

CONSTRUCTION PLANS FOR

DATE	ISSUE	BY
***	///	---



PATRICIA AVE WATER LINE REPLACEMENT

SECTION 04 TOWNSHIP 19S RANGE 24E

Chris Cheshire
MAYOR

Patrick DeGrave
VICE MAYOR
DISTRICT 1

Chris Cheshire
CITY COMMISSIONER
DISTRICT 3

Chris Bell
CITY COMMISSIONER
DISTRICT 5

Gary La Venia
CITY MANAGER

Robb Dicus
PUBLIC WORKS
DIRECTOR

John Mobilian
CITY COMMISSIONER
DISTRICT 2

John L. Gunter Jr.
CITY COMMISSIONER
SEAT 4, DISTRICT 4

Anita Geraci Carver
CITY ATTORNEY
SERVICES DIRECTOR

OWNER/DEVELOPER:

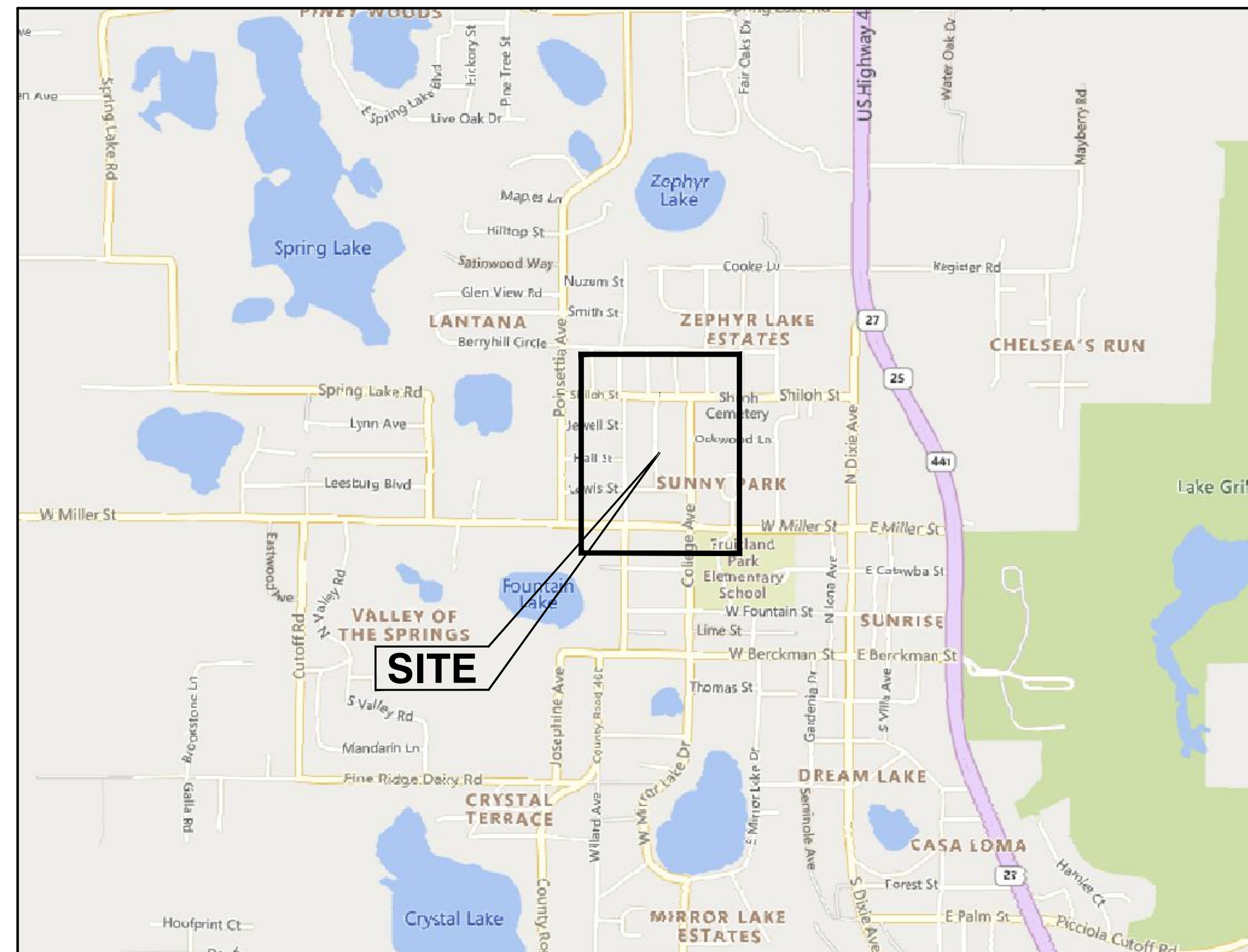
CITY OF FRUITLAND PARK
202 W BERCKMAN STREET
FRUITLAND PARK, FL 34731
ROBB DICUS, PUBLIC WORKS DIRECTOR
PHONE: (352) 360-6795
RDICUS@FRUITLANDPARK.ORG

ENGINEER/SURVEYOR:

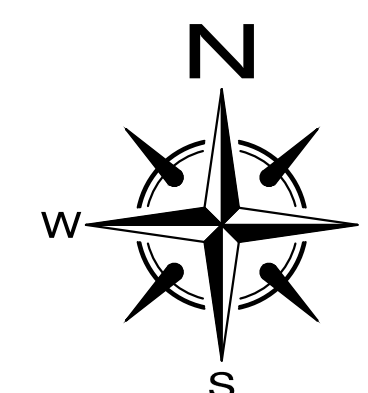
HALFF ASSOCIATES, INC.
902 N. SINCLAIR AVENUE
TAVARES, FL 32778
BRETT J. TOBIAS, P.E.
(352) 343-8481
BTOBIAS@HALFF.COM



Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.
Check positive response codes before you dig!



VICINITY MAP
1" = 1,000'



INDEX OF SHEETS

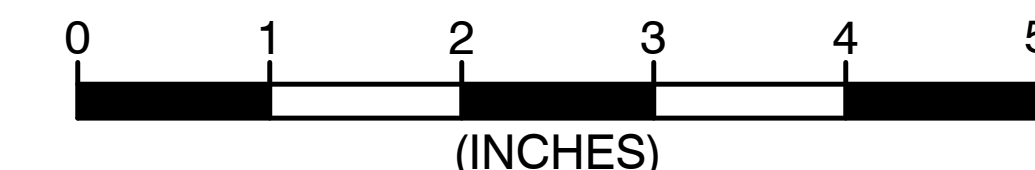
- 1 COVER SHEET
- 2 AERIAL PLAN
- 3 UTILITY PLAN
- 4 OFFSITE UTILITY PLAN
- 5 CITY DETAILS 1
- 6 CITY DETAILS 2
- 7 CITY DETAILS 3

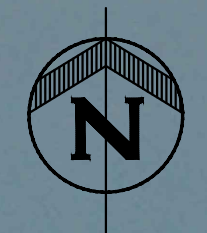
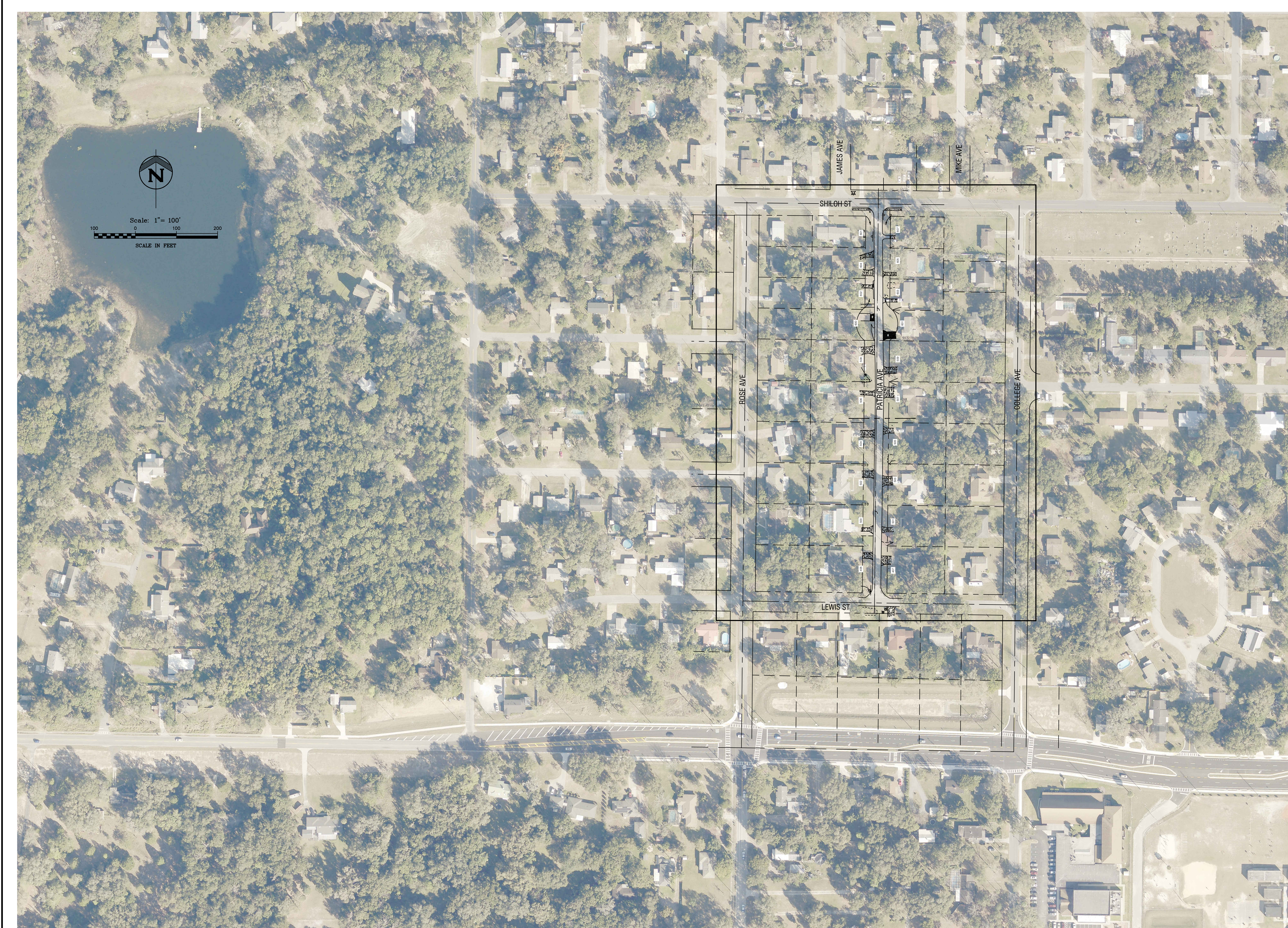
PREPARED BY:



902 NORTH SINCLAIR AVE.
TAVARES, FLORIDA 32778
TEL (352) 343-8481 FAX (352) 343-8495
www.halff.com

ORIGINAL DOCUMENT SIZE 24"x36"





Scale: 1" = 100'
 100 0 100 200
 SCALE IN FEET

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

Fruitland Park, Florida
 Patricia Ave.
 Aerial Plan




half
 902 NORTH SINGLAR AVE.
 TALLAHASSEE, FLORIDA 32310
 TEL: (904) 343-9481

DATE:	April 2023
DESIGNED BY:	BJT
DRAWN BY:	MC
CHECKED BY:	CLB
JOB NO.:	43866.096
FILE NAME:	Patricia Ave
Sheet 02	

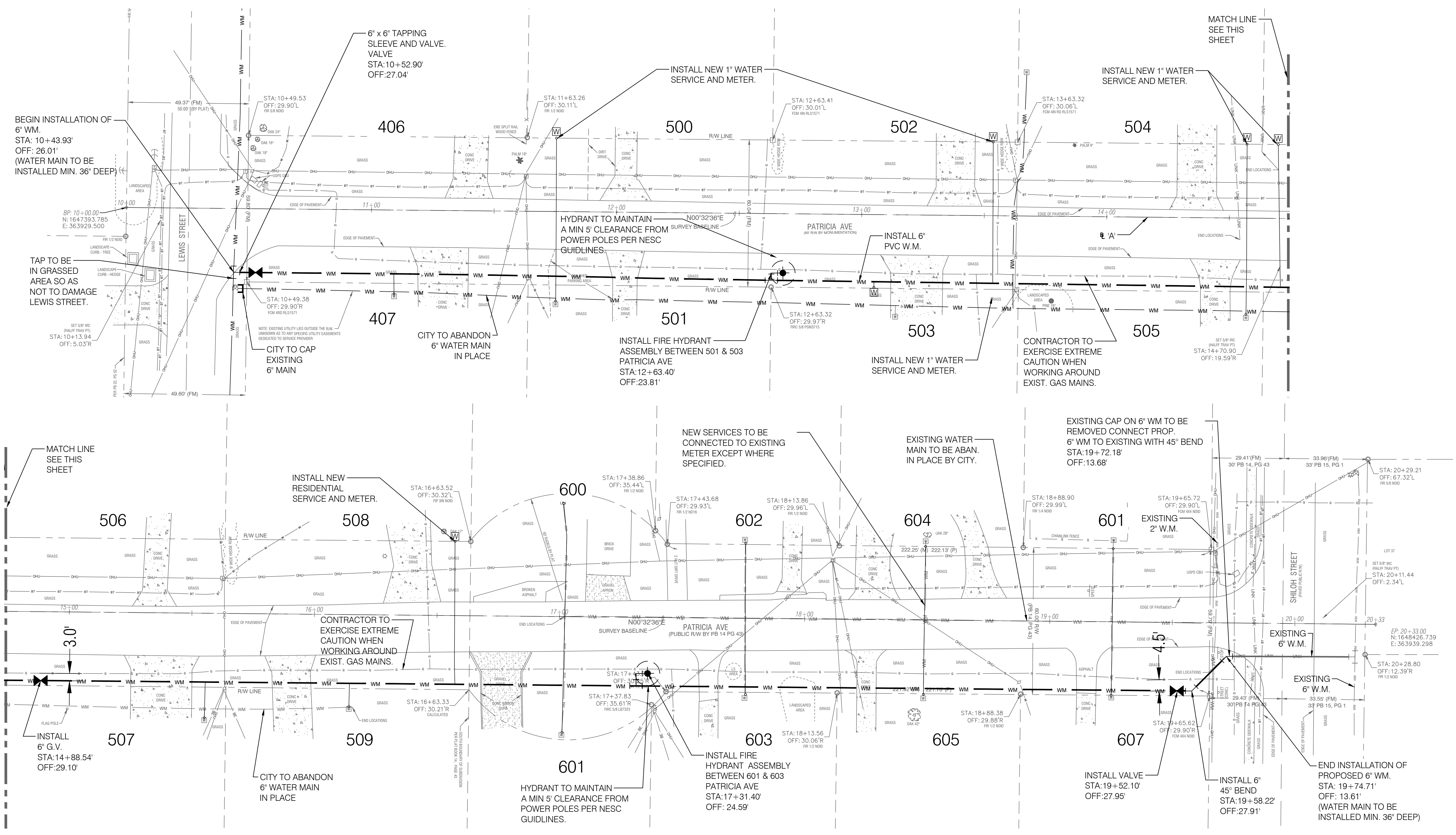
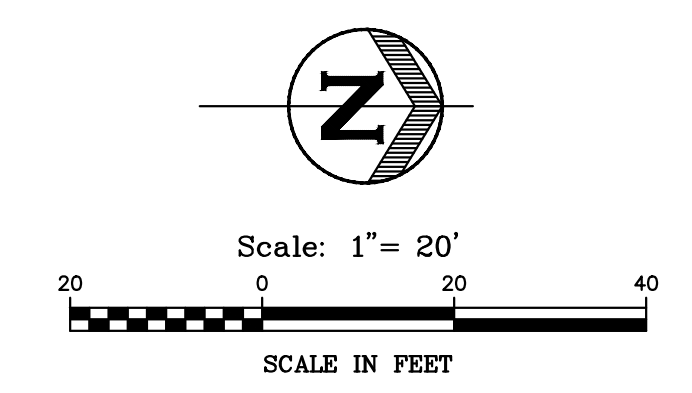
BRETT J. TOBIAS, PE
 Registered Eng 69017

LEGEND			
(SO)	SANITARY MANHOLE NUMBER	U.E.	UTILITY EASEMENT
(S)	SANITARY SEWER MANHOLE	— —	SINGLE WATER SERVICE
— —	SANITARY SEWER PIPE	— — —	DOUBLE WATER SERVICE
— —	WATER MAIN	— — — —	SINGLE SANITARY LATERAL
X	GATE VALVE	— — — — —	DOUBLE SANITARY LATERAL
R	REDUCER	— — — — — —	SINGLE REUSE SERVICE
T	TEE	— — — — — — —	DOUBLE REUSE SERVICE
EL	ELBOW	(A)	AIR RELEASE VALVE
BO	BLOW-OFF	BT	BACTERIOLOGICAL SAMPLE POINT
FH	FIRE HYDRANT	WM	WATER METER

NOTE:
TO THE EXTENT LEGALLY POSSIBLE FOR HOUSES WITH EXISTING BACKYARD METERS, CONTRACTOR TO FIELD VERIFY SERVICE CONNECTIONS TO HOUSE TO DETERMINE PROPOSED METER LOCATIONS IN FRONT YARD THAT CONSERVE THE QUANTITY OF PIPE TO CONNECT.

NOTE:
ANY NEW METER REQUIRED WILL BE PROVIDED TO THE CONTRACTOR BY THE CITY OF FRUITLAND PARK.

NOTE:
PHASE I - SHALL BE THE INSTALLATION OF WATER MAIN, AND HYDRANTS. ALSO TESTING AND ASSOCIATED APPURTENANCES.
PHASE II - SHALL BE NEW SERVICE LINES AND ANY NEW METERS.



REVISION	1	2	3	4	5	6	7	8	9	10
DATE	***									

Fruitland Park, Florida
Patricia Ave.
Utility Plan



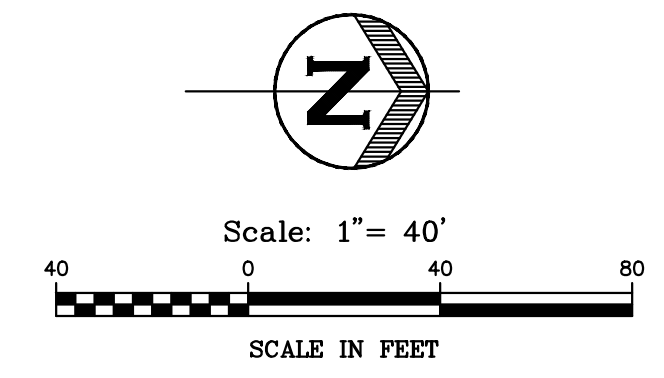
half
902 NORTH SINGLAR AVE.
TALLAHASSEE, FLORIDA 32310
TEL. (904) 343-9481

DATE:	April 2023
DESIGNED BY:	BJT
DRAWN BY:	MC
CHECKED BY:	CLB
JOB NO.:	43866.096
FILE NAME:	Patricia Ave
Sheet 03	

BRETT J. TOBIAS, PE
Registered Eng 69017

LEGEND			
(SO)	SANITARY MANHOLE NUMBER	U.E.	UTILITY EASEMENT
(S)	SANITARY SEWER MANHOLE	— —	SINGLE WATER SERVICE
— —	SANITARY SEWER PIPE	— — — —	DOUBLE WATER SERVICE
WM	WATER MAIN	— — — — — —	SINGLE SANITARY LATERAL
X	GATE VALVE	— — — — — — — —	DOUBLE SANITARY LATERAL
*	REDUCER	— — — — — — — — — —	SINGLE REUSE SERVICE
T	TEE	— — — — — — — — — — — —	DOUBLE REUSE SERVICE
⌋	ELBOW	⊕	AIR RELEASE VALVE
⊕	BLOW-OFF	(A)	BT
⊕	FIRE HYDRANT		BACTERIOLOGICAL SAMPLE POINT

LEGEND	
—	Existing
—	Proposed



NOTE:
LOCATIONS ARE SCHEMATIC IN NATURE, CONTRACTOR TO FIELD LOCATE.



REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

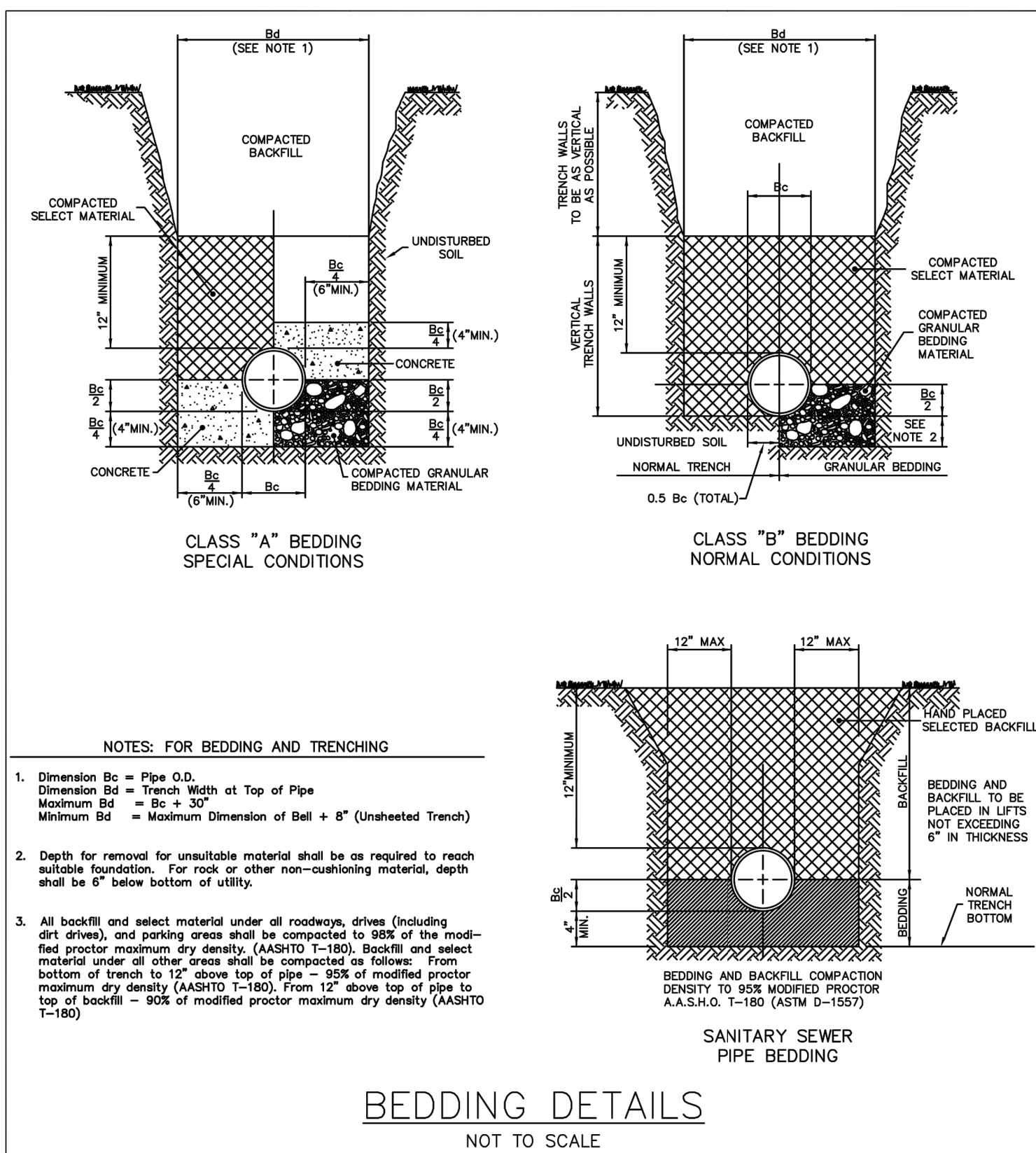
Fruitland Park, Florida
Patricia Ave.
Offsite Utility Plan



902 NORTH SINGLAR AVE.
TVALES, FLORIDA 32778
TEL. (352) 343-9481

DATE:	April 2023
DESIGNED BY:	BJT
DRAWN BY:	MC
CHECKED BY:	CLB
JOB NO.:	43866.096
FILE NAME:	Patricia Ave
Sheet 04	

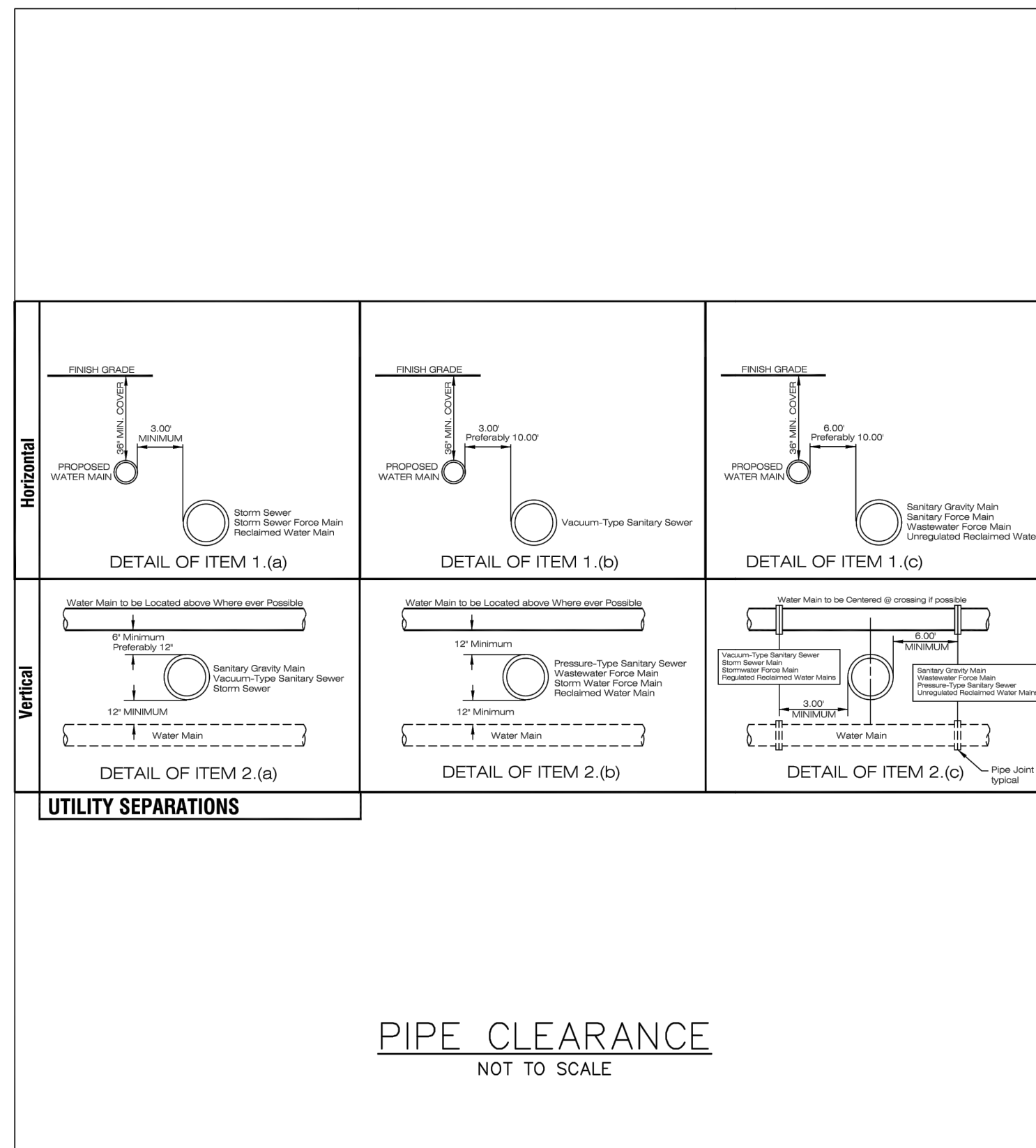
BRETT J. TOBIAS, PE
Registered Eng 69017



City of Fruitland Park
Standard Details

JANUARY 2020

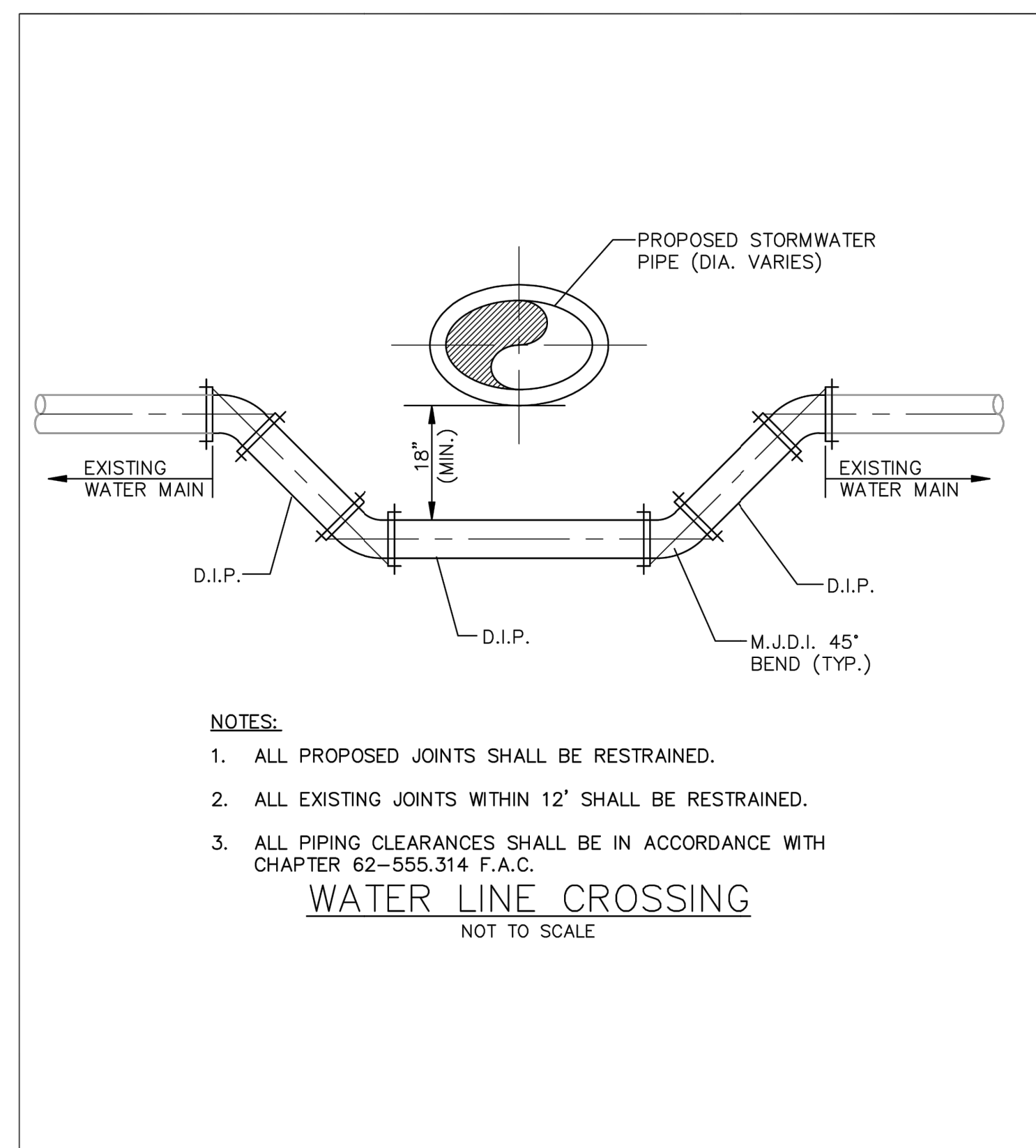
Detail G-3



City of Fruitland Park
Standard Details

JANUARY 2020

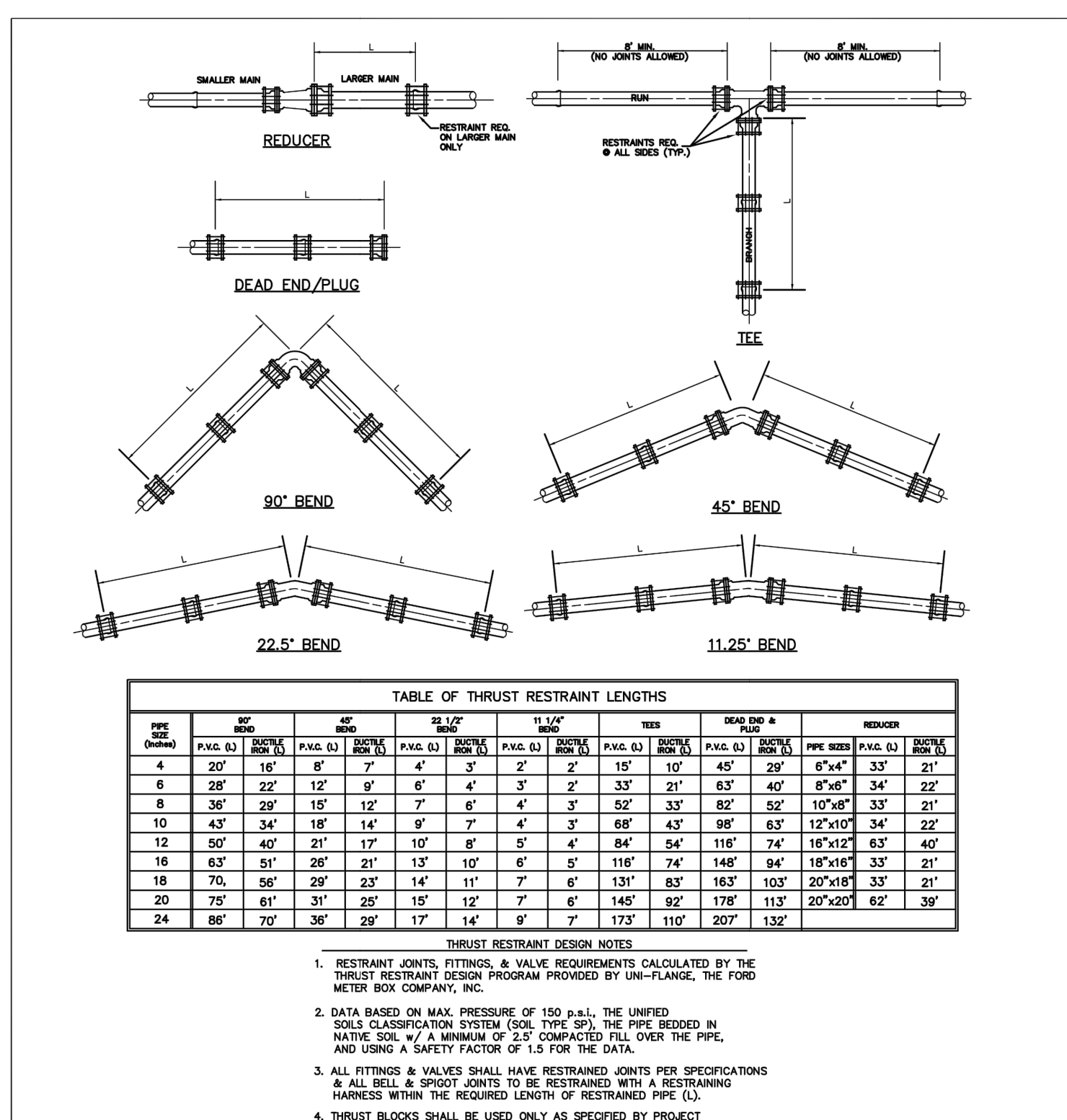
Detail G-4A



City of Fruitland Park
Standard Details

JANUARY 2020

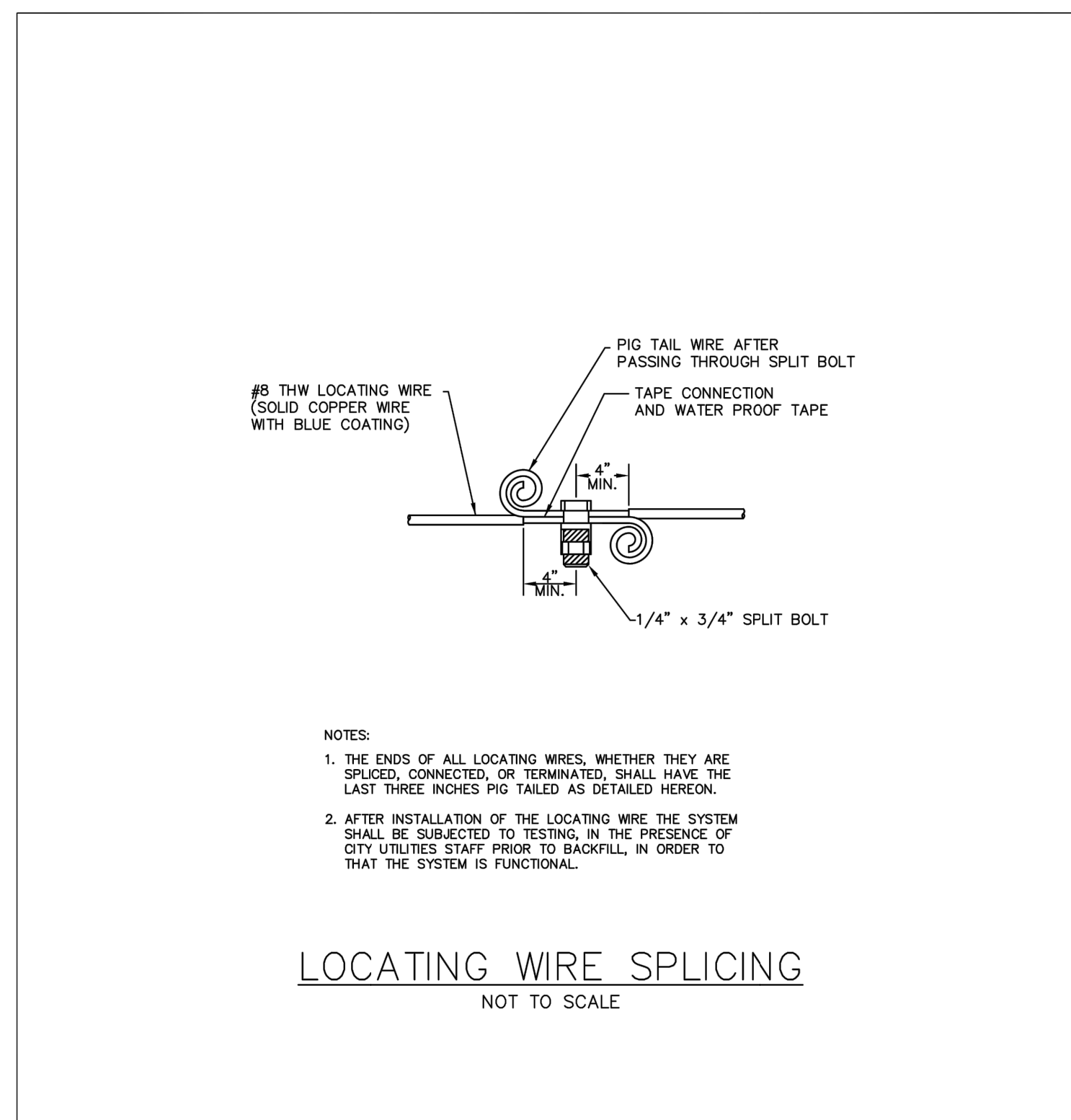
Detail G-5



City of Fruitland Park
Standard Details

JANUARY 2020

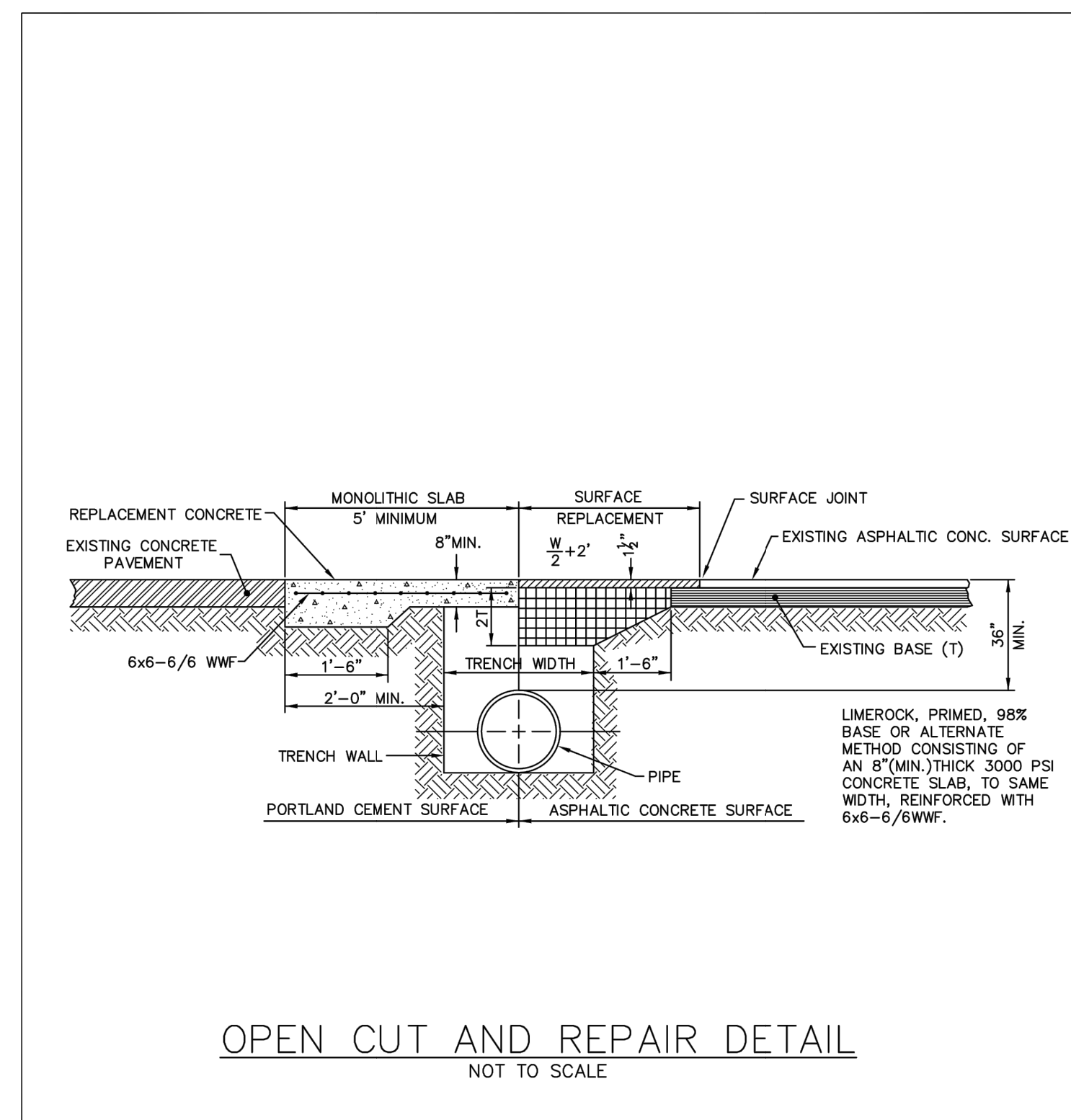
Detail G-6



City of Fruitland Park
Standard Details

JANUARY 2020

Detail G-8



City of Fruitland Park
Standard Details

JANUARY 2020

Detail G-9

REVISION	///
DATE	***
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Fruitland Park, Florida
Patricia Ave.
City Detail Sheet 1



half

902 NORTH SINGLAIER AVE.
TAVARES, FL 32778
TEL. (852) 343-9481

DATE:	April 2023
DESIGNED BY:	BJT
DRAWN BY:	MC
CHECKED BY:	CLB
JOB NO.:	43866.096
FILE NAME:	Patricia Ave
Sheet 05	

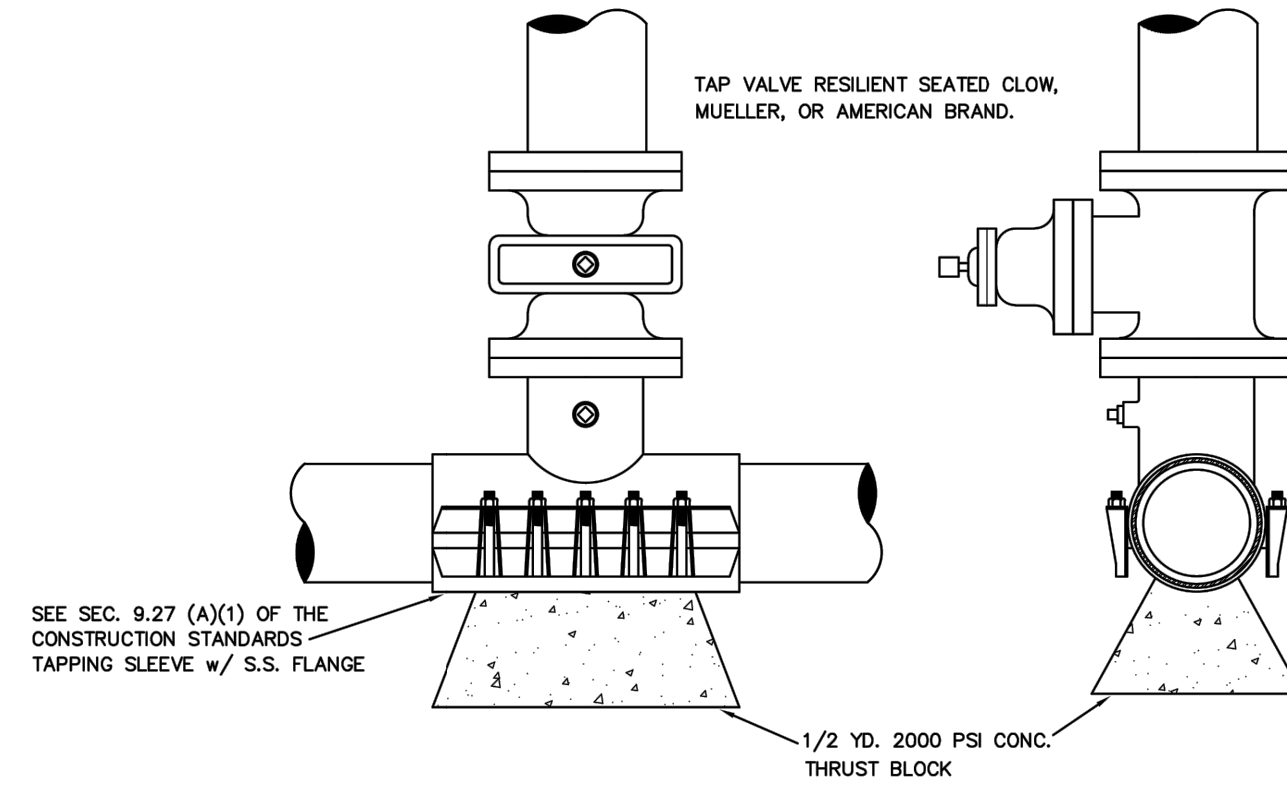
BRETT J. TOBIAS, PE
Registered Eng 69017

GENERAL WATER NOTES

1. WATER SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS COMPOUNDS, SOLVENTS, LUBRICANTS AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES TO BE MINIMUM 36" BELOW FINISHED GRADE.
5. WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. ALL PIPING CLEARANCES SHALL BE IN ACCORDANCE WITH CHAPTER 62-555.314, F.A.C., AND APPROVED BY THE CITY.
7. ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON AND SHALL EXTEND 5' BEYOND THE BACK OF CURB, OR DIRECTIONAL BORES, WHICH SHALL BE SDR-11 HDPE.
8. ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.

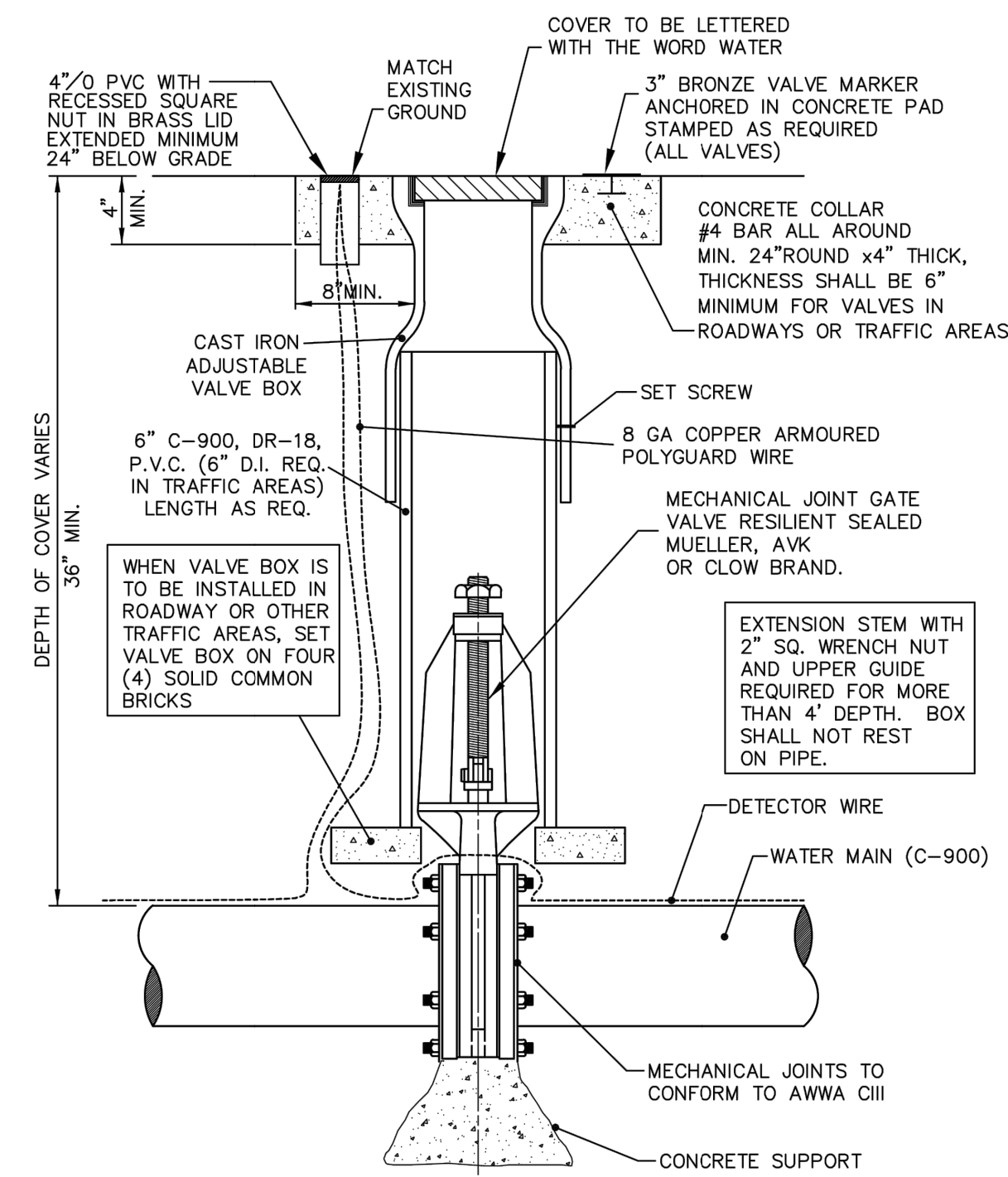
*** NOTE: MARK ALL POINTS WHERE WATER SERVICES CROSS CURB WITH A "W" MARK IN CONCRETE.

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-1	




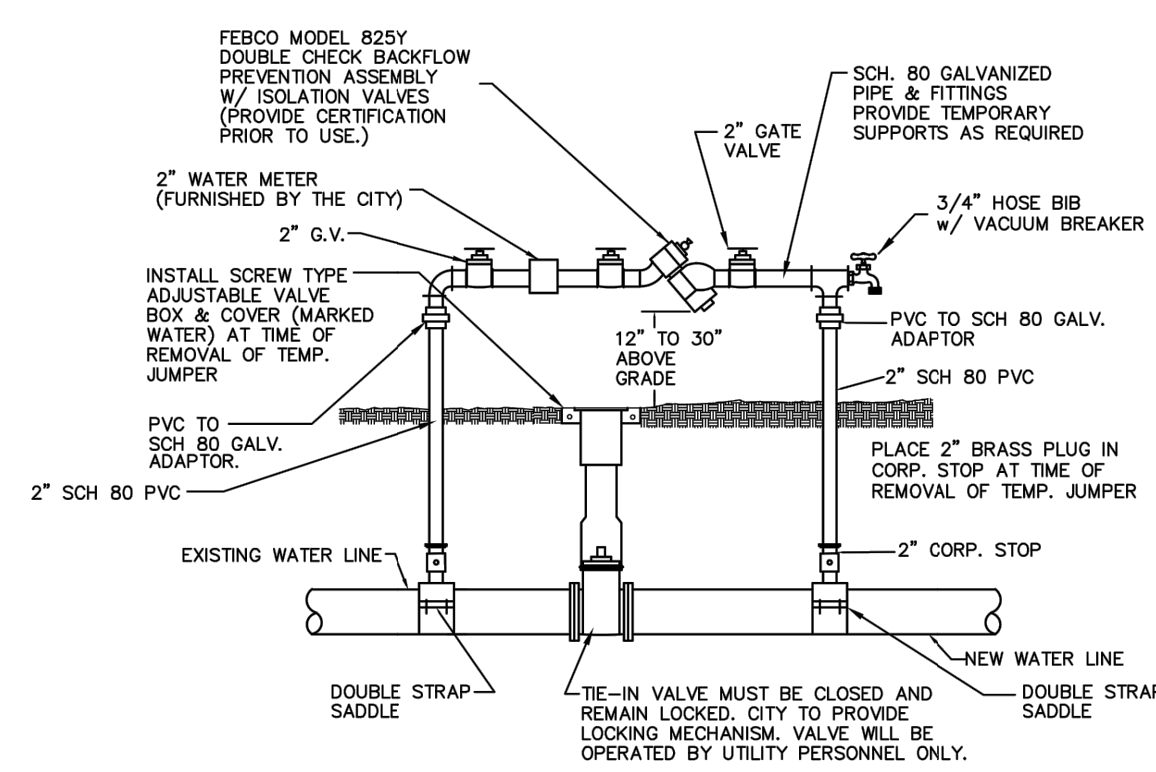
WET TAP SLEEVE & TAP VALVE
NOT TO SCALE

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-2	



GATE VALVE & BOX
NOT TO SCALE

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-3	



TEMPORARY JUMPER CONNECTION DETAIL
NOT TO SCALE

NOTE: LOCATION TO BE DETERMINED AT TIME OF PRECONSTRUCTION CONFERENCE W/ CITY.

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-7	

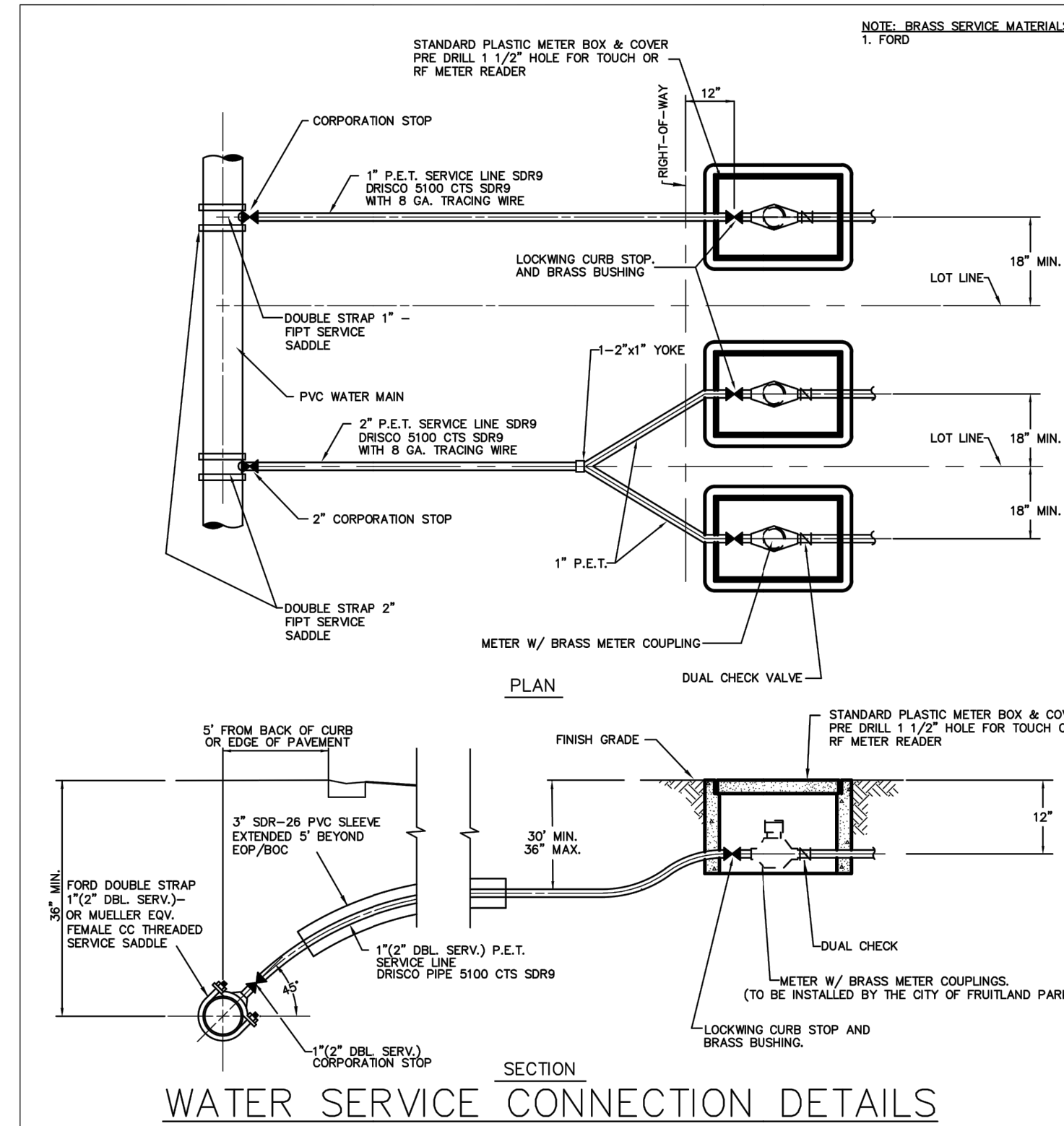
TEMPORARY JUMPER CONNECTION NOTES

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.
2. THE DETAILS TO BE USED FOR FILLING ANY WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY) AND FOR PULLING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OTHER PERTINENT AGENCIES HAS BEEN RECEIVED. THE JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 psi IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE FDEP CLEARANCE LETTER IS OBTAINED. ADEQUATE THRUST BLOCKING AND/OR RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651. THIS TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION II OF AWWA C651.
3. FLUSHING OF 10" DIAMETER AND LARGE WATER MAINS MAY BE DONE THROUGH THE TIE-IN VALVE, IN THE PRESENCE OF THE UTILITY DEPARTMENT. THE UTILITY DEPARTMENT WILL BE NOTIFIED IN WRITING 48 HOURS PRIOR TO THE FLUSHING OF SAID MAINS.

THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:


- A. THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY COMPANY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO THE TIE-IN. VALVES WHICH ARE NOT WATER TIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE.
 - B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN AND FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE FDEP PERMIT.
 - FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAIN.
 - ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TIE-IN VALVE.
 - PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN POINT, THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 psi.
 - TIE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY, ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 psi.
 - C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE CITY UNTIL FLUSHING BEGINS.
 - D. THE TIE-IN VALVE SHALL BE OPENED ONLY A FEW TURNS FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE CITY AND OBSERVED BY THE ENGINEER.
 - E. AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION BY THE CITY.
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE RPZ BACKFLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION AND IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION. THE TEST SHALL BE PERFORMED BY A QUALIFIED BACKFLOW PREVENTION TECHNICIAN.
 5. EXCEPT AS REQUIRED TO FLUSH LINES OF GREATER THAN 8" IN DIAMETER, THE TIE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSED POSITION BY THE CITY. THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY FDEP AND ALL OTHER PERTINENT AGENCIES.
 6. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND ALL OTHER PERTINENT AGENCIES, THE CONTRACTOR SHALL REMOVE THE JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
 7. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE FITTINGS, VALVE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-8	



WATER SERVICE CONNECTION DETAILS
NOT TO SCALE

(NOTE: METERS TO BE INSTALLED BY CITY OF FRUITLAND PARK.)

	City of Fruitland Park Standard Details	JANUARY 2020
	Detail W-9	

Fruitland Park, Florida
Patricia Ave.
City Detail Sheet 2



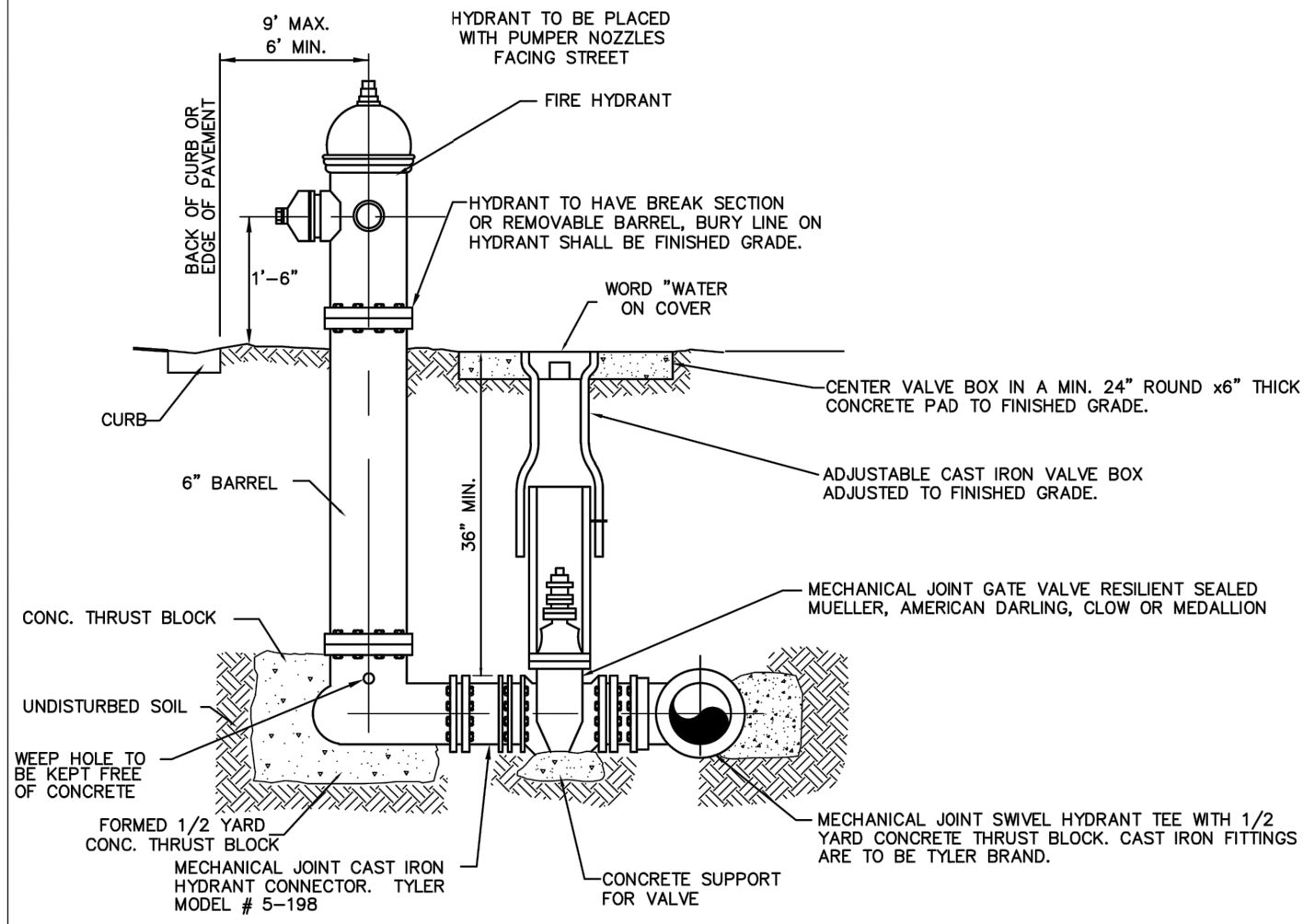
halff
902 NORTH SINGLAI AVE.
TALLAHASSEE, FLORIDA 32378
TEL. (850) 343-9481

DATE: April 2023
DESIGNED BY: BJT
DRAWN BY: MC
CHECKED BY: CLB
JOB NO.: 43866.096
FILE NAME: Patricia Ave
Sheet 06

BRETT J. TOBIAS, PE
Registered Eng 69017

SPECIFICATIONS

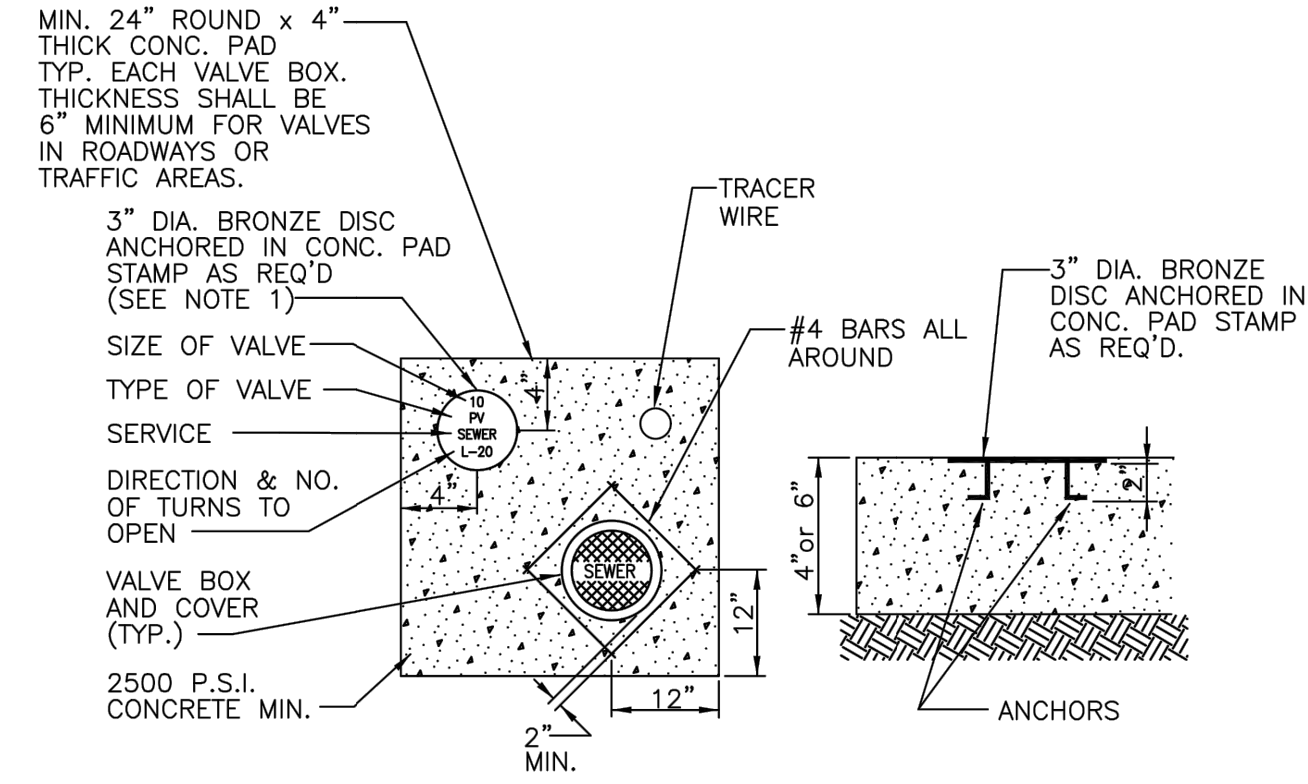
1. AWWA SPECIFICATIONS C-502
 2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
 3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
 4. ONE 1-1/2" OPERATING NUT, LEFT
- APPLY TWO COATS OF SHERMAN WILLIAMS RED (SHERWIN WILLIAMS #854R38) FOR ALL HYDRANTS
5. HYDRANTS SHALL BE FLOW TESTED BY CONTRACTOR. COORDINATE WITH CITY ENGINEER FOR TESTING PROCEDURES.
 6. ALL HYDRANTS SHALL BE EQUIPPED WITH GRADE-LOK FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
 7. ALL HYDRANTS SHALL BE : MUELLER CENTURION 250
 8. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RISERS NEEDED TO BRING BASE OF HYDRANT TO FINISHED GRADE.



FIRE HYDRANT WITH VALVE

NOT TO SCALE
(STANDARD FIRE HYDRANT ASSEMBLY)

	City of Fruitland Park Standard Details		JANUARY 2020
			Detail W-11



VALVE COLLAR

NOT TO SCALE

- NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES

	City of Fruitland Park Standard Details		JANUARY 2020
			Detail S-14

REVISION	1	2	3	4	5	6	7	8	9	10
DATE	***									

Fruitland Park, Florida
 Patricia Ave.
 City Detail Sheet 3



half

902 NORTH SINGLAR AVE.
 TALLAHASSEE, FLORIDA 32310
 TEL. (904) 343-9481

DATE:	April 2023
DESIGNED BY:	BJT
DRAWN BY:	MC
CHECKED BY:	CLB
JOB NO.:	43866.096
FILE NAME:	Patricia Ave
Sheet 07	

BRETT J. TOBIAS, PE
 Registered Eng 69017