin: C-17

Receiving Body: FDOT Beeline Highway system

Class: N/A

Special Drainage District: Northern Palm Beach County Improvement District

Conservation Easement To District : No

Sovereign Submerged Lands: No

#### PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit to authorize construction and operation of a surface water management system to serve an 18.25 acre institutional/commercial development known as Triangle Commerce Center.

App.no. : 060918-15

Page 1 of 7

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 67 of 95

#### **PROJECT EVALUATION:**

#### PROJECT SITE DESCRIPTION:

The site is located in western Riviera Beach approximately 0.6 mile west of I-95 on Blue Heron Boulevard. The site is triangular in shape, with the exception of a couple of out areas along Military Trail, and is bordered by Blue Heron Boulvard on the north, Military Trail on the east, and the Beeline Highway on the southwest.

There are no defined drainage facilities within the existing site. Based on the topographic map submitted the site will discharge predominately into the north roadside swale running along the Beeline Highway and inlets along the west side of Military Trail.

There are no permitted surface water management facilities within the project area. The site is vacant with maintained grass.

There are no wetlands or other surface waters located within or affected by the proposed project.

#### PROPOSED PROJECT:

Proposed is the construction and operation of a surface water management system to serve an 18.25 acre institutional/commercial development known as Triangle Commerce Center. The project consists of a medical related development just south of the existing VA Hospital in Rivera Beach. The plans indicate construction of a 4-story 64,353 SF hospital, two 4-story 33,500 SF medical office buildings, a 3-story 27,000 SF medical office building, a 3-story 20,000 SF general office building, two single story retail buildings totaling 15,800 SF, and a 1,800 SF restaurant, internal roadways, parking areas, utilities and water management system.

The proposed surface water management system has two non-connected basins each consisting of site grading, catch basins and storm piping which direct runoff into a wet detention lake for water quality treatment and attenuation. Both lakes discharge into the north swale of the Beeline Highway (SR 710) through proposed control structures.

Basin 1 (9.07 acres) consists of the northwestern half of the site and contains the triangular shaped lake (Lake 1) located at the west end of the project. Lake 1 will discharge into the Beeline swale via a control structure (CS-1) consisting of a Type "C" inlet with a grate elevation of 18.3' NGVD. The inlet has a 3" diameter orifice with an invert elevation of 14.75' NGVD and a 2" high by 5" wide orifice with an invert elevation of 16.2' NGVD cut into its upstream face. The inlet discharge into the adjacent Beeline Highway swale with 62 LF of 24" HDPE culvert.

Basin 2 (9.18 acres) consists of the southeastern half of the site and contains the rectangular shaped lake (Lake 2) located at the central region of the project. Lake 2 will discharge into the adjacent Beeline Highway swale via a control structure (CS-2) consisting of a Type "C" inlet with a grate elevation of 18.7' NGVD. The inlet has a 3" diameter orifice with an invert elevation of 15.0' NGVD and a 2" high by 5" wide orifice with an invert elevation of 16.52' NGVD cut into its upstream face. The inlet discharges into the adjacent Beeline Highway swale with 50 LF of 24" HDPE culvert.

Ultimate discharge is to the C-17 canal lying approximately 1 mile east of the site via the FDOT drainage system within the Beeline Highway. FDOT Drainage Connection Permit No. 06D-496 0076 was issued for this project.

LAND USE: The Provide state of the Provide state of

App.no.: 060918-15

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## Construction:

### Project:

#### Total Project

Total Basin

Building Coverage	1.57	acres
Concrete	.59	acres
Lake	1.51	acres
Lake Bank	.85	acres
Pavement	9.75	acres
Pervious	3.98	acres
Total:	18.25	

#### Basin : Basin 1

		Total Dasi	
Building	Coverage	.45	acres
Concrete		.19	acres
Lake		.82	acres
Lake Bar	ık	.55	acres
Pavemer	ht	5.23	acres
Pervious		1.83	acres
То	tai:	9.07	
Basin :	Basin 2		
		Total Basi	n ,

Building Coverage	1.12	acres
Concrete	.40	acres
Lake	.69	acres
Lake Bank	.30	acres
Pavement	4.52	acres
Pervious	2.15	acres
Total:	9.18	

WATER QUANTITY :

#### Discharge Rate :

As shown in the table below, the proposed project discharge is within the allowable limit for the area. The allowable discharge is based on 62.7 CSM for the C-17 canal.

Discharge Storm Frequency : 25 YEAR-3 DAY

Design Rainfall: 12.8 inches

#### Basin

App.no. : 060918-15

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Basin	Allow Disch (cfs)	Method Of Determination	Peak Disch (cfs)	Peak Stage (ft, NGVD)	
Basin 1	.89	Discharge Formula	.89	18.31	
Basin 2	.9	Discharge Formula	.9	18.7	

#### **Finished Floors :**

As shown in the following table and the attached exhibits, minimum finished floor elevations have been set at or above the calculated design storm flood elevation.

Building Storm Frequency : 100 YEAR-3 DAY		Design Rainfall: 15 inches		
Basin Peak Stage ( ft, NGVD)		Proposed Min. Finished Floors FEMA Elevat ( ft, NGVD) ( ft, NGVD)		
Basin 1	18.89	19.55	N/A	
Basin 2	19.32	20	N/A	

#### **Road Design :**

As shown in the following table and the attached exhibits, minimum road center lines have been set at or above the calculated design storm flood elevation.

Road Storm Frequency : 5 YEAR-1 DAY		Design Rainfall: 7 inches		
Basin	Peak Stage ( ft, NGVD)	Proposed Min. Road Crown ( ft, NGVD)		
Basin 1	17.42	17.95		
Basin 2	17.89	18.35		

#### Parking Lot Design :

As shown in the following table and the attached exhibits, minimum parking lot elevations have been set at or above the calculated design storm flood elevation.

Parking Lot Storm Freque	ncy : 5 YEAR-1 DAY	Design Rainfall 7 inches
Basin	Peak Stage	Proposed Min.Parking Elev.
	( ft, NGVD)	( ft, NGVD)
Basin 1	17.42	17.69
Basin 2	17.89	17.99

#### **Control Elevation :**

Basin	Area (Acres)	Ctrl Elev (ft, NGVD)	WSWT Ctrl Elev ( ft, NGVD)	v Method Of Determination
Basin 1	9.07	14.75	14.75	Wet Season Soil Borings
Basin 2	9.18	15	15.00	Wet Season Soil Borings

#### **Receiving Body :**

Basin	Str.#	Receiving Body	
Basin 1	CS-1	Beeline Highway swale	
Basin 2	CS-2	Beeline Highway swale	

App.no.: 060918-15

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Bioodoro.										
Basin	Str#	Count	Тур	e	Width He	eight	Length D	)ia.	invert Angle	Invert Elev
Basin 1	CS-1	1	Circular (	Drifice				3"	-	14.75
Basin 1	CS-1	1	Rectangula	r Orifice	5"	2"				16.2
Basin 2	CS-2	1	Circular (	Drifice			;	3"		15
Basin 2	CS-2	1	Rectangula	r Orifice	5"	2"				16.52
Culverts:										
Basin		Str#	Count		Туре	١	Nidth	L	.ength	Dia.
Basin 1		CS-1	1	High De	nsity Polyethylene	e			62'	24"
Basin 2		CS-2	1	High De	nsity Polyethylene	e			62'	24"
Inlets:										
Basin		Str#	Count		Туре	Widt	h Length	Dia	•	Crest Elev.
Basin 1		CS-1	1	Fdot Mo	d C Drop Inlet					18.3
Basin 2		CS-2	1	Fdot Mo	d C Drop Inlet					18.7

Discharge Structures: Note: The units for all the elevation values of structures are (ft, NGVD)

### WATER QUALITY :

No adverse water quality impacts are anticipated as a result of the proposed project. Each basin independently provides wet detention water quality treatment of the runoff generated by 2.5" times the impervious area.

Basin		Treatment Method	Vol Req.d (ac-ft)	Vol Prov'd	
Basin 1	Treatment	Wet Detention	1.41	1.41	
Basin 2	Treatment	Wet Detention	1.23	1.23	

#### **GERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM**

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system

App.no.: 060918-15

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Last Date For Agency Action: December 20, 2011

#### GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

PREVIOUS PERMIT MOD REPORT

Project Name:	Ed Healey Skilled N	ursing Facility			
Permit No.: Application No.:	50-07743-P 110929-3	Associated File:	110929-2 110929-1	WU WU	Concurrent Concurrent
Application Type:	Environmental Reso	ource (General Pern	nit Modificatio	on)	
Location: Pal	m Beach County, S	S25/T42S/R42E			
Permittee : Hea Poi	alth Care District Of F nte West Riviera Bea	Palm Beach County ach, Inc.			
Operating Entity	Triangle Commerce	ce Center Poa, Inc.			
Project Area: 6.4	3 acres				
Project Land Use	: Institutional				
Drainage Basin:	C-17				
Receiving Body:	FDOT Beeline High	nway System			
Special Drainage	District: Northern	Palm Beach Count	ty Improveme	ent Dist	rict
Conservation Eas Sovereign Subme	sement To District: erged Lands: No	No			

#### PROJECT PURPOSE:

This application is a request for modification of an Environmental Resource Permit to authorize construction and operation of a surface water management system to serve a 6.43-acre institutional development known as Ed Healy Skilled Nursing Facility.

App.no. : 110929-3
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#### PROJECT EVALUATION:

#### PROJECT SITE DESCRIPTION:

The project site is located at the southwest corner of the intersection of W. Blue Heron Blvd. and N. Military Trail in the City of Riviera Beach, Palm Beach County. The area proposed for additional development within the Triangle Commerce Center consists of previously cleared uplands. There are no wetlands or other surface waters located within or affected by the proposed project.

## PROJECT BACKGROUND:

The 18.25-acre Triangle Commerce Center was originally permitted in February of 2007 under Application No. 060918-15 for the construction and operation of a surface water management system to serve an institutional and commercial development consisting of medical related facilities as well as a retail component. This application is for a revised site plan for a 6.43 acre portion of the site.

#### PROPOSED PROJECT:

The modification of Permit No. 50-07743-P for the construction and operation of a surface water management system to serve a 6.43-acre institutional development known as Ed Healy Skilled Nursing Facility. The proposed surface water management system will consist of inlets and culverts directing runoff to an existing wet detention area (Detention Pond #2 - see Exhibit 2) which resides on the larger 18.25-acre Triangle Commerce Center where water quality treatment and attenuation are provided prior to discharge to the FDOT Beeline Highway surface water management system.

Additionally, this modification to Permit No. 50-07743-P authorizes the re-delineation of Basins 1 & 2 of the 18.25-acre Triangle Commerce Center as designed and permitted under Application No. 060918-15 (see Land Use). As a result of the re-delineation, new peak stages and peak discharge rates have been established and the two existing control structures will require modification (CS-1 in Detention Pond #1 & CS-2 in Detention Pond #2 - see Exhibit 2).

The basin and control structure modifications are as follows:

Basin 1: Revise from 9.07-acres to 7.26-acres Basin 2: Revise from 9.18-acres to 10.99-acres

Control Structure - 1: Rectangular Orifice Bleeder - revise invert elevation from 16.09-feet NGVD to 17.0-feet NGVD.

Control Structure - 2: Rectangular Orifice Bleeder - revise invert elevation from 16.65-feet NGVD to 16.89-feet NGVD.

LAND USE:

## Construction:

Project:

	Previously Permitted	This Phase	Total Project	
Building Coverage	1.57	.73	1.68	acres
Impervious	10.34	4.06	10.74	acres

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	Previously Permitted	This Phase	Total Project	
Lake	1.51		1.51	acres
Lake Bank	.85		.85	acres
Pervious	3.98	1.64	3.47	acres
Total:	18.25	6.43	18.25	
Basin : Basin 1				

#### Basin : Basin 1

	Total Basin		
Building Coverage	.45	acres	
Impervious	4.12	acres	
Lake	.82	acres	
Lake Bank	.55	acres	
Pervious	1.32	acres	
Total:	7.26		

#### Basin : Basin 2

Building Coverage	1.23	acres
Impervious	6.62	acres
Lake	.69	acres
Lake Bank	.30	acres
Pervious	2.15	acres
Total:	10.99	

WATER QUANTITY :

#### Discharge Rate :

As shown in the table below, the proposed cumulative discharge (Basins 1 & 2) is within the allowable limit for the area.

Discharge Storn	n Frequency : 25 YEAR-3	Design Rainfall :	13 inches	
Basin	Allow Disch (cfs)	Method Of Determination	Peak Disch (cfs)	Peak Stage ( ft, NGVD 29)
Basin 1	1.79	Discharge Formula	.71	17.88
Basin 2	1.79	Discharge Formula	1.08	18.62

#### Finished Floors :

Building Storm Frequency : 100 YEAR-3 DAY	Design Rainfall :	15	inches

#### Basin

App.no.: 110929-3

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	(	ft, NGV	age D 29)	Propos	( ft, NGVD	sned Floor 29)	s FEMAE (ft,N0	Elevation GVD 29)
Basin 1		18.37			19.55	5		N/A
Basin 2		19.18			20			N/A
Parking Lot	Design :							
Parking Lot	Storm Frequ	iency : 5	YEAR-1	DAY		Design R	ainfall :7 inche	S
Basin				Peak Stage ( ft, NGVD 2	9)	Proposed (ft	d Min.Parking , NGVD 29)	Elev.
Basin 1				17.16			17.95	
Basin 2				17.94			18.35	
Control Elev	vation :							
Basin		<i>ل</i> (A	Area Acres)	Ctrl Elev ( ft, NGVD 29	WSWT ( ) (ft, NG	Ctrl Elev GVD 29)	Method Of Determinat	ion
Racin 1			7.26	14.75	14.7	75 Pre	viously Permitt	ted
Dasiii I			1.20					
Basin 2			10.99	15	15.0	00 Pre	viously Permit	ted
Basin 2 Receiving B Basin	ody :	1	10.99 Str.#	15 <b>Rece</b>	15.0 iving Body	00 Pre	viously Permiti	ted
Basin 1 Basin 2 Receiving B Basin Basin 1 Basin 2	ody :		Str.# CS-1 CS-2	15 Rece FDO <sup>-</sup> FDO <sup>-</sup>	15.( <b>iving Body</b> Γ Beeline Hig Γ Beeline Hig	00 Pre hway Syste hway Syste	viously Permitt m m	ted
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Basin 1 Basin 2 Receiving B Basin 1 Basin 2 Discharge Bleeders: Basin Basin 1 Basin 1	ody : Structures Str# CS-1 CS-1	:: Note: Count 1 1	10.99 Str.# CS-1 CS-2 The units T Circula Rectang	15 Rece FDO <sup>-</sup> FDO <sup>-</sup> for all the elev ype ar Orifice ular Orifice	15.0 <b>iving Body</b> T Beeline Hig T Beeline Hig vation values Width .42'	00 Pre hway Syste hway Syste of structure <b>Height</b> .17'	viously Permitt m s are (ft, NG Length Dia. .25'	ted IVD 29) Invert Invert Angle 14 1
Basin 1 Basin 2 Receiving B Basin 1 Basin 2 Discharge 1 Bleeders: Basin 1 Basin 1 Basin 1 Basin 2	ody : Structures Str# CS-1 CS-1 CS-2	:: Note: Count 1 1 1	Str.# CS-1 CS-2 The units T Circula Rectang Circula	15 Rece FDO <sup>-</sup> FDO <sup>-</sup> for all the elev ype ar Orifice ular Orifice ar Orifice	15.0 <b>iving Body</b> T Beeline Hig T Beeline Hig vation values <b>Width</b> .42'	00 Pre hway Syste hway Syste of structure <b>Height</b> .17'	viously Permitt m s are (ft, NG Length Dia. .25' .25'	ted IVD 29) Invert Invert Angle 14 15
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Basin 1 Basin 2 Receiving B Basin 1 Basin 2 Discharge 1 Bleeders: Basin 1 Basin 1 Basin 1 Basin 2 Basin 2 Inlets: Basin	ody : Structures Str# CS-1 CS-1 CS-2 CS-2	:: Note: Count 1 1 1 1 Str#	Str.# CS-1 CS-2 The units T Circula Rectang Circula Rectang Circula	15 Rece FDO <sup>-</sup> FDO <sup>-</sup> for all the elev <b>ype</b> ar Orifice ular Orifice ular Orifice T	15.0 <b>iving Body</b> T Beeline Hig ration values <b>Width</b> .42' .42' .42'	00 Pre hway Syste hway Syste of structure Height .17' .25' Width	viously Permitt m s are (ft, NG Length Dia. .25' .25' i Length Dia	ted Invert Invert Angle 14 15 16 1. Crest El
Basin 1 Basin 2 Receiving B Basin 1 Basin 2 Discharge 1 Bleeders: Basin 1 Basin 1 Basin 1 Basin 2 Basin 2 Inlets: Basin Basin 1	ody : <u>Structures</u> Str# CS-1 CS-1 CS-2 CS-2	:: Note: Count 1 1 1 1 Str# CS-1	Str.# CS-1 CS-2 The units T Circula Rectang Circula Rectang Circula	15 Rece FDO <sup>-</sup> FDO <sup>-</sup> for all the elev ype ar Orifice ular Orifice ular Orifice T Fdot Mod	15.0 iving Body F Beeline Hig ration values Width .42' .42' .42' .42' .20 C Drop Inlet	00 Pre hway Syste hway Syste of structure Height .17' .25' Width	viously Permitt m s are (ft, NG Length Dia. .25' .25' .25'	ted Invert Invert Angle 14 15 16 I. Crest El 18.36

The required water quality treatment (2.5" times percent impervious) will be provided and split between two wet detention areas which will discharge independently through two control structures into the FDOT Beeline Highway surface water management system.

Basin		Treatment Method	Vol Req.d (ac-ft)	Vol Prov'd
Basin 1	Treatment	Wet Detention	.92	.92

App.no.: 110929-3

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Basin 2Treatment MethodVol Req.d (ac-ft)Vol Prov'dBasin 2TreatmentWet Detention1.571.57

#### CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

App.no.: 110929-3

Page 5 of 7

## PREVIOUSLY APPROVED CALCULATIONS



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# Engineering & Water Resources, Inc.

7881 SW Ellipse Way, Stuart, Florida 34997 • 772-781-6408 • Fax: 772-781-6409 • www.ewr1.com

Drainage Report and Calculations

**Triangle Commerce Center** 

(September 2006)

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- Existing Conditions
- 1.1 Location 1.2 Soils
- 1.2 So 1.3 Gi
  - .3 Groundwater
- 1.4 Allowable Discharge Rate 1.5 Offsite Flow
- 1.5 Offsite Flow 2 Proposed Development
  - Results Summary
- 3 Results Attachments:

Water Quality, Soil Storage, and 100 yr, 3 day Stage Calculation Basin Stage-Storage Calculations ICPR Nodal Diagram ICPR Input Report ICPR Node Maximum Conditions Report 110929-3

RECEIVED SEP 2.4 2011 WATER RESOURCE REGULATION

Alan Shirkey, P.E. #55548

P:\Project Files\G05 - Gaeta\G0502 - triangle medical\02 - Preliminary Design\Triangle Commerce Center Drainage Report.doc

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Drainage Report & Calculations September 2006 Page 2 of 3

## Project Description Triangle Commerce Center

## 1 Existing Conditions:

#### 1.1 Location

The project site for the proposed Triangle Medical Park is located within Section 25, Township 42 S and Range 42 E in Palm Beach County. The overall property contains 18.25 acres and is currently undeveloped. It is bound by Blue Heron Boulevard to the north, S.R. 710 to the south/west, and Military Trail to the east.

## 1.2 Soils

The existing soil consists mainly of Arents, Basinger, and Immokalee sands, with a minor incursion of Myakka Sand. These types of soils are nearly level, poorly drained soil with a thick, sandy subsurface layer.

## 1.3 Groundwater

Ardaman & Associates, Inc. performed an exfiltration test onsite on May 17, 2006 in accordance with methods described in the South Florida Water Management District (SFWMD) Permit Information Manual, Volume IV. The results of the test conclude that groundwater was observed at a depth of 6.0 feet from existing grade. With existing grade at 17.67' NGVD this would put the groundwater elevation at 11.67' NGVD. In order to be more conservative and take wet season rainfall into consideration a water table elevation of 13.75' was assumed in calculating the soil storage values for Basins 1 & 2. Please note that a control elevation of 14.75' and 15.00' was used in the drainage calculations for Basins 1 & 2, respectively. These two control elevations account for the existing grades in the project's outfall conveyance ditch. This conveyance ditch is owned and operated by FDOT. A drainage connection permit is being applied for.

## 1.4 Allowable Discharge Rate

Final design is based on the SFWMD allowable discharge rate of 62.7 cfs/mi<sup>2</sup> (25-year, 3-day storm event) for the C-17 Basin.

## 1.5 Offsite Flow

There is no offsite flow onto the project. The property is bound by Blue Heron Boulevard to the north, S.R. 710 to the south/west, and Military Trail to the east. Each of these roadway systems

Drainage Report & Calculations September 2006 Page 3 of 3

has their own stormwater management system which collects the road runoff and conveys it away from the project. 5.884 511 117

## 2 Proposed Development:

The Triangle Medical Park encompasses 18.25 acres more or less. The proposed project consists of 8 buildings, with associated parking, utility connections, and a stormwater management system.

Pavement and buildings will make up approximately 65% (11.91 acres) of the project. The lakes will make up 2.36 acres, which is approximately 13% of the project. This results in approximately 78% (14.27 acre) of the project being impervious with the remaining area being green space. > Think the ball of the Hands when

Harl youth William The master drainage system for the project is broken up into two basins, each with its own associated lake. Each basin includes a series of inlets that will collect surface runoff from the proposed site and direct it to its own lake. Water quality and attenuation for the project will be achieved onsite in the lakes before discharging through a control structure into the swale located in the Bee Line Highway Right-of-Way. The control structure (CS-1) for Basin 1 is located in Lake 1 and consists of a 3" circular bleeder set at elevation 14.75' NGVD, a 2" x 5" rectangular weir set at 16.20' NGVD, and 62 LF of 24" diameter HDPE culvert that discharges into the Bee Line Highway swale system. The control structure (CS-2) for Basin 2 is located in Lake 2 and consists of a 3" circular bleeder set at elevation 15.00' NGVD, a 2" x 5" rectangular weir set at 16.52' NGVD, and 62 LF of 24" diameter HDPE culvert that also discharges into the Bee Line Highway swale system.

#### the state of the first of the state of the s 3 Results Summary:

Basin 1 - 9.07 acres many and plants of the the state of the state of the state of the state of the Control Elevation @ 14.75 NGVD white size I a first which a strenger in the s Rainfall Peak Stage (feet) Peak Discharge (cfs) New Storm Pavement (5-year, 1-day) 7.0 inches 17.42 17.16 0.71 Design (25-year, 3-day) 12.8 inches 18.31 17.88 0.89 1.71 Floors (100-year, 3-day) 15.0 inches 18.89 0-18.37 a

Basin 2 – 9.18 acres Control Elevation @ 15.00' NGVD

1.1 Amagas Deckaras Cars

Second Plate and

Storm	Rainfall	Peak Stage (feet)	Mer .	Peak Discharge (cfs) Nev
Pavement (5-year, 1-day)	7.0 inches	17.89	17.94	0.75
Design (25-year, 3-day)	12.8 inches	18.70	18.17	0.90
Floors (100-year, 3-day)	15.0 inches	19.32	19.18	0

include and the second all activity is a first of the of some of 化化 统计选辑者 医酚丁 后连裙属 使自身输品 使迷惑 索勒 医髓管膜间炎 化加拉硫酸化化化 计分子

GIVEN: Control Elevation of 14.75' NGVD from Soil Report and grades at point of outfall.

A. Acreage

Pervious / Green Area Impervious Area (Building) Impervious Area (Pavement / Sidewalk) Impervious Area (Lake) Total Site Area	Area (Acres) 1.83 0.45 5.42 1.37 9.07	Percentage 20.18 4.96 59.76 15.10 100.00
B. Design Storm allowable discharge		
Final design to be based on the SFWMD allowable discharge rate of 62.7 cfs/mi <sup>2</sup> (25-year, 3-day storm event) for the C-17 basin.	0.89	cfs
C. Water Level Elevations		
Average Wet Season Water Table	14.75	Feet
D. Rainfall Amounts:		
Pavement (5-year, 1-day) Design (25-year, 3-day) Floors (100-year, 3-day)	7.0 12.8 15.0	inches inches inches
DESIGN CRITERIA:		
A. Quality		2 2
Greater of ~ the first inch of runoff from the entire site ~ 2.5 inches times the percent impervious		· · · · · ·
B. Quantity		
Final design to be based on the SFWMD allowable discharge rate of 62.7 cfs/mi <sup>2</sup> (25-year, 3-day storm event) for the C-17 basin.	0.89	ofs .
		<b>t</b> .

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1 of 3

#### COMPUTATIONS:

A Quality	10 3	이 가지 않는 것 이 가지 않는 것 	
First inch of runoff from the developed site 1inch x 1ft / 12inches x 9.07 acres	0.76	acre-feet	,3
2.5 Inches times research impositions	ىسىپىتىرىسىسىرى بو ئىنچىتىرىرىسى		
2.0 inches times percent impervious		naking nake shippaki Ghintan	
1. Site Area = Project Area - roofs	8.62	acres	
2. Impervious Area = Site Area - Pervious Area	6.79	acres	
3. Percent Impervious = Impervious Area / Site Area	0.79	7 <b>9%</b>	
4. 2.5 inches times percent impervious	1.97	inches	
5. Volume required for treatment		a ang	
= inches to be treated x Site Area	1.41	acre-feet	

6.	Therefore,	nin an faith ann ann ann ann ann ann ann ann ann an	<del>مىيەتىرى مىكى بىر سارىر يوسلەكار</del> 1	1.41 acre-feet CONTROLS
1.12.00				

B. SCS Curve Number

and the second		
Developed Site Drainage Basin		sta way a se
Average Site Grade	17	75 feet
Average Wet Season Water Table	13.	75 feet
Average Depth to Water Table		* A feet 19 0 80 0
Soil Storage, from Table (use 4.0 feet compacted)	8.	18 inches
Developed Pervious Area = Pervious / Green Area	1.1	33 acres
Soil Storage = Storage Available X Pervious Area	1.3	25 acre-feet
Moisture Soil Storage, S = S = Available Soil Storage / Developed Area		35 inches

SCS Curve Number, CN CN = 1000 / (S + 10)

85.83

16.20

FEET

C. Stage-Storage - Developed Area

Refer to separate stage-storage calculation sheets.

WATER QUALITY	MET (on the developed site) AT	
	ELEVATION	

2 of 3

9/8/2006

(f)

D. Control Structure			
<ol> <li>Set the crest high enough to store the required water</li> <li>Water Quality volume of 1.41 acre-feet is met at elev feet.</li> </ol>	quality volume. ation 16.20		
E. 100-Year Zero Discharge Elevation			
<ol> <li>Rainfall from the 100-yr, 3-day design storm =</li> <li>Runoff, Q, in inches: Area utilitized = Developed Site</li> </ol>		15.0	inches
Q = (P-0.2S)^2 / (P+0.8S)			
Finished Floor (100-year, 3-day)	P =	15.00	inches
•	S =	1.65	inches
	Q =	13.19	inches
	V =	9.97	acre-feet
Met at Elevation (d	leveloped site)	18.89	feet

3 of 3

9/8/2006

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 82 of 95

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GIVEN: Control Elevation of 15.00' NGVD from Soil Report and grades at point of outfall.

A. Acreage	Alliga i di Companya i	al a canto to da Al secondo to da
	Area (Acres)	Percentage
Pervious / Green Area	2.15	23.42
Impervious Area (Building)	1.12	12.20
Impervious Area (Road / Sidewalk)	4.92	53.59
Impervious Area (Lake)	0.99	10.78
Total Site Area	9.18	100.00
B. Design Storm allowable discharge	al i i i	
Final design to be based on the SFWMD allowable discharge rate of 62.7 cfs/mi <sup>2</sup> (25-year, 3-day storm event) for the C-17	n in adda	
basin. ***	0.90	cfs
C. Water Level Elevations		
Average Wet Season Water Table	15.00	Feet
D. Rainfall Amounts:		
Pavement (5-year, 1-day)	7.0	inches
Design (25-year, 3-day)	12.8	inches
Floors (100-year, 3-day)	15.0	inches

#### **DESIGN CRITERIA:**

A. Quality

Greater of

~ the first inch of runoff from the entire site

~ 2.5 inches times the percent impervious

## B. Quantity

Final design to be based on the SFWMD allowable discharge rate of 62.7 cfs/mi<sup>2</sup> (25-year, 3-day storm event) for the C-17 basin.

0.90 cfs

1 of 3

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9/8/2006

COMPL	ITA	TIO	NS

A Quality		
First inch of runoff from the developed site 1inch x 1ft / 12inches x 9.18 acres	0.77	acre-feet
2.5 inches times percent impervious	an a	
1. Site Area = Project Area - roofs	8.06	acres
2. Impervious Area = Site Area - Pervious Area	5.91	acres
3. Percent Impervious = Impervious Area / Site Area	0.73	73%
4. 2.5 inches times percent impervious	1.83	inches
<ul> <li>5. Volume required for treatment</li> <li>= inches to be treated x Site Area</li> </ul>	1.23	acre-feet

C.C. C.		and the second	and the second secon	 and the second sec	and the state of the
D.	i neretore,			1.23	acre-feet
				CONTROLS	The second se
				Sourcere	man his his hard and a second

B. SCS Curve Number

Deve	loped	Site	Dra	inage	Basin	í
------	-------	------	-----	-------	-------	---

Av	erage Site Grade	18 25	feet
Av	erage Wet Season Water Table	13 75	feet
Av	erage Depth to Water Table	4.5	feet
So	I Storage, from Table (use 4.00 feet compacted)	8.18	inches
De	veloped Pervious Area = Pervious / Green Area	2.15	acres
So	I Storage = Storage Available X Pervious Area	1.47	acre-feet
Mo	isture Soil Storage, S =	1.92	inches
S	= Available Soil Storage / Developed Area		inclued
SC	S Curve Number, CN	83.02	му.
C	N = 1000 / (S + 10)	00.02	
C. Stag	e-Storage - Developed Area		16 H

Refer to separate stage-storage calculation sheets.

WATER QUALITY MET (on the developed site) AT ELEVATION

16.52 FEET

2 of 3

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D. Control Structure	e Calment I in		
<ol> <li>Set the crest high enough to store the required wate</li> <li>Water Quality volume of 1.23 acre-feet is met at ele- feet.</li> </ol>	r quality volume. vation 16.52		т. — ет. — <sup>с</sup> .
E. 100-Year Zero Discharge Elevation			
1. Rainfall from the 100-yr, 3-day design storm =		15.0	inches
Area utilitized = Developed Site	A CONTRACTOR	de la companya de la comp	
Q = (P-0.2S)^2 / (P+0.8S)	e i si ti seet		at in the t
Finished Floor (100-year 3-day)	D =	15.00	inches
the second the second of the second	S=	1.92	inches
	Q =	12.92	inches
	V =	9.89	acre-feet
Met at Elevation (	developed site)	19.32	feet

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Triangle Medical P	ark Stage-Store	de Calculation	T		······			
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Proposed		·····		······································				+
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Pavement		U/40 5.00						- The second second second second
Sidewalk		0,43					·····	·
ake Bottom		0.19					the second se	· · · · · · · · · · · · · · · · · · ·
ake Bank		0.62	-				· · · · · · · · ·	· · · · ·
Green		U,55	·			and the second as a second second second	· · · · ·	and the second
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Elene ente		1				· ·		
ciements	Blag	Pavement	Sidewalk	Lake Bottom	Lake Bank	Green		1
storage type	Vertical	Linear	1/2					Total
Irea	0.45	5 22	Linear	Vertical	Lineer	Linear		·· · ·
start stage	10.75	48.75	0.79	0.82	0.55	1.83		9.07
and stage		19.75	16.75	14.75	14.75	16.75		
stage	storane	10.10	18./3		16.75	18.75	a la	· · · · · · · · ·
14.75	0.00	6.00	storage	storage	storage	storage	stage	storage
15.25	0.00	0.00	0.00	0.00	0.00	0.00	14.75	0,00
15.75	0.00	0.00	0.00	0.41	0.03	0.00	15.25	0,44
18.25	0.00	0,00	0.00	0.82	0.14	0.00	15.75	0.96
16 75	0.00	0.00	0.00	1.23	0.31	0.00	16.25	1.54
17 26	0.00	0.00	0.00	1,64	0.55	0.00	16.75	2.19
17 75	1 0.00	0.00	0.01	2.05	0.83	0.11	17.25	3.33
19.05	0.00	1.31	0.05	2.46	1.10	0.46	17.75	5.37
19.76	0.00	2.84	0.11	2.87	1.38	1.03	18.25	8.32
40.05	0.00	5.23	0.19	3.28	1.65	1.83	18.75	12.18
19.40		7.85	0.29	3.69	1.93	2,75	19.25	16.49
19.75	0.00	10,46	0.38	4.10	2.20	3.66	19.75	20.80
20.25	0.00	13.08	0.48	4.51	2.48	4.58	20.25	25.11

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Irlangle Medical Pa	irk Stage-Storag	ge Calculation			······	······		
Basin 2					-	anian an anna an		
Proposed								
		Area (ac)	***					
						1		[
Bidg	.15	1.19	· · · · · · · · · · · · · · · · · · ·					
Pavement		4.52						
Sidewalk	1005	040			· · · · · · · · · · · · · · · · · · ·			
ske Bottom	1 1 4 4 4 4 4	0.60						}
ake Bank		0.00						
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Contractices	- Coury	Favement	Sidewalk	Lake Bottom	Lake Benk	Green		
elorada hono	Mandband	Farmer and	·				1	Total
Can Interest Contract	Yerucai	Linear	Lineer	Vertical	Linear	Linear		
fart cloco	1016	<u>494</u>	0.40	0.69	0.30	215		9.18
	19,00	17.00	17.00	15.00	15.00	17.00	······································	
	-	18,90	19,00		17,00	19.00		
45.00	SIGREGO	Storage	Storage	storage	storage	storage	stage	storage
10.14	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00
15:50	0.00	0.00	0.00	0.35	0.02	0.00	15.50	0.00
16:00	0.00	0.00	0.00	0.69	0.08	0.00	18 00	0.00
16.50	0.00	0.00	0.00	1.04	0.17	0.00	16.50	1 20
17,00	0.00	0.00	0.00	1.38	0.30	0.00	17.00	1.20
17.50	0.00	0.28	0.03	1.73	0.45	0,00	17.00	00.1
18.00	0.00	1.13	0.10	2.07	0.60	0.10	19.00	2.84
18,50	0.00	2.54	0.23	2.42	0.55	1.04	10.00	4,44
19.00	0.00	4.52	0.40	2.76	0.90	2 46	10.00	7.14
19.50	0.00	6,78	0.80	3.11	1.05	2.10	10.50	10.73
20,00	0.00	9.04	0.80	3.45	1 20	4 30	19,30	14.78
20.50	0.00	11.30	1.00	3.80	1 26	-7.3U E 30	20.00	18.79
The for the second s	1318 S. 19				1.00	0.30	20.50	22.82

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 87 of 95 . .

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Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.

CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 88 of 95 Triangle Commerce Center Input Report



Interconnected Channel and Pond Routing Model (ICPR) ©2002 Streamline Technologies, Inc.

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#### Triangle Commerce Center Input Report

Time(hrs) Stage(ft) 14.750 0.00 100.00 14.750 Name: Offsite 2 Group: BASE Base Flow(cfs): 0.000 Init Stage(ft): 15.000 Warn Stage(ft): 0.000 Type: Time/Stage Time (hrs) Stage(ft) \*\* \*\* \*\*.\*\*,== i= == = -----0.00 15.000 15.000 100.00 ---- Drop Structures -----Name: Bloff1-D From Node: Basin 1 Length (ft): 62.00 Count: 1 Group: BASE To Node: Offsite 1 UPSTREAM DOWNSTREAM Friction Equation: Average Conveyance Geometry: Circular Span(in): 24.00 Rise(in): 24.00 Invert(ft): 14.750 Circular Solution Algorithm: Automatic Flow: Both 24.00 24.00 Entrance Loss Cost: 0.000 Exit Loss Coaf: 0.000 Outlet Cirl Spec: Use dc or tw Inlet Cirl Spec: Use dn Solution Incs: 10 Manning's N; 0.012000 Top Clip(in): 0.000 Bot Clip(in): 0.000 0.012000 0.000 0.000 Upstream THWA Inlat Edge Description: Circular Concrete: Square edge w/ headwall Downstream FHWA Inlet Edge Description: Circular Concrete: Square edge w/ headwall \*\*\* Weir 1 of 2 for Drop Structure BlOffl-D \*\*\* TABLE Count: 1 Type: Vertical: Mavis Flow: Both Bottom Clip(in): 0.000 Top Clip(in): 0.000 Weir Disc Coef: 3.200 Geometry: Circular Orifice Disc Coef: 0.600 \$pan(in): 3.00
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Triangle Commerce Center Input Réport

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Triangle Commerce Center Input Report

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#### Triangle Commerce Center Node Maximum Conditions Report

-	Name	Group	Simulation	Max Time Stage hrs	Max Stage Ét	Warning Stage ft	Max Delta Stage ft	Max Surf Area It2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs	
	Basin 1 Basin 2 Offsite 1 Offsite 2 Basin 1 Basin 2 Offsite 1 Offsite 2	BASE BASE BASE BASE BASE BASE BASE BASE	25 year 3 day 25 year 3 day 25 year 3 day 25 year 3 day 5 year 1 day 5 year 1 day 5 year 1 day	72.36 72.35 0.00 0.00 24.14 23.94 0.00 0.00	18.306 18.696 14.750 15.000 17.424 17.890 14.750 15.000	0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000	0,0050 0,0050 0,0000 0,0043 0,0050 0,0050 0,0050 0,0000 0,0000	260292 236152 0 95223 134303 0 0	60.33 60.33 72.36 72.35 12.42 12.42 24.14 23.94	24.335 24.383 0.891 0.908 15.854 15.458 0.711 0.750	72.36 72.35 0.00 24.14 23.94 0.00 0.00	0.891 0.908 0.000 0.000 0.711 0.750 0.000 0.000	

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WATER RESOURCE REGULATION

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CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 93 of 95 CITY OF RIVIERA BEACH

CONTRUCTION OF THE PACHCOUNTY

City of Riviera Beach Planning and Zoning Division 600 W. Blue Heron Blvd. Riviera Beach, FL 33404 Phone: (561) 845-4060 Email: <u>comdev@rivierabch.com</u>

#### AFFIDAVIT OF INSTALLATION OF NOTIFICATION SIGNS

**INSTRUCTIONS:** To be completed by individual submitting application (property owner, petitioner with consent, or authorized agent).

Application Number and Name: Site Plan (SP-20-23), Special Exception (SE-20-02)

Date(s) of Public Hearing(s): February 9, 2023

#### STATEMENT OF COMPLETENESS AND ACCURACY

In accordance with the requirements of Section 31-4 Public Notification Signs, of the Code of Ordinances of Riviera Beach, Brian Terry, hereby certify that 2 Notification Signs, herein called Signs, for the above

Application Number and Name have been posted/installed on the subject property under review for said Application located at: <u>PCN 56-42-42-25-41-000-0060</u> 56-42-42-25-41-000-0050\_\_\_\_\_

Address/ Location of Signs

The Signs have been produced and meet the specifications of the requirements of the City of Riviera Beach, Zoning Division's Technical Manual. Posting/Installation of the Signs was completed on  $\frac{1/25/23}{Date of Posting/Installation}$ , which was no less than

fifteen (15) days prior to the first public hearing listed above. Said signs have been posted in a manner which provides an unobstructed view and which allows for clear reading from the street(s) along <u>Beeline Highway</u>, <u>Military Trail</u>.

I will ensure that the Signs remain on the subject property, until the application has had a Final Development Order by the Hearing Officer, Planning and Zoning Board, or City Council or has been withdrawn by the Applicant. The Signs, in no case, shall remain on the subject property more than five (5) days following the Final Board Action. I understand that any knowingly false, inaccurate, or incomplete information provided by me will result in the denial, revocation, postponement, or administrative withdrawal of this application request.

Supportive Documents: Attached hereto as Attachment "A" is a complete list of all photographs of posted signs along the subject property.

Check (X) one: I am the [ ] property of	wner [x]agent []other_	10	······································
Brian Terry		BIT	$\rightarrow$
(Name - type, stamp or print clearly) Insite Studio, Inc.		(Signature) 8144 Okeechobee Blvc West Palm Beach, FL 3	0. #A, 33411
(Name of Firm)		(Address, City, State,	Zip)
NOTARY PUBLIC INFORMATION:		COUNT	STATE OF FLORIDA IY OF PALM BEACH
The foregoing instrument was acknowled	dged before me this 25	_day of _January	, 20 <u>_23</u> _by
Brian Terry	He/she is personally known to	me or has produced	
(Name of person acknowledging) as identification and did/ <mark>did not take an o</mark> Paula Miller	circle correct response).	Pane M	be of identification)
(Name - type, stamp or print clearly)		(Signature)	
My Commission Expires on: <u>11/29/24</u>		PAULA MILLER Notary Public - State of Florida Commission # HH 064882 AF	ATS SEAL OR STAMP
Affidavit of Installation of Notification Signs Page 1 of 2	Bonc	My Comm. Expires Nov 29, 2024 led through National Notary Assn.	Revised 05/18/2018

FORM # 14

## **ATTACHMENT A: Photographs of Signs**

All posted signs along the subject property are required to be photographed and attached here.



Affidavit of Installation of Notification Signs Page 2 of 2 CASE: SP-20-23 and SE-20-02 PZB Exhibit 1 Page 95 of 95