

July 15, 2016

**BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA**

Addendum No.2/IFB Y16-783-PH

**Cypress Walk, Orangewood, Hunters Creek, Oak Meadows Water
Supply Facilities Chemical Feed System Upgrade**

Bid Opening Date: July 21, 2016

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining, deletions are indicated by ~~strikethrough~~.

A. CLARIFICATIONS

1. Q: Is the Blanket Pollution Policy adequate for use for this project?

A: No.

2. Q: Can the iFix licenses on each existing workstation (page 13300-17, part 2.11, subsection C) be transferred to the new workstations or will new View Only licenses be required?

A: The existing license keys can be transferred to the new machines without having to purchase new keys.

3. Q: Section 13300 2.11C lists a Dell U2412M, which is a Dell Ultrasharp 24" monitor. What is the specification for the "Windows 7 professional workstation within the enclosure with raid one capability"?

A: The HMI Workstation Computer shall be a Dell Precision 5T610 (or current family product), comprised of the following configuration. This configuration is to be provided as a minimum:

- Processor type: Quad-Core (Intel Xeon)
- Processor speed: 2.4 Ghz
- Monitor size: 24-inch Ultrasharp Widescreen monitor
- Memory size (RAM): 8 GB
- Manufacturer: Dell
- Two 500 GB hard drives or larger with integrated RAID 1 controller
- Single CPU, dual capable
- 16X DVD-RW DL

- 256 MB PCIe Dual Monitor DVI capable video card
- 6 MB Cache
- Two 10/100/1000 Giga bit RJ-45 connectivity Ethernet controller PCIe cards
- 2 button scroll mouse
- Standard Windows keyboard
- 2 Serial Ports standard
- 2 Parallel Port standard or USB ports
- Sound Card and speakers
- MS Windows 7 Professional, Full Service, Service Pack 1, 32-bit
- Microsoft Office 2010 Professional 32-bit
- Resource DVD or USB Contains Diagnostics and Drivers

4. Q: What is the iFix version used at Eastern Regional referenced in Section 13300 2.11C?

A: iFix Version 5.8

5. Q: Which version of iFix Development is required to fulfill 13300 2.11B?

A: iFix Plus Unlimited Development

6. Q: The fluoride areas are calling for a FRP tank support. Would concrete pads be an acceptable alternative to the FRP stands?

A: No, concrete tank supports for the Fluoride Bulk Tanks are not acceptable.

B. PROJECT MANUAL

PART H – TECHNICAL SPECIFICATIONS:

INDEX OF DRAWINGS

Add: Figures SK-FP1 through SK-FP6 have been added with this addendum to include additional yard piping and details associated with the Fire Protection System.

DIVISION 1 – GENERAL REQUIREMENTS

SECTION 13219 – POLYETHELENE STORAGE TANKS

Modify: The following text is modified in SECTION 13219 with this addendum.

1.02 QUALITY ASSURANCE

B. 1. Material Testing: Material from each tank shall be tested for the following:

<u>Parameter</u>	<u>Test Standard</u>	<u>Value</u>
Gel, minimum percent	ASTM D 1998	1/32-inch of inner wall: 65 <u>60</u>

2. Following fabrication, the tanks, including factory applied inlet and outlet fittings, shall be hydraulically tested with water. ~~The factory test shall compensate for the difference in specific gravity between the test water and chemical stored to simulate actual maximum operating pressures. Test methods may include adding a 2.5 psi air pad to a filled tank or filling the tank with standpipes, raising the maximum water surface approximately 5 feet higher than the normal maximum tank level.~~ Test method shall be filling the tank full of water to maximum tank level and holding for a 60-minute period of time, which is in accordance with ASTM D1998.

1.03 SUBMITTALS

- A. 4. Submit design calculations for ~~structural design of walls~~ the design wall thickness with hoop stress calculated using 600-psi @ 100 degrees F per ASTM D1998.
- B. 2. Approved Materials: All materials that come into contact with the water being treated or the finished water shall be on either the EPA or NSF lists of products approved for use in contact with potable water and potable water treatment chemicals.

2.02 MATERIALS AND EQUIPMENT

- C. 1. c. The tank shall be provided with a solid polyethylene cover, integrally molded with the cylindrical wall or tank dome.
2. b. The tank shall be provided with a solid polyethylene cover, integrally molded with the cylindrical wall or tank dome.
3. b. The tank shall be provided with a solid polyethylene cover, integrally molded with the cylindrical wall or tank dome.

2.03 ACCESSORIES

- A. 1. g. Each tank shall be provided with the following nozzles with the orientation as shown on the Drawings:

Connection	Nozzle Size (Inches)	Location on Tank
Fluoride Bulk Tank		
Fill	2	Top
Day Tank Fill/Drain	1	Side @ Bottom
Level Sensor	6	Top
Vent	3 <u>6</u>	Top
Fluoride Day Tank		

Fill	1	Top
Feed Pump Suction/Drain	1	Side @ Bottom
Vent	2	Top
Sodium Hypochlorite Tank		
Fill	2	Top
Overflow	2 3	Side @ Top
Feed Pump Suction/Drain	2	Side @ Bottom
Level Sensor	6	Top
Vent	3 6	Top

Note: Vent and overflow pipe sizing are the suggested minimum but may be larger based on manufacturer requirements.

C. The Proposer shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of the proposal.

D. All other terms and conditions of the IFB remain the same.

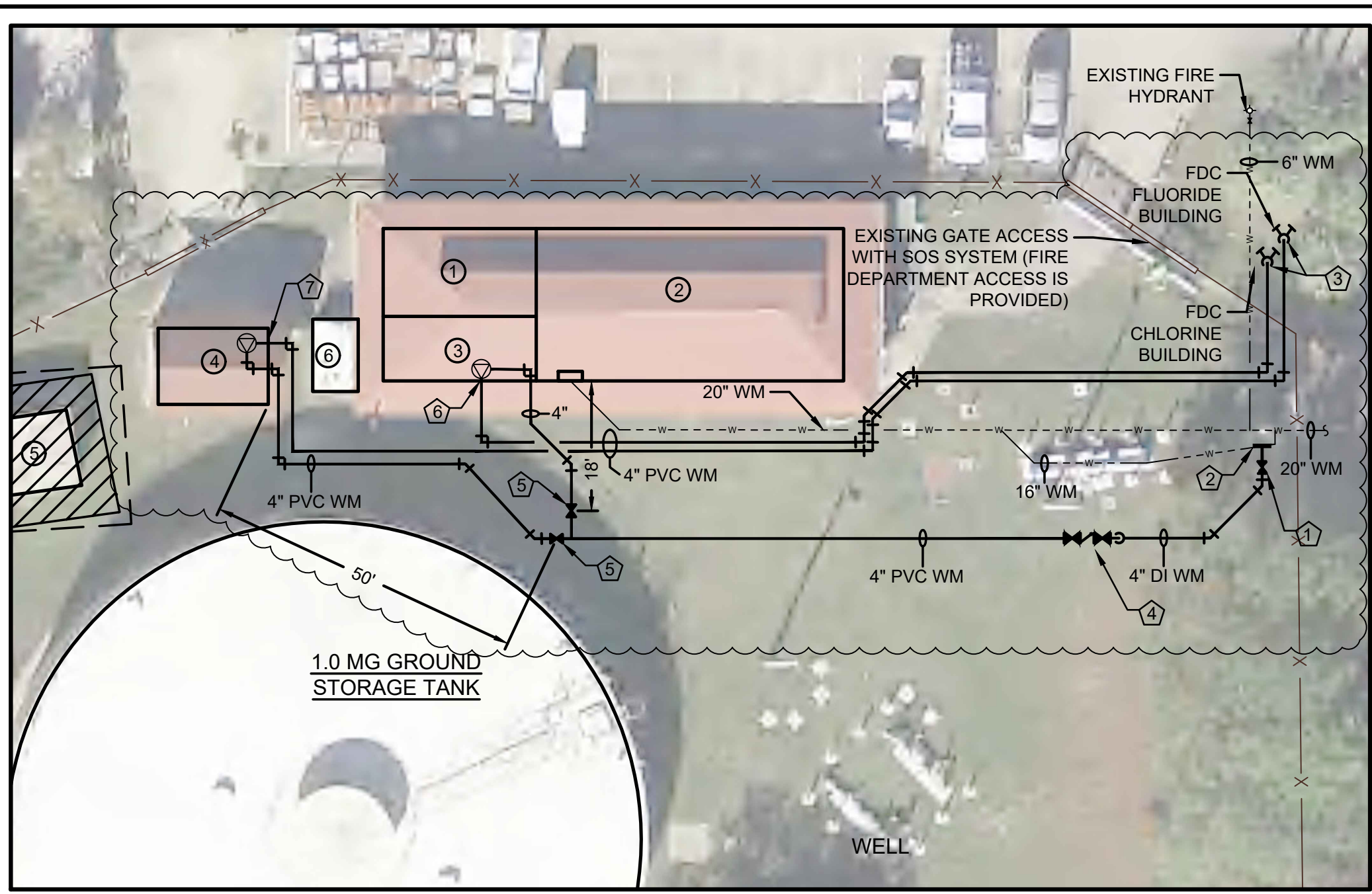
Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm



EXISTING FACILITIES LEGEND:

- ① CHLORINE ROOM
- ② HIGH SERVICE PUMP BUILDING
- ③ GENERATOR ROOM
- ④ FLUORIDE BUILDING
- ⑤ CAUSTIC BUILDING (NOT IN USE)
- ⑥ DIESEL FUEL TANK

FIRE PROTECTION KEY NOTES:

①	POINT OF FIRE SERVICE
②	POINT OF CONNECTION WITH EXISTING 16" WM. PROVIDE TAPPING SLEEVE AS SHOWN ON CIVIL PLANS.
③	FIRE DEPARTMENT SIAMESE CONNECTION.
④	DOUBLE DETECTOR CHECK BACKFLOW ASSEMBLY, REFER TO CIVIL PLANS.
⑤	POST INDICATOR VALVE, REFER TO CIVIL PLANS.
⑥	REFER TO SHEET FP-101 FOR FIRE PROTECTION SYSTEM SERVING CHLORINE ROOM.
⑦	REFER TO SHEET FP-102 FOR FIRE PROTECTION SYSTEM SERVING FLUORIDE BUILDING.

1 CYPRESS WALK WSF—FIRE PROTECTION SITE PLAN
SK-FP1

1"=20'-0"



DESIGN ENGINEER
ZEMP B. PEPPER, P.E.

FLA REGISTRATION No.
41147

AVCON, INC.
ENGINEERS & PLANNERS
5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
OFFICE: (407) 599-1122 - FAX: (407) 599-1133
CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
WWW.AVCONINC.COM

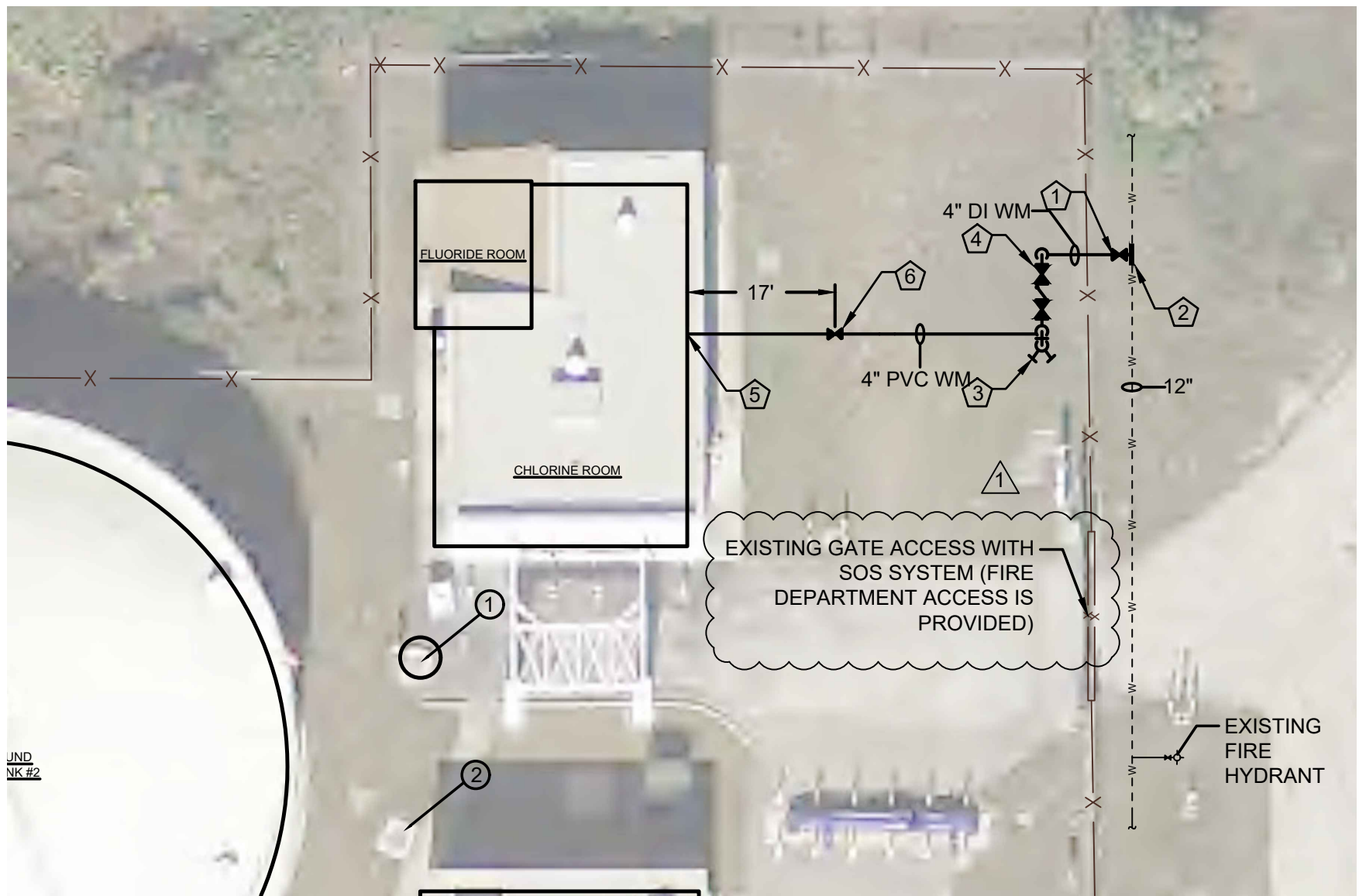
PROJECT DATE:	5/31/16	No.	REVISION	BY	DATE
DESIGNED BY:	ZP	1	REV 1	KD	7/01/16
DRAWN BY:	SE				
CHECKED BY:	ZP				

CYPRESS WALK WSF

**FIRE PROTECTION
SITE PLAN**

SK-FP1

VA, 2015, 196.01 - OCU WSF Fire Protection BFA, 2015, 196.01 - CADD/Permit Sketches/SKFP-1.dwg 7/11/2016 8:59 AM



EXISTING FACILITIES LEGEND:

- ① ON SITE LIFT STATION
- ② DRAINAGE STRUCTURE

FIRE PROTECTION KEY NOTES:

①	POINT OF FIRE SERVICE
②	POINT OF CONNECTION WITH EXISTING 12" WM. PROVIDE TAPPING SLEEVE AS SHOWN ON CIVIL PLANS.
③	FIRE DEPARTMENT SIAMESE CONNECTION.
④	DOUBLE DETECTOR CHECK BACKFLOW ASSEMBLY, REFER TO CIVIL PLANS.
⑤	REFER TO SHEET FP-201 FOR FIRE PROTECTION SYSTEM SERVING CHLORINE ROOM AND FLUORIDE ROOM.
⑥	POST INDICATOR VALVE, REFER TO CIVIL PLANS.

1 ORANGEWOOD WSF—FIRE PROTECTION SITE PLAN
 SK-FP2
 1"=20'-0"



DESIGN ENGINEER
 ZEMP B. PEPPER, P.E.

 FLA REGISTRATION No.
 41147

AVCON
 ENGINEERS & PLANNERS
 5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
 OFFICE: (407) 599-1122 - FAX: (407) 599-1133
 CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
 WWW.AVCONINC.COM

PROJECT DATE:	5/31/16	No.		REVISION		BY		DATE	
DESIGNED BY:	ZP	1	REV 1	KD	7/01/16				
DRAWN BY:	SE								
CHECKED BY:	ZP								

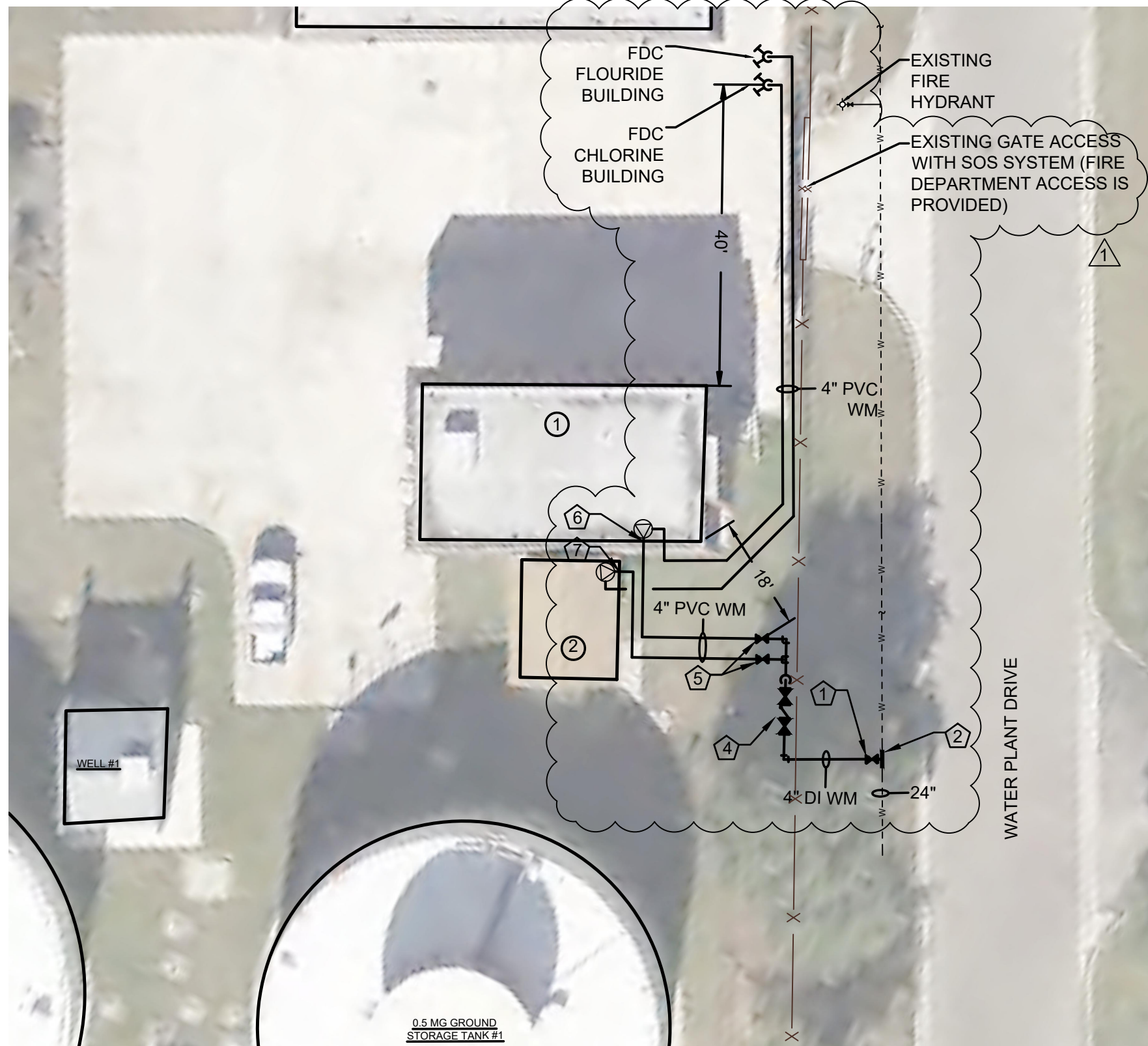
ORANGEWOOD WSF

**FIRE PROTECTION
 SITE PLAN**

SK-FP2

VA-2015-2015-196-01 - OCU WSF Fire Protection BFA 2015.196.01 - CAD/Permit Sketches/SKFP-2.dwg 7/6/2016 3:03 PM JND NK #2

VA\2015\2015.196.01 - OCU WSF Fire Protection BFA\2015.196.01 - CADD\Permit Sketches\SKFP-3.dwg 7/6/2016 3:03 PM



EXISTING FACILITIES LEGEND:

- ① CHLORINE BUILDING
- ② FLUORIDE BUILDING

FIRE PROTECTION KEY NOTES:

①	POINT OF FIRE SERVICE
②	POINT OF CONNECTION WITH EXISTING 24" WM. PROVIDE TAPPING SLEEVE AS SHOWN ON CIVIL PLANS.
③	FIRE DEPARTMENT SIAMESE CONNECTION.
④	DOUBLE DETECTOR CHECK BACKFLOW ASSEMBLY, REFER TO CIVIL PLANS.
⑤	POST INDICATOR VALVE, REFER TO CIVIL PLANS.
⑥	REFER TO SHEET FP-301 FOR FIRE PROTECTION SYSTEM SERVING CHLORINE ROOM.
⑦	REFER TO SHEET FP-302 FOR FIRE PROTECTION SYSTEM SERVING FLUORIDE BUILDING.

DESIGN ENGINEER
ZEMP B. PEPPER, P.E.

FLA REGISTRATION No.
41147

1 HUNTERS CREEK WSF-FIRE PROTECTION SITE PLAN
SK-FP3 1"=20'-0"



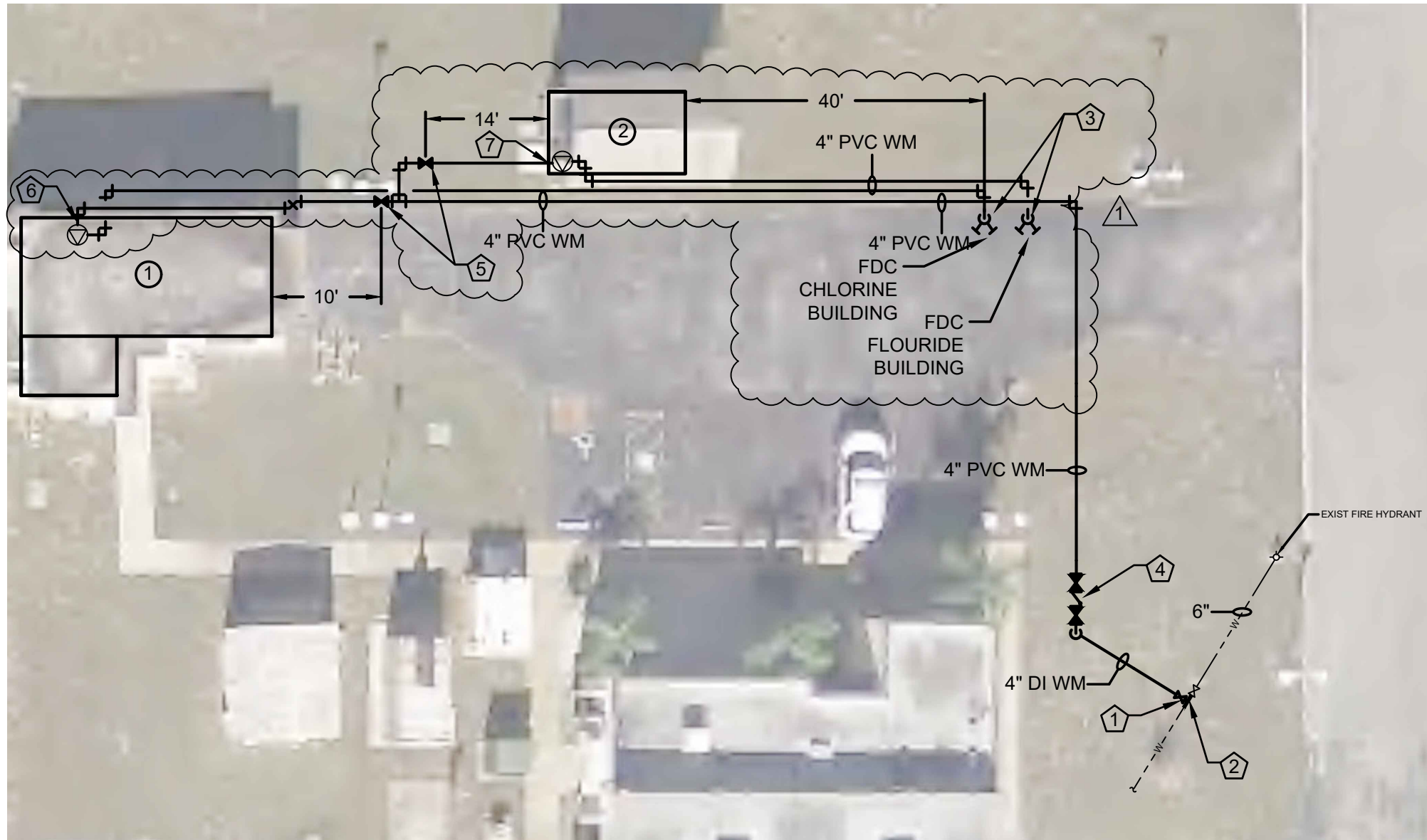
AVCON, INC.
ENGINEERS & PLANNERS
5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
OFFICE: (407) 599-1122 - FAX: (407) 599-1133
CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
WWW.AVCONINC.COM

PROJECT DATE:	5/31/16	No.		REVISION		BY		DATE	
DESIGNED BY:	ZP	1	REV 1		KD	7/01/16			
DRAWN BY:	SE								
CHECKED BY:	ZP								

HUNTERS CREEK WSF

**FIRE PROTECTION
SITE PLAN**

SK-FP3



EXISTING FACILITIES LEGEND:

- ① CHLORINE BUILDING
- ② FLUORIDE BUILDING

FIRE PROTECTION KEY NOTES:

①	POINT OF FIRE SERVICE
②	POINT OF CONNECTION WITH EXISTING 16" WM. PROVIDE TAPPING SLEEVE AS SHOWN ON CIVIL PLANS.
③	FIRE DEPARTMENT SIAMESE CONNECTION.
④	DOUBLE DETECTOR CHECK BACKFLOW ASSEMBLY, REFER TO CIVIL PLANS.
⑤	POST INDICATOR VALVE, REFER TO CIVIL PLANS.
⑥	REFER TO SHEET FP-401 FOR FIRE PROTECTION SYSTEM SERVING CHLORINE ROOM.
⑦	REFER TO SHEET FP-402 FOR FIRE PROTECTION SYSTEM SERVING FLUORIDE BUILDING.

1 OAK MEADOWS WSF—FIRE PROTECTION SITE PLAN
 SK-FP4
 1"=20'-0"



DESIGN ENGINEER
 ZEMP B. PEPPER, P.E.

FLA REGISTRATION No.
 41147

VA, 2015, 2015, 196, 01 - OCU WSF Fire Protection BFA, 2015, 196, 01 - CADD\Permit Sketches\SKFP-4.dwg 7/6/2016 3:03 PM



AVCON, INC.
 ENGINEERS & PLANNERS
 5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
 OFFICE: (407) 599-1122 - FAX: (407) 599-1133
 CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
 WWW.AVCONINC.COM

PROJECT DATE:	5/31/16	No.		REVISION		BY		DATE	
DESIGNED BY:	ZP	1		REV 1		KD		7/01/16	
DRAWN BY:	SE								
CHECKED BY:	ZP								

OAK MEADOWS WSF

**FIRE PROTECTION
 SITE PLAN**

SK-FP4

PROJECT BUILDING INFORMATION

SITE	CYPRESS WALK WSF	CYPRESS WALK WSF	ORANGE WOOD WSF	HUNTERS CREEK WSF	HUNTERS CREEK WSF	OAK MEADOWS WSF	OAK MEADOWS WSF
BUILDING	CHLORINE BUILDING	FLUORIDE BUILDING	COMBINED BUILDING	CHLORINE BUILDING	FLUORIDE BUILDING	CHLORINE BUILDING	FLUORIDE BUILDING
CONSTRUCTION TYPE	V	V	V	II	V	II	V
SPRINKLERED	YES	YES	YES	YES	YES	YES	YES
FIRE ALARM	YES	YES	YES	YES	YES	YES	YES
AREA (SF)	1800	210	1680	800	200	820	235
BUILDING HEIGHT (FT)	18	14	17	18	14	10	14
OCCUPANCY LOAD <input type="checkbox"/>	300 SF/PERSON (6 PEOPLE)	300 SF/PERSON (1 PERSON)	300 SF/PERSON (6 PEOPLE)	300 SF/PERSON (3 PEOPLE)	300 SF/PERSON (1 PERSON)	300 SF/PERSON (3 PEOPLE)	300 SF/PERSON (1 PERSON)

FBC CHAPTER 10 - TABLE 1004.1.2 (EQUIPMENT ROOM)

DESIGN ENGINEER
ZEMP B. PEPPER, P.E.

FLA REGISTRATION No.
41147



AVCON, INC.
ENGINEERS & PLANNERS
5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
OFFICE: (407) 599-1122 - FAX: (407) 599-1133
CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
WWW.AVCONINC.COM

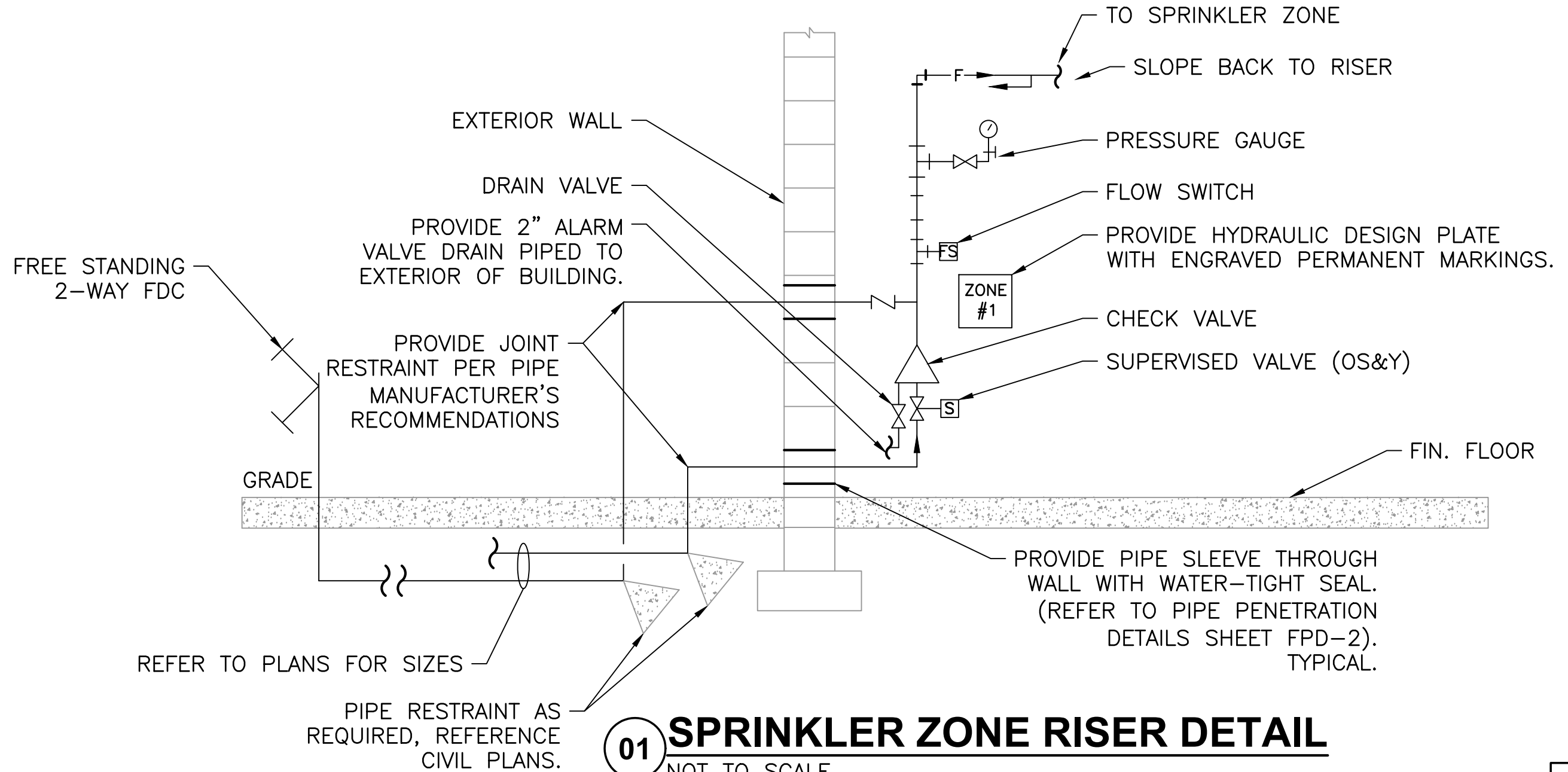
PROJECT DATE: 5/31/16
DESIGNED BY: ZP
DRAWN BY: KD
CHECKED BY: ZP

WATER SUPPLY FACILITIES CHEMICAL SYSTEMS IMPROVEMENTS

FIRE PROTECTION
BUILDING INFORMATION

SK-FP5

VA\2015\2015.196.01 - OCU WSF Fire Protection BFA\2015.196.01 - CADD\Permit Sketches\SKFP-6.dwg 7/5/2016 4:48 PM



NOTE: ALL SPECIAL TOOLS REQUIRED TO RESET THE SPRINKLER ALARMS SHALL BE PROVIDED.

DESIGN ENGINEER
ZEMP B. PEPPER, P.E.

FLA REGISTRATION No.
41147



AVCON, INC.
ENGINEERS & PLANNERS
5555 EAST MICHIGAN ST., SUITE 200 - ORLANDO, FL 32822
OFFICE: (407) 599-1122 - FAX: (407) 599-1133
CORPORATE CERTIFICATE OF AUTHORIZATION NO. 5057
WWW.AVCONINC.COM

PROJECT DATE:	7/01/16	No.	REVISION	BY	DATE
DESIGNED BY:	ZP				
DRAWN BY:	KD				
CHECKED BY:	ZP				

**FIRE PROTECTION
DETAIL**

**FIRE PROTECTION
BUILDING INFORMATION**

SK-FP6