

March 12, 2025

## MEMORANDUM

TO: Jason Patterson, P.G., Senior Hydrogeologist, Environmental Flows and Levels Section

FROM: Tiffany Horstman, P.G., Senior Professional Geologist, Geohydrologic Data Section

SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

---

The Southwest Florida Water Management District's (District) Geohydrologic Data Section was tasked to install a surficial aquifer monitor well at the Peace River at Bartow well site in Polk County, Florida for the Central Florida Water Initiative (CFWI) Data, Monitoring, and Investigations Team (DMIT) (attachment 1). The well site is on a parcel of land granted by easement to the District by the City of Bartow (attachment 2). The CFWI DMIT will provide data to support minimum level research for three groundwater basins in five counties. Long-term water level data collected from this well will be available to relate changes in Peace River water levels to water level changes in the surficial aquifer due to groundwater withdrawals and will help ensure compliance with adopted minimum flows and levels.

Mendez Drilling, Incorporated (Mendez), installed the surficial aquifer monitor well on February 18, 2025, using a Central Mine Equipment (CME) 75 drill rig and the hollow-stem auger method. Mendez used a post-hole digger to collect lithologic samples from land surface to 4 feet below land surface (bls) to ensure there were no underground utilities. Then, Mendez used a 140-pound hammer to advance a split-spoon sampler through the hollow-stem augers to collect continuous split-spoon samples from 4 to 14 feet bls. The samples were described by the onsite geologist (attachment 3). Clay was encountered at 13.5 feet bls. Wet sand was noted at 6 feet bls during sample collection; however, the well was dry after the well construction was completed.

After split-spoon sampling was completed, Mendez installed the 2-inch, schedule 40, 0.010-inch slot, threaded, polyvinyl chloride (PVC) screen pre-packed with 20-40 silica sand from 3.5 to 13.5 feet bls, and 2-inch, schedule 40, threaded PVC casing from 3 feet above land surface to 3.5 feet bls while removing the augers. A locking metal well cover and a 2-feet by 2-feet by 6-inch concrete pad were placed around the well (attachments 4 and 5). A monitoring request was submitted to collect water level data.

The following data are attached: maps showing the location and layout of the well site (attachment 1), easement agreement (attachment 2), the field lithologic log of the split-spoon samples collected at the well site (attachment 3), the well as-built diagram (attachment 4), a photograph of the finished well (attachment 5), and the daily drilling log detailing the well construction activities (attachment 6).

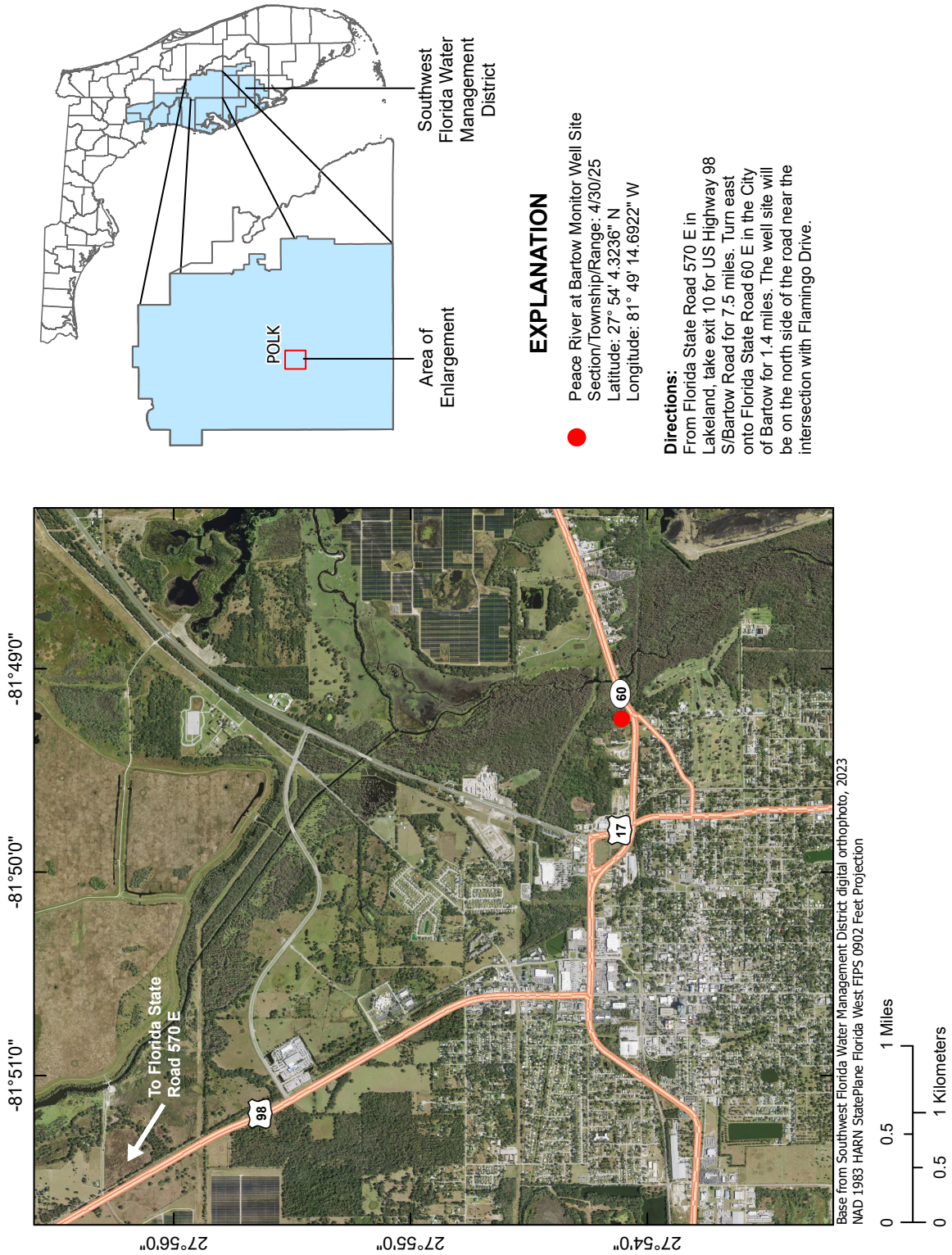
TMH  
Attachments (6)

SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 2

March 12, 2025

Attachment 1



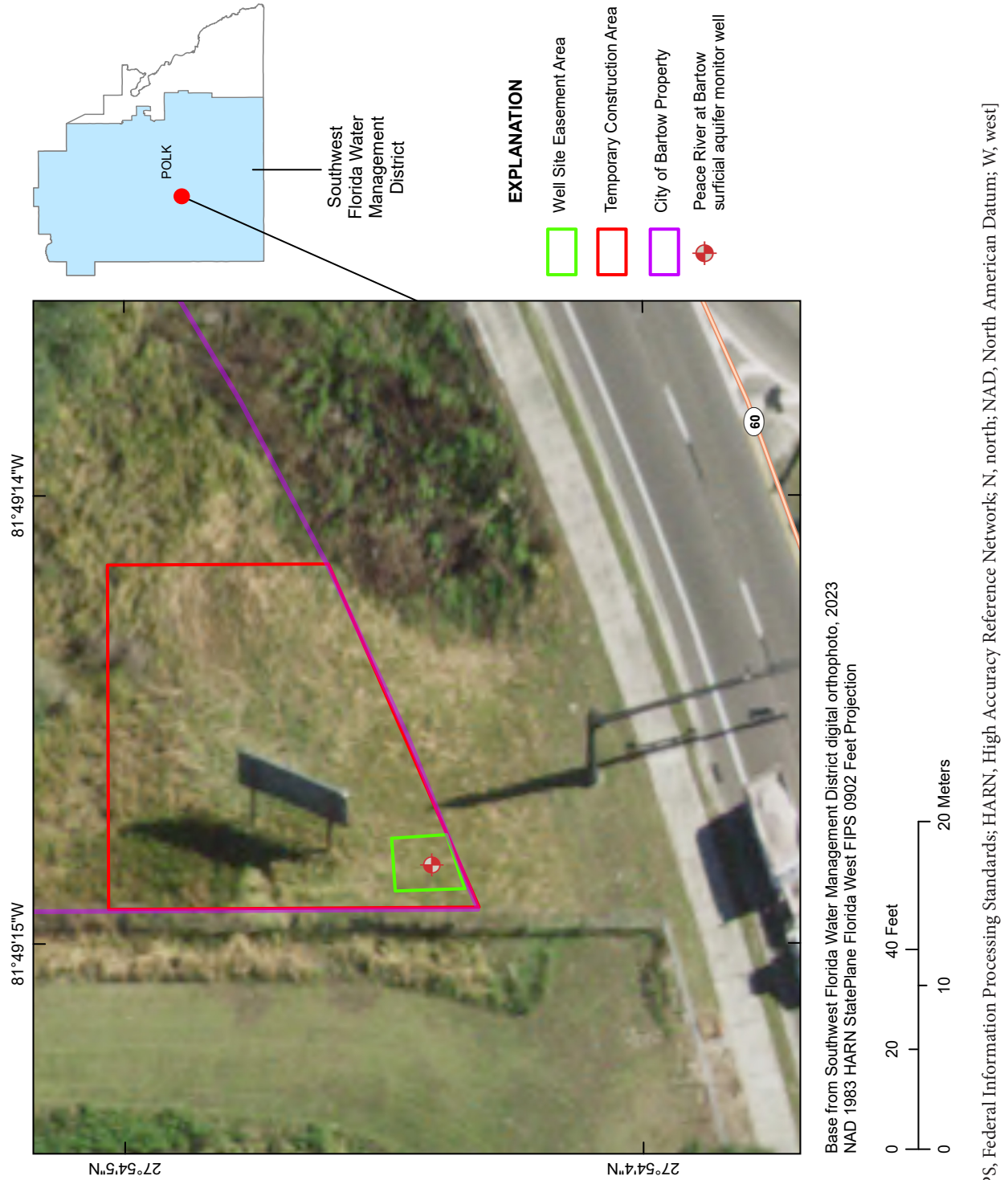
[FIPS, Federal Information Processing Standards; HARN, High Accuracy Reference Network; N, north; NAD, North American Datum; S/T/R, Section/Township/Range; W, west]

SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 3

March 12, 2025

Attachment 1





SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 4

March 12, 2025

Attachment 2

Prepared by:  
Southwest Florida Water Management District  
2379 Broad Street  
Brooksville, FL 34604

Return recorded original to:  
Southwest Florida Water Management District  
2379 Broad Street  
Brooksville, FL 34604  
Attn. Land Resources Bureau

**PERPETUAL EASEMENT**

This Easement (this "Easement") is made and entered into this 4<sup>th</sup> day of November 2024, by and between the City of Bartow, a municipal corporation of Florida, having an address of 450 N. Wilson Avenue, Bartow, FL 33830, hereinafter called "Grantor", and the Southwest Florida Water Management District, a public corporation, having an address of 2379 Broad Street, Brooksville, Florida 34604-6899, hereinafter referred to as "Grantee".

Grantor, for and in consideration of the sum of Ten Dollars and no cents (\$10.00) and other good and valuable consideration from Grantee to Grantor, the receipt and sufficiency of which are hereby acknowledged, hereby grants, bargains, sells and conveys to Grantee a non-exclusive, perpetual easement to enter upon, over and across and to use any and all lands more particularly described below solely for the following purposes:

- a. To construct, maintain, repair, or replace one monitoring well and data monitoring equipment over the land more particularly described on Exhibit "A" (the "Well Site Easement Area"); and
- b. For ingress and egress upon, over and across the land more particularly described on Exhibit "A" (the "Well Site Easement Area") to access the monitoring wells and equipment in order to perform hydrologic measurements.

Grantee shall exercise all of its rights contained in this Easement in the least intrusive manner so as not to interfere with Grantor's use of its property. Grantor reserves the right to use the Well Site Easement Area in any manner not inconsistent with this Easement; provided, however, that Grantor shall avoid physically disturbing the well casing or cover (water meter box) of the monitoring well or wells in any way.

Grantee hereby agrees to protect, indemnify, and hold harmless the Grantor from and against any and all liabilities, losses, damages or expenses, reasonable attorneys' fees and costs, whether incurred out of court or in litigation including fees and costs incurred for representation on appeals, expert witness fees and costs for paralegal assistance, arising on account of, relating to, in connection with loss of life, bodily injury or damage to property, arising out of the use of the Well Site Easement Area by the Grantee and its contractors and agents, except to the extent such liability is finally judicially determined to directly arise from the willful misconduct or negligence of the Grantor. Upon receiving knowledge of any suit, claim or demand asserted by a third party that Grantor believes is covered by this indemnity, the Grantor shall give the Grantee notice of the matter. Any failure or delay of the Grantor to notify the Grantee of any such suit, claim or demand shall not relieve the Grantee of its obligations under this provision but shall reduce such obligations to the extent of any increase in those obligations caused solely by any such failure or



## Attachment 2

delay. This provision shall not be construed as a waiver of Grantee's sovereign immunity for torts or an extension of such liability beyond the limits established in Section 768.28, F.S.

All provisions of this instrument, including the benefits and burdens, run with the land and are binding upon and inure to the benefit of the respective assigns, successors, and tenants of the parties hereto. This Easement may be amended or modified only by an instrument signed by Grantor and Grantee.

The formation, interpretation and performance of this Easement shall be construed pursuant to and governed by the laws of the State of Florida. In the event of any dispute arising out of this Easement or any instrument given in connection herewith, or in the event it shall become necessary for any party to employ counsel to protect the party under this Easement or any instrument given in connection herewith, the prevailing party shall be entitled to recover reasonable attorneys' fees and costs, whether incurred out of court or in litigation including fees and costs incurred for representation on appeals, expert witness fees and costs for paralegal assistance, to the extent permitted under Section 768.28, F.S. This provision does not constitute a waiver of the Grantee's sovereign immunity or extend the Grantee's liability beyond the limits established in Section 768.28, F.S.

This grant shall not constitute a dedication to the public, and no parties shall have any rights or entitlements pursuant to the terms of this Easement except as specifically set forth herein.

[signature pages follow]

Attachment 2

IN WITNESS WHEREOF, Grantor has caused these presents to be executed the day and year first written above.

Grantor:

Signed, sealed and delivered  
in the presence of:

City of Bartow

Jacqueline Poole  
Witness #1 signature

JACQUELINE POOLE  
Print Witness #1 name

Kaylee Fussell  
Witness #2 signature

Kaylee Fussell  
Print Witness #2 name

By: Trish Pfeiffer  
Name: Trish Pfeiffer  
Title: Mayor

ACKNOWLEDGMENT

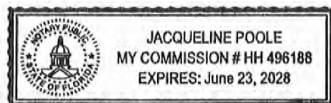
STATE OF FLORIDA  
COUNTY OF Polk

The foregoing instrument was acknowledged before me this 4th day of November 2024, by Trish Pfeiffer as Mayor of the City of Bartow. He/She ☒ is personally known to me or has produced \_\_\_\_\_ as identification.

(Seal)

Jacqueline Poole  
Name of Notary  
JACQUELINE POOLE  
(Name of Notary typed, printed or stamped)

Commission No. HH 496188  
My Commission  
Expires: 6-23-2028



SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 7

March 12, 2025

## Attachment 2

IN WITNESS WHEREOF, Grantee has caused these presents to be executed in its name by its Governing Board acting by the Chair or Vice Chair of said board, the day and year aforesaid.

Grantee:

Southwest Florida Water Management District

By: Michelle Williamson  
Name: Michelle Williamson  
Title: Chair

ATTEST:

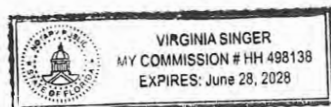
By: Paul J. Bispham  
Name: Paul J. Bispham  
Title: Secretary

### ACKNOWLEDGMENT

STATE OF FLORIDA  
COUNTY OF Hernando

The foregoing instrument was acknowledged before me this 22 day of October 2024, by \_\_\_\_\_, as \_\_\_\_\_, for the Southwest Florida Water Management District, a public corporation, on behalf of the Southwest Florida Water Management District. He/She ☐ is personally known to me or has produced \_\_\_\_\_ as identification.

(Seal)



Virginia Singer  
Name of Notary  
Virginia Singer  
(Name of Notary typed, printed or stamped)

Commission No. HH498138  
My Commission  
Expires: June 28, 2028



## Attachment 2

### EXHIBIT "A"

Legal Description Parcel 20-020-190 (Well Site Easement Area)

A strip of land being a portion of the lands described per Official Records Book 894, Page 113, of the Public Records of Polk County, Florida, lying and being in Section 4, Township 30 South, Range 25 East, Polk County, Florida, being more particularly described as follows:

COMMENCE at a point marking the Southwest corner of the Northwest 1/4 of Section 4, Township 30 South, Range 25 East, Polk County, Florida; thence coincident with the South boundary of the Northwest 1/4 of said Section 4, N 89°15'24" E a distance of 1893.00 feet; thence departing said South boundary, N 00°44'36" W a distance of 240.63 feet to a point coincident with the Northerly right-of-way boundary of Highway 60 East per Florida Department of Transportation right-of-way map section 16110-2505, said point also being coincident with a non-tangent curve concave to the North, said curve having a radius of 740.51 feet, a delta angle of 00°24'37" and being subtended by a chord bearing of N 69°49'36" E for a distance of 5.30 feet; thence coincident with said Northerly right-of-way boundary and coincident with the arc of said curve a distance of 5.30 feet to the POINT OF BEGINNING; thence departing said Northerly right-of-way boundary, N 00°44'36" W a distance of 13.65 feet; thence N 89°15'24" E a distance of 10.00 feet; thence S 00°44'36" E a distance of 10.00 feet to a point coincident with said Northerly right-of-way boundary, said point also being coincident with a non-tangent curve concave to the North, said curve having a radius of 740.51 feet, a delta angle of 00°49'25" and being subtended by a chord bearing S 69°12'35" W for a distance of 10.64 feet; thence coincident with said Northerly right-of-way boundary and the arc of said curve a distance of 10.65 feet to the POINT OF BEGINNING.

Containing an area of 118.38 square feet, 0.003 acres, more or less.

Remainder of this page is intentionally left blank.

SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 9

March 12, 2025

Attachment 2

*Sketch & Description  
Peace River at Bartow  
Utility Easement  
Section 4, Township 30 South, Range 25 East  
Polk County, Florida*





SWF 20-020-190 Utility Easement: As Written by SurvTech Solutions

A strip of land being a portion of the lands described per Official Records Book 894, Page 113, of the Public Records of Polk County, Florida, lying and being in Section 4, Township 30 South, Range 25 East, Polk County, Florida, being more particularly described as follows:

COMMENCE at a point marking the Southwest corner of the Northwest 1/4 of Section 4, Township 30 South, Range 25 East, Polk County, Florida; thence coincident with the South boundary of the Northwest 1/4 of said Section 4, N 89°15'24" E a distance of 1893.00 feet; thence departing said South boundary, N 00°44'36" W a distance of 240.63 feet to a point coincident with the Northerly right-of-way boundary of Highway 60 East per Florida Department of Transportation right-of-way map section 16110-2505, said point also being coincident with a non-tangent curve concave to the North, said curve having a radius of 740.51 feet, a delta angle of 00°24'37" and being subtended by a chord bearing of N 69°49'36" E for a distance of 5.30 feet; thence coincident with said Northerly right-of-way boundary and coincident with the arc of said curve a distance of 5.30 feet to the POINT OF BEGINNING; thence departing said Northerly right-of-way boundary, N 00°44'36" W a distance of 13.65 feet; thence N 89°15'24" E a distance of 10.00 feet; thence S 00°44'36" E a distance of 10.00 feet to a point coincident with said Northerly right-of-way boundary, said point also being coincident with a non-tangent curve concave to the North, said curve having a radius of 740.51 feet, a delta angle of 00°49'25" and being subtended by a chord bearing S 69°12'35" W for a distance of 10.64 feet; thence coincident with said Northerly right-of-way boundary and the arc of said curve a distance of 10.65 feet to the POINT OF BEGINNING.

Containing an area of 118.38 square feet, 0.003 acres, more or less.

Legend

(P)	Plat Reference
PSM	Professional Surveyor and Mapper
Id.	Identification
LB	Licensed Business
OR	Official Records
	Electrical Pull Box
	Light Pole
	Traffic Signal Box
	Traffic Signal
-x-x-	Fence

SURVEY NOTES:

- 1.) Paper copies of this survey are not valid without the original signature and raised seal of a Florida Licensed Surveyor and Mapper. Digital copies are not valid without the digital signature of a Florida Licensed Surveyor and Mapper.
- 2.) The bearing structure for this survey is based on a Florida West State Plane grid bearing of S 00°10'24" E for the West Boundary of the NW 1/4 of Section 4-30S-25E
- 3.) THIS IS NOT A BOUNDARY SURVEY.

Stacy L. Brown P.S.M. No. 6516  
SurvTech Solutions, Inc. LB No. 7340

Drafted By: D. DeRoche  
Date Drafted: 08/05/24

Approved By: S. Brown  
Date Approved: 08/12/24

Last Field Date: 07/11/24  
Field Book/Page: 24-17/10

Project No.: 241161  
Ref. No.: 241112

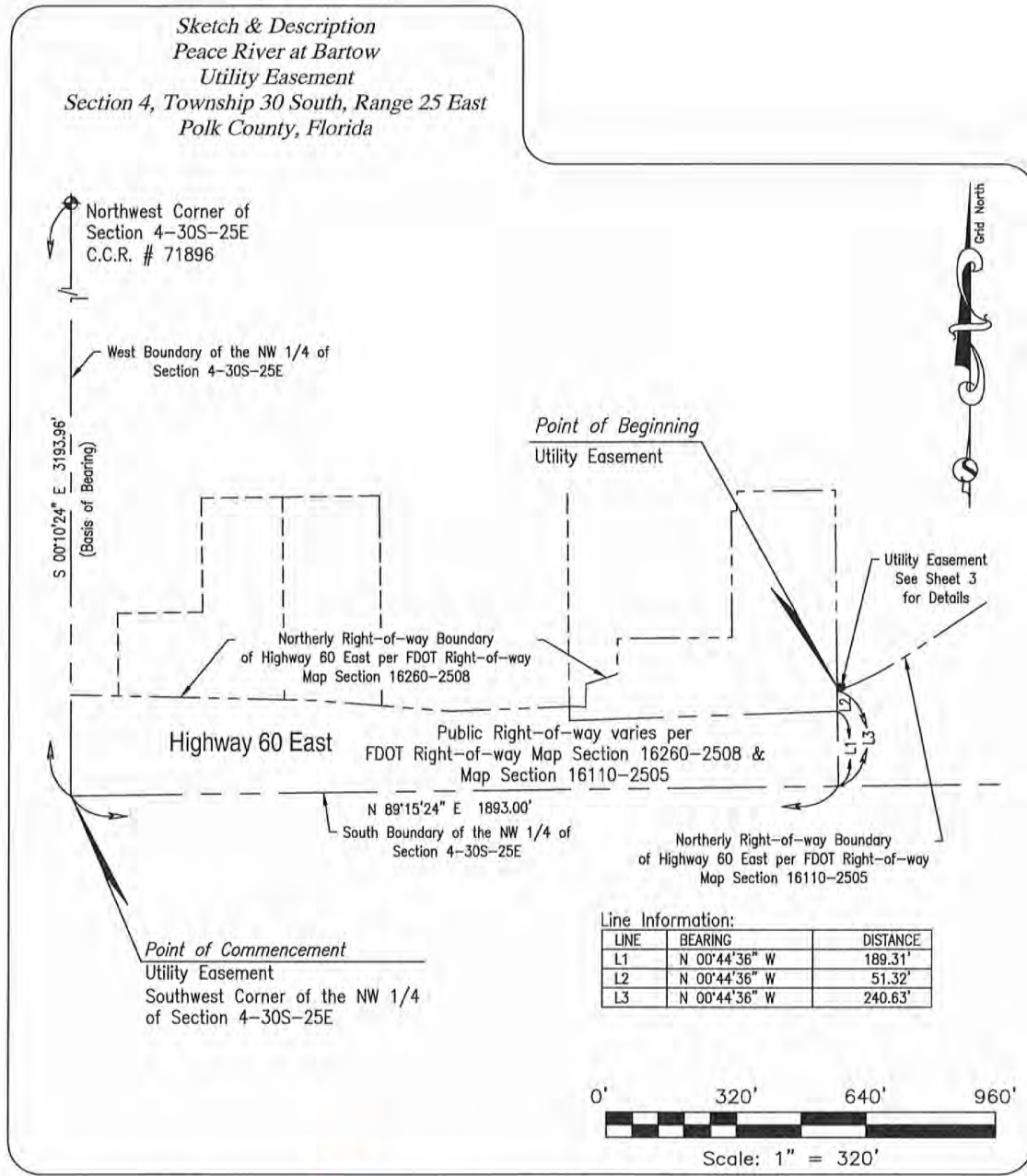
Drawing Name: 241161\_SK  
Revision Date: 08/23/24

SURVEYING TODAY WITH  
TOMORROW'S TECHNOLOGY



SURVTECH SOLUTIONS, INC. SURVEYORS AND MAPPERS  
10220 U.S. Highway 92 East, Tampa, FL 33610  
phone: (813)-621-4929, fax: (813)-621-7194, Licensed Business #7340  
email: sbrown@survtechsolutions.com <http://www.survtechsolutions.com>

Attachment 2



PROJECT NO.: 241161  
REF. No.: N/A  
LAST FIELD DATE: 07/11/24



SURVTECH SOLUTIONS, INC. SURVEYORS AND MAPPERS  
10220 U.S. Highway 92 East, Tampa, FL 33610  
phone: (813)-621-4929, fax: (813)-621-7194, Licensed Business #7340  
email: sbrown@survtechsolutions.com <http://www.survtechsolutions.com>

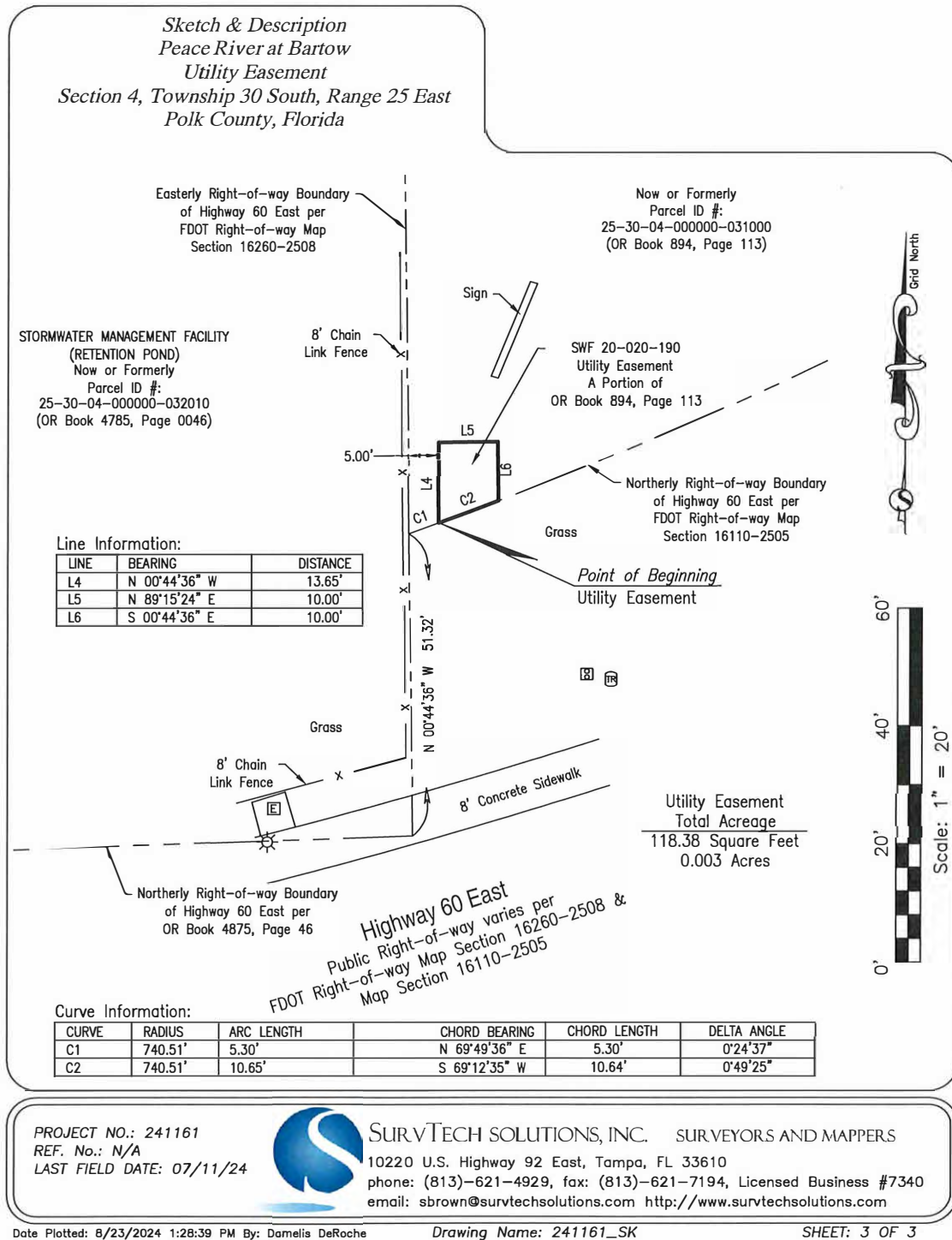


SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 11

March 12, 2025

Attachment 2



Attachment 3

HYDROGEOLOGY FIELD LOG

Site Name: Peace River at Bartow Surficial aquifer

Geologist: T. Horstman

Page: 1 of 2

Date	Box No.	Geology	Hydrogeology	Hydrostrat.	Depth (ft bls)	Recovery (%)	Lithology	Porosity (%)	Description	Test Interval	Comments	Comments (Driller)
2/18/2025					0 - 1				Sand - fine to medium grained, moderate to dark yellowish brown roots, silt, iron staining sand concretions		104r 5/4 to 104r 4/2	
					1 - 2				Sand, fine to medium grained, dark yellowish brown, some sand concretions at top, rare clay stringers rare roots		104r 4 1/2	
					2 - 3				Sand, fine to medium grained Dusky yellowish brown with some dark yellowish orange nodules rare roots		104r 2/a	
					3 - 4				Sand, fine to medium grained Dusky yellowish brown, rare sand stone pebbles			

Attachment 3

HYDROGEOLOGY FIELD LOG

Site Name: Peace River @ Bartow

Geologist: T. Horstman

Page: 2 of 2

Date	Box No.	Geology	Hydrogeology	Hydrostrat.	Depth (ft bls)	Recovery (%)	Lithology	Porosity (%)	Description	Test Interval	Comments	Comments (Driller)
2/18/25					4 - 6				Sand, white, fine to medium grained			
					6 - 8				Sand, dusky yellowish brown, fine to medium grained ~ 7 ft Sand is moderate brown		wet N 6 R	
					8 - 10				Sand, grayish to moderate brown fine to medium grained clay ~ 9 ft w/ dark yellowish orange stringers. Sand turns pale yellowish brown			
					10 - 12				clay, sandy, pale yellowish brown w/ dark yellowish orange stringers			
					12				12-13 ft sand, pale yellowish brown medium grained 13 ft light olive gray sandy clay			
					14				13.5 ft clay, dark greenish gray		TD Split Spoon 14 ft	

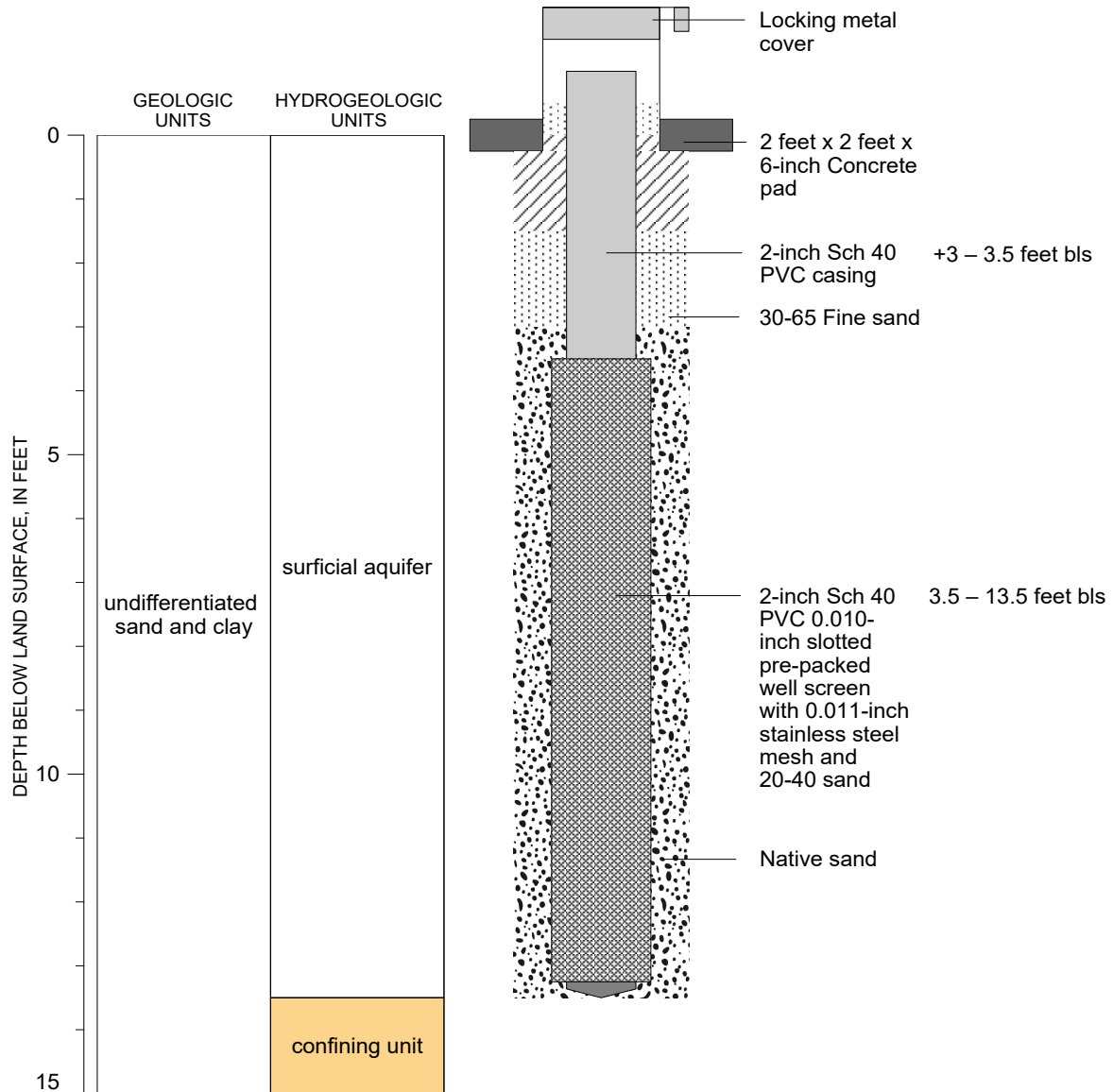


SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 14

March 12, 2025

## Attachment 4



Well Name:	Peace River at Bartow Surf Aq Monitor
SID:	1037163
WCP:	951642
S/T/R:	4/30/25
Latitude:	27° 54' 4.3236" N
Longitude:	81° 49' 14.6922" W
Reporting Category:	PRBA
Const. Began:	02/18/2025
Const. Complete:	02/18/2025

### EXPLANATION

	Pre-packed screen		PVC casing
	Concrete		Nose cone
	Cement grout		Well head protector
	Fine sand		Native sand

Note: As-built is not to scale above land surface.

[bls, below land surface; Const., construction; N, north; PVC, polyvinyl chloride; Sch, schedule; SID, station identification; S/T/R, Section/Township/Range; WCP, well construction permit; W, west]



SUBJECT: Central Florida Water Initiative Data, Monitoring, and Investigations Team Peace River at Bartow Surficial Aquifer Monitor Well Construction Summary

Page 15

March 12, 2025

## Attachment 5





