

# **CONSTRUCTION PLANS**

# WINTER PARK PINES OUTFALL CANAL E-03-H IMPROVEMENTS FROM FORSYTH ROAD TO THE CRANE STRAND CANAL

OWNER

ORANGE COUNTY PUBLIC WORKS 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839

CIVIL ENGINEER (PRIME CONSULTANT) CDM SMITH 101 SOUTHHALL LANE, SUITE 200 MAITLAND, FLORIDA 32751

CIVIL ENGINEER (SUB-CONSULTANT) PEGASUS ENGINEERING, LLC 301 WEST STATE ROAD 434, SUITE 309 WINTER SPRINGS, FLORIDA 32708

GEOTECHNICAL (SUB-CONSULTANT) ANTILLIAN ENGINEERING ASSOCIATES, INC. 3331 BARTLETT BOULEVARD ORLANDO. FLORIDA 32811

SURVEYOR (SUB-CONSULTANT) SOUTHEASTERN SURVEYING & MAPPING CORPORATION 6500 ALL AMERICAN BOULEVARD ORLANDO, FLORIDA 32810

### NOTE

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

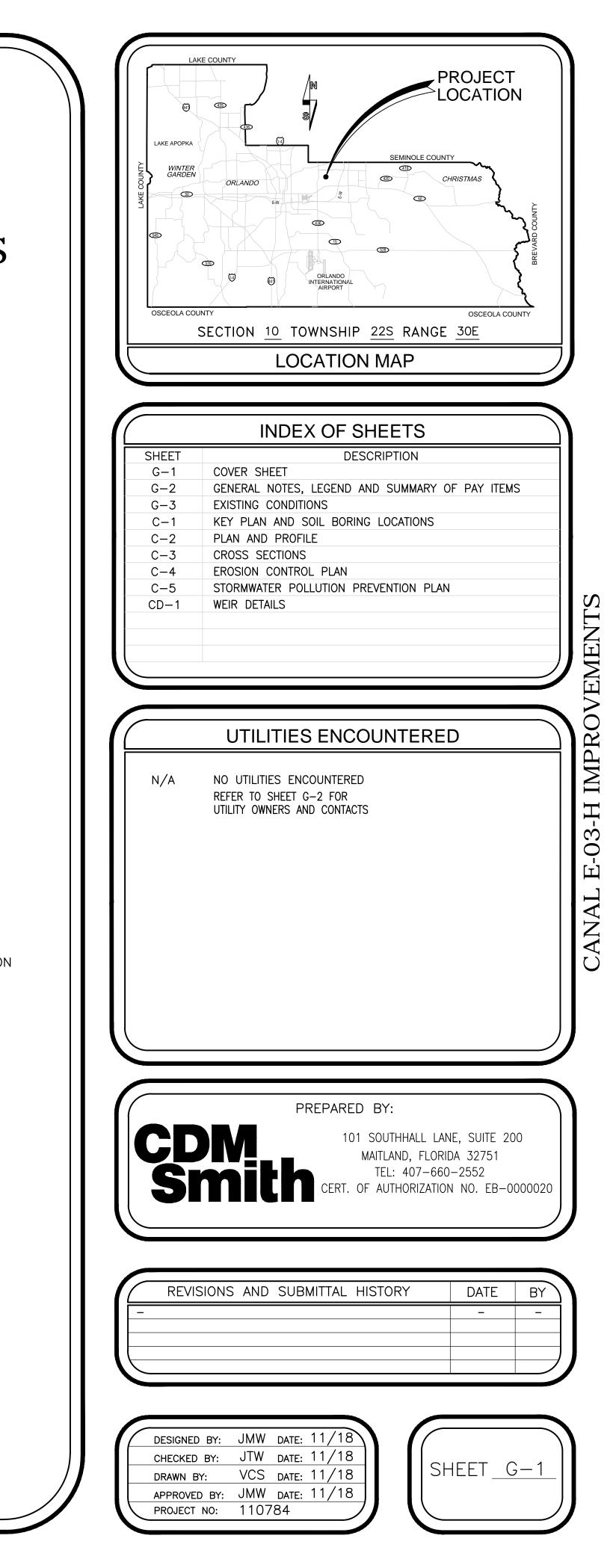
## **CERTIFICATION TO PLANS**

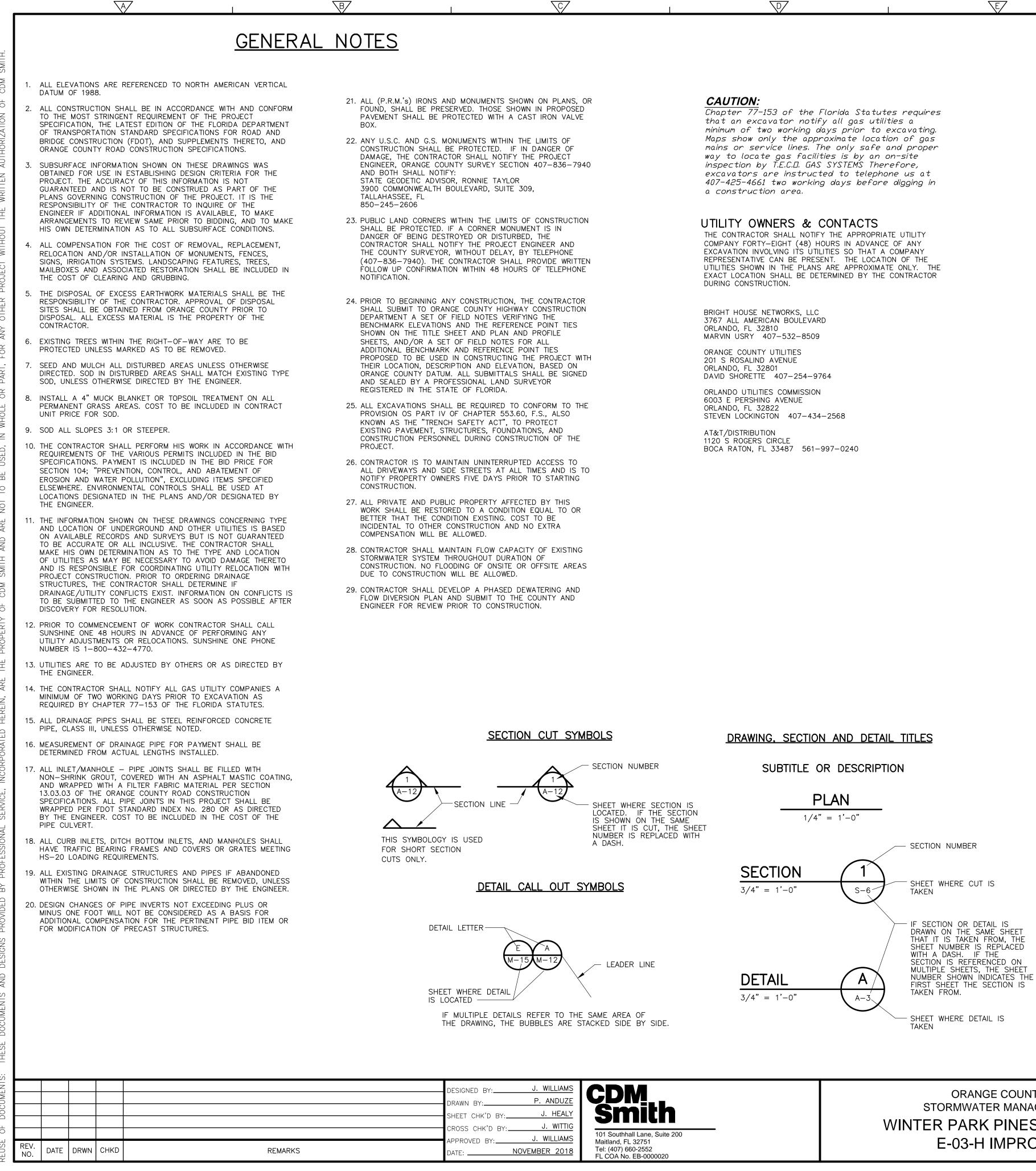
I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT AND THE ATTACHED CONSTRUCTION PLANS COMPLY WITH THE REQUIREMENTS OF SECTION 336.045 OF THE FLORIDA STATUTES AND ARE IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS CONTAINED IN THE EDITION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" IN EFFECT ON THIS DATE AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTION 336.045(1) OF THE FLORIDA STATUTES.

ENGINEER:

JANE M. WILLIAMS, P.E.

REG. NO. \_\_\_\_64088





Z E 6:01:15 \04 Desi Time: XM1 E SI יז פר

[] 11/15/2018 6059\110784\

		_
		STORM SEWER
CALITION	0 <sup><i>M.H.</i></sup> SAN.	EXISTING SANITARY SEWER
<b>CAUTION:</b> Chapter 77–153 of the Florida Statutes requires that an excavator notify all gas utilities a minimum of two working days prior to excavating.	FIBER	EXISTING FIBER OPTIC
Maps show only the approximate location of gas mains or service lines. The only safe and proper way to locate gas facilities is by an on-site	<i>W</i>	EXISTING WATER MAIN
inspection by T.E.C.D. GAS SYSTEMS Therefore, excavators are instructed to telephone us at 407-425-4661 two working days before digging in	<i>T</i>	EXISTING BURIED TELEPHO
a construction area.	P	EXISTING POWER DUCTS OF
JTILITY OWNERS & CONTACTS THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY	OHW	EXISTING OVERHEAD WIRE
COMPANY FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE	CATV	EXISTING CABLE TELEVISIO
UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.	<i>C.B.</i>	EXISTING STORM SEWER W
	<i>F.н.</i>	EXISTING FIRE HYDRANT
BRIGHT HOUSE NETWORKS, LLC 3767 ALL AMERICAN BOULEVARD	$\Box$ or $\Diamond$ <i>P.P.</i>	EXISTING POWER POLE
ORLANDO, FL 32810 MARVIN USRY 407-532-8509	□ or ° <i>L.P</i> .	EXISTING LIGHT POLE
ORANGE COUNTY UTILITIES 201 S ROSALIND AVENUE ORLANDO, FL 32801 DAVID SHORETTE 407–254–9764		R/W - RIGHT OF WAY
ORLANDO UTILITIES COMMISSION 6003 E PERSHING AVENUE		PL - PROPERTY LINE
ORLANDO, FL 32822 STEVEN LOCKINGTON 407-434-2568	_ · · _ · · _ · · _ · · _	JURISDICTIONAL BOUNDAR
AT&T/DISTRIBUTION 1120 S ROGERS CIRCLE BOCA RATON, FL 33487 561-997-0240		LIMITS OF CONSTRUCTION
		EASEMENTS
		WATER ELEVATION
	<del></del>	BASE LINE

REF.	FDOT PAY
NUMBER	ITEM NUMBER
1	101-1
2	102-1
3	104-1
4	104a-1
5	110-1-1
6	120-9
7	455-133-3
8	524-1
9	530-3-3
10	550-10-220
11	570-1
12	571-1-13
13	900-1
14	900-2

\_\_\_\_x \_\_\_\_x \_\_\_\_x \_\_\_\_

**NF** 

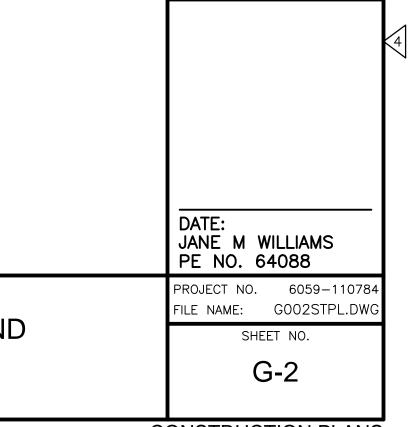
**ORANGE COUNTY, FLORIDA** STORMWATER MANAGEMENT DIVSION WINTER PARK PINES OUTFALL CANAL E-03-H IMPROVEMENTS

	G		
<u>LEGEND</u>			
	XXX	EXISTING CHAIN LINK FENCE	
EWER W/ MANHOLE	۲	STORMSEWER TO BE CONST. UNDER EXISTING UTILITY	
	~	STORMSEWER TO BE CONST. OVER EXISTING UTILITY	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	BENCH MARK/ SOIL BORING	<1
EPHONE	oo	PROPOSED SILT FENCE	
TS OR CABLES	12.00	EXISTING CONTOUR	
WIRE	12.00	PROPOSED CONTOUR	
VISION	× 12.00	EXISTING SPOT ELEVATION	
ER W/CATCH BASIN	12.00	PROPOSED SPOT ELEVATION	
NT	S-2	DRAINAGE STRUCTURE ID	
Ξ		DITCH BOTTOM INLET	
~	۲	STORMWATER MANHOLE	
Y	—— GAS —— GAS —— GAS ——	EXISTING GAS LINE	
	W	EXISTING SPRINKLER HEAD	
IDARY		EXISTING ELECTRICAL BOX	2
TION			

PROPOSED FLOATING TURBIDITY BARRIER

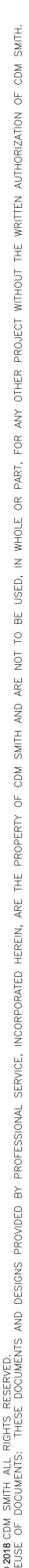
PROPOSED CHAIN LINK FENCE

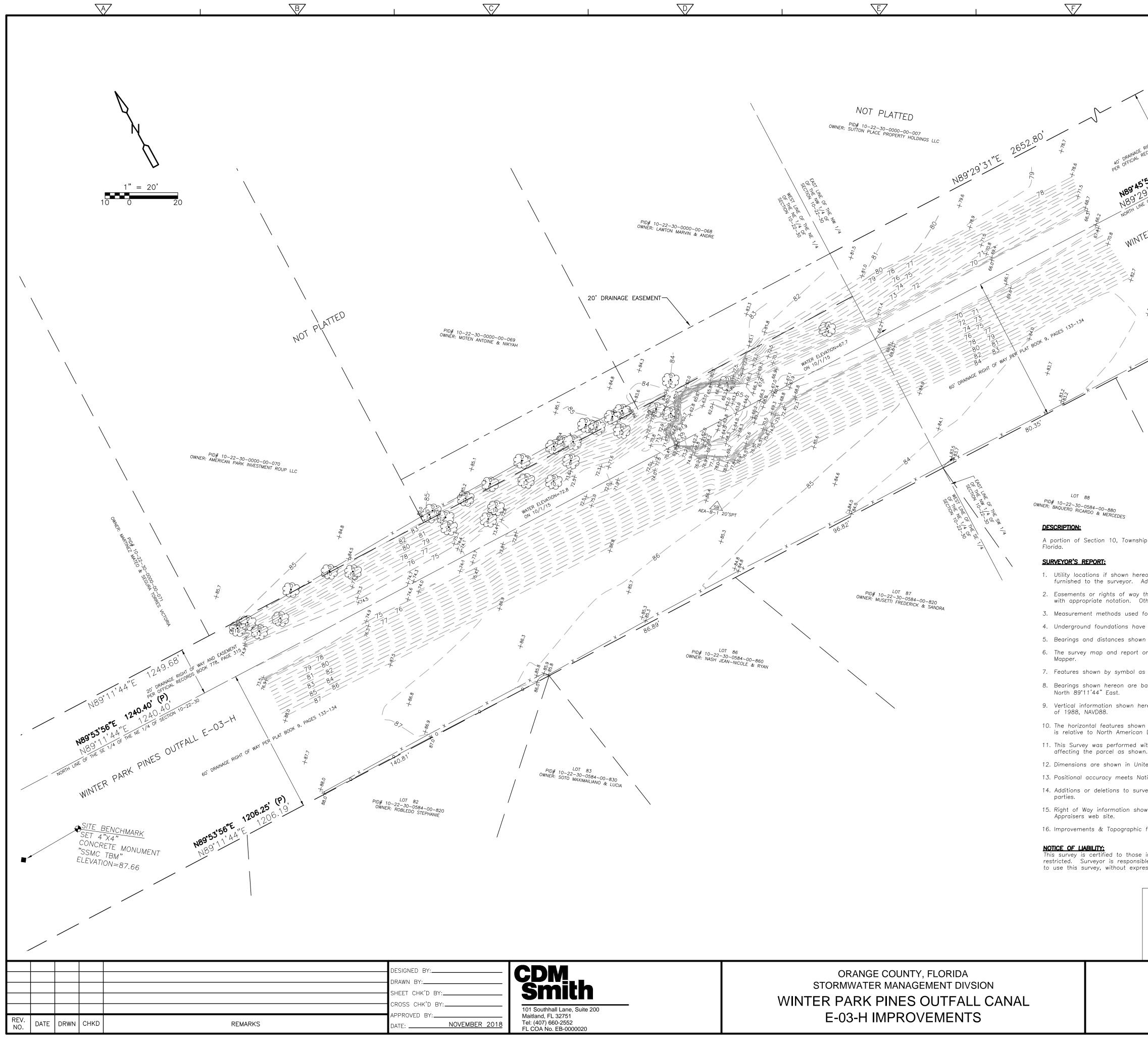
SUMMARY OF PAY ITEMS				
	DESCRIPTION	UNITS	QUANTITY TOTAL	
R			PLAN	FINAL
	Mobilization(10% of Items 2 through 12)	LS	1	
	Maintenance of Traffic	LS	1	
	Prevention, Control and Abatement of			
	Erosion and Water Pollution	LS	1	
	Dewatering / Flow Diversion	LS	1	
	Clearing & Grubbing	LS	1	
	Excavation Embankment and Grading	LS	1	
	Sheet Piling Steel (Permanent)	SF	1320	
	Concrete Ditch Pavement	SY	128	
	Riprap-Rubble (Bank & Shore)	TN	160	
	Fencing Type "B"	LF	32	
	Performance Turf	SY	900	
	Plastic Erosion Mat, TRM, Type 3	SY	1200	
	As-Built Plans	LS	1	
	Indemnification	LS	1	



### GENERAL NOTES, LEGEND AND SUMMARY OF PAY ITEMS

CONSTRUCTION PLANS





# to use this survey, without expre

$\mathbf{56^{9}E_{HE}} = \frac{1210!}{1216!} \frac{6.29}{0!} \frac{5}{5} \frac{5}{5} \frac{121}{12} \frac{1}{10} $	RETE MONUMENT "RLS 1263"
$\frac{1276.43}{1276.43}$ $\frac{1276.43}{1276.43}$ $\frac{1276.43}{1276.43}$ $\frac{1276.29}{1276.43}$ $\frac{1276.29}{1276.29}$	
$\frac{1216.29}{1216.29} \text{ of } \text{ section} \qquad \text{SSMC TBM}^{\text{SSMC TBM}^{SMC TBM}^{\text{SSMC TBM}^{\text{SSMC TBM}^{SMC TBM}^{SMC TBM}^{SMC TBM}^{SMC TBM}^{SMC TBM}^{SMC T$	APPARENT RIGHT OF MAX LI
R PARN	OT
<b>6 4 4 3 3 3</b>	
N89.53'56"E 1260. N89.29'31"E 1260.	
N83	
65.00 <sup>0</sup>	
$\begin{array}{c} PID \# 10 - 22 - 30 - 0584 \\ OWNFR \\ COUNTR \\ COUNT$	
PID# 10-22-30-0584-00-890 OWNER: CONN LARRY & VAN HONG	
> 22 South, Range 30 East and a portion of Bel—Aire Pines Unit Two, Plat Book 9, Pages	133 and 134 Orange County.
hat appear on recorded plans or that have been furnished to the surveyor by others have her easements may be discovered by a search of the Public Records. or this survey meet STANDARDS OF PRACTICE FOR LAND SURVEYING Chapter 5J—17 requirem not been located. hereon are measured unless otherwise noted. r the copies thereof are not valid without the signature and the original raised seal of a F	ents.
indicated in the legend are not to scale.	
ased on the North line of the SE 1/4 of the NE 1/4 of Section 10, Township 22 South, R	
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN N Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis	MCKEE" and PID number AK7129 and stances shown are GRID distances.
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search ded States standard survey feet and decimals thereof. ional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redundo	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements.
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search ded States standard survey feet and decimals thereof. ional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redundo ey maps or reports by other than the signing party or parties is prohibited without written	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search ed States standard survey feet and decimals thereof. cional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redundo ey maps or reports by other than the signing party or parties is prohibited without written wn hereon was determined by found monumentation, recorded plats, and information obtaine	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search de States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redunde ey maps or reports by other than the signing party or parties is prohibited without written wn hereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client.	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search de States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redunde ey maps or reports by other than the signing party or parties is prohibited without written whereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client.	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search ed States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redunde ey maps or reports by other than the signing party or parties is prohibited without written whereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client. individuals shown on the face thereof. Any other use, benefit or reliance by any other par le only to those certified and hereby disclaims any other liability and hereby restricts the ri ss written consent of the surveyor. FIELD DATE: OCTOBER 2, 2015	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis thout benefit of an abstract, title search, title opinion or title commitment. A title search ed States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redunde ey maps or reports by other than the signing party or parties is prohibited without written whereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client. individuals shown on the face thereof. Any other use, benefit or reliance by any other par le only to those certified and hereby disclaims any other liability and hereby restricts the ri ss written consent of the surveyor. FIELD DATE: OCTOBER 2, 2015 SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard Orlando, Florida 32810-4350	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN N Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis ithout benefit of an abstract, title search, title opinion or title commitment. A title search ed States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redundo ey maps or reports by other than the signing party or parties is prohibited without written whereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client. individuals shown on the face thereof. Any other use, benefit or reliance by any other par le only to those certified and hereby disclaims any other liability and hereby restricts the ri swritten consent of the surveyor. FIELD DATE: OCTOBER 2, 2015 SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard Orlando, Florida 32810-4350 (407) 292-8580 Certification Number LB2108	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property
on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN M Datum, NAD 1983, 2011 adjustment, State Plane Coordinate System, Florida East Zone. Dis ithout benefit of an abstract, title search, title opinion or title commitment. A title search de States standard survey feet and decimals thereof. tional Geodetic Survey, NGS Third Order, Class One, specifically 1:10,000, verified by redunde ey maps or reports by other than the signing party or parties is prohibited without written whereon was determined by found monumentation, recorded plats, and information obtaine features shown hereon are limited to areas per specific instructions of the client. individuals shown on the face thereof. Any other use, benefit or reliance by any other par le only to those certified and hereby disclaims any other liability and hereby restricts the riss written consent of the surveyor. FIELD DATE: OCTOBER 2, 2015 SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard Orlando, Florida 32810–4350 (407) 292–8580 Certification Number LB2108	MCKEE" and PID number AK7129 and stances shown are GRID distances. may reveal additional information ant measurements. consent of the signing party or ed on the ** County Property "ty is strictly prohibited and ights of any other individual or firm

 $\forall \forall$ 

CR

'Y

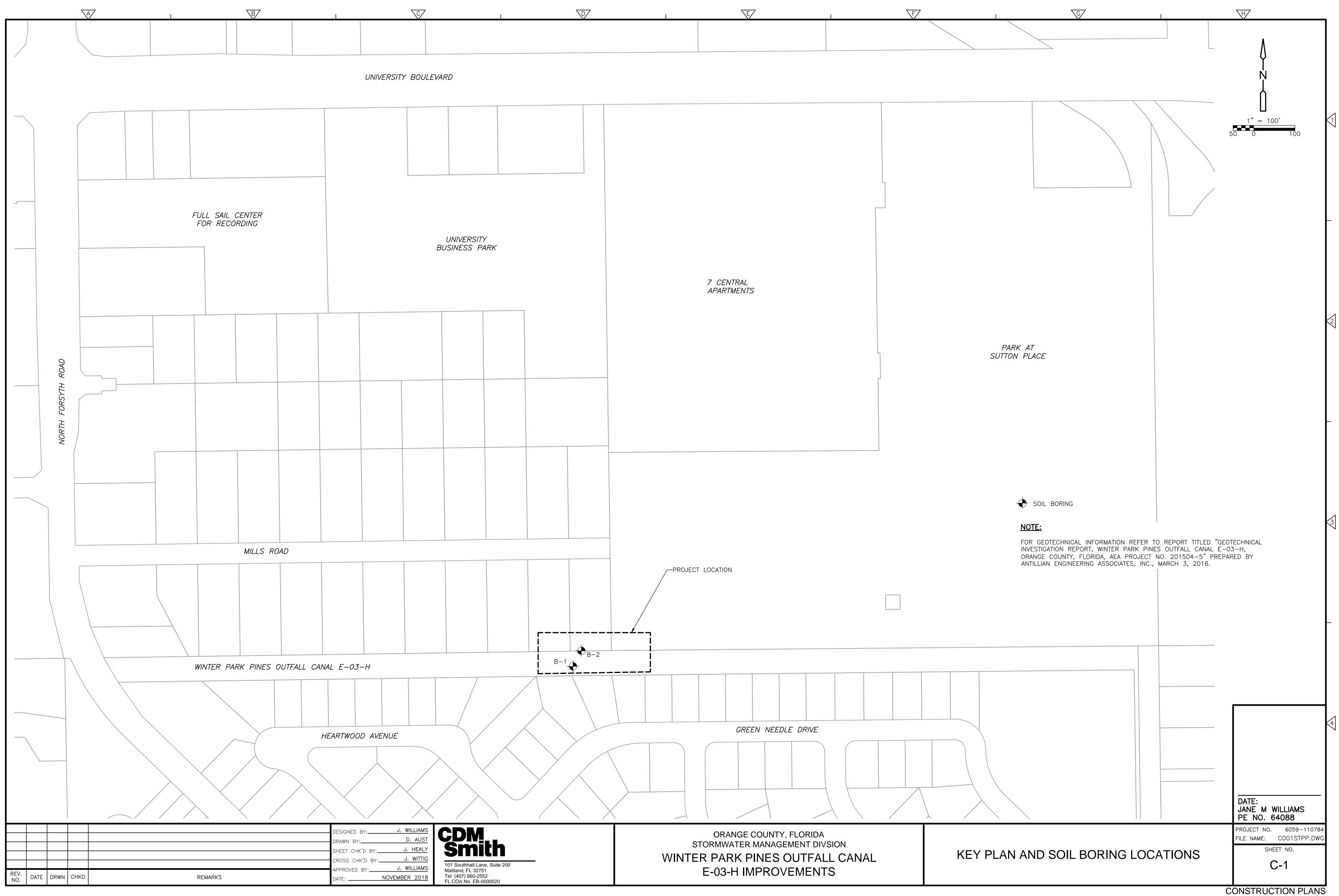
FOUND 4"X4" CONCRETE MONUMENT

SITE BENCHMARK

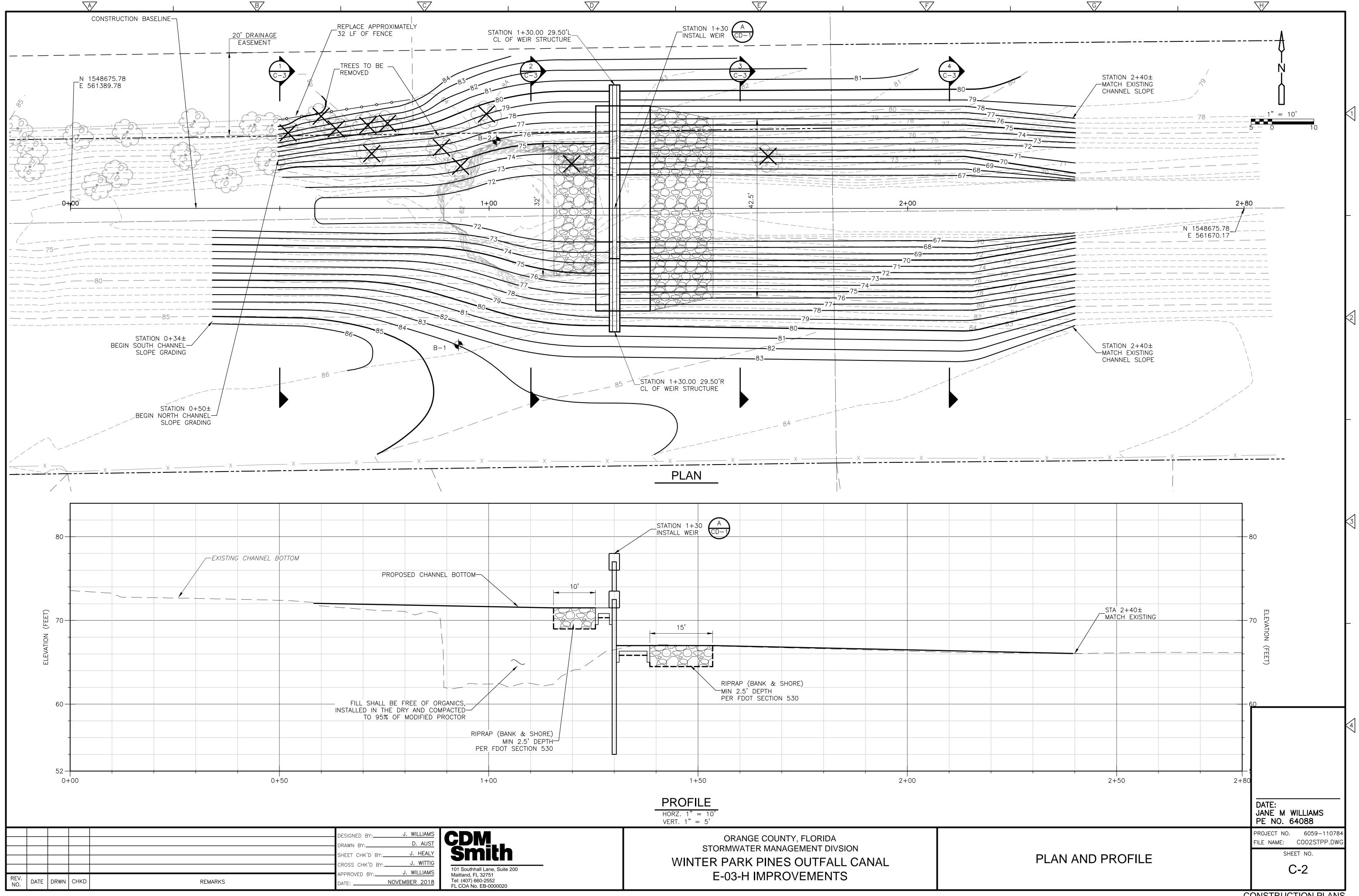
G

XREFs: [CDMS\_2234, Orange Parcels E-03-H] Images: [] Last saved by: WILLIAMSJ Time: 9/24/2018 5:02:50 PM pw:\\pw.cdmsmith.com:PW\_XM1\6059\110784\04 Design Services NM\_90%\02 Civil\10 CADD\C001STPP.dwg © 2018 CDM SMITH ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED



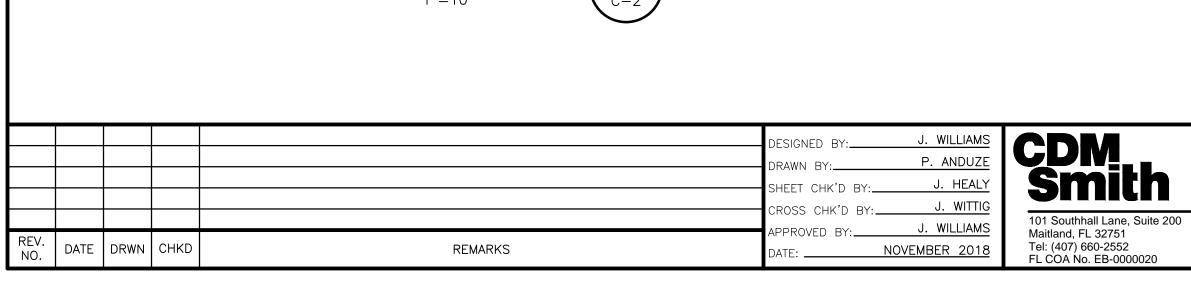


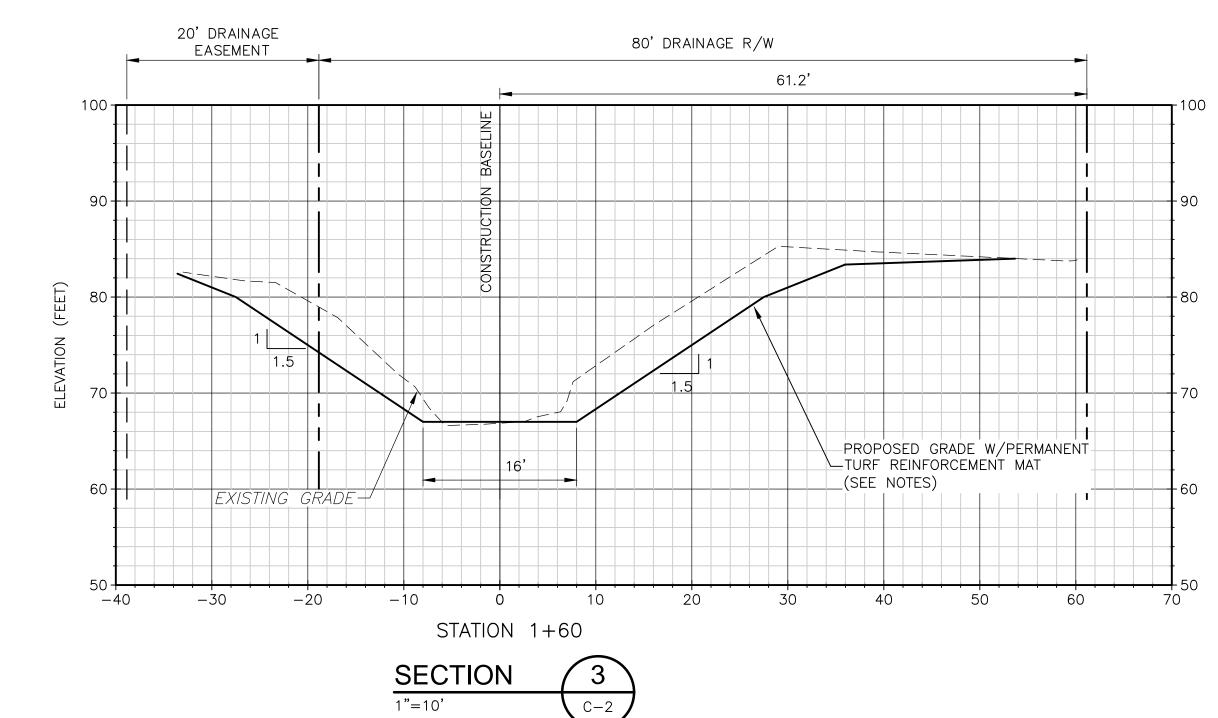


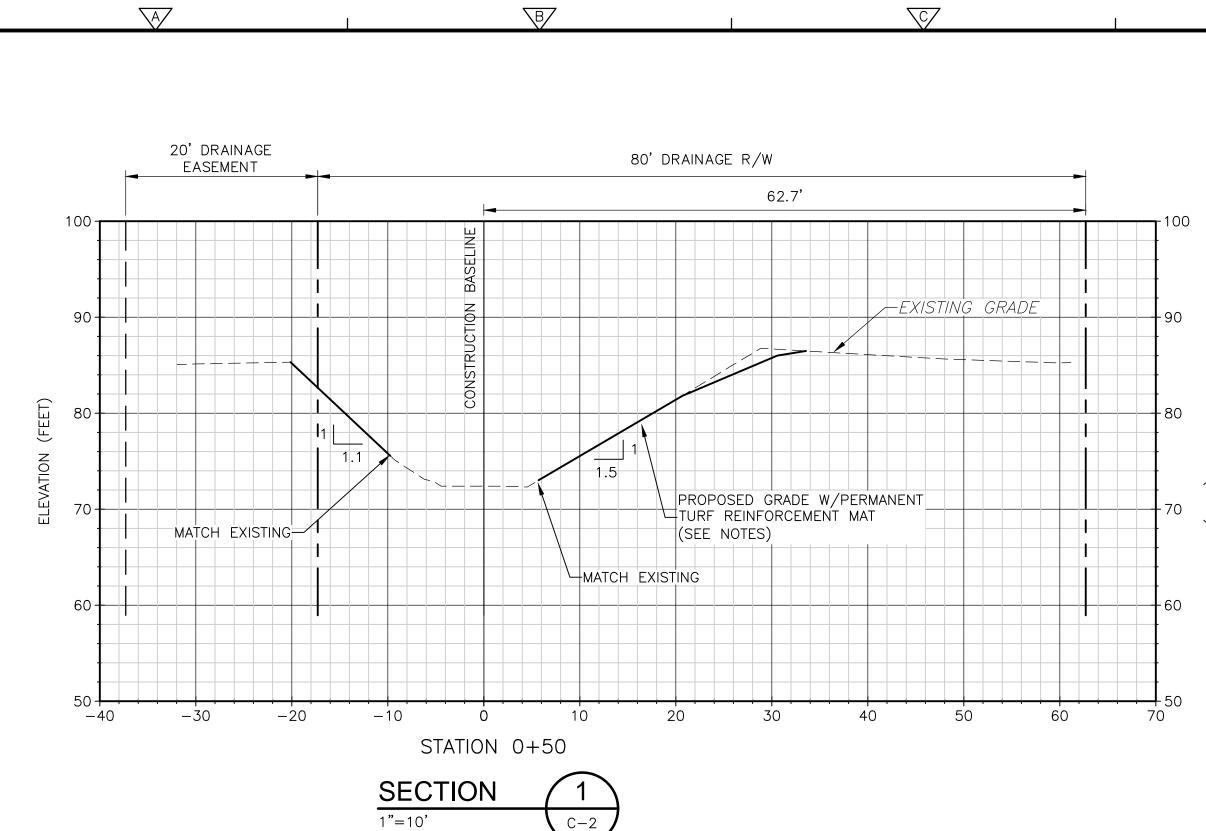


CONSTRUCTION PLANS

, CWR000ST] Images: [] :: 11/15/2018 6:01:32 PM \6059\110784\04 Design Se :ESFRVFD 2234, CEPOOOST, ( WILLIAMSJ Time: nith.com:PW\_XM1\6 [CDMS\_2 aved by: w.cdmsm XREFs: Last sa<sup>,</sup> pw:\\pw







20' DRAINAGE EASEMENT 100 **т** 90- $\widehat{}$ 80-Ŀ 2.5 7 Ш 15' 60--40 -30 -20 -10 0 10 STATION 1+10

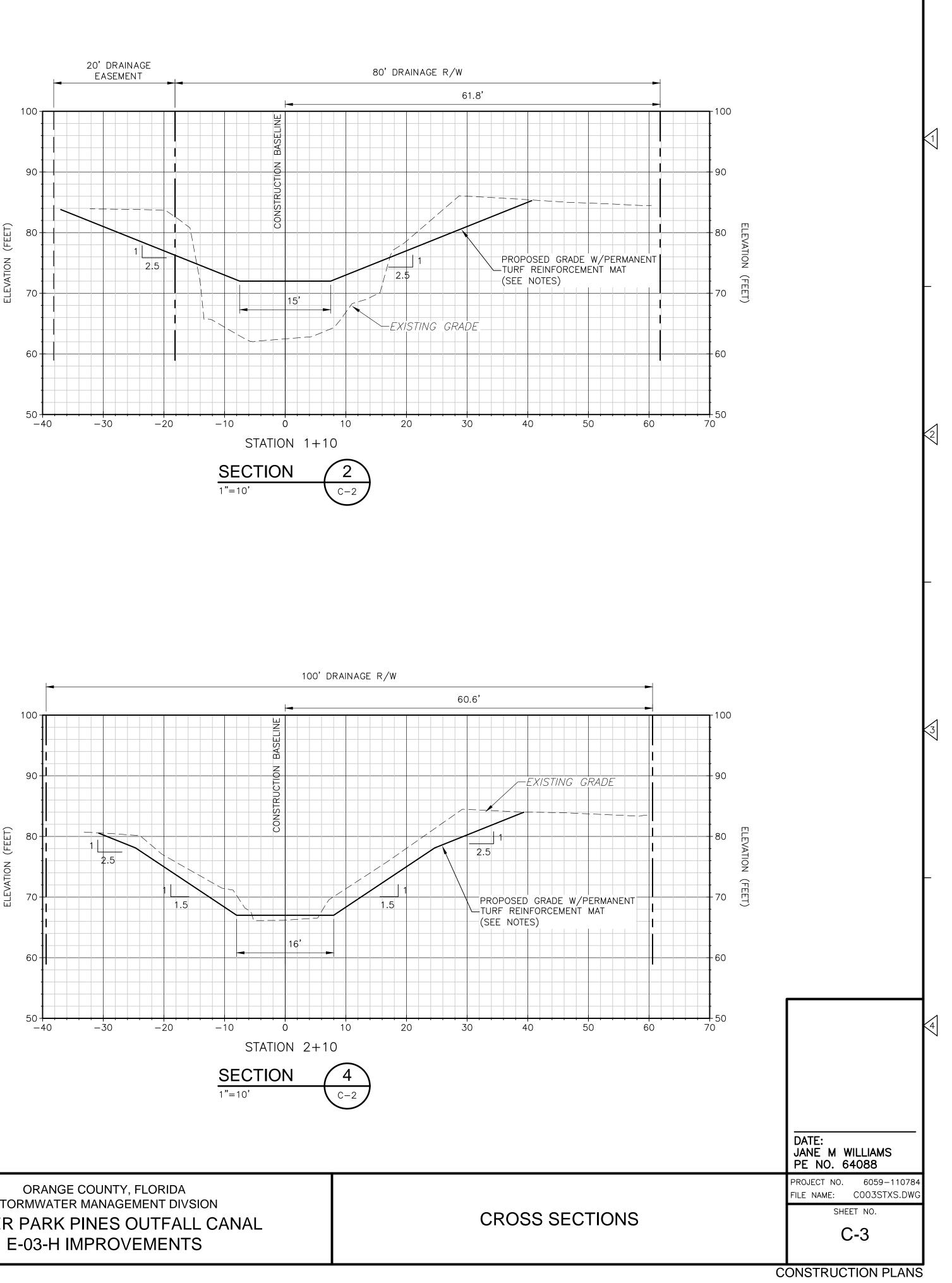
 $\overline{F}$ 

E/

NOTES:

 $\nabla D$ 

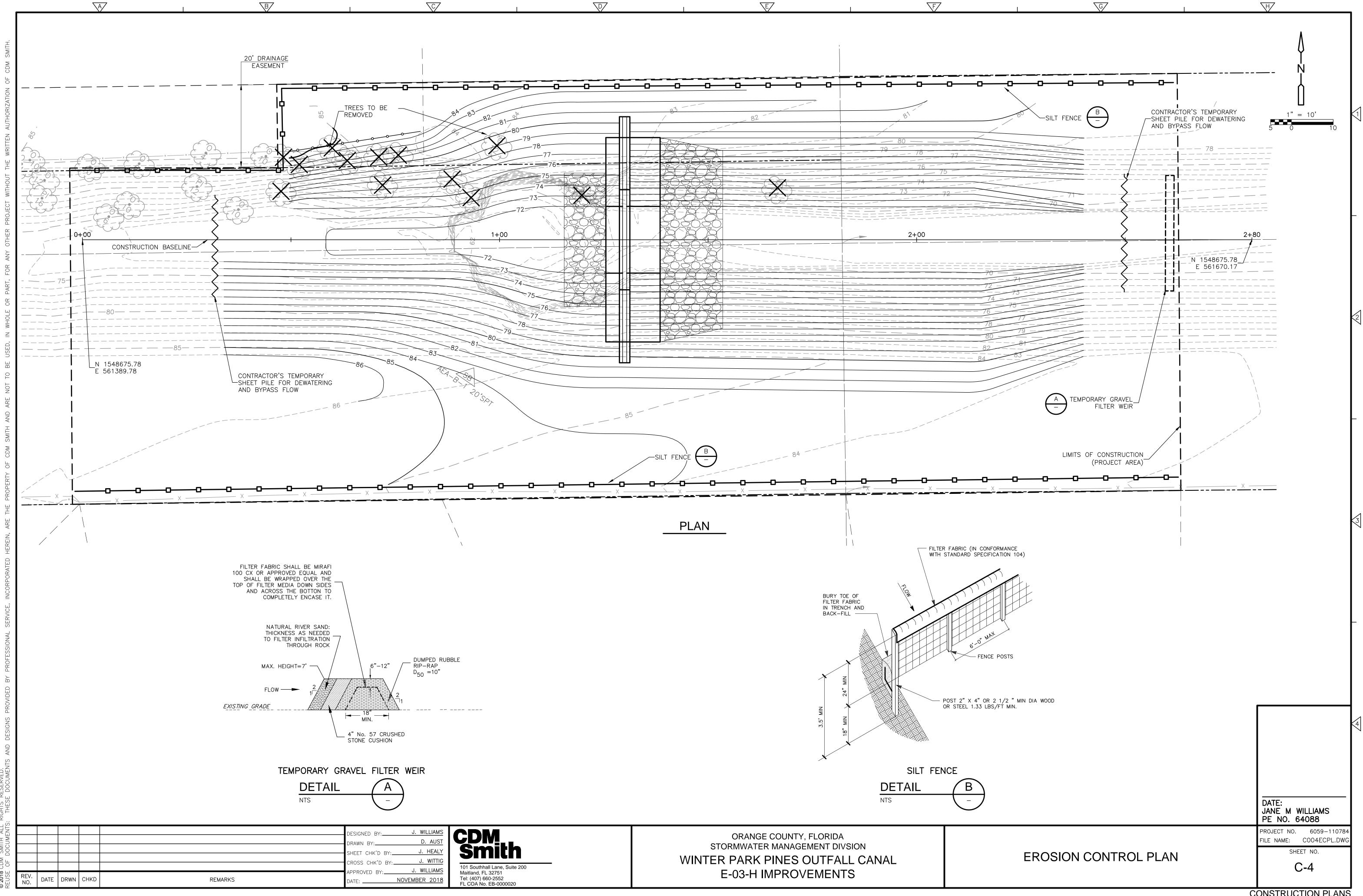
- 1. INSTALL PERMANENT TURF REINFORCEMENT MATTING ON ALL NEW GRADED AREAS.
- 2. PERMANENT TURF REINFORCEMENT MAT SHALL BE NORTH AMERICAN GREEN C350 OR APPROVED EQUAL.
- 3. PERMANENT TURF REINFORCEMENT MAT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO ANCHORING, STAPLE SPACING, AND SEAM OVERLAP. SECURE MAT WITH 12 INCH TWIST ANCHORS, MINIMUM 3 PER SQUARE YARD OR APPROVED EQUAL.
- 4. STAKED SOD SHALL BE INSTALLED OVER PERMANENT TURF REINFORCEMENT MAT.



G

 $\forall H$ 

STORMWATER MANAGEMENT DIVSION WINTER PARK PINES OUTFALL CANAL E-03-H IMPROVEMENTS



CWR000ST] Images: [] : 9/25/2018 9:27:03 AM \6059\110784\04 Design S 2234, CEPOOOST, ( WILLIAMSJ Time: nith.com:PW\_XM1\6 TH ALL RIGHTS PER MS\_\_\_\_ by: msm [CDN jved w.cdr (REFs: .ast sa .w:\\pv

CONSTRUCTION PLANS

THE CONTRACTOR IS RESPONSIBLE FOR APPROVING AND IMPLEMENTING THIS STORMWATER INFORMATION AND SWPPP COMPLIANCE AGREEMENTS FOR ALL CONTRACTORS AND AS SITE CONDITIONS CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE RESPONSIBLE PARTY OR SUBCONTRACTOR ACCOUNTABLE FOR IMPLEMENTING EACH MEASURE DESCRIBED IN THE SWPPP AND DELEGATING SWPPP RESPONSIBILITIES. THE CONTRACTOR MUST PREPARE AND SIGN THE FOLLOWING CERTIFICATION: "I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER." ALL SUBCONTRACTORS ARE REQUIRED TO SIGN A COPY OF THE CERTIFICATION AND ALL CERTIFICATIONS ARE TO BE HELD BY THE CONTRACTOR AS PART OF THE COMPLETE SWPPP. THE CONTRACTOR SHALL APPROVE THIS STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE GENERAL REQUIREMENTS AND/OR ANY SPECIAL CONDITIONS OF ALL PERMITS WHICH AUTHORIZE THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING, MONITORING AND MODIFYING THE SWPPP FOR CONSTRUCTION ACTIVITIES TO MEET CHANGING PROJECT SITE CONDITIONS. 1.0 SITE DESCRIPTION: 1.A NATURE OF CONSTRUCTION ACTIVITY: INSTALLING A SHEET PILE WEIR AND RE-GRADING OF APPROXIMATELY 200 LINEAL FEET OF THE EXISTING CHANNEL. 1.B SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES: THE CONTRACTOR SHALL PROVIDE A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES AS REQUIRED BY CONDITION OF PERMIT. THE CONTRACTOR SHALL IDENTIFY THE SEQUENCE OF MAJOR ACTIVITIES FOR CONTROLLING EROSION AND TRAPPING SEDIMENT. 1.C AREA ESTIMATES: 1.D RUNOFF DATA: BEFORE: -AFTER: – OUTFALL INFORMATION: 1.E SITE MAP: DRAINAGE PATTERNS: SHEETS. 53 De /24/2018 3:05: 59\110784\04 0,0

					DESIGNED BY:J. WILLIAMS	
					DRAWN BY: D. AUST	
					SHEET CHK'D BY:J. HEALY	
					CROSS CHK'D BY: J. WITTIC	
					APPROVED BY:J. WILLIAMS	2 N
REV. NO.	DATE	DRWN	СНКД	REMARKS	DATE:NOVEMBER 2018	<u>з</u> Т F

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS PRIOR TO OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED AND APPROVAL TO REMOVE CONTROLS IS PROVIDED BY ENGINEER. TOTAL SITE AREA: 0.43 ACRES. TOTAL AREA TO BE DISTURBED: 0.43 ACRES. APPROXIMATE RUNOFF COEFFICIENTS:

 $\overline{A}$ 

SOILS DATA: - "URBAN LAND COMPLEX" DERIVATIVES OF POMELLO FINE SAND AND SMYRNA FINE

RECEIVING WATER BODIES: LITTLE ECONLOCKHATCHEE RIVER

APPROXIMATE SLOPES: THE SITE GRADES AND SLOPES ARE PRESENTED IN THE PLAN

POLLUTION PREVENTION PLAN (SWPPP). THE COMPLETE AND FINAL SWPPP SHALL INCLUDE THE SITE PLAN, EROSION CONTROL PLAN, A NARRATIVE DESCRIPTION, PROJECT NOTES, CONTACT SUBCONTRACTORS. THE CONTRACTOR SHOULD MODIFY THIS SWPPP THROUGHOUT CONSTRUCTION

B7

2.0 CONTROLS

2.A EROSION AND SEDIMENT CONTROLS:

THE CONTRACTOR SHALL REVIEW AND APPROVE THIS PLAN TO MANAGE THE STORMWATER RUNOFF TO MINIMIZE EROSION AND TRANSPORT OF SEDIMENTS. AS WORK PROGRESSES, THE CONTRACTOR SHALL MODIFY THE PLAN TO ADAPT TO SEASONAL VARIATION, CHANGES IN CONSTRUCTION ACTIVITIES, AND THE NEED FOR BETTER PRACTICES.

ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA OR DESIGNATED WETLAND AREA, UNLESS OTHERWISE SPECIFICALLY DESCRIBED BY THE CONSTRUCTION PLANS AND GRANTED BY PERMIT FROM GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THE PROJECT.

PRIOR TO CLEARING AND GRUBBING, THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY MARKED TO PROTECT NATURAL AREAS FROM ENCROACHMENT OF CONSTRUCTION ACTIVITIES.

ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND SHALL REPLACE ANY PORTION, WHICH IN THE OPINION OF THE ENGINEER, HAS BECOME DISPLACED DUE TO EROSION OR DUE TO CARELESSNESS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR.

2.A.1 STABILIZATION PRACTICES:

THE CONTRACTOR SHALL DESCRIBE THE STABILIZATION PRACTICES PROPOSED TO CONTROL EROSION. THE CONTRACTOR SHALL INITIATE ALL STABILIZATION MEASURES AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. THE STABILIZATION PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

TEMPORARY: \* ARTIFICIAL COVERINGS AS REQUIRED.

\* SEED AND MULCH, AND SOD IN ACCORDANCE WITH PLANS.

PERMANENT:

\* SOD IN ACCORDANCE WITH PLANS.

- \* EROSION CONTROL MATTING
- \* RIPRAP

2.A.2 STRUCTURAL PRACTICES:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT AND OTHERWISE PREVENT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SEDIMENT CONTROLS SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL. THE STRUCTURAL PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

TEMPORARY:

\* SILT FENCE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS, SECTION 104. \* SANDBAGS TO CONTROL EROSION AND TRAP SILT.

\* SEDIMENT BASIN: TEMPORARY STAGING AREAS TO INCLUDE TEMPORARY SEDIMENTATION BASINS.

\* STORMWATER CONVEYANCE: STABILIZED CHANNEL TO CONVEY RUNOFF AND CONTROL VELOCITIES

SECTION 104

\* SLOPE CONTROLS SUCH AS EROSION CONTROL BLANKETS OR TACKIFIERS ON STEEP SLOPES.

AREAS OF SOIL DISTURBANCE: CULVERT REPLACEMENT AREAS INCLUDING APPROXIMATELY 20 FEET UPSTREAM AND DOWNSTREAM WITHIN THE CHANNEL, SEE PLANS AND CROSS SECTIONS.

\* AREAS NOT TO BE DISTURBED: AREAS OUTSIDE LIMITS OF CONSTRUCTION.

AREAS TO BE STABILIZED: TEMPORARY STABILIZATION PRACTICES ARE REQUIRED FOR AREAS OF TEMPORARY SOIL DISTURBANCE. PERMANENT STABILIZATION IS SHOWN ON PLANS.

\* FLOATING TURBIDITY BARRIER IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS,

PERMANENT:

\* SOD

\* RIPRAP

2.B STORMWATER MANAGEMENT:

THE FACILITIES HAVE BEEN PERMITTED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS TO PREVENT THE DISCHARGE OF SOLID MATERIALS, INCLUDING BUILDING MATERIALS, TO WATERS OF THE UNITED STATES. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

\* PROVIDING LITTER CONTROL AND COLLECTION WITHIN THE PROJECT DURING CONSTRUCTION ACTIVITIES.

\* DISPOSING OF ALL FERTILIZER OR OTHER CHEMICAL CONTAINERS ACCORDING TO EPA's STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.

\* DISPOSING OF SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS OFF THE PROJECT SITE BUT NOT IN SURFACE WATERS, OR WETLANDS.

2.C.2 OFFSITE VEHICLE TRACKING & DUST CONTROL:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATING DUST. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

- \* COVERING LOADED HAUL TRUCKS WITH TARPAULINS.
- \* REMOVING EXCESS DIRT FROM ROADS DAILY.
- \* STABILIZING CONSTRUCTION ENTRANCES

\* USING ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND MILLING OPERATIONS, IF APPLICABLE.

2.C.3 STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED PROCEDURES TO COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, AND SANITARY SEWER OR SEPTIC SYSTEMS.

2.C.4 FERTILIZERS AND PESTICIDES:

THE CONTRACTOR SHALL DESCRIBE THE PROCEDURES FOR APPLYING FERTILIZERS AND PESTICIDES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF SECTION 570 OF THE SPECIFICATIONS.

2.C.5 TOXIC SUBSTANCES:

THE CONTRACTOR SHALL PROVIDE A LIST OF TOXIC SUBSTANCES THAT ARE LIKELY TO BE USED ON THE JOB AND PROVIDE A PLAN ADDRESSING THE GENERATION, APPLICATION, MIGRATION, STORAGE AND DISPOSAL OF THESE SUBSTANCES.

2.C.6 STATE AND LOCAL PLANS AND PERMITS TO BE OBTAINED:

\* THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, PERMITTING AND OPERATION OF AN ADEQUATE DEWATERING SYSTEM TO DEWATER EXCAVATIONS FOR CONSTRUCTION IF REQUIRED



### 3.0 MAINTENANCE

 $\overline{G}$ 

THE CONTRACTOR SHALL PROVIDE A PLAN FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT CONSTRUCTION. THE MAINTENANCE PLAN SHALL, AT A MINIMUM, COMPLY WITH THE FOLLOWING:

 $\overline{H}$ 

\* SILT FENCE: THE CONTRACTOR SHOULD ANTICIPATE REPLACING SILT FENCE ON 6 MONTH INTERVALS. ANY REPAIRS SHOULD BE MADE IMMEDIATELY AND SEDIMENT REMOVED WHEN IT REACHES A MAXIMUM HEIGHT ½ THE BARRIER HEIGHT.

\* SYNTHETIC BALES OR BALE TYPE BARRIERS: REMOVE SEDIMENT WHEN IT REACHES 1/2 HEIGHT OF BALES OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS. THE CONTRACTOR SHOULD ANTICIPATE REPLACING BALES ON 3-MONTH INTERVALS. NATURAL AND STRAW BALES WILL NOT BE ALLOWED.

\* SEEDED OR SODDED AREAS THAT WERE WASHED OUT DUE TO STORMWATER SHALL BE REPLACED IMMEDIATELY OR OTHERWISE STABILIZED.

\* CONSTRUCTION ENTRANCE: MAINTENANCE SHALL BE PERFORMED ON THE ROCK CONSTRUCTION DRIVEWAYS WHEN ANY VOID SPACES ARE FULL OF SEDIMENT.

\* ALL OTHER BMPS: REPAIR IMMEDIATELY FOLLOWING DAMAGE OR DISPLACEMENT.

4.0 INSPECTIONS:

THE PERMITTEE SHALL BE RESPONSIBLE FOR THE FUNCTIONALITY OF ALL CONTROL MEASURES IN ACCORDANCE WITH THE INSPECTION SCHEDULE OUTLINED BELOW. THE PURPOSE OF SUCH INSPECTIONS WILL BE TO DETERMINE THE OVERALL EFFECTIVENESS OF THE CONTROL PLAN AND THE POSSIBLE NEED FOR ADDITIONAL CONTROL MEASURES.

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER. TO COMPLY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES AND RECORD THE DAILY RAINFALL. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.

- \* POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.
- \* POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM SEWER SYSTEMS.
- \* DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- \* AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
- \* STRUCTURAL CONTROLS.
- \* STORMWATER MANAGEMENT SYSTEMS.
- \* LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTIONS THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER.

INSPECTIONS SHALL BE RECORDED ON THE FDEP SWPPP INSPECTION FORM AND KEPT ON FILE WITH THE CONTRACTOR AS PART OF THE COMPLETE SWPPP.

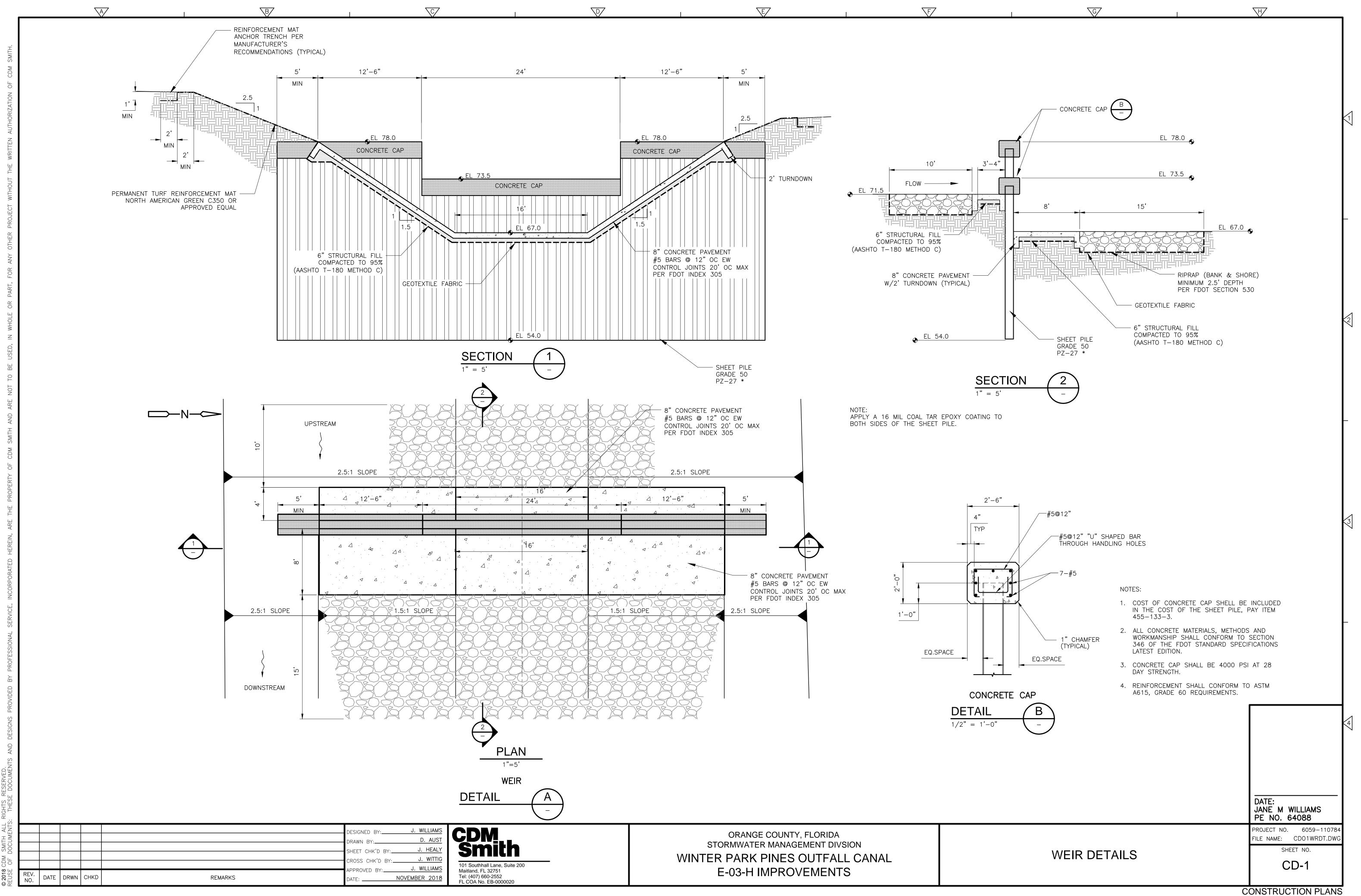
IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, AS APPROVED BY THE ENGINEER. FOLLOWING FINAL GRADING AND SODDING ACTIVITIES, CONTRACTOR SHALL INSPECT AND REMOVE ANY ACCUMULATED SEDIMENTS FROM EXISTING AND NEW STORMWATER STRUCTURES AND PIPES.

### 5.0 NON-STORMWATER DISCHARGES:

THE CONTRACTOR SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES (EXCEPT FLOWS FROM FIRE FIGHTING ACTIVITIES). THE CONTRACTOR SHALL DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION OF THESE NON-STORMWATER DISCHARGES. IF THE CONTRACTOR ENCOUNTERS CONTAMINATED SOIL OR GROUNDWATER NOT INDICATED ON THE CONSTRUCTION DRAWINGS, ALL CONSTRUCTION ACTIVITIES SHALL STOP, AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD FOR FURTHER INSTRUCTIONS.

NON-STORMWATER DISCHARGES FOR THIS PROJECT ARE EXPECTED TO INCLUDE UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION), PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS SUBSTANCES HAVE OCCURRED) AND ANY WATER USED FOR DUST CONTROL. TURBID AND OTHER NON-STORMWATER DISCHARGES SHALL BE TREATED SO AS TO NOT ALLOW A DISCHARGE OF POLLUTED STORMWATER. APPROPRIATE TREATMENT MAY INCLUDE TURBIDITY CONTROLS, SETTLING PONDS, THE PROPER USE OF FLOCCULATING AGENTS, OR OTHER APPROPRIATE

	DATE: JANE M WILLIAMS PE NO. 64088	4
ATER POLLUTION PREVENTION PLAN	PROJECT NO. 6059-110784 FILE NAME: COO5SWPL.DWG SHEET NO. <b>C-5</b>	
C	ONSTRUCTION PLANS	



REFs: [CDMS\_2234, CWR000ST] Images: [] ast saved by: WILLIAMSJ Time: 9/25/2018 1:35:25 PM w:\\pw.cdmsmith.com:PW\_XM1\6059\110784\04 Design Services NM\_90%\02 Civil\10 CADD\