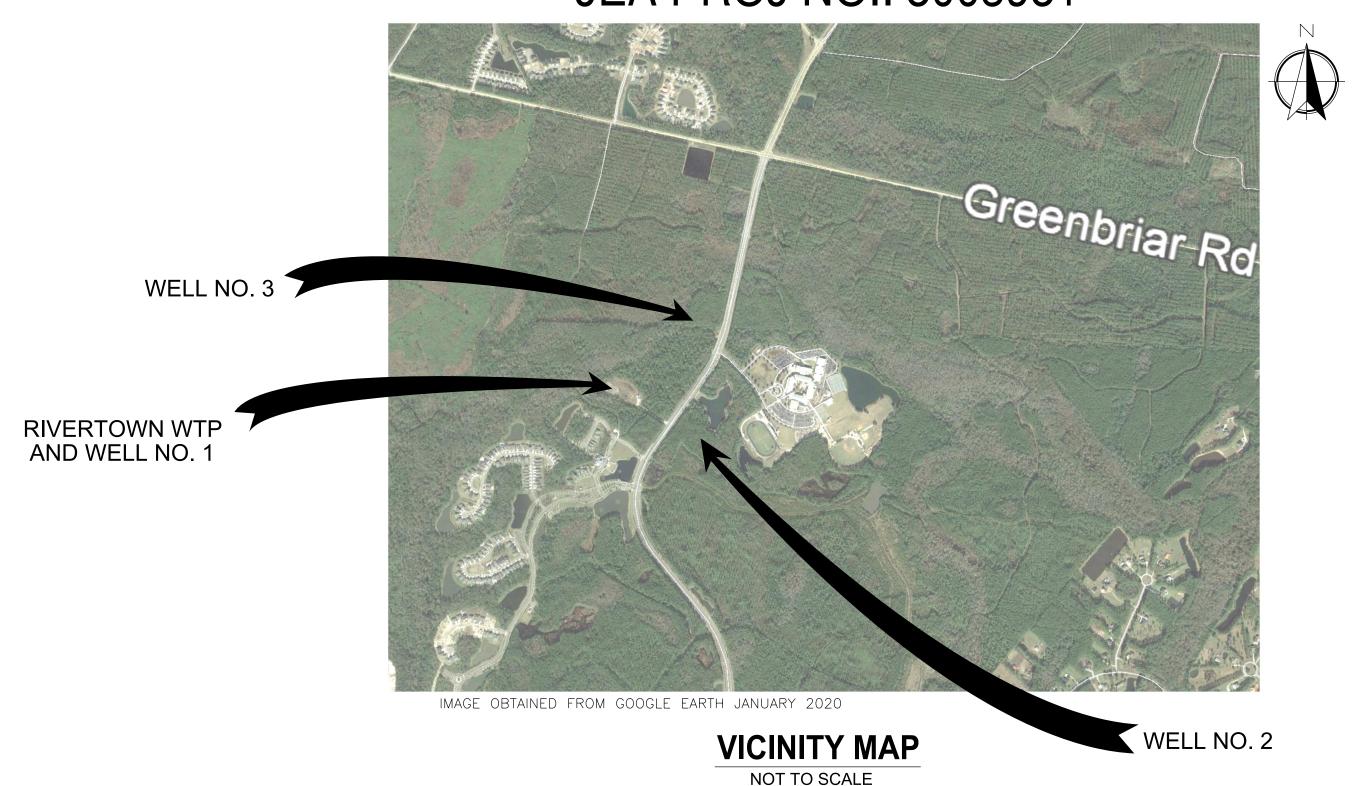
## PART 1 PACKAGE CONSTRUCTION DRAWINGS FOR

## JEA RIVERTOWN WATER TREATMENT PLANT WELL NOs. 1, 2, AND BACKUP WELL NO. 3

PART 1 - PRODUCTION WELL DRILLING

WELL NOs. 2 & 3 SITE PREPARATION FOR WELL DRILLING DRAWINGS

JEA PROJ NO.: 8003981



#### PREPARED BY:



4651 Salisbury Road, Suite 420 Jacksonville, FL 32256 Tel: (904) 731-7109 FL COA No. EB-0000020 PROJECT NO. 6103-229758

# Building Communitysm

#### **INDEX TO DRAWINGS**

SHEET NUMBER	<u>DRAWING</u> <u>NUMBER</u>	DRAWING TITLE
1 2 3 4 5 6 7 8 9 10	G-1 G-2 C-1 C-2 C-3 C-4 C-5 C-6 C-7 C-8 S-1	COVER SHEET, LOCATION MAPS AND DRAWING INDEX CIVIL LEGEND AND GENERAL NOTES WELL NO. 2 SITE PLAN BACKUP WELL NO. 3 SITE PLAN BACKUP WELL NO. 3 ACCESS DRIVEWAY BACKUP WELL NO. 3 RAW WATER MAIN STUB-OUT WELL SITE SECTIONS BACKUP WELL NO. 3 ACCESS DRIVEWAY DETAILS BACKUP WELL NO. 3 ACCESS DRIVEWAY DETAILS CIVIL DETAILS RETAINING WALL NOTES, SECTION AND DETAILS

### JACOBS®

245 Riverside Ave, Suite 300
Jacksonville, FL 32202
Tel: (904) 636-5432
EB0000072 AAC001992 LC26000188
PROJECT NUMBER: D3270100

ISSUED FOR BID FEBRUARY 2021

DATE DRWN CHKD

#### SURVEY AND LOCATE DATA:

- 1. ELEVATIONS ARE BASED ON N.A.V.D. 88.
- 2. EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND ROADWAY AND SUBDIVISION AS BUILT
- SEE BENCHMARK CALLOUTS ON INDIVIDUAL SITE PLANS FOR APPLICABLE BENCHMARK LOCATIONS AND DATA.

#### PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
- 2. THE FDEP, SJRWMD, JEA AND ST JOHNS COUNTY ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL ALL ENVIRONMENTAL PERMITS HAVE
- 3. ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, LATEST EDITION, AND ST JOHNS COUNTY STANDARDS AND DETAILS MANUAL, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- 4. THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- 5. THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE ST JOHNS COUNTY, FDOT, AND FDEP REQUIREMENTS.
- 6. CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.
- 7. SJRWMD ERP PERMIT AND ARMY CORPS OF ENGINEERS (ACE) 404 PERMIT/NATIONWIDE PERMIT (PERMIT TYPE TO BE DETERMINED BY ACE DURING APPLICATION PROCESS) TO BE ACQUIRED BY JEA PRIOR TO COMMENCEMENT OF WORK WITHIN WETLANDS.
- CONTRACTOR TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERIC CONSTRUCTION PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES PRIOR TO COMMENCEMENT OF WORK. PURSUANT TO THE NPDES GENERIC PERMIT, THE CONTRACTOR SHALL ALSO DEVELOP A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO DOCUMENT HOW GCP REQUIREMENTS WILL BE MET.
- 9. JEA'S CURRENT C.U.P. NO. IS 88271.
- 10. CONTRACTOR SHALL REFER TO THE GENERAL REQUIREMENTS SPECIFICATION 010100 (LOCATED IN VOLUME 1) FOR A LIST OF THE REQUIRED PERMITS FOR THIS PROJECT AS WELL AS ON-GOING PERMITS FOR THESE SITES UNDER A FUTURE CONTRACT THAT MAY AFFECT THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF THE COMPETE PERMITTING REQUIREMENTS FOR THIS PROJECT.

#### **RESTORATION NOTES:**

- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION.
- THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.

#### **UTILITY CONTACTS:**

<u> </u>	
A. AT&T ~ GENERAL NUMBER	904-519-2529
B. AT&T ~ ADAM DUGAN ~ NORTH DISTRICT	904-781-0741
C. AT&T ~ BILL LAKE ~ SOUTH DISTRICT	904-303-8754
D. ST JOHNS COUNTY ~ ENGINEERING	904-209-0110
E. ST JOHNS COUNTY ~ ROAD AND BRIDGE	904-209-0246
F. FLORIDA DEPT. OF TRANSPORTATION ————————————————————————————————————	904-360-5200
G. JEA ~ WATER COLLECTION & DISTRIBUTION ————————————————————————————————————	904-665-8484
H. JEA ~ SEWER COLLECTION & DISTRIBUTION ~ JOSH PARKER ———————————————————————————————————	904-665-6052
I. JEA ~ GENERAL INFORMATION————————————————————————————————————	904-665-6000
J. JEA ~ PROJECT OUTREACH	904-665-7500
K. JEA ~ POWER OUTAGES	904-665-6000
L. JEA ~ SEWER PROBLEMS	904-665-4802
M. JEA ~ WATER PROBLEMS	904-665-4801
N. JEA ~ WATER & SEWER LOCATES	904-665-8410
O. ST JOHNS COUNTY UTILITY DEPT.	904-209-2700
P. SUNSHINE ONE CALL	811

#### **EXISTING UTILITY PROTECTION:**

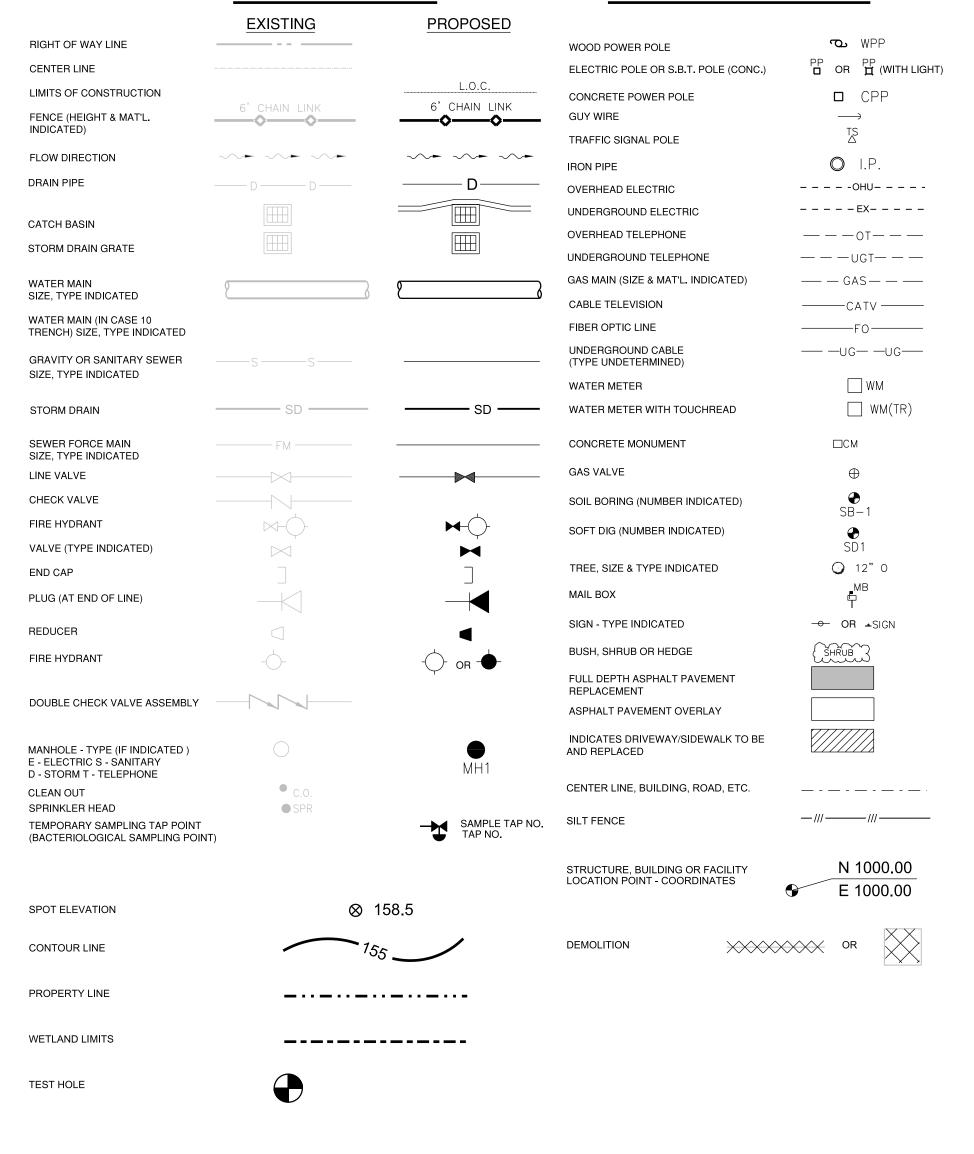
- IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE ST JOHNS COUNTY RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S/JEA'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
- 3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. BY SUBMITTING A BID, THE CONTRACTOR SHALL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE FEATURES AFFECTING HIS WORK.
- 5. LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS.
- 6. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL PHYSICALLY VERIFY LOCATION OF ALL UTILITIES, ABOVE AND BELOW GROUND AND NOTIFY JEA 72 HOURS PRIOR TO DIGGING IN ANY PORTION OF
- 7. CONTRACTOR SHALL REFER TO CONTRACT SHEET C-4 OF THIS VOLUME FOR ADDITIONAL REQUIREMENTS FOR THE EXISTING UTILITY PROTECTION MEASURES AND PIPING INSTALLATION IN ACCORDANCE TO JEA WATER AND WASTEWATER STANDARDS (JANUARY 1, 2020 EDITION).

#### UTILITY SYMBOLS

**GENERAL** 

CIVIL LEGEND

AND GENERAL NOTES



CIVIL LEGEND

#### **ABBREVIATIONS:**

AC	ASBESTOS CEMENT	INT.	INTERSECTION
A.G.	ALLEY GRATE	INV.	INVERT
艮	BASE LINE	I.P.	IRON PIPE
<u>Б</u> .м.	BENCH MARK	J.W.W.	JACKSONVILLE WATER
BC	BOTTOM OF CURVE		WORKS
C.B.	CATCH BASIN	LT.	LEFT
C.I.	CAST IRON	MB	MAIL BOX
<b>Φ</b>	CENTER LINE	M.H.	MANHOLE
C.E.P.	CITY ELECTRIC POLE	N.T.S.	NOT TO SCALE
CLDI	CEMENT-LINED DUCTILE IRON	O.E.	OVERHEAD ELECTRIC
CONC.	CONCRETE	O.T.	OVERHEAD TELEPHONE
CONST.	CONSTRUCTION	P.R.M.	PERMANENT REFERENCE
C.M.P.	CORRUGATED METAL PIPE		MONUMENT
C.M.P.A.	CORRUGATED METAL PIPE ARCH	P.V.C.	POLYVINYL CHLORIDE
CULV.	CULVERT	r	RADIUS
C&G	CURB & GUTTER	R	RATE
С	CUT	R.C.P.	REINFORCED CONCRETE PIPE
D.B.I.	DITCH BOTTOM INVERT	RT	RIGHT
D.W. OR DR	DRIVEWAY	R/W	RIGHT OF WAY
D.I.	DUCTILE IRON	RW	RAW WATER MAIN
E.O.P.	EDGE OF PAVEMENT	R.D.	ROOF DRAIN
ELEV.	ELEVATION	S/W	SIDE WALK
ERCP	ELLIPTICAL REINFORCED	S.B.T.	SOUTHERN BELL TELEPHONE
	CONC. PIPE	SST	STAINLESS STEEL
EXP. JT.	EXPANSION JOINT	STA	STATION
F	FILL	TC	TOP OF CURVE
F.H.	FIRE HYDRANT	U.G.E.	UNDERGROUND ELECTRIC
Æ	FLOW LINE	U.G.T.	UNDERGROUND TELEPHONE
FM	FORCE MAIN	U.S.C. & G.S.	UNITED STATES COASTAL &
GALV./GLV	GALVANIZED		GEODETIC SURVEY
G	GAS LINE	V.C.	VITRIFIED CLAY
G.V.	GAS VALVE	WM	WATER METER
HDPE	HIGH DENSITY	W.V.	WATER VALVE
	POLYETHYLENE PIPE	WLP	WOOD LIGHT POLE
H.W.	HEAD WALL	WPP	WOOD POWER POLE
H.C.	HIGH CURB	WTP	WOOD TELEPHONE POLE

DATE: **02/2021** RICHARD THOMAS MORRISON PE NO. 67713 PROJECT NO. 6103-237938 JACOBS FILE NAME: SP\_0G-010\_D3270100.dgn

G-2

**JACOBS** Jacksonville, FL 32256 EB0000072 AAC001992 LC26000188 Tel: (904) 731-7109

FL COA No. EB-0000020

N PATTERSON

R MORRISON

FEBRUARY 2021

PLOT TIME: 5:10:05 AM

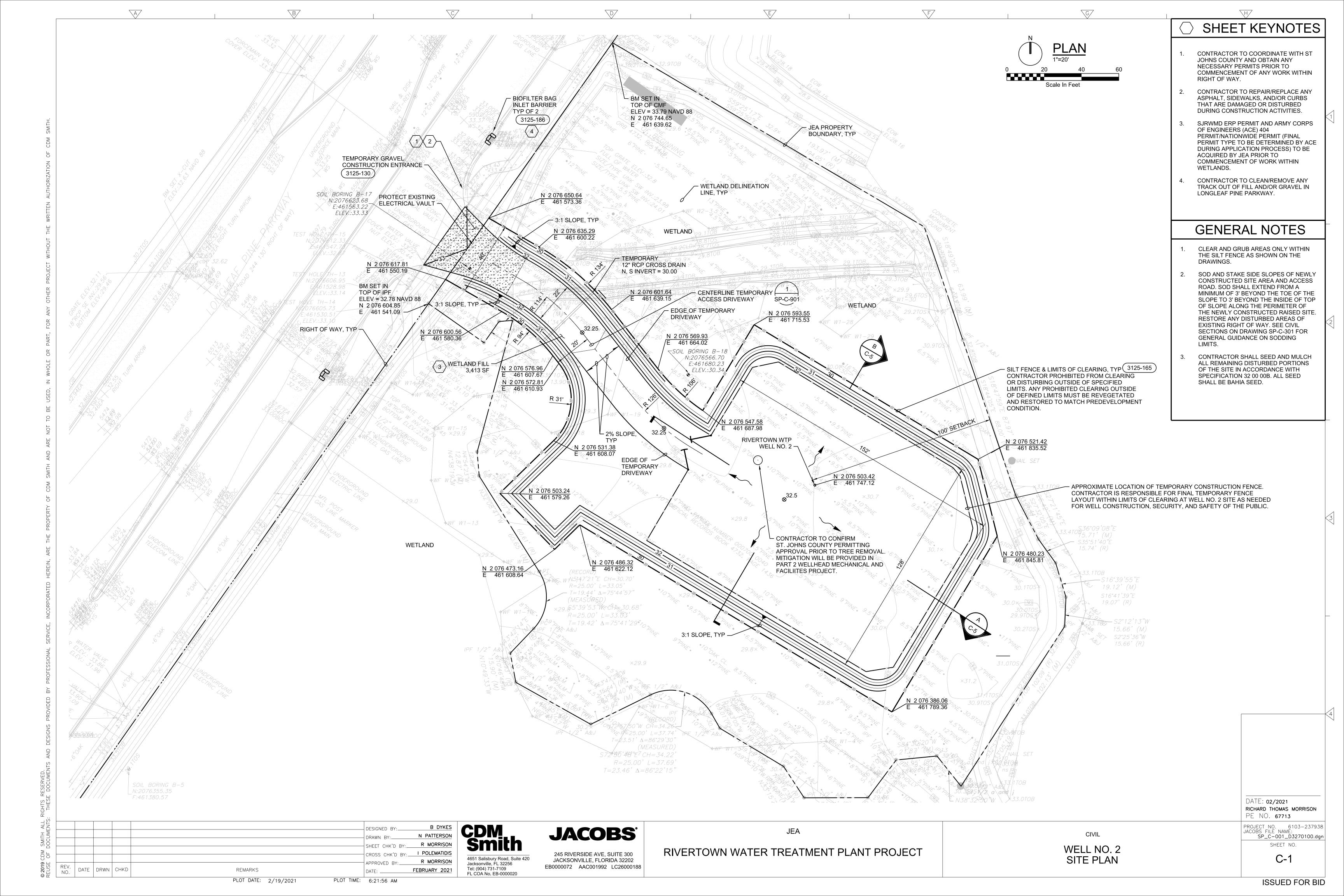
RIVERTOWN WATER TREATMENT PLANT PROJECT 245 RIVERSIDE AVE, SUITE 300 JACKSONVILLE, FLORIDA 32202

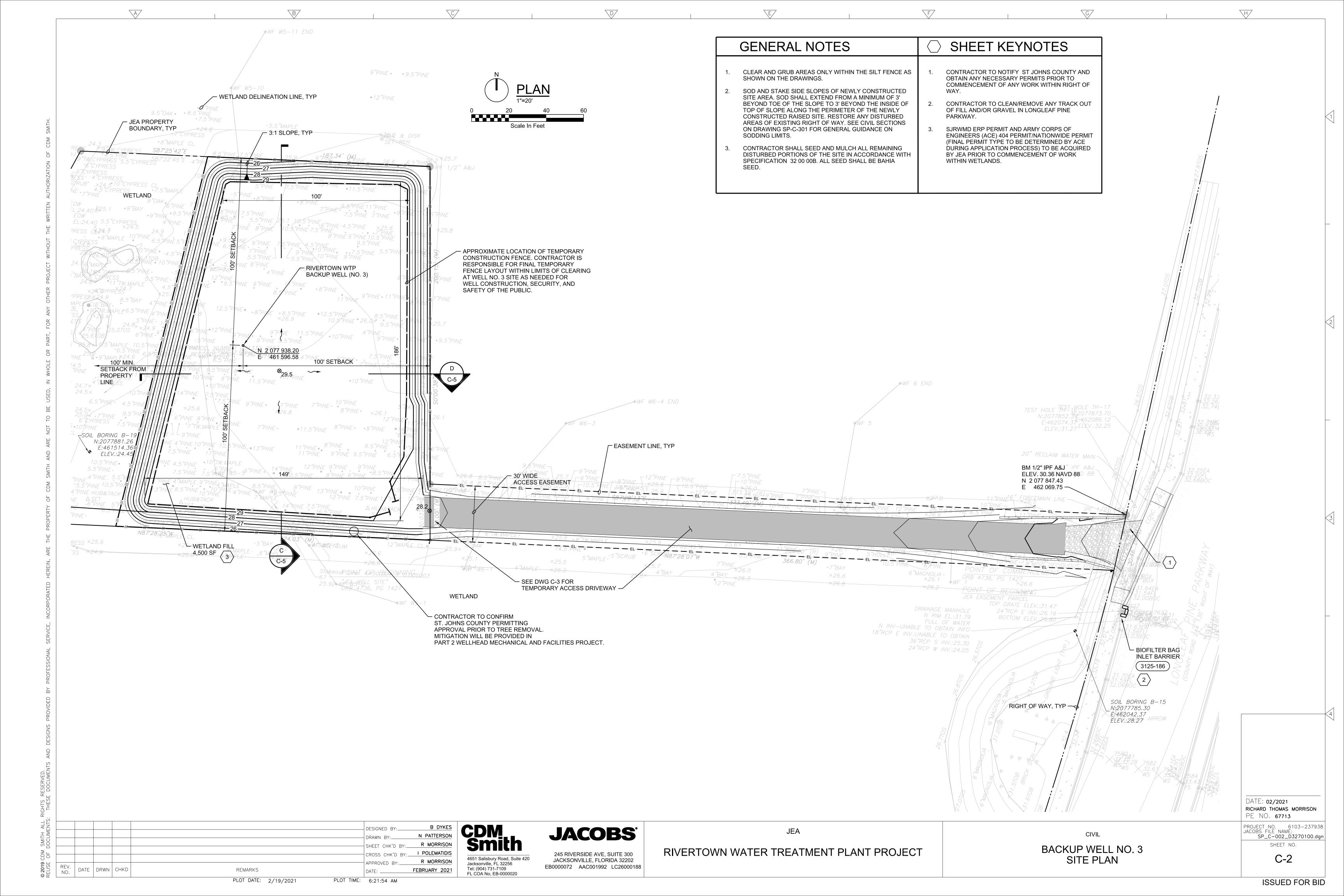
JEA

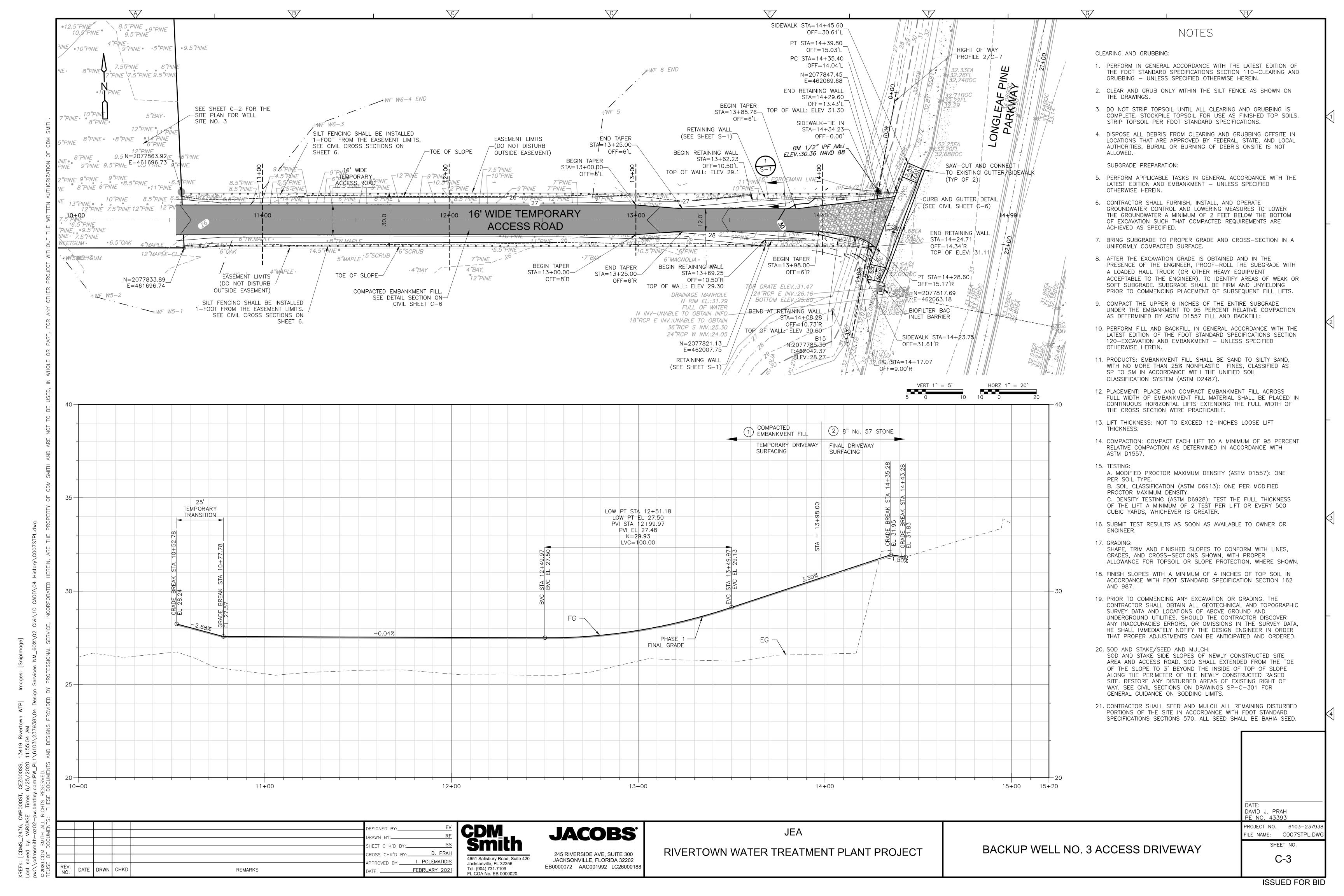
PLOT DATE: 2/19/2021

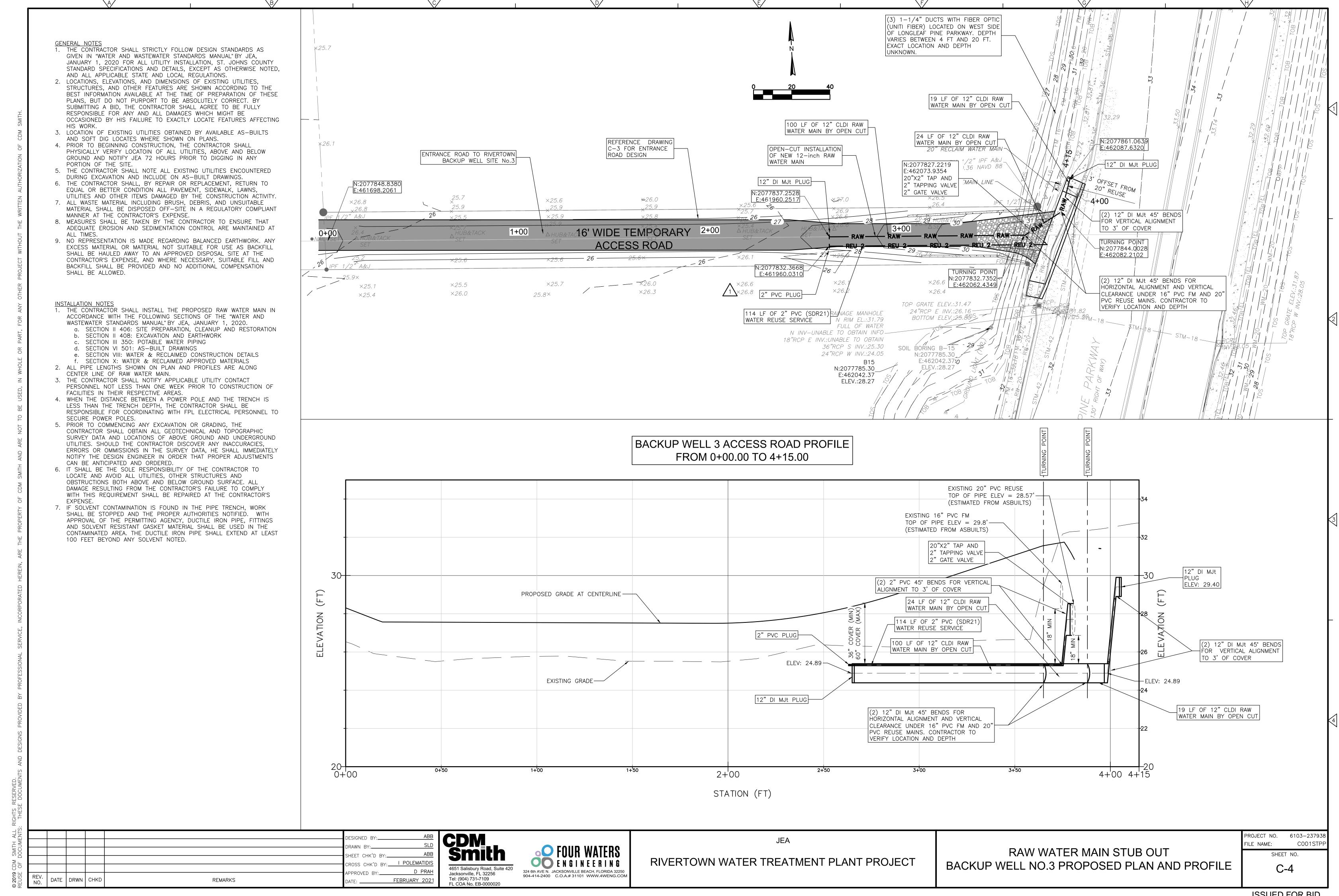
REMARKS

ISSUED FOR BID

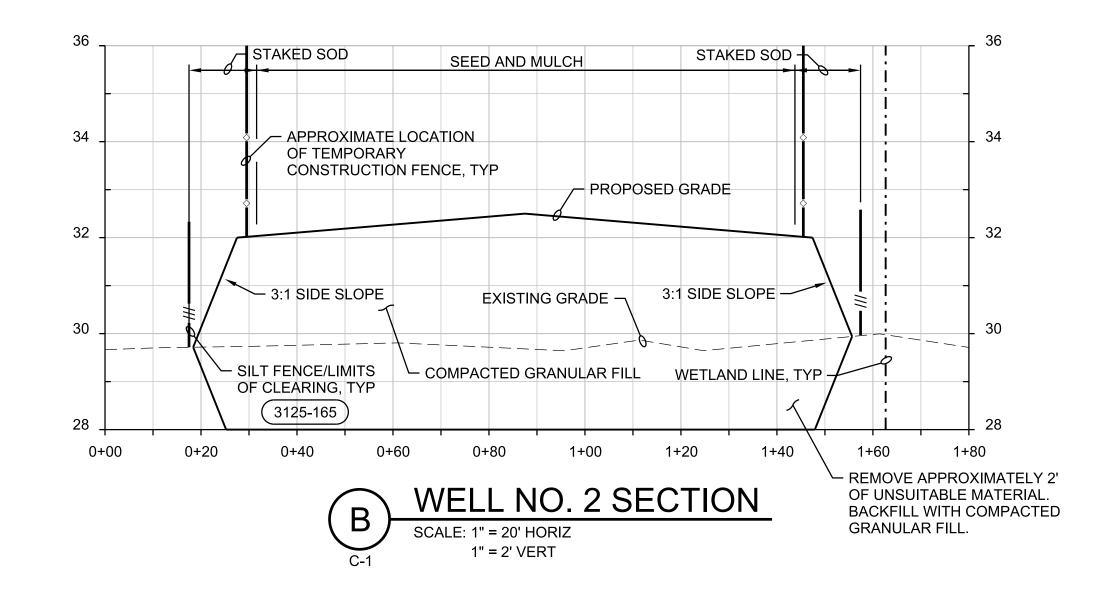


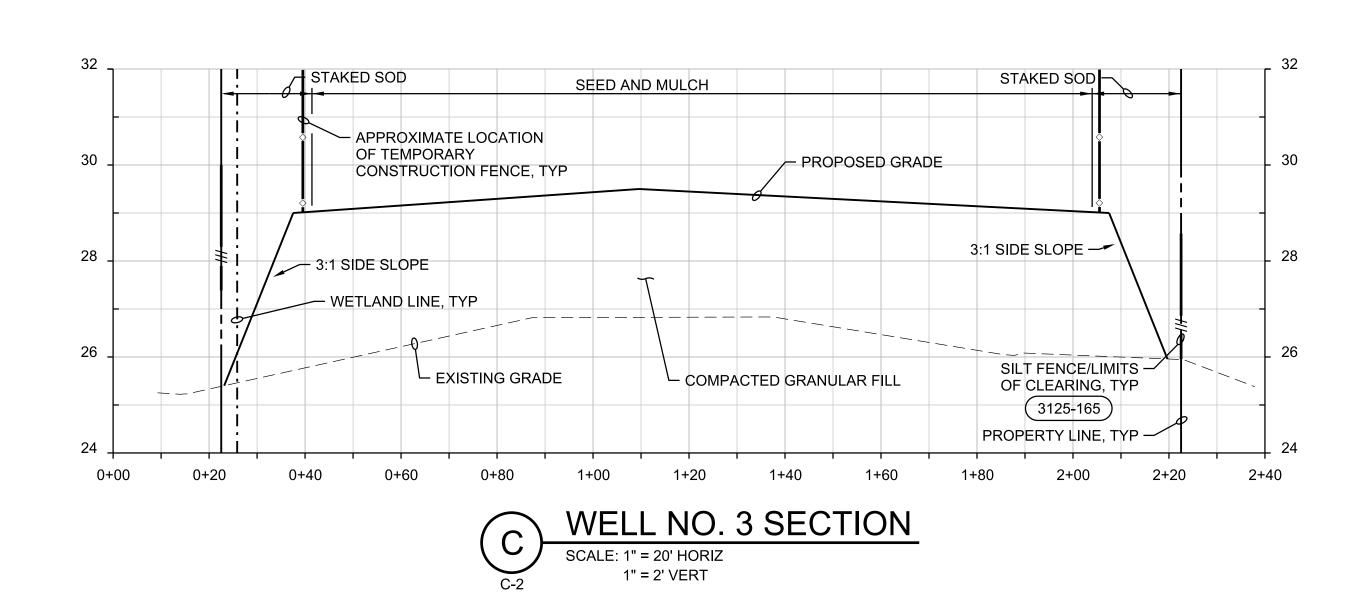


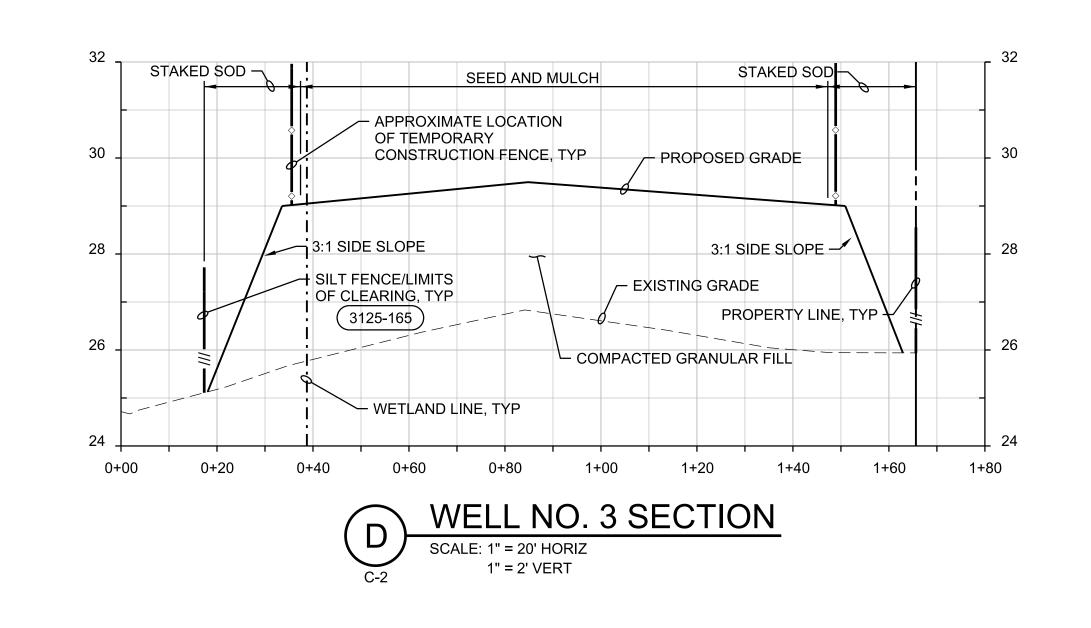




SEED AND MULCH STAKED SOD - APPROXIMATE LOCATION OF TEMPORARY CONSTRUCTION FENCE, TYP - PROPOSED GRADE 3:1 SIDE SLOPE SILT FENCE/LIMITS -OF CLEARING, TYP COMPACTED GRANULAR FILL — EXISTING GRADE (3125-165) 1+00 1+20 1+80 2+00 0+00 0+60 1+40 2+20 0+20 0+40 REMOVE APPROXIMATELY 2'
OF UNSUITABLE MATERIAL.
BACKFILL WITH COMPACTED WELL NO. 2 SECTION GRANULAR FILL. 1" = 2' VERT







CDM Smith

TIDIS

HSON
2021

A651 Salisbury Road, Suite 42
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No. EB-0000020

245 RIVERSIDE AVE, SUITE 300
JACKSONVILLE, FLORIDA 32202
EB0000072 AAC001992 LC26000188

RIVERTOWN WATER TREATMENT PLANT PROJECT

JEA

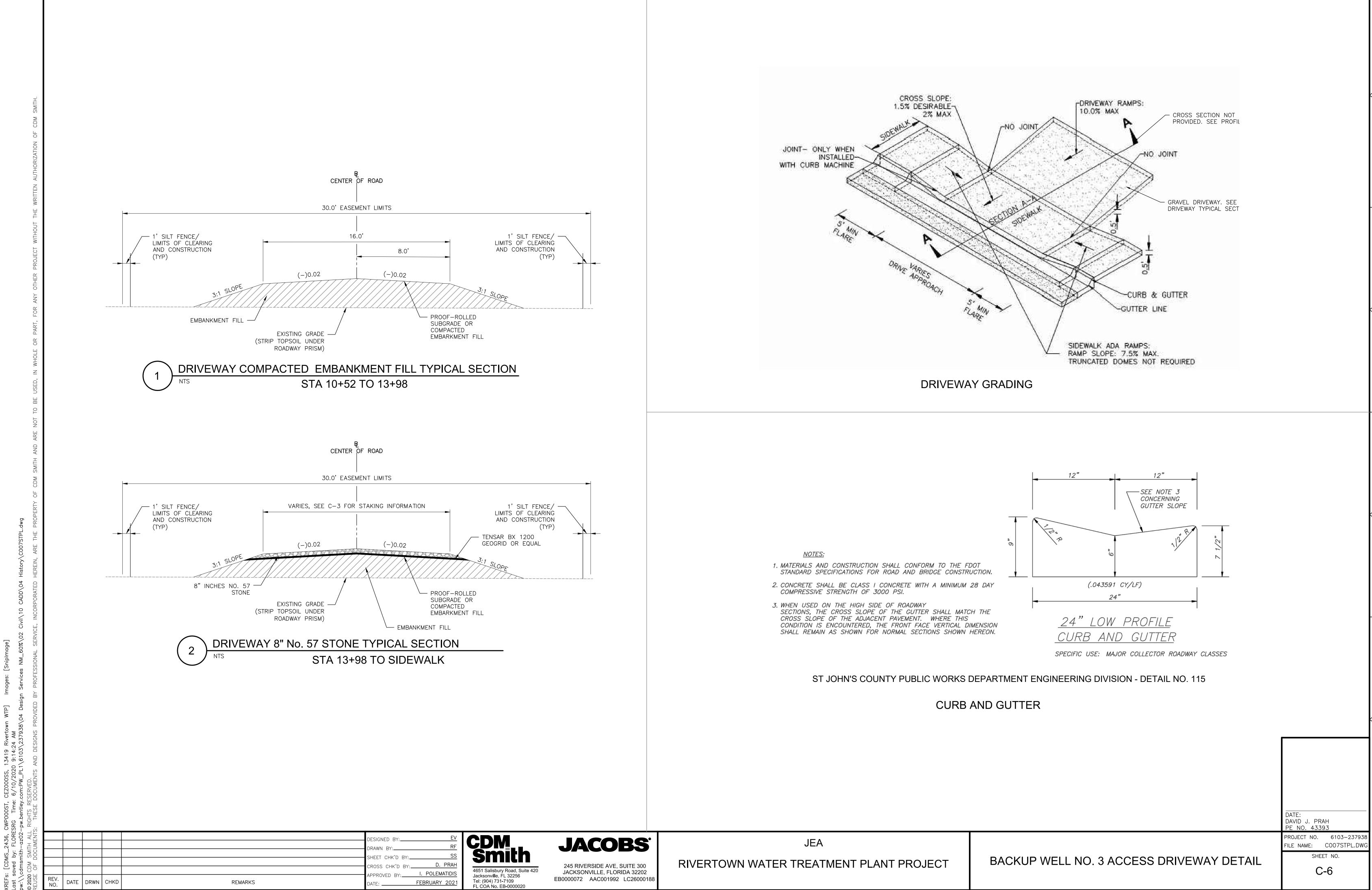
WELL SITE SECTIONS RICHARD THOMAS MORRISON
PE NO. 67713

PROJECT NO. 6103-237938
JACOBS FILE NAME:
SP\_C-005\_D3270100.dgn

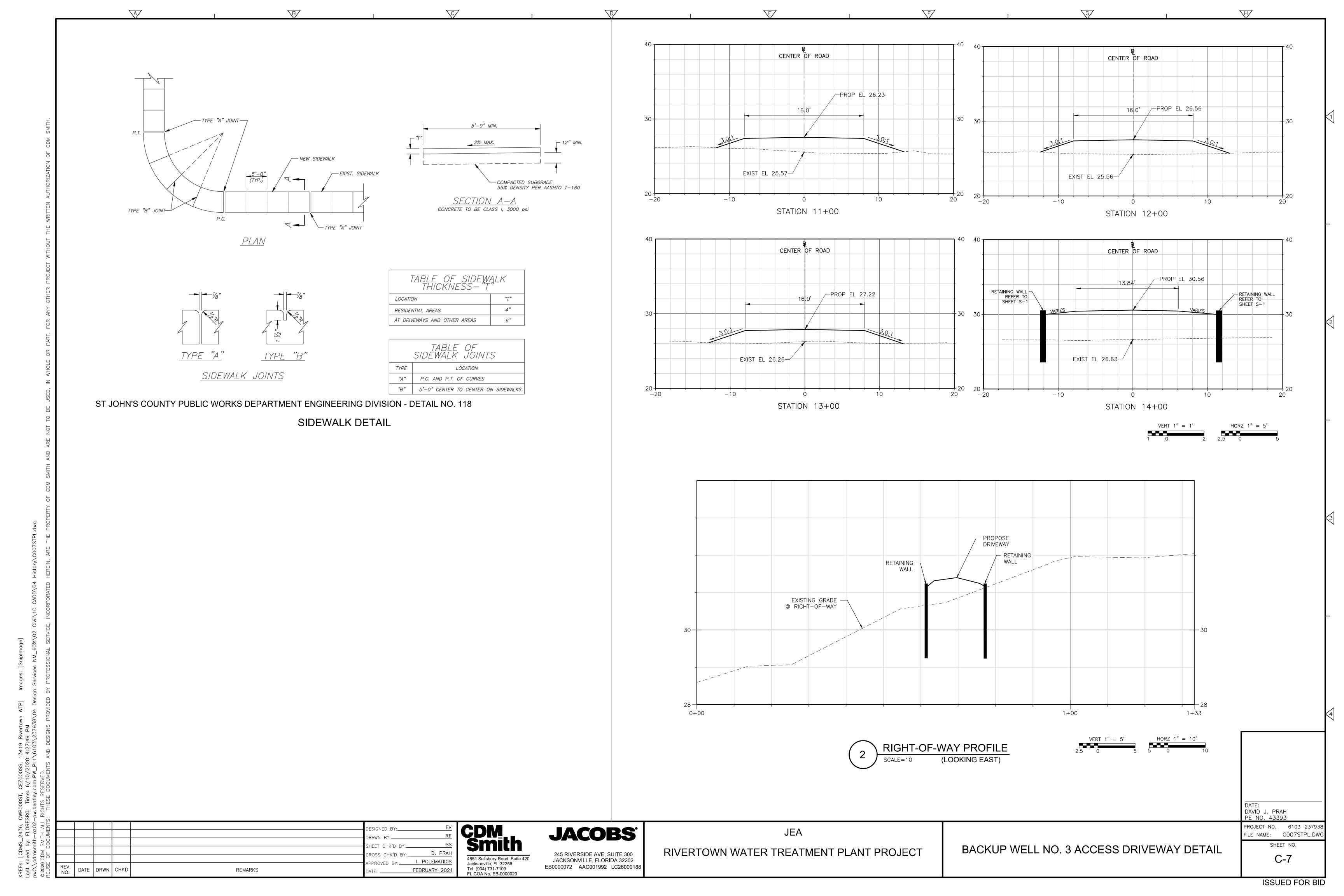
SHEET NO.

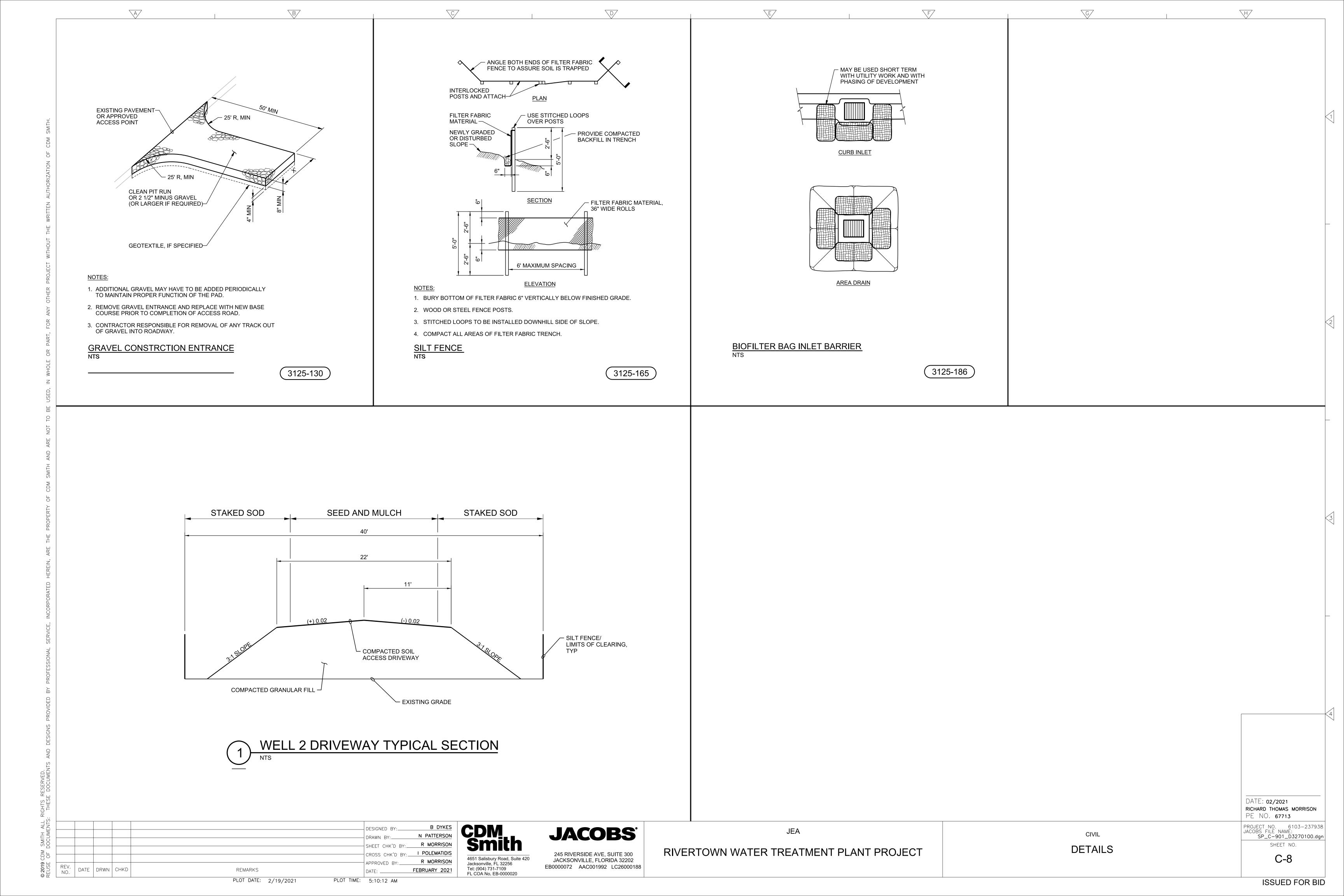
DATE: **02/2021** 

C-5



ISSUED FOR BID





2. DESIGN:

A. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS, SEVENTH EDITION AND IMPLEMENTED MODIFICATIONS THERETO.

B. FDOT STRUCTURES MANUAL DATED 2020.

C. SHEET PILE WALLS HAVE BEEN DESIGNED BASED ON THE RETAINED HEIGHT AS SHOWN AND WHEN APPLICABLE, WITH A 240 PSF LIVE LOAD SURCHARGE AT THE UPPER GROUND SURFACE WHEN TRAFFIC IS ADJACENT TO THE WALL.

D. SOIL DATA IS BASED UPON THE GEOTECHNICAL REPORT FROM CSI GEO (DATED JUNE 2, 2020) AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

3. SHOP DRAWINGS FOR STEEL SHEET PILE WALLS SHALL BE SUBMITTED IN ACCORDANCE WITH FDOT SPECIFICATION 5.

4. TEMPORARY EXCAVATION SLOPES SHALL NOT EXCEED 1.0 VERTICAL TO 2.0 HORIZONTAL.

5. FOR EXISTING AND PROPOSED UTILITY LOCATIONS, SEE CIVIL AND ROADWAY PLANS.

6. STEEL SHEET PILES SHALL BE ASTM A572.

7. THE CONTRACTOR SHALL HAVE SUITABLE EQUIPMENT AND SHALL TAKE APPROPRIATE MEASURES TO ACHIEVE THE REQUIRED TIP ELEVATIONS. THESE MAY INCLUDE PRE-PUNCHING, SPUDDING, PREFORMED PILE HOLES, OR OTHER METHODS, AND ANY ASSOCIATED COST SHALL BE INCIDENTAL TO THE COST OF STEEL SHEET PILING (PERMANENT).

8. THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY MEASURES TO PROTECT EXISTING STRUCTURES FROM DAMAGE WHEN WORKING IN AND AROUND EXISTING STRUCTURES PERFORMING WORK SUCH AS DEMOLITION, FOUNDATION EXCAVATION AND OTHERS.

9. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE CIVIL AND ROADWAY DRAWINGS AND SPECIFICATIONS.

10. THE CONTRACTOR SHALL REVIEW AND VERIFY DIMENSION SHOWN IN ALL PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE STRUCTURE. SHOULD DISCREPANCIES APPEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE WORK.

11. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

12. STANDARD DETAILS APPLY TO ALL SIMILAR SITUATIONS ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

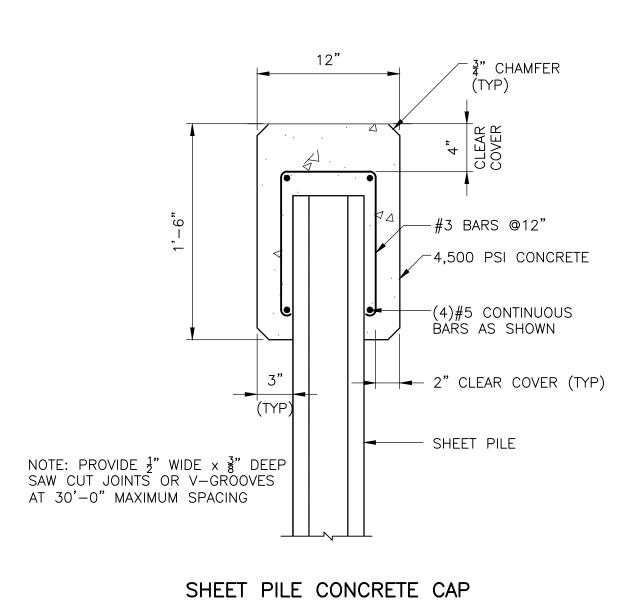
CONCRETE AND REINFORCING NOTES:

1. CONCRETE SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 346.

2. CONCRETE SHALL BE CLASS II AND OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,500 PSI.

3. PROVIDE  $\frac{3}{4}$ " CHAMFERS ON ALL EXPOSED EDGES UNLESS NOTED OTHERWISE.

4. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.



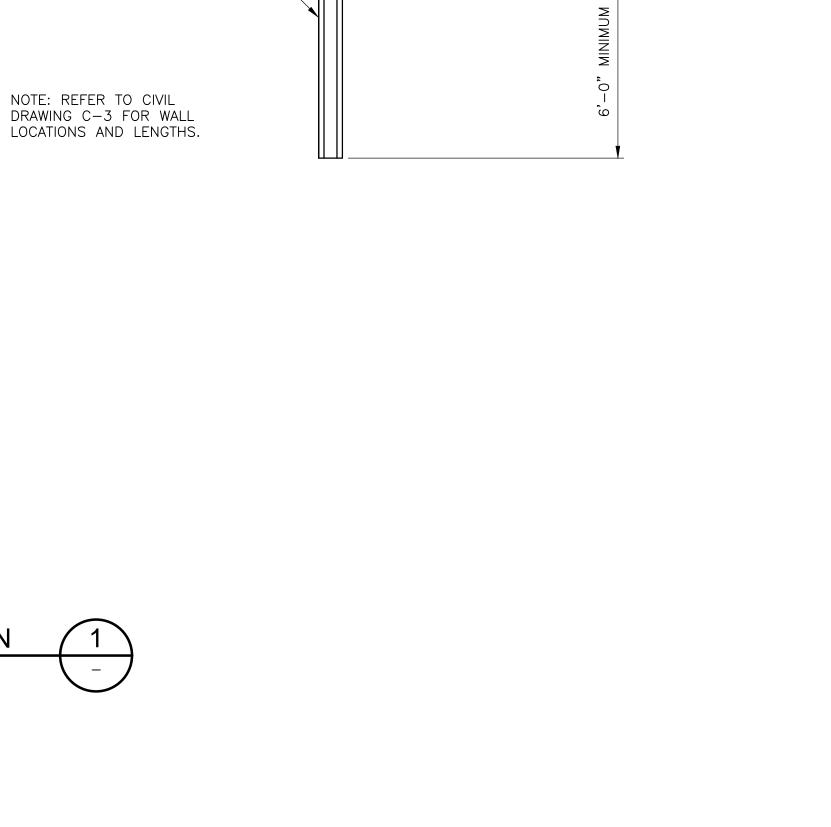
**DETAIL** 



245 RIVERSIDE AVE, SUITE 300
JACKSONVILLE, FLORIDA 32202
EB0000072 AAC001992 LC26000188

RIVERTOWN WATER TREATMENT PLANT PROJECT

RETAINING WALL NOTES, SECTION AND DETAILS



REFERENCE

TOP OF CAP

EXISTING GRADE

SKS11 SHEET PILE

(FY=50 KSI) —

CONCRETE

PILE CAP

EL REFER TO CIVIL

CIVIL DRAWINGS-

					DESIGNED BY:	Н. М
					DRAWN BY:	Р.
					SHEET CHK'D BY: <u></u>	
					CROSS CHK'D BY:_	
DEV					APPROVED BY:	H. M
REV. NO.	DATE	DRWN	CHKD	REMARKS	DATE:	FEBRUA

JEA

PROVIDE APPROXIMATELY 60 LF OF

LOCATIONS WHERE THE RETAINED

EQUAL TO 2'-6"

REFERENCE

TOP OF CAP

CONCRETE

PILE CAP -

EL REFER TO CIVIL

EXISTING GRADE

SKS11 SHEET PILE

(FY=50 KSI) —

NOTE: REFER TO CIVIL DRAWING C-3 FOR WALL

LOCATIONS AND LENGTHS.

CIVIL DRAWINGS-

SOIL HEIGHT IS GREATER THAN OR

ALUMINUM PIPE GUIDERAIL PER FDOT STANDARD INDEX 515-070 AT ALL

DATE:
HECTOR G. MORATAYA
PE NO. 76177

PROJECT NO. 6103-237938
FILE NAME: S001STNT.DWG

SHEET NO.

ISSUED FOR BID