December 7, 2017

Ms. Cindy Mulkey
Program Administrator
Office of Siting Coordination
Florida Department of Environmental Protection
2600 Blair Stone Road, MS#5500
Tallahassee, FL 32399-2400

RE: Amendment of Site Certification Application
FPL Riviera Beach Clean Energy Center (PA09-54C)

Dear Ms. Mulkey:

Florida Power & Light Company (FPL) is requesting a post-certification amendment to the Site Certification for FPL's Riviera Beach Clean Energy Center (RBEC), pursuant to rule 62-17.205(1)(A) of the Florida Administrative Code. The purpose of this amendment request is to obtain approval to construct a new asphalt-paved parking area and associated access drive east of the existing aboveground water tanks in the approximate northeast corner of the facility, within the certified site boundary. The proposed parking area will serve to accommodate the overflow of vehicles and heavy equipment during outages.

Included in this submittal are design plans showing the location of the proposed parking lot and access driveway. The project would entail the conversion of approximately 0.37 acres of pervious surface; however, stormwater calculations were performed to ensure all stormwater runoff associated with the proposed project would be captured by the existing stormwater system. Attached you will also find a drainage statement detailing the stormwater calculations.

Thank you for your attention to and consideration of FPL's request to amend the Site Certification for RBEC. If you have any questions regarding this submittal, please do not hesitate to contact me at 561-691-2209 or Patrick Stein at 561-694-4931.

Sincerely,
Florida Power & Light Company

Jena S. Mier
Environmental Services Manger

Attachments

cc: Ann Seiler, SCO
Wilfredo Rosario, FPL

Attachments

Drainage Statement for the
Florida Power and Light Company (FPL)
Riviera Beach Energy Center (RBEC) Parking Lot East of Water Tanks

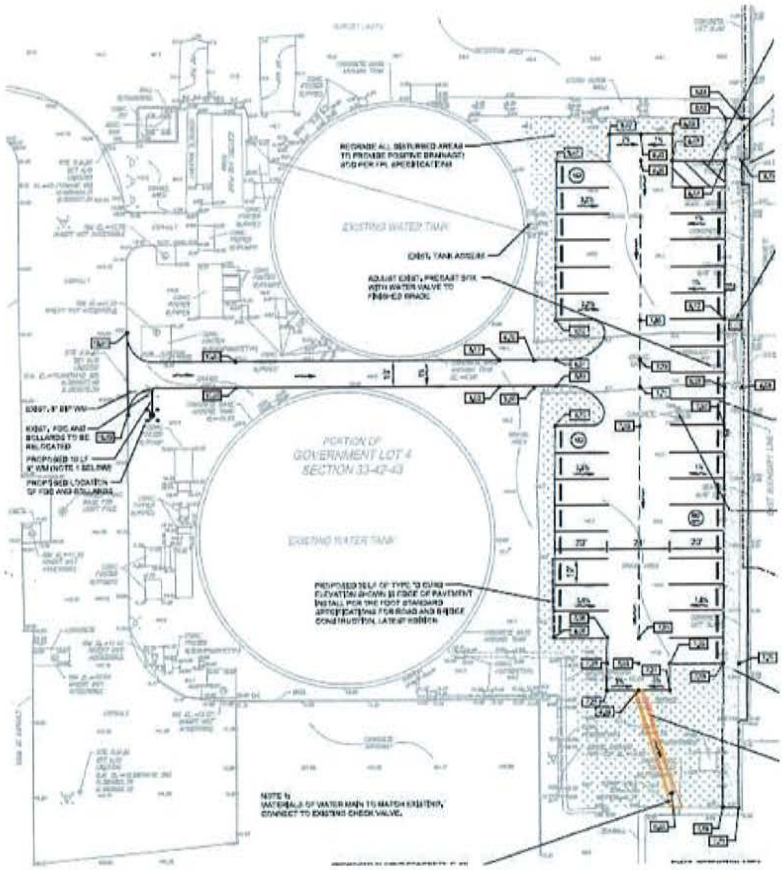
Introduction:

In November 2017, the RBEC determined that additional parking was required to meet the needs of FPL Personnel and Contractors during outages, emergency operations, and planned maintenance activities. An undeveloped area, on the east side of the site, north of the Administration Building and east of the Water Tanks, was deemed as the most suitable location for the construction of the improvements.

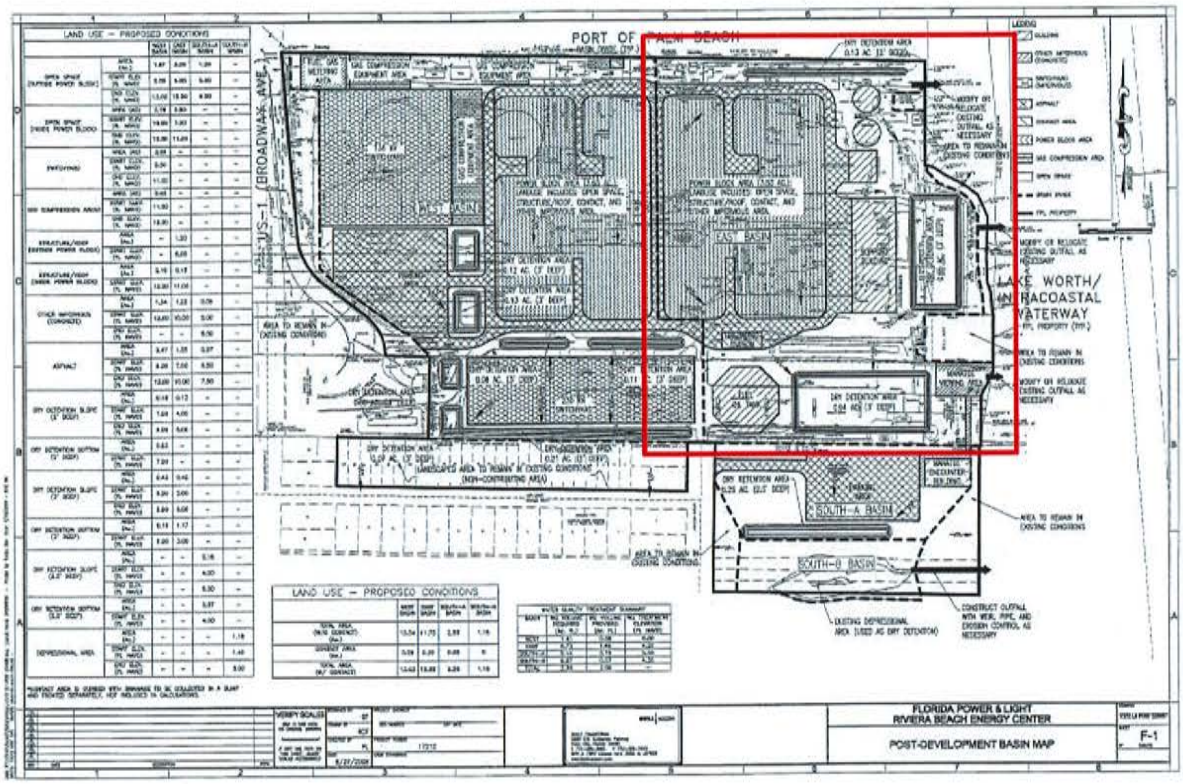
The improvements will consist of the following:

- Construct a paved access drive from the existing asphalt parking area west of the Water Tank;
- Construct a parking lot with 32 parking spaces on the east side of the Water Tanks;
- Construct a sidewalk along the east side of the parking lot for pedestrian access along the seawall;
- Construct a concrete flume from the south side of the parking lot to direct runoff from the parking lot and sidewalks to the existing drains that discharge to Pond H.

There will be the increase in impervious area of 16,196 square feet or 0.37 acres for the improvements.



The stormwater management for the RBEC is part of a previously approved Site Certification Application (SCA) permitted circa 2009. The stormwater management system for the 33.3 acre property encompasses several distinct drainage areas.



Based on a review of the RBEC Stormwater Management Plan, it appears that the improvements will be constructed within the East Basin of the RBEC.

The following is a description of the East Basin from the RBEC Stormwater Management Plan:

4.2.2 – EAST BASIN – 12.02 ACRES

The East Basin is proposed to include ±3.6 acres of power block areas, ±1.4 acres of asphalt (roadway and parking), oil and water storage tanks, administration and service buildings, and open space. The basin area varies in elevation from 5.0 to 11.0-ft NAVD. The power block areas within the East Basin have been set at 11.0-ft NAVD for modeling purposes and are based on existing topography.

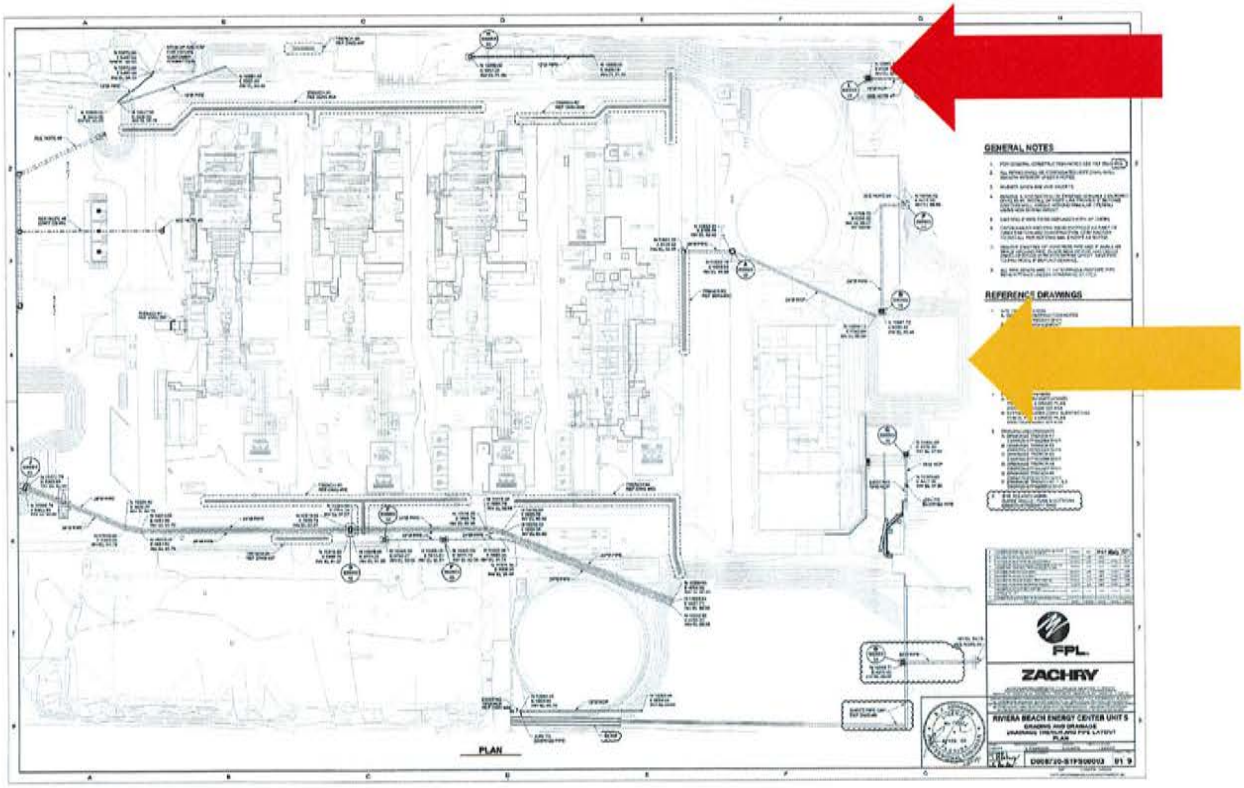
Runoff from the East Basin will collect in a series of interconnected dry detention areas located on the eastern edge of the site near Lake Worth Lagoon. These detention areas vary in depth from two to three feet. The two foot deep detention area covers 0.13 acres with a bottom elevation of 4.0-ft NAVD. The three foot deep detention areas cover 1.59 acres with a bottom elevation of 3.0-ft NAVD.

The outfall from the East Basin and the plant site has been conceptualized at this time with three separate control structures acting in unison. The assumption is that the dry detention areas within this basin will be interconnected and will exhibit identical time-stage relationships. These structures would use existing outfall locations to discharge to Lake Worth Lagoon. The amount of stormwater outfall points will be reduced to three from seven existing outfalls. Each of the three control structures for the East Basin has a 36-inch weir set at 4.3-ft NAVD. One of the control structures would have a 3.25-inch diameter bleeder set at the basin control elevation of 2.0-ft NAVD. These structures have been sized to provide approximately 1.56 acre-ft of WQ volume. The connection downstream of each control structure has been conceptualized to use existing 21-inch culverts with an estimated elevation of 0.20-ft NAVD.

As noted before, the eastern boundary of the East Basin is located adjacent to Lake Worth Lagoon. In many places along this boundary, a seawall is present which includes the plant cooling water discharge structures. This seawall and these structures will be incorporated into the new power plant site. The maximum elevation of the seawall is approximately 6.6-ft NAVD near the proposed dry detention areas. This seawall has been conceptualized in the modeling as a broad-crested weir set at 6.6-ft NAVD.

The construction plan for the Plant is shown below.

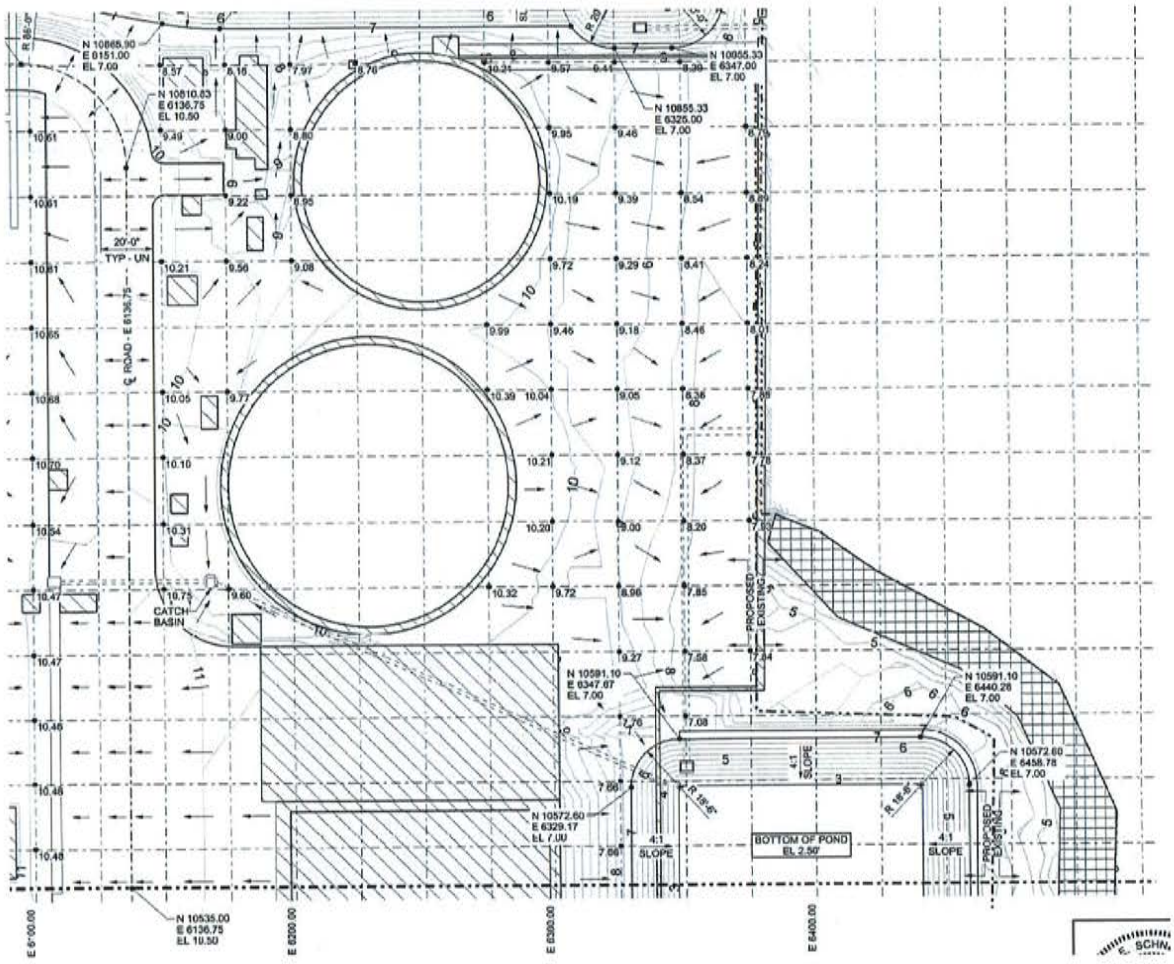
Reference: Zachry Grading and Drainage, Drainage Trench and Pipe Layout Plan



Pond J is located north of the proposed improvements (red arrow) and Pond H is located south of the proposed improvements (orange arrow).

Paving, Grading and Drainage Improvements:

Please note that based on *Zachry's Grading and Drainage Rough Grades Zone B Plan*, the area for the planned improvements currently drains via overland flow to an existing pond to the south.



The proposed improvements will include a paved parking lot and access drive with an inverted crown and concrete flume that drains via overland flow to two drains that discharge to the Pond H; the runoff from the improvements will continue to drain to Pond H. The Pond H and the area for the parking lot/sidewalk improvements are located within Sub-basin 25 of the previously permitted system. The access drive component of the planned improvements is located within Sub-basin 24 of the previously permitted system.

Piping and drainage structures will not be installed as part of the planned improvements. All improvements will be constructed at the existing finished grades. The existing topographical elevations

will not change with the proposed construction (i.e. no filling of the site is planned). The existing retention ponds will not be modified.

RBEC Stormwater Management System East Basin:

As stated above, the existing stormwater management system consists of several drainage Basins. The project improvements reside within the East Basin.

The water quality treatment within the RBEC is as follows:

Table 4.3 – Water Quality Summary

Basin	Treatment Method	WQ Volume Required	WQ Volume Provided	WQ Treatment Elevation
		(ac-ft)	(ac-ft)	(ft NAVD)
West	Dry Detention	1.41	0.68	8.00
East	Dry Detention	0.73	1.46	4.20
	Plant Total:	**2.14**	**2.14**	--
South-A	Dry Retention	0.14	0.19	5.50
South-B	Dry Detention	0.07	0.57	4.30
	Manatee Area Total:	**0.21**	**0.78**	--

The water quality was based on a provision for 2.5 inches times the percent impervious plus an additional ½" of pretreatment. Reductions were provided for the provision of dry retention systems.

The existing system provides an excess of 0.57 acre-feet of water quality.

Based on the 0.37 acres of impervious area added, an additional 0.08 ac-ft of water quality would be required. This can be provided by the existing system leaving 0.49 ac-ft of remaining excess water quality treatment.

Prepared by:

Claudine Alexander, P.E.
Professional Engineer No. 53822 (Florida)
CAPE Jupiter, LLC
Certificate of Authorization No. 30993
Contract Civil Engineer working on behalf of Florida Power and Light Company

cfacd
cfxd
12/7/17.

December 7, 2017

PARKING LOT EAST OF WATER TANKS

AT

RIVIERA BEACH ENERGY CENTER

FOR

FLORIDA POWER & LIGHT Co.

PALM BEACH COUNTY, FLORIDA

SECTION 33, TOWNSHIP 42S, RANGE 43E

VICINITY MAP
SCALE: NONE

AERIAL PHOTO OF PROJECT LOCATION
SCALE: NONE

INDEX OF DRAWINGS

SKETCH / DRAWING NO.	DESCRIPTION
PKG-1	COVER SHEET
--	SURVEY (AVIROM AND ASSOCIATES)
PKG-3	DEMOLITION PLAN
PKG-4	PAVING, GRADING AND DRAINAGE PLAN
PKG-5	CIVIL DETAILS
PKG-6	CIVIL DETAILS

FOR BIDDING PURPOSES ONLY

CLAUDINE ALEXANDER, P.E. FL. REG. NO. 53822

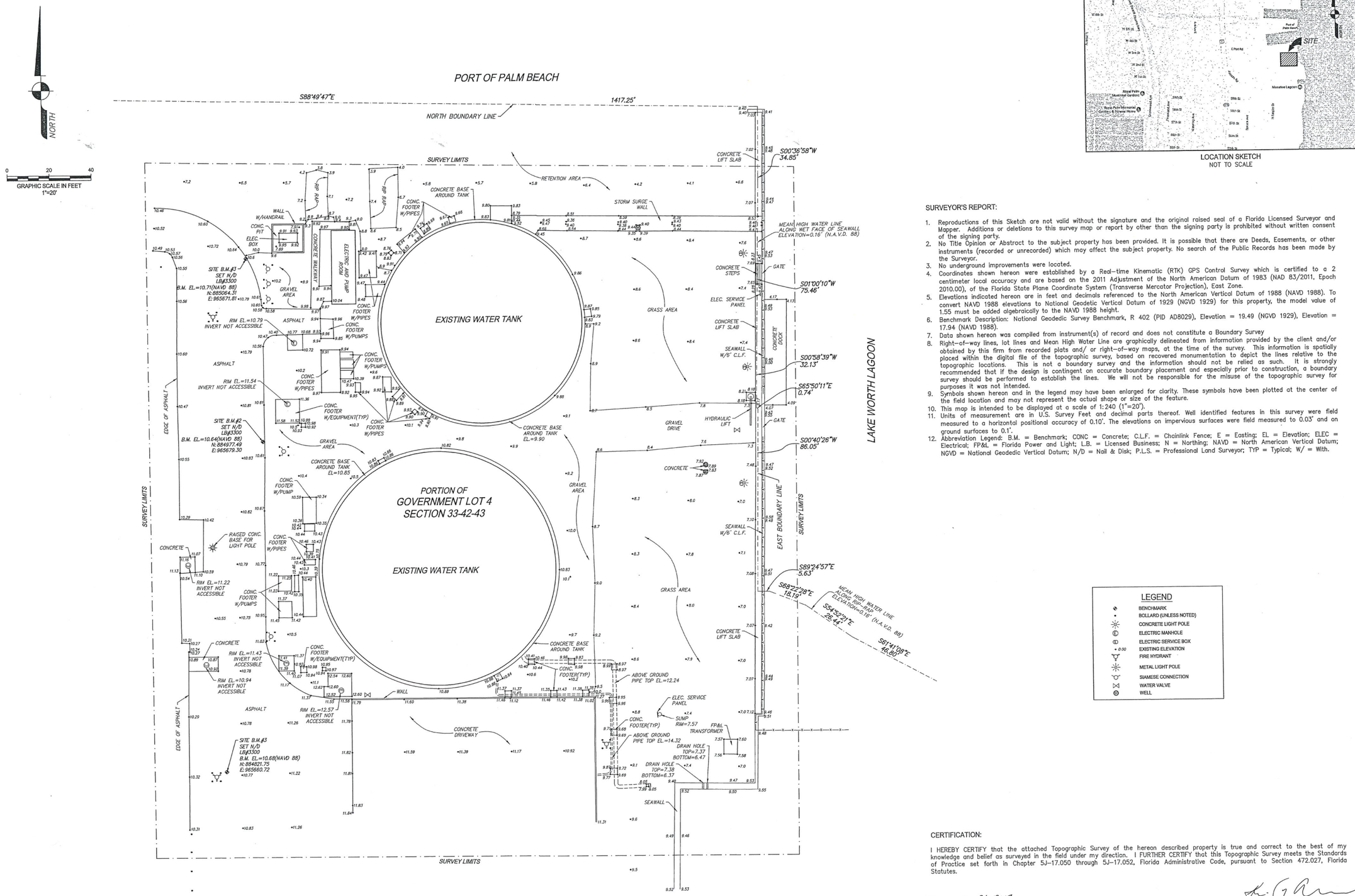
12/4/2017

DWG. TITLE:
COVER

PARKING LOT EAST OF WATER TANKS FOR RBEC

DWG. NO. PKG-1 SHEET 1 OF XX

\\WyDotsNEE\user$\CRAOPBR\Documents\O-PGD\RBEC\Parking Lot East of Water Tanks\CAD\RBECEC--PKG--1.dwg;Plotted by: Alexander, Claudine; Date:12/4/2017 3:42:57 PM



LOCATION SKETCH
NOT TO SCALE

SURVEYOR'S REPORT:

1. Reproductions of this Sketch are not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper. Additions or deletions to this survey map or report by other than the signing party is prohibited without written consent of the signing party.
2. No Title Opinion or Abstract to the subject property has been provided. It is possible that there are Deeds, Easements, or other instruments (recorded or unrecorded) which may affect the subject property. No search of the Public Records has been made by the Surveyor.
3. No underground improvements were located.
4. Coordinates shown hereon were established by a Real-time Kinematic (RTK) GPS Control Survey which is certified to a 2 centimeter local accuracy and are based on the 2011 Adjustment of the North American Datum of 1983 (NAD 83/2011, Epoch 2010.00), of the Florida State Plane Coordinate System (Transverse Mercator Projection), East Zone.
5. Elevations indicated hereon are in feet and decimals referenced to the North American Vertical Datum of 1988 (NAVD 1988). To convert NAVD 1988 elevations to National Geodetic Vertical Datum of 1929 (NGVD 1929) for this property, the model value of 1.55 must be added algebraically to the NAVD 1988 height.
6. Benchmark Description: National Geodedic Survey Benchmark, R 402 (PID AD8029), Elevation = 19.49 (NGVD 1929), Elevation = 17.94 (NAVD 1988).
7. Data shown hereon was compiled from instrument(s) of record and does not constitute a Boundary Survey
8. Right-of-way lines, lot lines and Mean High Water Line are graphically delineated from information provided by the client and/or obtained by this firm from recorded plats and/ or right-of-way maps, at the time of the survey. This information is spatially placed within the digital file of the topographic survey, based on recovered monumentation to depict the lines relative to the topographic locations. This is not a boundary survey and the information should not be relied as such. It is strongly recommended that if the design is contingent on accurate boundary placement and especially prior to construction, a boundary survey should be performed to establish the lines. We will not be responsible for the misuse of the topographic survey for purposes it was not intended.
9. Symbols shown hereon and in the legend may have been enlarged for clarity. These symbols have been plotted at the center of the field location and may not represent the actual shape or size of the feature.
10. This map is intended to be displayed at a scale of 1:240 (1"=20').
11. Units of measurement are in U.S. Survey Feet and decimal parts thereof. Well identified features in this survey were field measured to a horizontal positional accuracy of 0.10'. The elevations on impervious surfaces were field measured to 0.03' and on ground surfaces to 0.1'.
12. Abbreviation Legend: B.M. = Benchmark; CONC = Concrete; C.L.F. = Chainlink Fence; E = Easting; EL = Elevation; ELEC = Electrical; FP&L = Florida Power and Light; L.B. = Licensed Business; N = Northing; NAVD = North American Vertical Datum; NGVD = National Geodedic Vertical Datum; N/D = Nail & Disk; P.L.S. = Professional Land Surveyor; TYP = Typical; W/ = With.

LEGEND

- BENCHMARK
- BOLLARD (UNLESS NOTED)
- CONCRETE LIGHT POLE
- ELECTRIC MANHOLE
- ELECTRIC SERVICE BOX
- 0.00 EXISTING ELEVATION
- FIRE HYDRANT
- METAL LIGHT POLE
- SIAMESE CONNECTION
- WATER VALVE
- WELL

CERTIFICATION:

I HEREBY CERTIFY that the attached Topographic Survey of the hereon described property is true and correct to the best of my knowledge and belief as surveyed in the field under my direction. I FURTHER CERTIFY that this Topographic Survey meets the Standards of Practice set forth in Chapter 5J-17.050 through 5J-17.052, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

Date: 11-21-2017

KEITH M. CHEE-A-TOW, P.L.S.
Florida Registration No. 5328
AVIROM & ASSOCIATES, INC.
L.B. No. 3300

AVIROM & ASSOCIATES, INC.
SURVEYING & MAPPING
50 S.W. 2nd AVENUE, SUITE 102
BOCA RATON, FLORIDA 33432
(561) 392-2594 / www.AVIROMSURVEY.com

AVIROM & ASSOCIATES ESTABLISHED 1991

REVISIONS	DATE	F.B.	F.B./PG.	BY	CK'D

TOPOGRAPHIC SURVEY
RIVIERA BEACH CLEAN ENERGY CENTER
PORTION OF GOVERNMENT LOT 4
SECTION 33, TOWNSHIP 42 SOUTH, RANGE 43 EAST
RIVIERA BEACH
PALM BEACH COUNTY, FLORIDA

SCALE:	1" = 20'
DATE:	11/21/2017
BY:	KSB
CHECKED:	K.M.C.
F.B.	1715
PG.	8
SHEET:	1 OF 1
JOB #:	8461-23

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG	BY	DATE

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG	BY	DATE

PORT OF PALM BEACH

S88°49'47"E 1417.25'

NORTH BOUNDARY LINE

SURVEY LIMITS

RETENTION AREA

CONCRETE LIFT SLAB

S00°36'58"W 34.85'

STORM SURGE WALL

MEAN HIGH WATER LINE ALONG WET FACE OF SEAWALL ELEVATION=0.16' (N.A.V.D. 88)

EXIST. LIGHT POLES AND PULL BOXES TO REMAIN

GATE

S01°00'10"W 75.46'

CONCRETE BASE AROUND TANK

CONC. FOOTER W/PIPES

WALL W/HANDRAIL

CONC. PIT

ELEC. BOX

CONCRETE SLAB

ELECTRIC AND PUMP HOUSE

SITE B.M.#3 SET N/D LB#3300 B.M. EL.=10.71(NAVD 88) N:885064.31 E:965671.81

GRAVEL AREA

ASPHALT

RIM EL.=10.78 INVERT NOT ACCESSIBLE

CONC. FOOTER W/PUMPS

CLEAR AND GRUB ALL AREAS WITHIN LIMITS OF PROPOSED CONSTRUCTION

EXISTING WATER TANK

CONCRETE DOCK

S00°58'39"W 32.13'

EXIST. PRECAST BOX WITH WATER VALVE TO REMAIN

S65°50'11"E 0.74'

EXIST. LIFT AND SLAB TO REMAIN

CONC. FOOTER W/EQUIPMENT(TYP)

RIM EL.=11.54 INVERT NOT ACCESSIBLE

SITE B.M.#2 SET N/D LB#3300 B.M. EL.=10.64(NAVD 88) N:884877.49 E:965678.30

S00°40'26"W 86.05'

EXIST. MONITORING WELLS TO REMAIN

LAKE WORTH LAGOON

EDGE OF ASPHALT

CONCRETE BASE AROUND TANK EL=10.85

CONC. FOOTER W/PUMP

PORTION OF GOVERNMENT LOT 4 SECTION 33-42-43

GRAVEL AREA

EAST BOUNDARY LINE

SURVEY LIMITS

CLEAR AND GRUB ALL AREAS WITHIN LIMITS OF PROPOSED CONSTRUCTION

EXISTING WATER TANK

RAISED CONC. BASE FOR LIGHT POLE

CONCRETE

RIM EL.=11.22 INVERT NOT ACCESSIBLE

CONC. FOOTER W/PUMPS

S89°24'57"E 5.63'

S68°22'26"E 18.19'

S54°52'21"E 26.44'

MEAN HIGH WATER LINE ALONG WET FACE OF SEAWALL ELEVATION=0.16' (N.A.V.D. 88)

S61°41'09"E 40.89'

CONCRETE BASE AROUND TANK

CONC. FOOTER(TYP)

CONC. FOOTER W/EQUIPMENT(TYP)

RIM EL.=11.43 INVERT NOT ACCESSIBLE

RIM EL.=10.94 INVERT NOT ACCESSIBLE

WALL

ELEC. SERVICE PANEL

SUMP

ABOVE GROUND PIPE TOP EL.=14.32

TRANSFORMER

DRAIN HOLE TOP=7.39 BOTTOM=6.47

DRAIN HOLE TOP=7.39 BOTTOM=6.77

CLEAR AND GRUB ALL AREAS WITHIN LIMITS OF PROPOSED CONSTRUCTION

ASPHALT

RIM EL.=12.57 INVERT NOT ACCESSIBLE

CONCRETE DRIVEWAY

SITE B.M.#3 SET N/D LB#3300 B.M. EL.=12.68(NAVD 88) N:884821.75 E:965690.72

SEAWALL

SURVEY LIMITS

N

LEGEND

- BENCHMARK
- BOLLARD (UNLESS NOTED)
- CONCRETE LIGHT POLE
- ELECTRIC MANHOLE
- ELECTRIC SERVICE BOX
- 0.00 EXISTING ELEVATION
- FIRE HYDRANT
- METAL LIGHT POLE
- SIAMESE CONNECTION
- WATER VALVE
- WELL
- CONCRETE PAVEMENT
- 7.86 PROPOSED ELEVATION
- DIRECTION OF FLOW
- ASPHALT PAVEMENT
- DEMOLITION/CLEAR AND GRUB

811 Know what's **below.** **Call** before you dig.

SCALE 3/8"= 1'-0"

SCALE 1/4"= 1'-0"

FULL SCALE

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
0	–	–	CA	–	–	JRC	–

FPL

SYSTEM: –	DISCIPLINE: CIVIL	PLANT/UNIT: RIVIERA BEACH ENERGY CENTER
TYPE: –	UNIT: –	TITLE: PARKING LOT EAST OF WATER TANKS DEMOLITION PLAN –
DRAWING SIZE: D(24"X36")	SCALE: 1"=20'	
DRAWING NUMBER: –		SHEET: PKG–3 / REV: –

FPL BORDER-D 6/10

WALKDOWN INFORMATION				TECHNICAL ACCEPTANCE			
AS-BUILT INFORMATION	ORG			ENGINEERING ORGANIZATION	ORG		
	BY				BY		
	DATE				DATE		

PORT OF PALM BEACH

NORTH BOUNDARY LINE

SURVEY LIMITS

EXISTING WATER TANK

PORTION OF GOVERNMENT LOT 4 SECTION 33-42-43

EXISTING WATER TANK

LAKE WORTH LAGOON

EAST BOUNDARY LINE

SURVEY LIMITS

RETENTION AREA

CONCRETE LIFT SLAB

STORM SURGE WALL

CONCRETE BASE AROUND TANK

CONC. FOOTER W/PIPES

CONCRETE WALKWAY

ROOF AND FLUE

ELECTRIC ROOM

WALL W/HANDRAIL

CONC. PIT

ELEC. BOX

SITE B.M.#2 SET N/D LB#3300 B.M. EL.=10.71(NAVD 88) N:885084.31 E:965671.81

GRAVEL AREA

ASPHALT

RIM EL.=10.79 INVERT NOT ACCESSIBLE

CONC. FOOTER W/PUMPS

CONC. FOOTER W/EQUIPMENT(TYP)

RIM EL.=11.54 INVERT NOT ACCESSIBLE

SITE B.M.#3 SET N/D LB#3300 B.M. EL.=10.64(NAVD 88) N:884977.49 E:965679.30

EDGE OF ASPHALT

GRAVEL AREA

CONCRETE BASE AROUND TANK EL.=10.85

CONC. FOOTER W/PUMP

CONCRETE BASE AROUND TANK EL.=9.90

CONCRETE BASE AROUND LIGHT POLE

RIM EL.=11.22 INVERT NOT ACCESSIBLE

RIM EL.=11.43 INVERT NOT ACCESSIBLE

RIM EL.=10.94 INVERT NOT ACCESSIBLE

RIM EL.=12.57 INVERT NOT ACCESSIBLE

SITE B.M.#3 SET N/D LB#3300 B.M. EL.=10.68(NAVD 88) N:884821.75 E:965660.72

CONCRETE DRIVEWAY

WALL

SEAWALL

GRASS AREA

CONCRETE LIFT SLAB

ELEC. SERVICE

GATE

HYDRAULIC LIFT

GRAVEL AREA

CONCRETE

SEAWALL

MEAN HIGH WATER LINE ALONG TOP OF RIP-RAP ELEVATION=0.16' (N.A.V.D. 88)

MEAN HIGH WATER LINE ALONG WET FACE OF SEAWALL ELEVATION=0.16' (N.A.V.D. 88)

REGRADE ALL DISTURBED AREAS TO PROVIDE POSITIVE DRAINAGE; SOD PER FPL SPECIFICATIONS

EXIST. TANK ACCESS

ADJUST EXIST. PRECAST BOX WITH WATER VALVE TO FINISHED GRADE

EXIST. 6" DIP WM

EXIST. FDC AND BOLLARDS TO BE RELOCATED

PROPOSED 10 LF 6" WM (NOTE 1 BELOW)

PROPOSED LOCATION OF FDC AND BOLLARDS

PROPOSED 30 LF OF TYPE "D CURB ELEVATION SHOWN IS EDGE OF PAVEMENT INSTALL PER THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION

NOTE 1:
MATERIALS OF WATER MAIN TO MATCH EXISTING.
CONNECT TO EXISTING CHECK VALVE.

PROPOSED FLARED CONCRETE SLAB SLOPED TO EXISTING DRAIN HOLES IN WALL

EXIST. RETENTION AREA

4" WHITE PAINT 10' O.C. @ 45° ANGLE FOR PARKING STALL STRIPING; INSTALL PER THE FDOT STANDARD SPEC. FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION

NOTCH PROPOSED SIDEWALK WHERE SHOWN TO ACCOMMODATE EXISTING LIGHT POLES AND POLES BOXES

EXIST. ACCESS TO DOCK; MODIFY RISER AS REQUIRED

CONSTRUCT PROPOSED SIDEWALK ADJACENT TO EXIST. SLAB WITH LIFT; PROVIDE EXPANSION JOINT AT INTERFACE

4" WHITE PAINT FOR PARKING STALL STRIPING INSTALL PER THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION

ADJUST EXIST. MONITORING WELLS TO FINISHED GRADE

PROPOSED 4" THICK CONCRETE SIDEWALK SIDEWALK TO BE CONSTRUCTED PER FDOT STANDARD SPECIFICATIONS

PROPOSED CONCRETE FLUME

20' 24' 20'

10'

3.5%

1.8%

2%

1%

5%

3%

N

FULL SCALE

SCALE 3/8"= 1'-0"

SCALE 1/4"= 1'-0"

LEGEND

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- CONCRETE PAVEMENT
- 7.86 PROPOSED ELEVATION
- DIRECTION OF FLOW
- DEMOLITION/CLEAR AND GRUB

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REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
–	–	–	–	–	–	–	–
0	–	–	CA	–	–	JRC	–

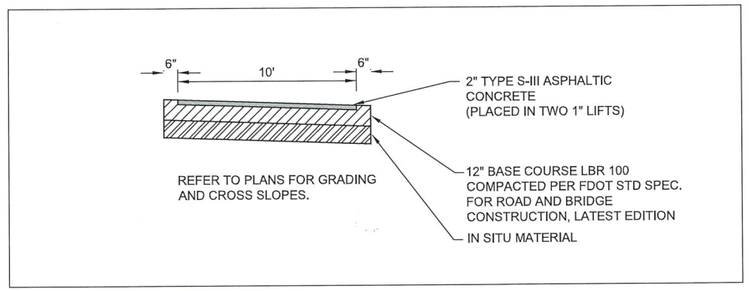
FPL

SYSTEM: –	DISCIPLINE: CIVIL	PLANT/UNIT: RIVIERA BEACH ENERGY CENTER	
TYPE: –	UNIT: –	TITLE: PARKING LOT EAST OF WATER TANKS PAVING, GRADING AND DRAINAGE PLAN –	
DRAWING SIZE: D(24"X36")	SCALE: 1"=20'		
DRAWING NUMBER: –		SHEET: PKG–4	REV: –

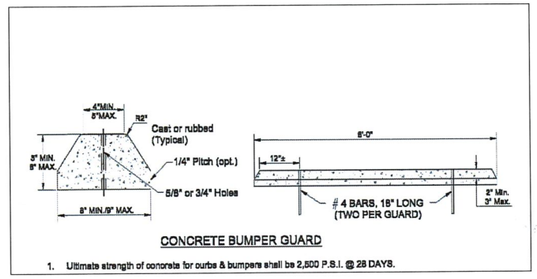
FPL BORDER–D 6/10

GENERAL CONSTRUCTION NOTES :

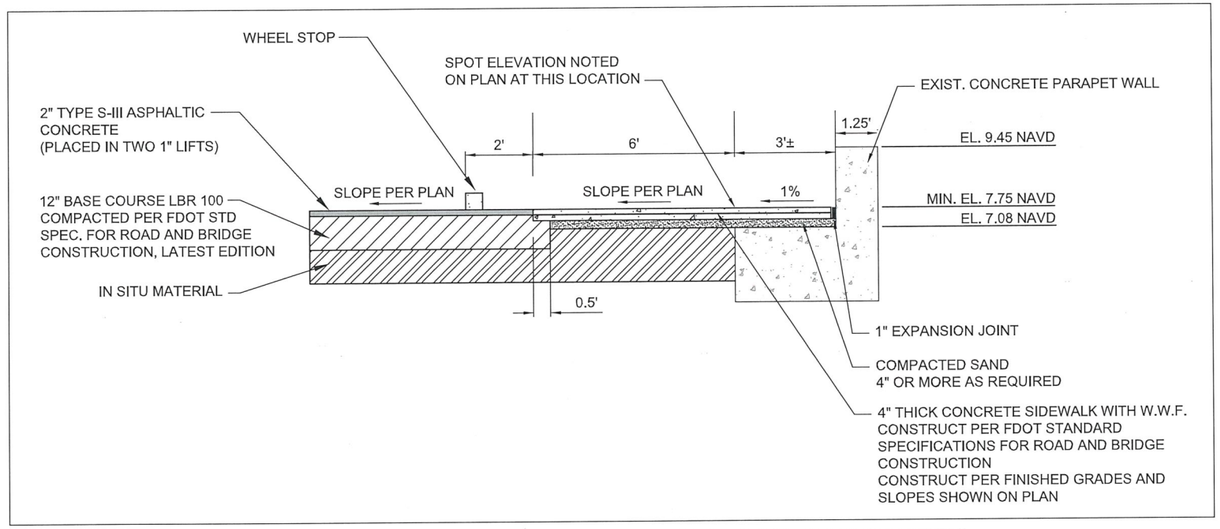
1. The Contractor is hereby notified that the drawings and specifications are generally believed to conform to FPL Specifications and FDOT Standard Spec for Road and Bridge Construction, latest edition.
2. The work consists of performing all operations: providing material, equipment, and labor to construct the work as shown on the drawings.
3. All work associated with the construction as shown in the drawings shall be to the satisfaction of the Owner and the Engineer.
4. All work shall proceed continuously from initiation of construction to completion with no intervening gaps in construction.
5. All construction activities shall be in compliance with applicable federal, state, and local laws, ordinances, and permit conditions.
6. Nothing contained in the construction drawings shall alleviate the contractor from using due care in the execution of the work, nor shall the contractor deviate from acceptable construction techniques in the performance of the work.
7. The Contractor shall be responsible for maintaining the project area to acceptable conditions as deemed by the owner and / or the Engineer.
8. The Contractor shall notify the Engineer of any errors, conflicts, or deviations from the plans prior to construction.
9. The Contractor is responsible for all damages done to the existing site, property and infrastructure as a result of the construction.
10. The Contractor shall restore the site to pre-construction conditions and to the satisfaction of the Engineer.
11. The Contractor shall remove from the site and dispose of in an acceptable manner, all construction material, waste, debris, and miscellaneous material.
12. The Contractor shall notify the Engineer upon substantial completion of construction. The Contractor shall correct all deficiencies as identified by the Engineer prior to the construction being deemed complete.
13. During construction operations, the Contractor shall be responsible for any damage to and for maintenance and protection of existing underground structures and utilities within limits of construction regardless of whether or not they are shown on the plans.
14. The Contractor is responsible to prevent erosion of the disturbed area during construction.
15. The Contractor is to maintain stability of existing structures adjacent to excavated areas.



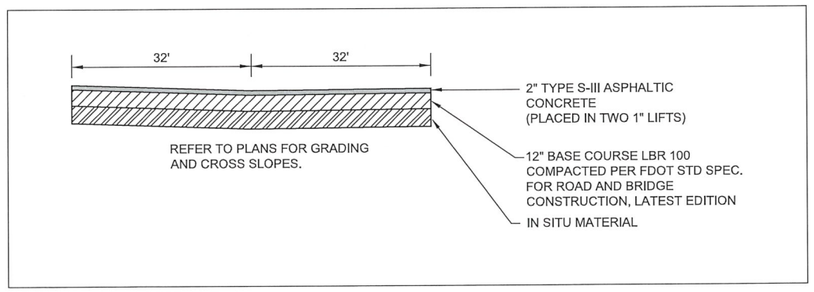
ACCESS BETWEEN TANKS: PAVING SECTION DETAIL



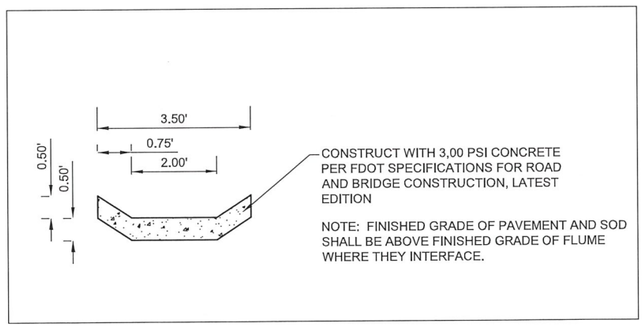
WHEEL STOP DETAIL



PARKING LOT AND SIDEWALK AT WALL: PAVING SECTION DETAIL



PARKING LOT: PAVING SECTION DETAIL



FLUME CROSS SECTION

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
–	–	–	–	–	–	–	–
0	–	–	CA	–	JRC	–	

TECHNICAL ACCEPTANCE — ORG | BY | DATE — ENGINEERING ORGANIZATION

WALKDOWN INFORMATION — ORG | BY | DATE — AS–BUILT INFORMATION

SCALE 3/8"= 1'–0"

SCALE 1/4"= 1'–0"

FULL SCALE

SYSTEM: –	DISCIPLINE: CIVIL	PLANT/UNIT: RIVIERA BEACH ENERGY CENTER	
TYPE: –	UNIT: –	TITLE: PARKING LOT EAST OF WATER TANKS CIVIL DETAILS –	
DRAWING SIZE: D(24"X36")	SCALE: NTS		
DRAWING NUMBER: –		SHEET: PKG–5	REV: –

FOLD

FPL BORDER–D 6/10

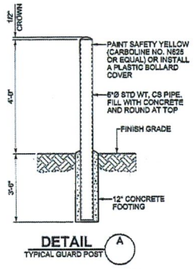
TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG	BY	DATE

WALKDOWN INFORMATION			
AS–BUILT INFORMATION	ORG	BY	DATE

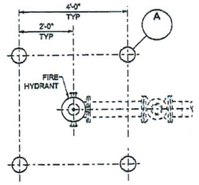
FULL SCALE

SCALE 3/8"= 1'-0"

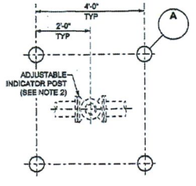
SCALE 1/4"= 1'-0"



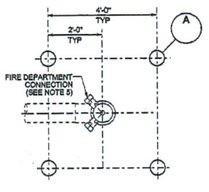
DETAIL A TYPICAL GUARD POST



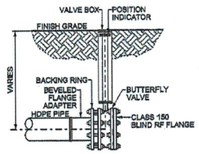
DETAIL B TYPICAL FIRE HYDRANT GUARD POST DETAIL



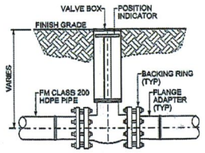
DETAIL C TYPICAL POST INDICATOR VALVE GUARD POST DETAIL



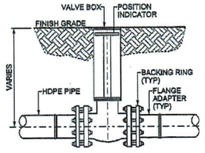
DETAIL D FIRE DEPARTMENT CONNECTION GUARD POST DETAIL



DETAIL E TYPICAL FLANGE ADAPTER AT BUTTERFLY VALVE

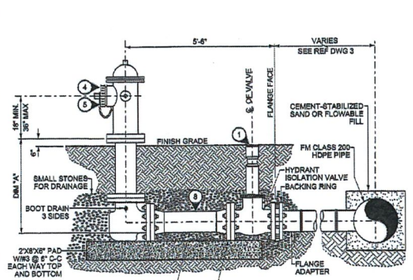


DETAIL F TYPICAL FIRE PROTECTION ISOLATION VALVE

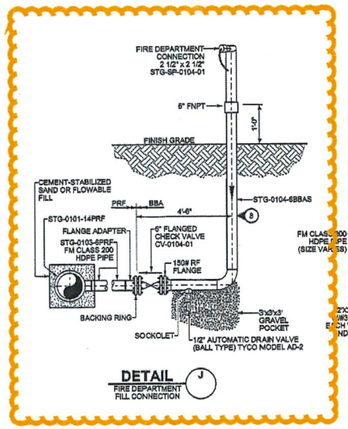


DETAIL G TYPICAL GENERAL SERVICE ISOLATION VALVE

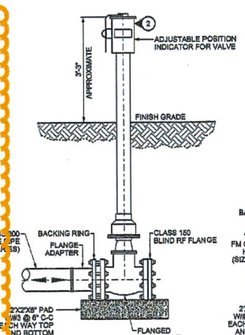
HYDRANT TAG	DIM "A"
FH-0105-01	6'-0"
FH-0112-01	4'-6"
FH-0126-01	5'-0"
FH-0128-01	5'-6"
FH-0130-01	5'-0"
FH-0132-01	5'-0"
FH-0152-01	4'-6"
FH-0154-01	5'-6"
FH-0156-01	5'-0"
FH-0158-01	5'-6"
FH-0162-01	5'-0"
FH-0165-01	5'-6"
FH-0169-01	5'-0"
FH-0170-01	5'-0"
FH-0176-01	5'-0"
FH-0180-01	5'-6"



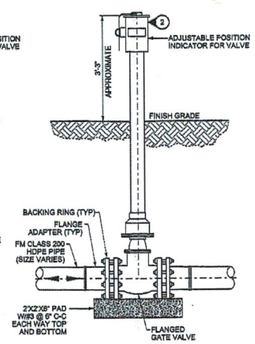
DETAIL H TYPICAL FIRE HYDRANT CONNECTION



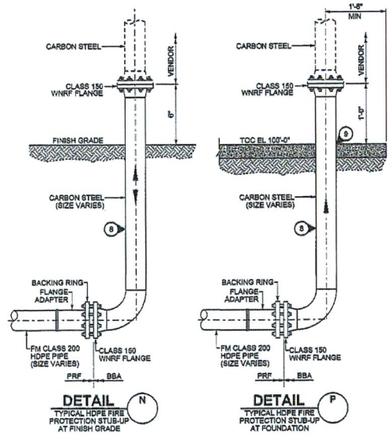
DETAIL J FIRE DEPARTMENT FILL CONNECTION



DETAIL L TYPICAL POST INDICATOR ISOLATION VALVE FOR FIRE LOOP

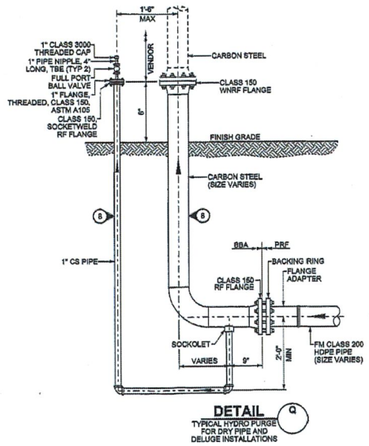


DETAIL M TYPICAL POST INDICATOR ISOLATION VALVE FOR FIRE LOOP

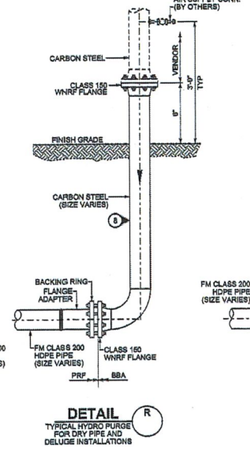


DETAIL N TYPICAL HDPE FIRE PROTECTION STUB-UP AT FINISH GRADE

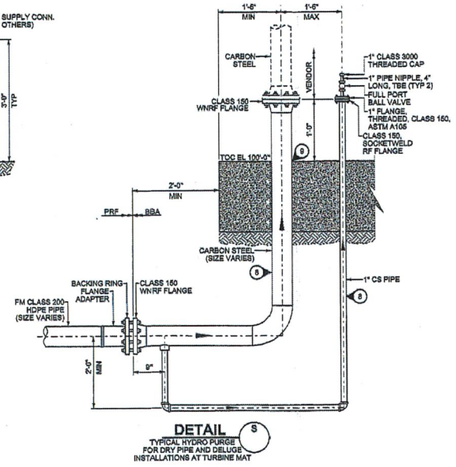
DETAIL P TYPICAL HDPE FIRE PROTECTION STUB-UP AT FOUNDATION



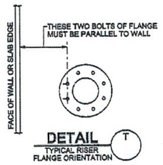
DETAIL Q TYPICAL HYDRO PURGE FOR DRY PIPE AND DELUGE INSTALLATIONS



DETAIL R TYPICAL HYDRO PURGE FOR DRY PIPE AND DELUGE INSTALLATIONS



DETAIL S TYPICAL HYDRO PURGE FOR DRY PIPE AND DELUGE INSTALLATIONS AT TURBINE MAT



DETAIL T TYPICAL RISER FLANGE ORIENTATION

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL ALL FIRE HYDRANT ISOLATION VALVES WITH EXTENSION STEMS, GEARED POSITION INDICATORS AND VALVE BOXES. CONTRACTOR SHALL ADJUST VALVE BOXES TO GRADE LEVEL.
2. CONTRACTOR SHALL INSTALL ALL FIRE LOOP ISOLATION AND BUILDING SHUTOFF VALVES WITH ADJUSTABLE POSITION INDICATOR AND GUARD POSTS. SEE TYPICAL GUARD POST DETAIL THIS DRAWING.
3. FOR ALL UNDERGROUND PIPING NOTES, SEE REF DWG 5.
4. ALL FIRE HYDRANTS SHALL BE ORIENTED SO THAT THE PUMPER NOZZLE FACES AWAY FROM ANY STRUCTURE OR TOWARDS THE NEAREST ACCESS ROADWAY.
5. HYDRANT CONNECTION SIZE AND THREAD SHALL BE 4 1/2 x 2 1/2 x 2 1/2.
6. COAT SLEEVE AND BOLTS WITH BITUMASTIC 300M.
7. PROVIDE LINK-SEAL WITH EPDM ELEMENTS AND S.S. BOLTS/NUTS ACCORDING TO WALL OPENING DIAMETER.
8. COAT ALL BURIED CARBON STEEL PIPING PER AWWA C213, OR APPROVED EQUAL.
9. WHERE CARBON STEEL PIPE IS IN CONTACT WITH CONCRETE, COAT THE PIPE WITH BITUMASTIC 300M, IN ADDITION TO OTHER CORROSION PROTECTION COATING APPLIED.

REFERENCE DRAWINGS

1. SITE RELATED WORK
   PIPING AND INSTRUMENTATION DIAGRAM
   MECHANICAL SYMBOLOGY
   D008720-STWM00001 8H01
2. SITE RELATED WORK
   PIPING AND INSTRUMENTATION DIAGRAM
   INSTRUMENTATION SYMBOLOGY
   D008720-STWC00001 8H01
3. SITE RELATED WORK
   PLANT NOMENCLATURE
   DRAWING IDENTIFICATION AND TAG FORMAT
   D008720-STW000001 8H01
4. SITE RELATED WORK
   GENERAL CONSTRUCTION NOTES
   D008720-STWB00001 8H01
5. SITE UNDERGROUND UTILITIES
   ZONES 1 THRU 28
   PIPING & DUCT BANK COMPOSITES
   PLAN VIEW
   D008720-STUL10101 8H01 THRU STUL10128 6H01
6. SITE UNDERGROUND UTILITIES
   OVERALL ZONE LAYOUT
   PLAN VIEW
   D008720-STUL10100 8H01

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
0	–	–	CA	–	–	JRC	–
–	–	–	–	–	–	–	–

FPL

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HEIDI BLASINGAME LICENSE No. 70079 STATE OF FLORIDA PROFESSIONAL ENGINEER

RIVIERA BEACH ENERGY CENTER UNIT 5
SITE UNDERGROUND UTILITIES
BURIED PIPING
DETAILS

D008720-STUM10001 | 01 | 0

FDC (FIRE DEPARTMENT CONNECTION) DETAIL FROM ZACHRY
FOR INFORMATIONAL PURPOSES

SYSTEM: –	DISCIPLINE: CIVIL	PLANT/UNIT: RIVIERA BEACH ENERGY CENTER	
TYPE: –	UNIT: –	TITLE: PARKING LOT EAST OF WATER TANKS CIVIL DETAILS –	
DRAWING SIZE: D(24"X36")	SCALE: NTS		
DRAWING NUMBER: –		SHEET: PKG–6	REV: –

FPL BORDER–D 6/10