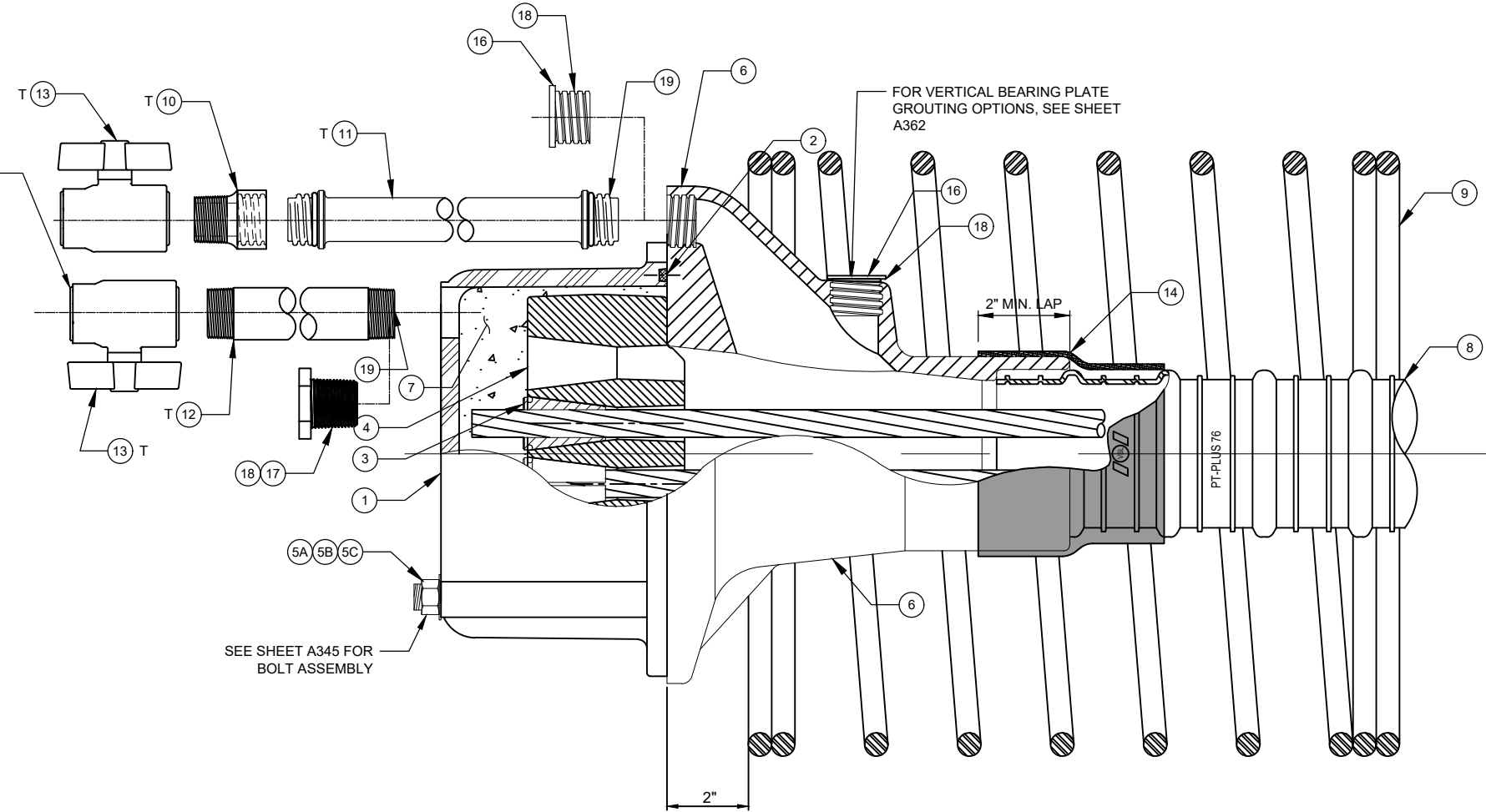
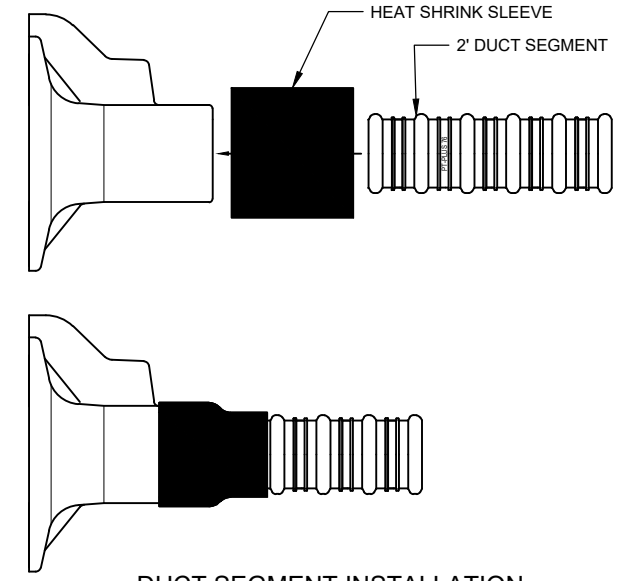


SEE SHEET A366 FOR ALTERNATIVE CAP VENT DETAILS



SEE SHEET A345 FOR BOLT ASSEMBLY

NOTE: ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.



DUCT SEGMENT INSTALLATION

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1	1	ECI 6-12 GROUT CAP W/ 3/4" HORIZONTAL PORT	ABS LUSTRAN 633 PER ASTM D4673	02GC61201V	C801
2	1	ECI 6-12 GROUT CAP O-RING (.210 CS X 7.475" ID # -367)	BUNA-N 70 D PER FDOT 960 TABLE 2.2.1.7-1	02WX5020	C796
3	12	1.6G WEDGE .6 1.77 W/GROOVE	AISI 11-L-17 PER ASTM A108	02WG0008	C218
4	1	ECI 6-12 ANCHOR HEAD	CAST IRON GR80-55-06 PER ASTM A536	02AH0037	C556
5A	1 SET	1/2-13 NC X 6 1/2"	(316L) STAINLESS PER ASTM F593	02WX5021D	A345
5B	1 SET	Ø1/2" FLAT WASHER	(316L) STAINLESS PER ASTM A240	02WX5021D	A345
5C	1 SET	1/2"-13 NUT	(316L) STAINLESS PER ASTM A240	02WX5021D	A345
6	1	ECI 6-12 GALV BEARING PLATE	CAST IRON GR80-55-06 PER ASTM A536	02BP0037	C553
7	-	GROUT	PREMIUM NON-BLEED PER FDOT APL	-	-
8	-	DUCT, WHT PP, 76 MM PT-PLUS	WHITE POLYPROPYLENE PER ASTM D4101	02DT0426	C684
9A	1	ECI 6-12 SPIRAL #3500 (#5, DIA. 13", 2" PITCH, 7 TURNS)	GR 60 STEEL AS PER ASTM A615	02BP0096	C728
9B	1	ECI 6-12 SPIRAL #5500 (#4, DIA. 13", 2" PITCH, 7 TURNS)	GR 60 STEEL AS PER ASTM A615	02BP0097	C728
10	1	BR PLATE BUSHING 3/4" NPT 23MM	BLACK POLYPROPYLENE PER ASTM D4101	02DT0316	C715
11	1	23MM BP GROUT EXTENSION	WHITE POLYPROPYLENE PER ASTM D4101	02DT0318	C714
12	1	3/4" NPT PVC NIPPLE	SCH 80 WHITE PVC	-	C887
13	2	PVC 1/4 TURN BALL VALVE W/ 3/4" FNPT	SCH 80 WHITE PVC	02DT01916	C720
14	1	CANUSA PLA-90-YE X 6" HEAT SHRINK SLEEVE	POLYOLEFIN PER TABLE 960 2.2.1.8-1	02DT0505	C762
16	1	23MM GROUT PLUG	HDPE BLACK PER ASTM D3350	02DT0341	C583
17	1	3/4"Ø NPT PE PLUG	HDPE BLACK PER ASTM D3350	02DT01913	C787
18	-	BONDUIT	COMMERCIALY AVAILABLE	-	-
19	-	SILICONE GREASE	COMMERCIALY AVAILABLE	-	-

- INSTALLATION PROCEDURES (INSTALLATION PROCEDURE IS GENERIC. FOLLOW THE PROJECT SPECIFIC REQUIREMENTS AND THE FDOT SPECIFICATIONS)
- PRE-ASSEMBLE DUCT SEGMENT INTO THE BEARING PLATE WITH HEAT SHRINK.
  - LIGHTLY GREASE ANCHORAGE CAP BOLTS. USE MOUNTING HOLES IN BEARING PLATE TO MOUNT BEARING PLATE ASSEMBLY TO FORM. SECURE BEARING PLATE ASSEMBLY WITH ANCHORAGE CAP BOLTS. USE CARE NOT TO DAMAGE THREADS.
  - INSTALL AND SECURE SPIRAL.
  - INSTALL FILLER PORT CONNECTIONS. SEAL ALL TEMPORARY CONNECTIONS WITH PIPE DOPE/SILICONE GREASE (BY OTHERS), AND SEAL ALL PERMANENT CONNECTIONS WITH BONDUIT OR SIMILAR (BY OTHERS).
  - SECURE DUCT SUPPORTS @ 2' MAX. INSERT MANDRELS INTO TRUMPETS.
  - PER FDOT SPECIFICATION SECTION 462-8.2.1.2, A VACUUM TEST IS REQUIRED PRIOR TO CONCRETE PLACEMENT.
  - CONCRETE PLACEMENT OCCURS BY OTHERS.
  - INSTALL STRAND. LEAVE SUFFICIENT STRAND FOR STRESSING EQUIPMENT.
  - INSTALL ANCHOR HEADS. MAKE SURE WEDGE CAVITIES ARE CLEAN AND RUST FREE. USE WIRE BRUSH TO CLEAN IF NECESSARY. ALIGN THE ANCHOR HEAD TO THE BEARING PLATE USING A GROUT CAP TEMPLATE.
  - ONLY STRESS STRANDS IF CONCRETE HAS REACHED REQUIRED STRENGTH SPECIFIED ON DRAWINGS.
  - ELONGATION SHOULD BE WITHIN ±7%.
  - AFTER ENGINEERS APPROVAL, STRAND TAILS MAY BE CUT.
  - AFTER FORM WORK IS REMOVED, USE MOUNTING BOLTS TO INSTALL ANCHORAGE CAP W/ O-RING.
  - SYSTEM IS NOW READY TO AIR TEST.
  - PER THE FDOT SPECIFICATION SECTION 462-8.2.2, A SECOND AIR PRESSURE TEST IS REQUIRED AFTER STRAND STRESSING AND PRIOR TO GROUT INJECTION.
  - GROUT TENDON PER GROUT SPEC.

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

PROJECT NO: SYSTEM

SHEET NO: A154

SYSTEM DRAWING

ECI 6-12 INTERNAL GROUTED TENDON ASSEMBLY

DATE: 29JAN2020

CHK: ZX

BY: CDL

DESCRIPTION: APPROVED FOR CONSTRUCTION

NO

STRUCTURAL TECHNOLOGIES, LLC

10150 OLD COLUMBIA RD

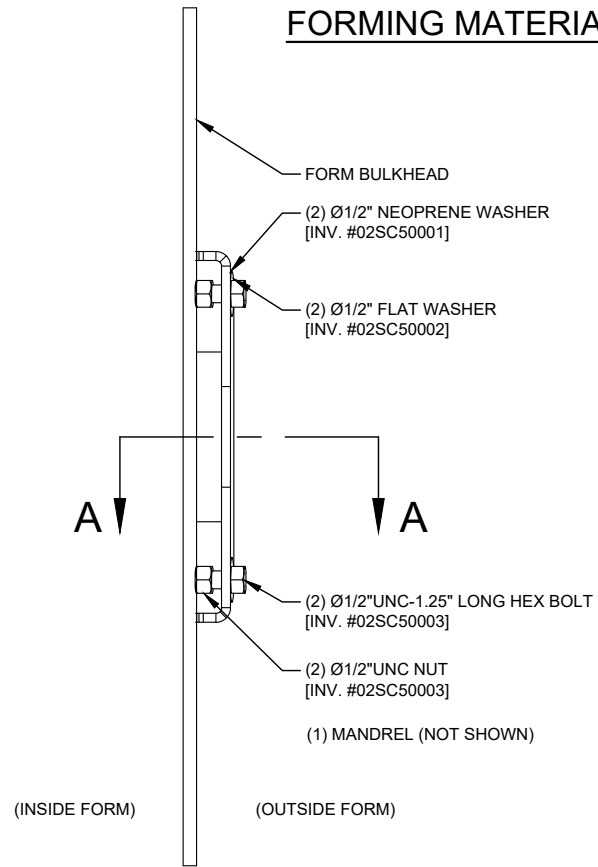
COLUMBIA, MD 21046

PHONE: (410) 850-7000

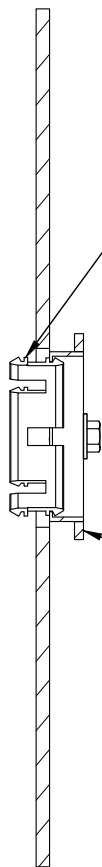
structuraltechnologies.com

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL

## FORMING MATERIALS



## FORM PLAN VIEW



SPIDER CLIP  
FOR 59MM, SEE SHEET C817 [INV. #02SC05904]  
FOR 76MM, SEE SHEET C818 [INV. #02SC07604]  
FOR 100MM, SEE SHEET C819 [INV. #02SC10004]  
FOR 130MM, SEE SHEET C820 [INV. #02SC13004]

### NOTES:

1. THE "OPEN" SIDE OF THE SPIDER CLIP IS MANUALLY "SNAPPED" ONTO EITHER THE HUB (SHOWN SHEET 4) OR THE FORM TOOL (SHOWN HERE).
2. THE "CLOSED" SIDE OF THE SPIDER CLIP IS "ENGAGED" WHEN THE MANDREL IS INSERTED THROUGH THE SPIDER CLIP FROM THE "OPEN" SIDE (SEE SHEET 2).
3. THE SPIDER CLIP IS USED TO:
  - 3.1. SECURE THE FORM TOOL TO THE HUB IN CASE OF A WET CAST (SEE SHEETS 1-3), AND
  - 3.2. SECURE THE HUB OF A MATCH-CAST SEGMENT TO THE HUB OF A PRE-CAST SEGMENT (SEE SHEET 4-6).
4. SPIDER CLIP SHOULD ALWAYS BE ORIENTED AS SHOWN WITH THE WIDE MANDREL RAMPS VERTICAL TO EACH OTHER.

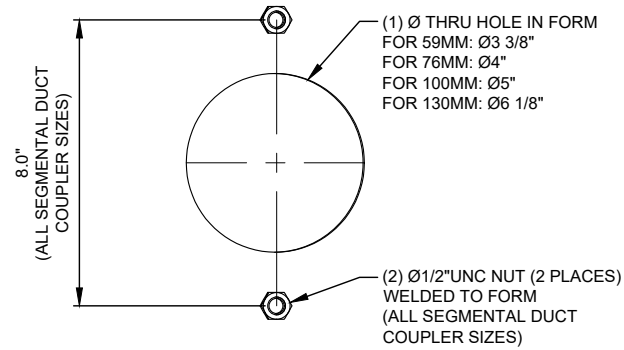
FORM TOOL  
FOR 59MM, SEE SHEET C672 [INV. #02SC05905]  
FOR 76MM, SEE SHEET C651 [INV. #02SC07605]  
FOR 100MM, SEE SHEET C645 [INV. #02SC10005]  
FOR 130MM, SEE SHEET C661 [INV. #02SC13005]

### NOTES:

1. PART NUMBERS SHOWN ARE FOR 3/8" THICK FORMWORK ONLY
2. ALTERNATE FORM TOOLS MAY BE USED BY CONTRACTOR ONLY IF THEY PERMIT  $\pm 6^\circ$  SKEW ANGLE AND IF THEY POSITION THE RECESS FORMER HALF-WAY INSIDE THE FORM BEING CAST.

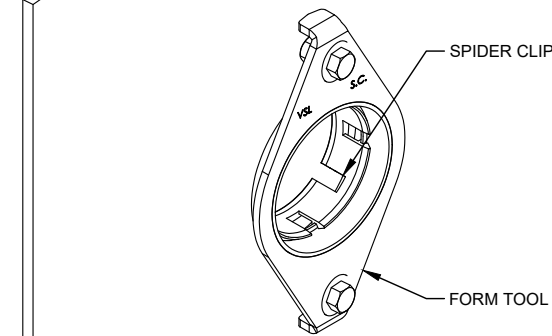
## FORM ELEVATION VIEW SECTION A-A

## FORMING PREPARATION GUIDE

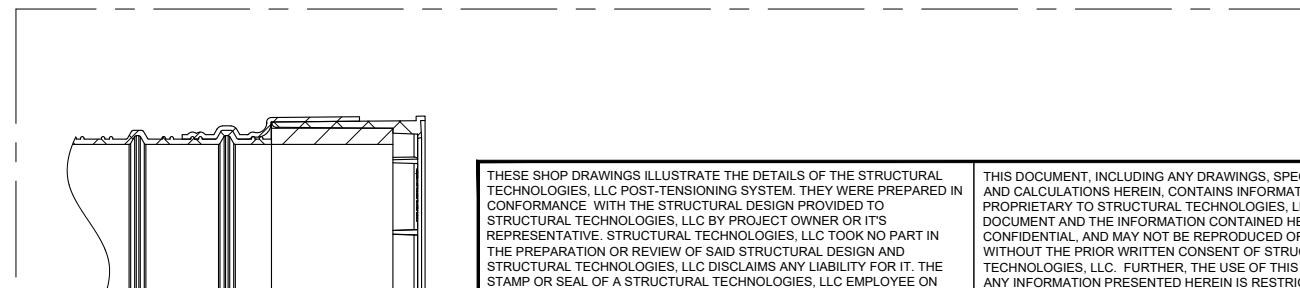


(OUTSIDE FORM)

(INSIDE FORM) (OUTSIDE FORM)



## SPIDER CLIP DETAIL



THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

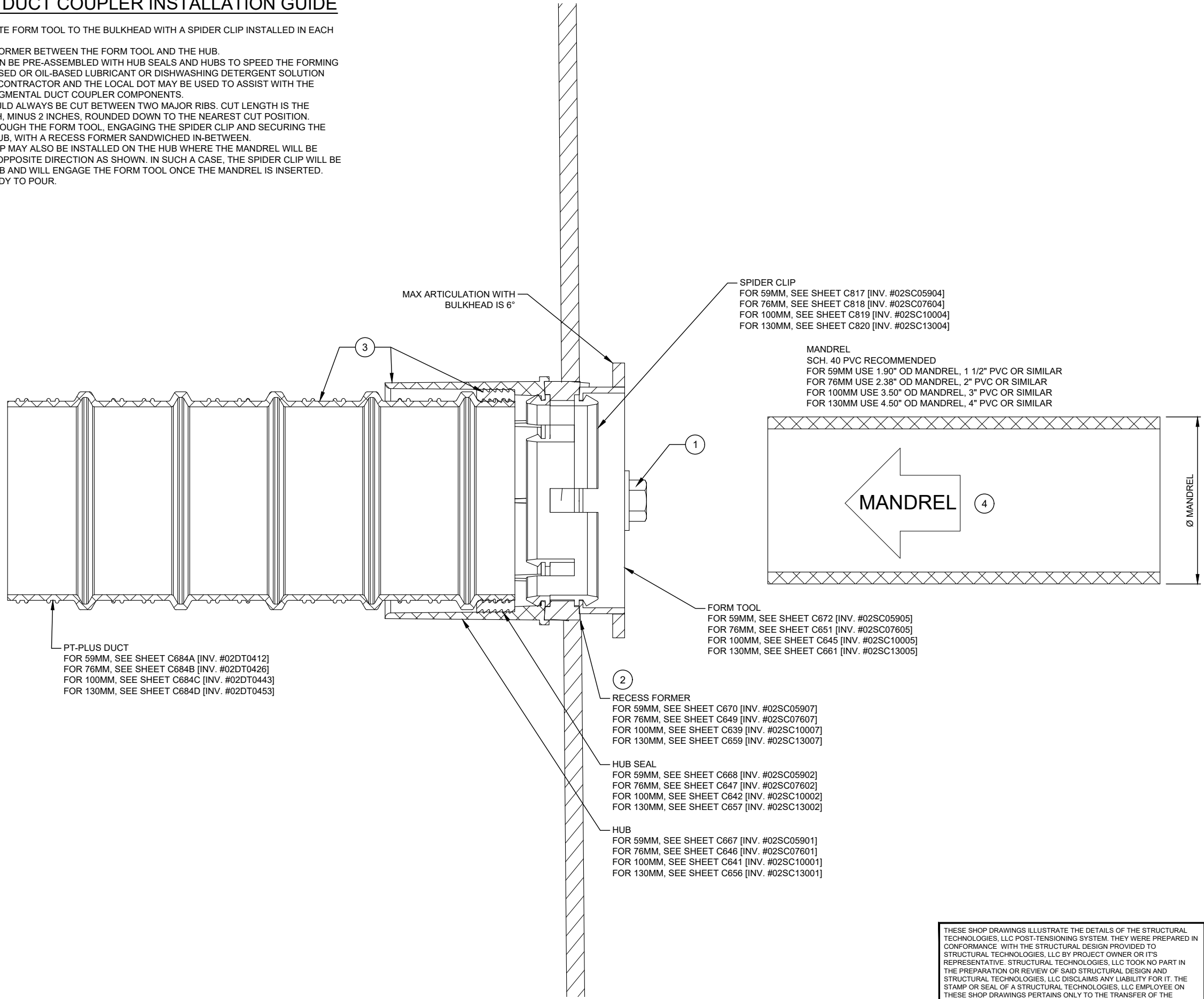
PROJECT INFORMATION:		CDL	ZX	29JAN2020	DATE
SYSTEM DRAWING		APPROVED FOR CONSTRUCTION	BY	CHK	
SEGMENTAL DUCT COUPLER INSTALLATION GUIDE		DESCRIPTION	NO		
PROJECT NO: SYSTEM		SCALE: NTS		A243 - 1 of 8	
SHEET NO:		DATE		FILE NAME: A243 Grouted Segmental Coupler Assembly FDOT.dwg	

**structural TECHNOLOGIES**  
Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
STRUCTURAL TECHNOLOGIES, LLC  
CORPORATE OFFICE  
10150 OLD COLUMBIA RD  
COLUMBIA, MD 21046  
PHONE: (410) 850-7000  
structuraltechnologies.com

# SEGMENTAL DUCT COUPLER INSTALLATION GUIDE

1. BOLT THE APPROPRIATE FORM TOOL TO THE BULKHEAD WITH A SPIDER CLIP INSTALLED IN EACH FORM TOOL.
2. POSITION A RECESS FORMER BETWEEN THE FORM TOOL AND THE HUB.
3. (OPTIONAL) DUCTS CAN BE PRE-ASSEMBLED WITH HUB SEALS AND HUBS TO SPEED THE FORMING TIME. ANY SILICON-BASED OR OIL-BASED LUBRICANT OR DISHWASHING DETERGENT SOLUTION ACCEPTABLE TO THE CONTRACTOR AND THE LOCAL DOT MAY BE USED TO ASSIST WITH THE ASSEMBLY OF THE SEGMENTAL DUCT COUPLER COMPONENTS.
- 3.1. NOTE: DUCT SHOULD ALWAYS BE CUT BETWEEN TWO MAJOR RIBS. CUT LENGTH IS THE SEGMENT LENGTH, MINUS 2 INCHES, ROUNDED DOWN TO THE NEAREST CUT POSITION.
4. INSERT MANDREL THROUGH THE FORM TOOL, ENGAGING THE SPIDER CLIP AND SECURING THE FORM TOOL TO THE HUB, WITH A RECESS FORMER SANDWICHED IN-BETWEEN.
5. NOTE: THE SPIDER CLIP MAY ALSO BE INSTALLED ON THE HUB WHERE THE MANDREL WILL BE INSERTED FROM THE OPPOSITE DIRECTION AS SHOWN. IN SUCH A CASE, THE SPIDER CLIP WILL BE ATTACHED TO THE HUB AND WILL ENGAGE THE FORM TOOL ONCE THE MANDREL IS INSERTED.
6. THE WET CAST IS READY TO POUR.

## WET CAST FORM



THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:		DATE	29JAN2020
SYSTEM DRAWING	APPROVED FOR CONSTRUCTION	BY	CDL ZX
SEGMENTAL DUCT COUPLER INSTALLATION GUIDE	DESCRIPTION	NO	
STRUCTURAL TECHNOLOGIES, LLC CORPORATE OFFICE 10150 OLD COLUMBIA RD COLUMBIA, MD 21046 DALLAS, TX / WASHINGTON DC / DENVER, CO / POMPAHO BEACH, FL PHONE: (410) 850-7000 structuraltechnologies.com			
PROJECT NO:	SYSTEM	SCALE:	NTS
SHEET NO:	A243 - 2 of 8		

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



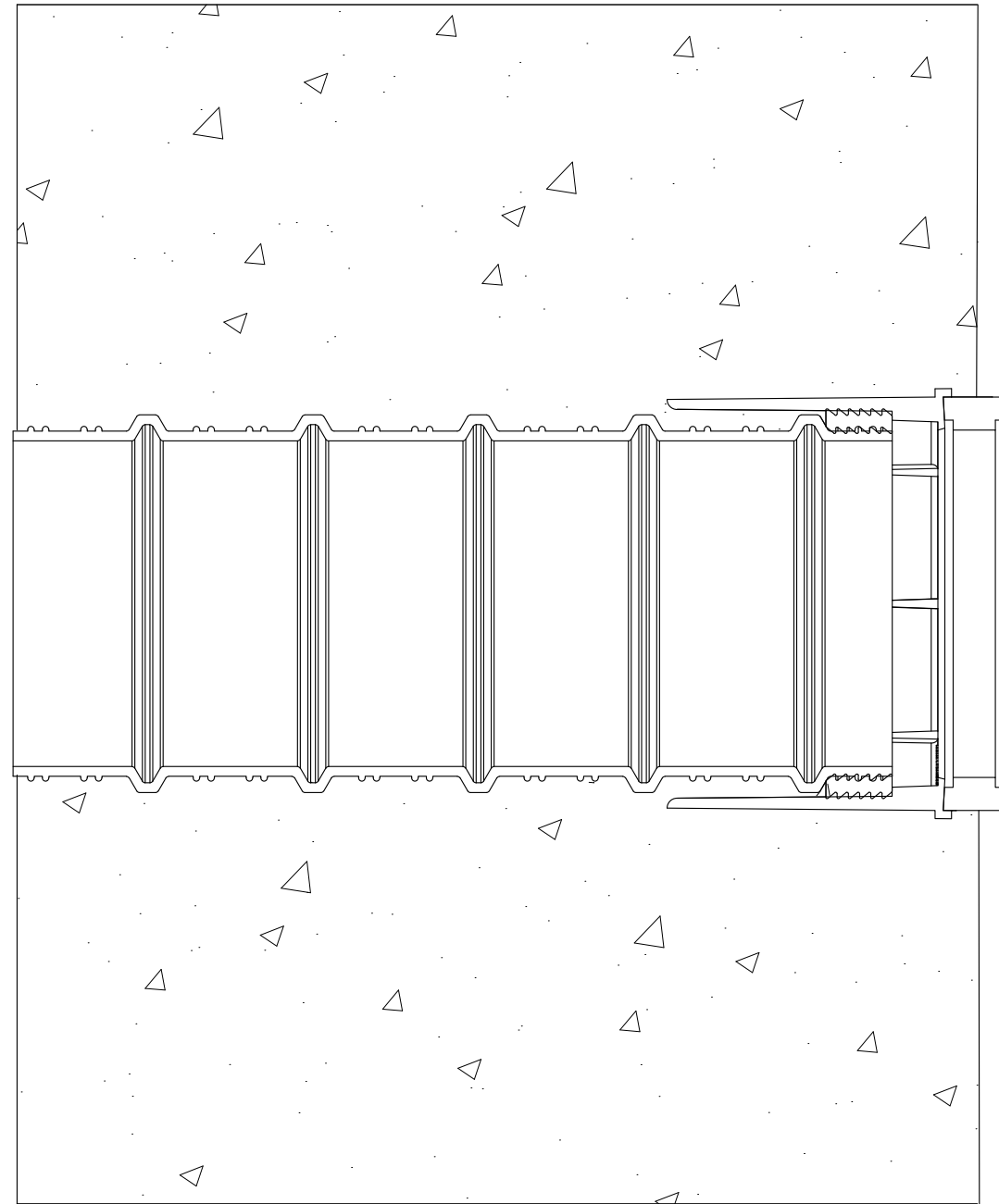




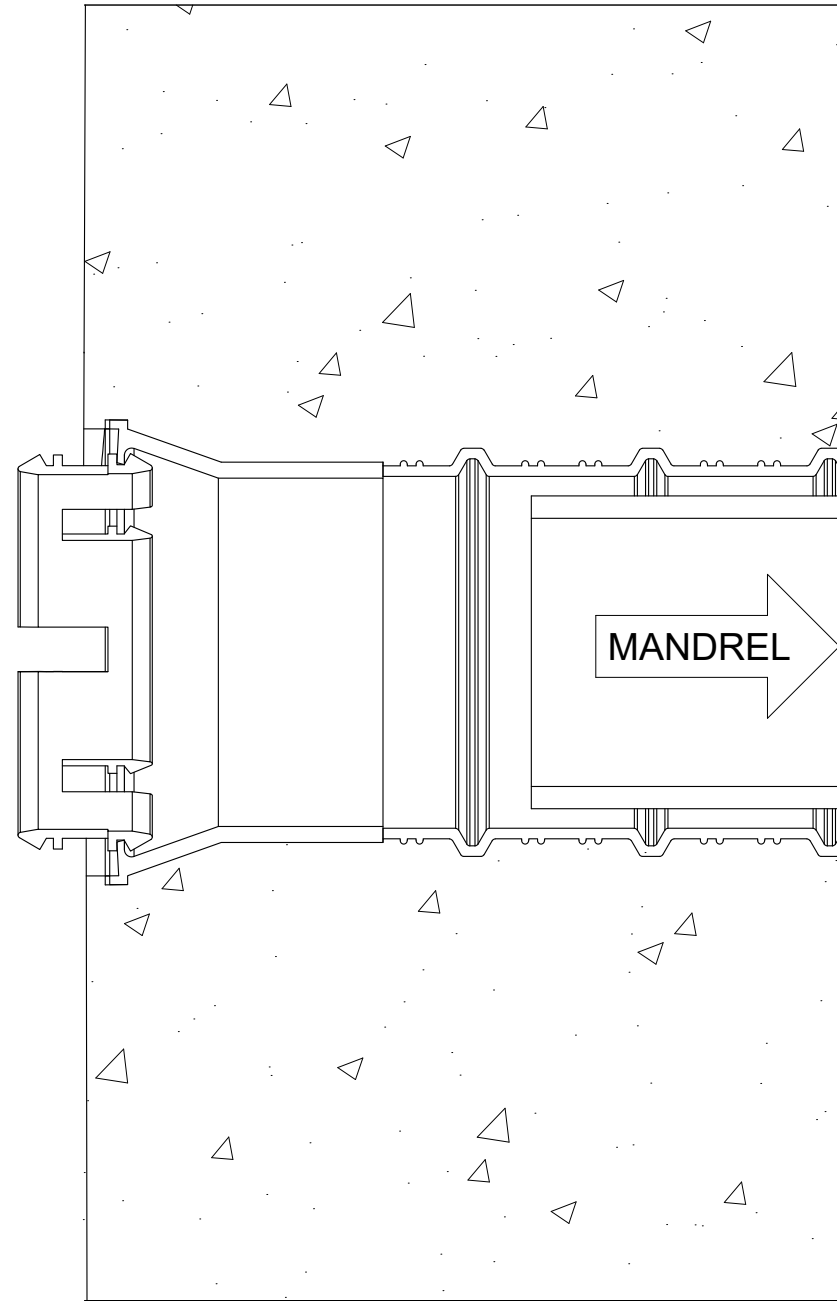


ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler

### PRE-CAST SEGMENT



### MATCH-CAST FORM



NOTE: FAILURE TO REMOVE MANDREL RESULTS IN SEVERE SPALLING OF BOTTOM SLABS

## SEGMENTAL DUCT COUPLER INSTALLATION GUIDE (CONTINUED)

13. TO SEPARATE THE MATCH-CAST SEGMENT FROM THE PRE-CAST SEGMENT, DISASSEMBLE THE FORM IN THE FOLLOWING STEPS:
  - 13.1 REMOVE ALL MANDRELS
  - 13.2 SEPARATE SEGMENTS
  - 13.3 REMOVE ALL SPIDER CLIPS. VISUALLY INSPECT. IF THERE ARE NOT SIGNIFICANT CUTS OR TEARS, RETAIN RECESS FORMER, OTHERWISE DISCARD. IF THERE ARE NO BROKEN OR MISSING "FEET", RETAIN SPIDER CLIP, OTHERWISE DISCARD.
  - 13.4 NOTE: THERE IS NO NEED TO REMOVE THE FORM TOOLS FROM THE BULKHEAD. VISUALLY INSPECT THE SPIDER CLIPS AS NOTED ABOVE.
14. INSTALL PROTECTIVE CAPS OVER DUCT OPENINGS
  - FOR 59MM, SEE SHEET C673 [INV. #02SC05906]
  - FOR 76MM, SEE SHEET C663 [INV. #02SC07606]
  - FOR 100MM, SEE SHEET C662 [INV. #02SC10006]
  - FOR 130MM, SEE SHEET C664 [INV. #02SC13006]

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

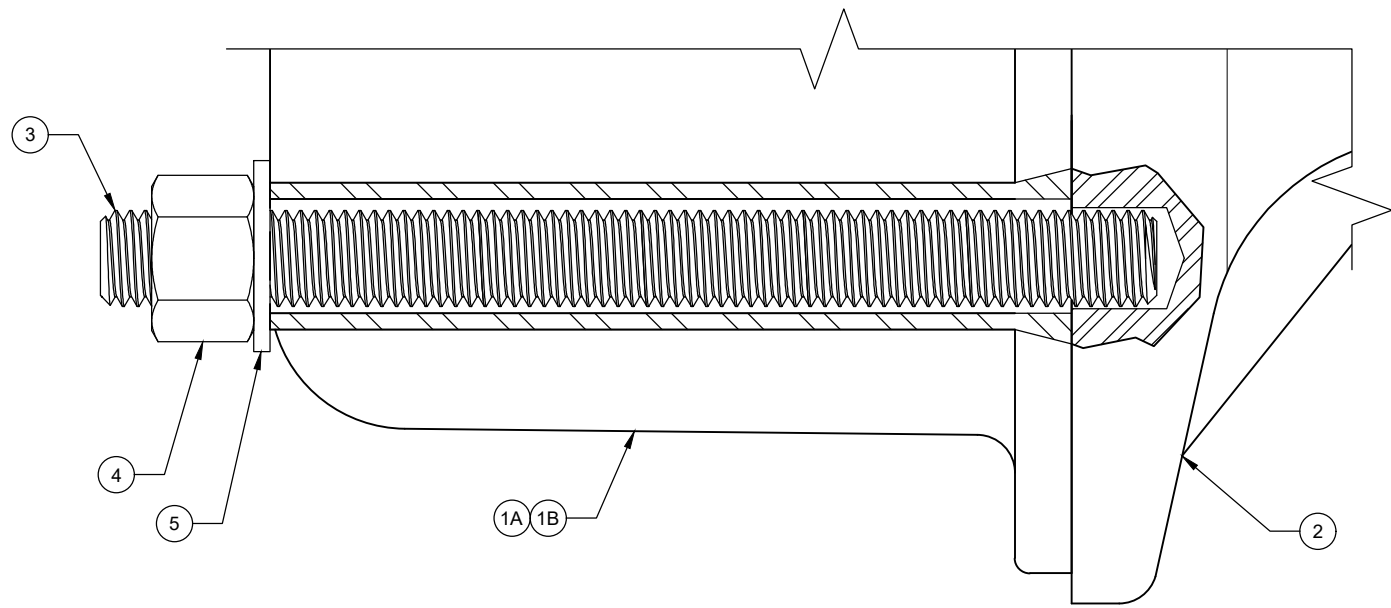
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:		SYSTEM DRAWING	APPROVED FOR CONSTRUCTION	CDL ZK	29JAN2020
		SEGMENTAL DUCT COUPLER INSTALLATION GUIDE	DESCRIPTION	BY	CHK
TITLE:		SYSTEM	NO		
PROJECT NO:		SYSTEM			
SHEET NO:		NTS			
		A243 - 6 of 8			
STRUCTURAL TECHNOLOGIES		Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL STRUTURAL TECHNOLOGIES, LLC CORPORATE OFFICE 10150 OLD COLUMBIA RD COLUMBIA, MD 21046 PHONE: (410) 850-7000 structuraltechnologies.com			

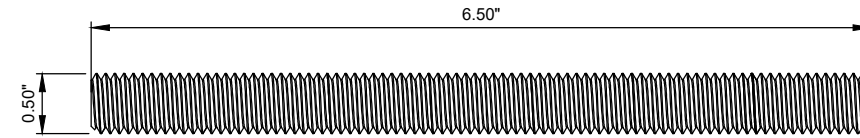




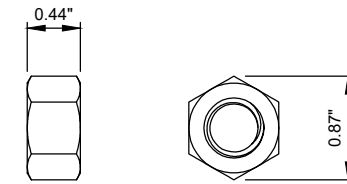
ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System



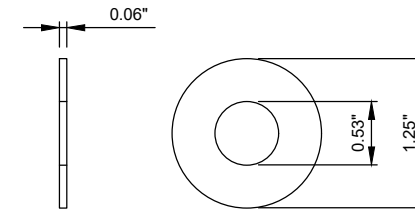
**CAP TO BEARING PLATE BOLTED ASSEMBLY**



**3 1/2"-13 THREADED ROD**



**4 1/2"-13 NUT**



**5 1/2" WASHER**

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWGM #
1A	1	ECI 6-12 GROUT CAP W/ 3/4" NPT HORIZ. PORT	ABS PER ASTM D4673	02GC61201V	C801
1B	1	ECI 6-12 GROUT CAP W/ 3/4" NPT VERT. PORT	ABS PER ASTM D4673	02GC61201	C860
2	1	ECI 6-12 BEARING PLATE GALVANIZED PER ASTM A123	IRON GR80-55-06 PER ASTM A536	02BP0037	C553
3	1 SET	1/2"-13 THREADED ROD X 6 1/2"	(316L) STAINLESS PER ASTM F593	02WX5021D	A345
4	1 SET	1/2"-13 NUT	(316L) STAINLESS PER ASTM A240	02WX5021D	A345
5	1 SET	1/2" WASHER	(316L) STAINLESS PER ASTM A240	02WX5021D	A345

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWING

ECI 6-12 BOLT ASSEMBLY

PROJECT NO:  
SYSTEM

SCALE:  
NTS

SHEET NO:

A345

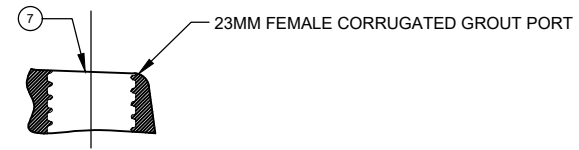
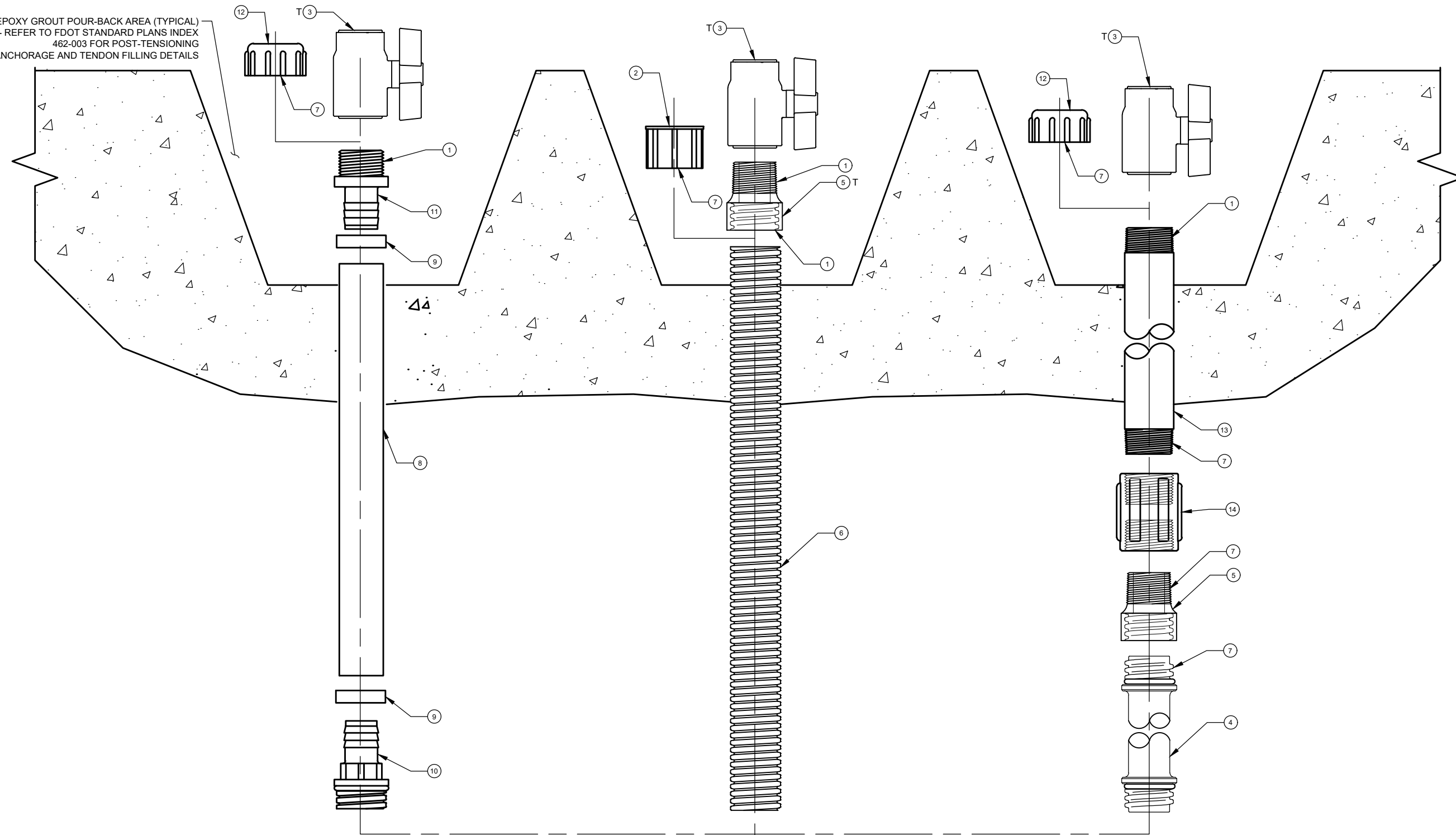
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

APPROVED FOR CONSTRUCTION  
 NO  
 DESCRIPTION

CDL ZX  
 BY  
 DATE  
 29JAN2020

EPOXY GROUT POUR-BACK AREA (TYPICAL)  
- REFER TO FDOT STANDARD PLANS INDEX  
462-003 FOR POST-TENSIONING  
ANCHORAGE AND TENDON FILLING DETAILS



ELECTRONIC FILE LOCATION: I:\S\1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Grouting Accessories

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1	-	SILICONE GREASE	COMMERCIALY AVAILABLE	-	-
2	1	23MM GROUT HOSE CAP	HDPE BLACK PER ASTM D3350	02DT0314	C586
3	1	PVC 1/4 TURN BALL VALVE W/ 3/4" FNPT	WHITE SCH 80 PVC	02DT01916	C720
4	1	23MM BP GROUT EXTENSION	WHITE POLYPROPYLENE PER ASTM D4101	02DT0318	C714
5	1	BR PLATE BUSHING 3/4" NPT 23MM	BLACK POLYPROPYLENE PER ASTM D4101	02DT0316	C715
6	-	23MM GROUT HOSE	HDPE BLACK PER ASTM D3350	02DT0310	C587
7	-	BONDUIT	COMMERCIALY AVAILABLE	-	-
8	1	3/4" SMOOTH HOSE	HDPE BLACK PER ASTM D3350	02DT01901	C685
9	2	3/4" ONE EAR BAND CLAMP	(316L) STAINLESS PER ASTM A240	02DT01905	C690
10	1	3/4" HOSE BARB TO 23MM FITTING	BLACK POLYPROPYLENE PER ASTM D4101	02DT01903	C692
11	1	3/4" HOSE BARB TO 3/4" NPT FITTING	BLACK POLYPROPYLENE PER ASTM D4101	02DT01908	C694
12	1	RIBBED CAP 3/4" FNPT	BLACK POLYPROPYLENE PER ASTM D4101	02DT01912	C701
13	1	3/4" NPT PP NIPPLE	SCH 80 POLYPROPYLENE PER ASTM D4101	-	C723
14	1	3/4" NPT F/F PP COUPLER	BLACK POLYPROPYLENE PER ASTM D4101	02DT01931	C775

- NOTES:
- ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.
  - ALL COMPONENTS MUST BE PRESSURE RATED FOR 150 PSI MINIMUM CONCRETE COVER SHALL BE 2" AND MUST MEET FDOT STRUCTURES DESIGN GUIDELINES SECTION 1.4.2
  - COMPONENTS MAY BE ASSEMBLED AS A VENT OR A DRAIN AS REQUIRED.

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

# structural TECHNOLOGIES

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046  
 PHONE: (410) 860-7000  
 structuraltechnologies.com

DATE

SYSTEM DRAWING

APPROVED FOR CONSTRUCTION

CDL ZX

29JAN2020

PROJECT NO:

DESCRIPTION

BY

CHK

TITLE:

SCALE:

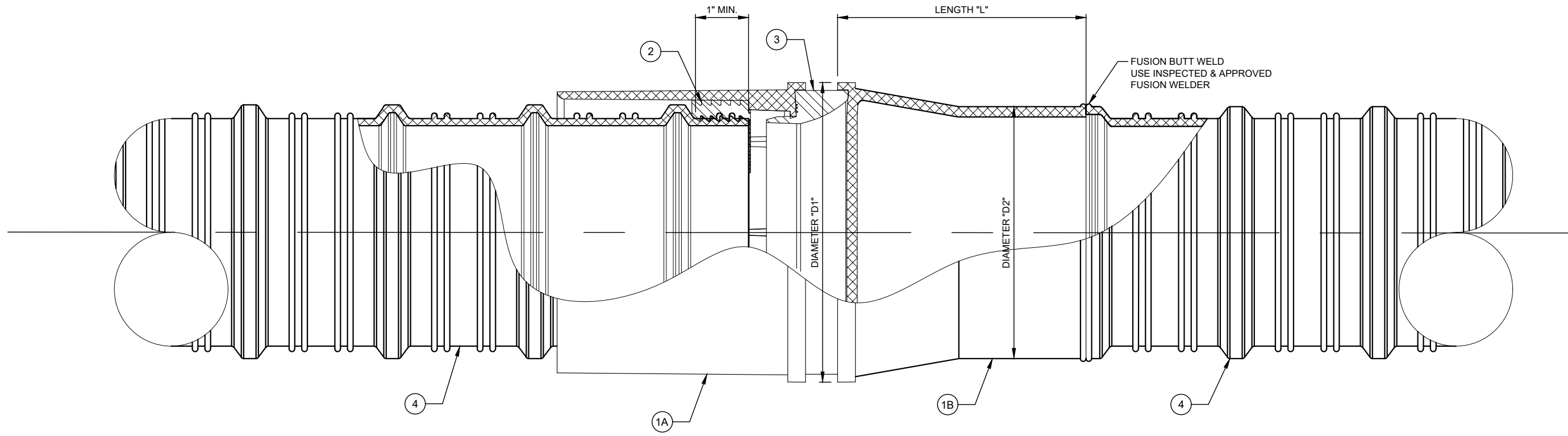
SHEET NO:

NTS

**A362**



ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



**ELEVATION VIEW**

**76MM SEGMENTAL DUCT COUPLER**

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1A	1	76MM DUCT SC - HUB	WHITE POLYPROPYLENE PER ASTM D4101	02SC07601	C646
1B	1	76MM DUCT SC - TAPERED HUB	WHITE POLYPROPYLENE PER ASTM D4101	02SC07610	C779
2	1	76MM DUCT SC - HUB SEAL	SANTOPRENE PER FDOT 960 TABLE 2.2.1.7-2	02SC07602	C647
3	1	76MM DUCT SC - FACE SEAL	SANTOPRENE PER FDOT 960 TABLE 2.2.1.7-2	02SC07603	C649
4	-	DUCT WHT PP 76MM PT-PLUS	WHITE POLYPROPYLENE PER ASTM D4101	02DT0426	C684B

**TAPERED HUB SIZE CHART**

DESCRIPTION	LENGTH "L"	DIAMETER "D1"	DIAMETER "D2"
76MM DUCT SC - TAPERED HUB	3.09"	4.00"	3.27"

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWINGS

TITLE:  
**76MM GROUDED SEGMENTAL DUCT COUPLER CONNECTION**

PROJECT NO:  
**SYSTEM**

SHEET NO:

SCALE:  
**NTS**

**A365B**

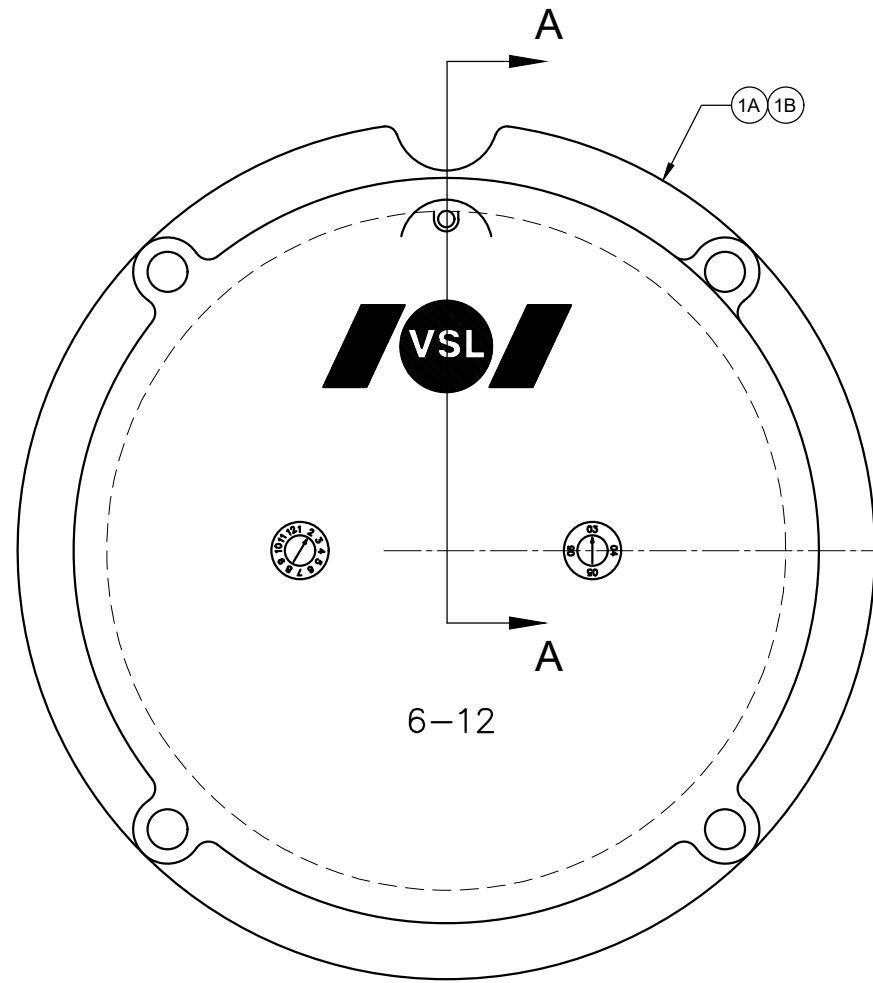
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

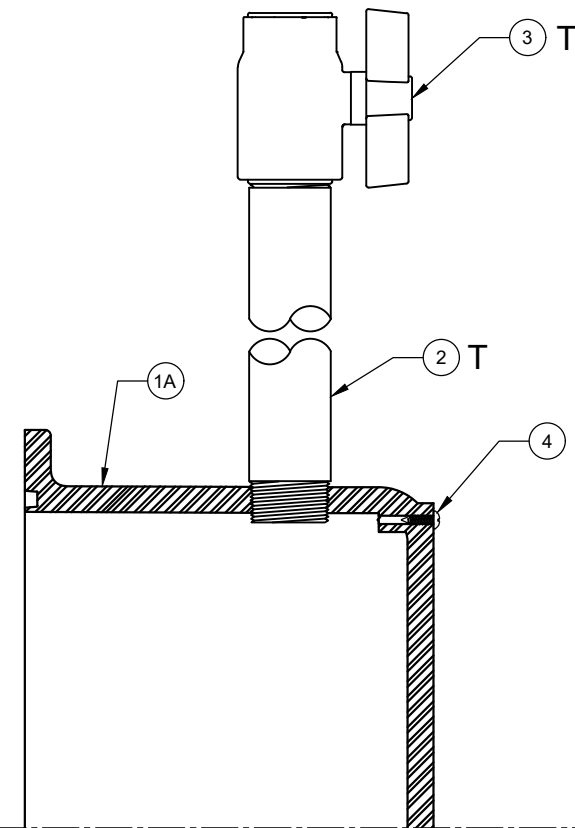
APPROVED FOR CONSTRUCTION  
 NO  
 DESCRIPTION

CDL ZX  
 BY CHK  
 DATE 29JAN2020

ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System

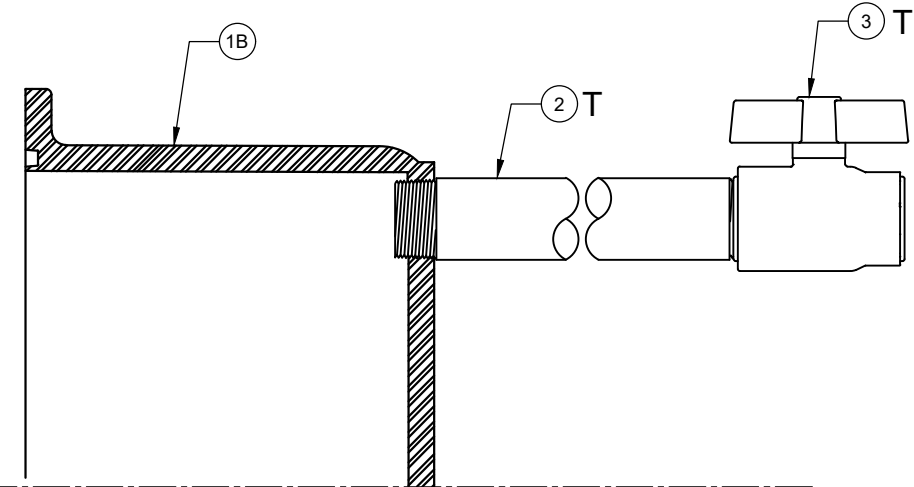


ECI 6-12 GROUT CAP

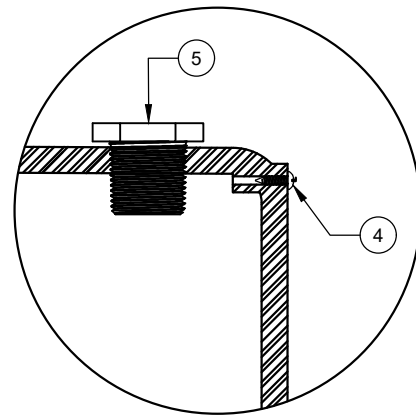


TOP PORT

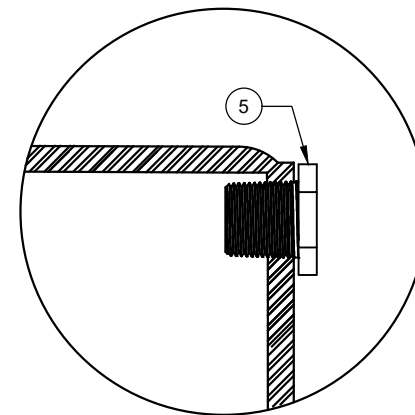
SECTION A-A



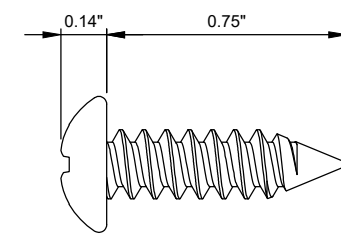
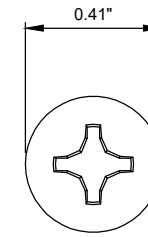
FRONT PORT



AFTER GROUT



AFTER GROUT



ITEM	DESCRIPTION	MATERIAL	INVENTORY #
4	3/16" PAN HEAD SCREW	(316L) STAINLESS	02WX7001

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1A	1	ECI 6-22 GROUT CAP W/ 3/4" VERT. PORT	ABS LUSTRAN 633 PER ASTM D4673	02GC61201	C860
1B	1	ECI 6-22 GROUT CAP W/ 3/4" HORIZ. PORT	ABS LUSTRAN 633 PER ASTM D4673	02GC61201V	C801
2	1	3/4" NPT PVC NIPPLE	SCH 80 WHITE PVC	-	C887
3	1	1/4 TURN PVC BALL VALVE W/ 3/4" FNPT	SCH 80 WHITE PVC	02DT01916	C720
4	1	3/16" PAN HEAD SCREW	(316L) STAINLESS PER ASTM A240	02WX7001	A366
5	1	3/4" NPT PE PLUG	HDPE BLACK PER ASTM D3350	02DT01913	C583

NOTE: ITEMS MARKED WITH A "T" ARE TEMPORARY AND ARE NOT A PERMANENT PART OF THE SYSTEM.

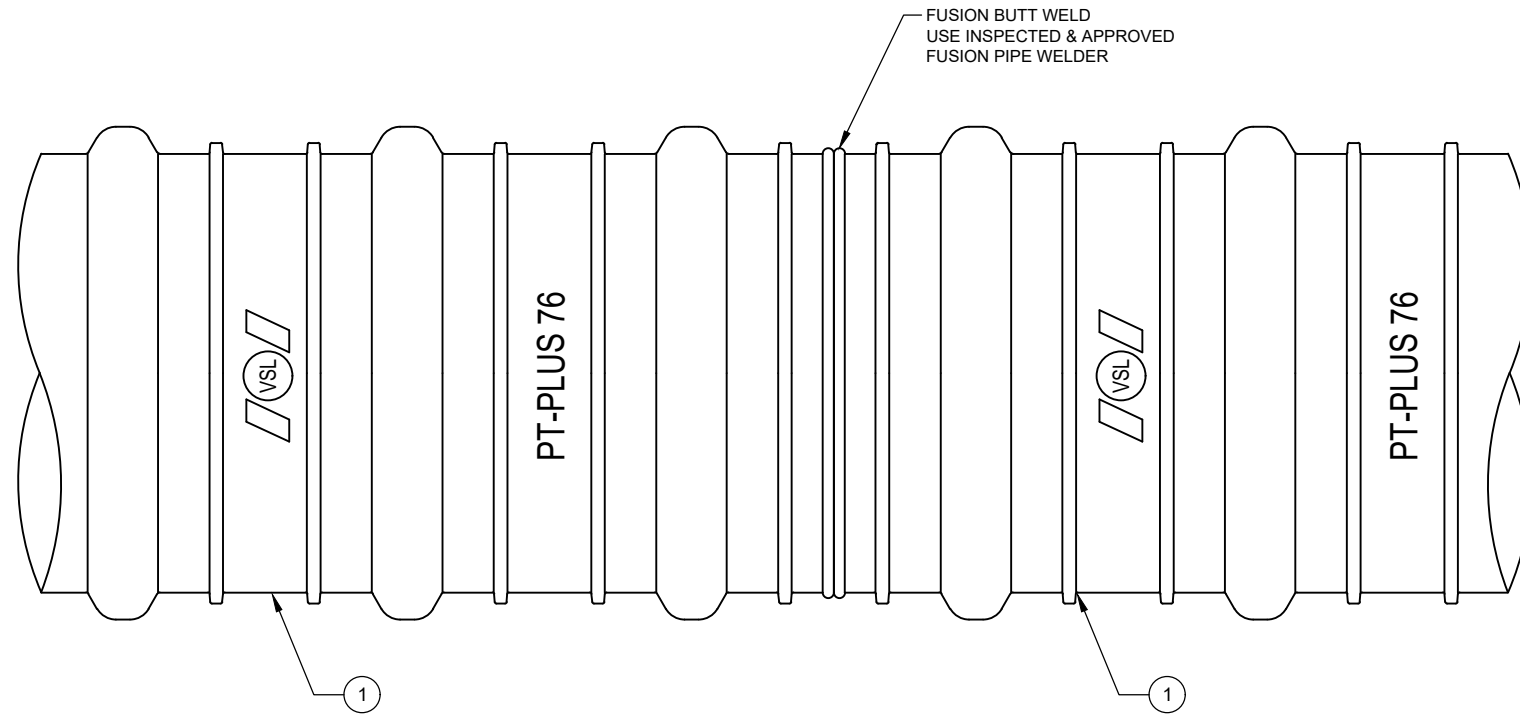
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:		APPROVED FOR CONSTRUCTION	CDL	ZX	29JAN2020	DATE
SYSTEM DRAWING		NO	BY	CHK	DESCRIPTION	
TITLE:		ECI 6-12 GROUT CAP ALTERNATIVE VENT DETAIL				
PROJECT NO:		SYSTEM		SCALE:		NTS
SHEET NO:		A366				

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046  
 PHONE: (410) 860-7000 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT\_Test 2017\ECI 6-12 Grouted System



ELEVATION VIEW

**NOTES:**

1. 76MM PT-PLUS DUCT MEETS FDOT 960 SPEC.
2. SEE VSL BUTT-WELDING PROCEDURE IN APPENDIX.
3. ADJUST THE LOCATION OF THE LAST FUSION BUTT WELD SO THAT THE FINAL DUCT COUPLER CONNECTION CAN BE APPLIED PROPERLY.

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1	2	DUCT, WHT PP, 76 MM PT-PLUS	WHITE POLYPROPYLENE PER ASTM D4101	02DT0426	C684

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:  
**76MM PT-PLUS BUTT WELD CONNECTION**

PROJECT NO:  
SYSTEM

SHEET NO:

SCALE:  
NTS

**A379**

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY

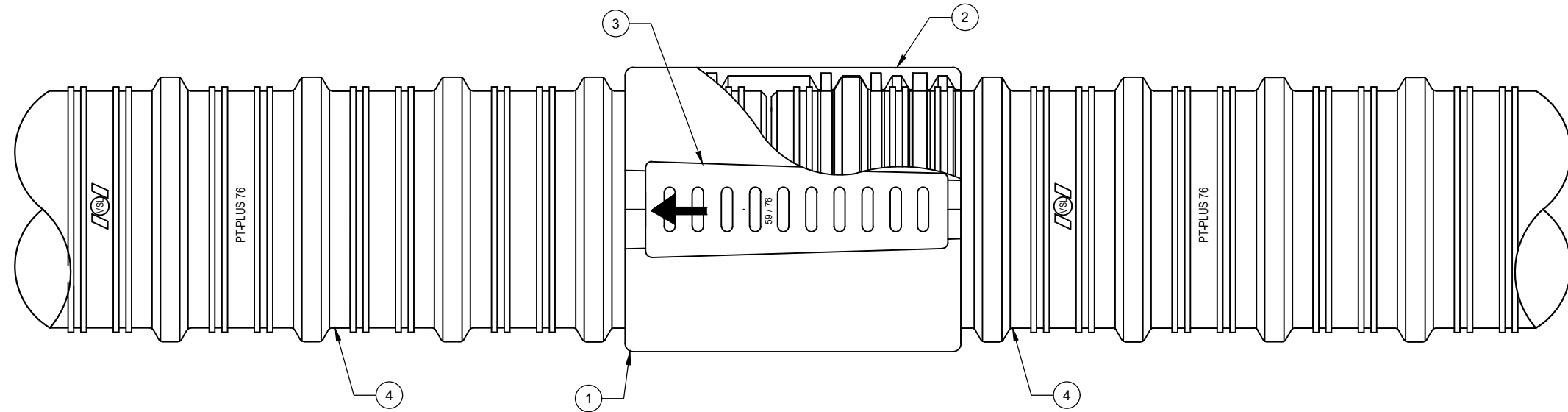
CHK

DATE  
29JAN2020

**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 860-7000  
 structuraltechnologies.com

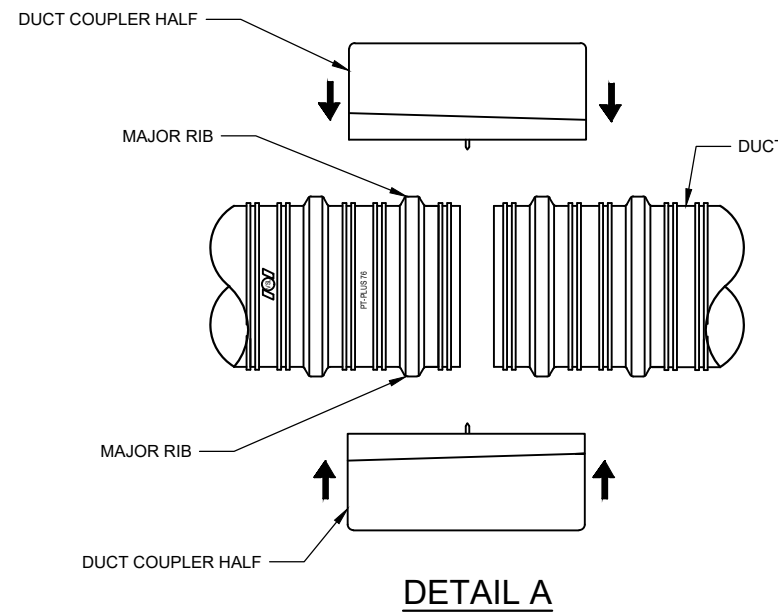
ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECJ 6-12 Grouted System



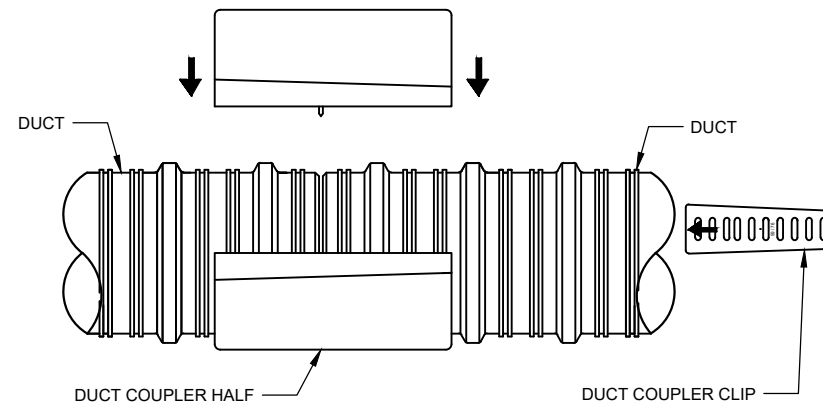
**ELEVATION VIEW**

**INSTALLATION PROCEDURES**

1. CUT DUCT HALF WAY BETWEEN 2 MAJOR RIBS SEE DETAIL A
2. INSTALL DUCT INTO COUPLER HALF. PLACE COUPLER HALF OVER MAJOR RIB. SEE DETAIL B
3. PLACE SECOND COUPLER HALF OVER DUCT, USING INTERLOCKING PINS TO CENTER SECOND COUPLER HALF
4. PARTIALLY INSTALL COUPLER CLIPS IN DIRECTION INDICATED BY ARROWS SHOWN ON COUPLER HALF.
5. INSURE BOTH DUCTS ARE SECURED IN COUPLER.
6. FINISH INSTALLATION OF CLIPS.



**DETAIL A**



**DETAIL B**

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960.

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1	2	COUPLER HALF, 76 MM PT-PLUS	BLACK POLYPROPYLENE PER ASTM D4101	02DT0027	C626
2	2	SEAL (INCLUDED IN COUPLER HALF)	SANTOPRENE PER FDOT TABLE 2.2.1.7-2	02DT0027	C626
3	2	COUPLER CLAMP, 76 MM PT-PLUS	BLACK POLYPROPYLENE PER ASTM D4101	02DT0029	C628
4	-	DUCT, WHT PP, 76 MM PT-PLUS	WHITE POLYPROPYLENE PER ASTM D4101	02DT0426	C684B

\* SEE SHEET C626 FOR COUPLER HALF, 76 MM PT-PLUS VENTED

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

NO	APPROVED FOR CONSTRUCTION	CDL	ZX	29JAN2020
	DESCRIPTION	BY	CHK	DATE

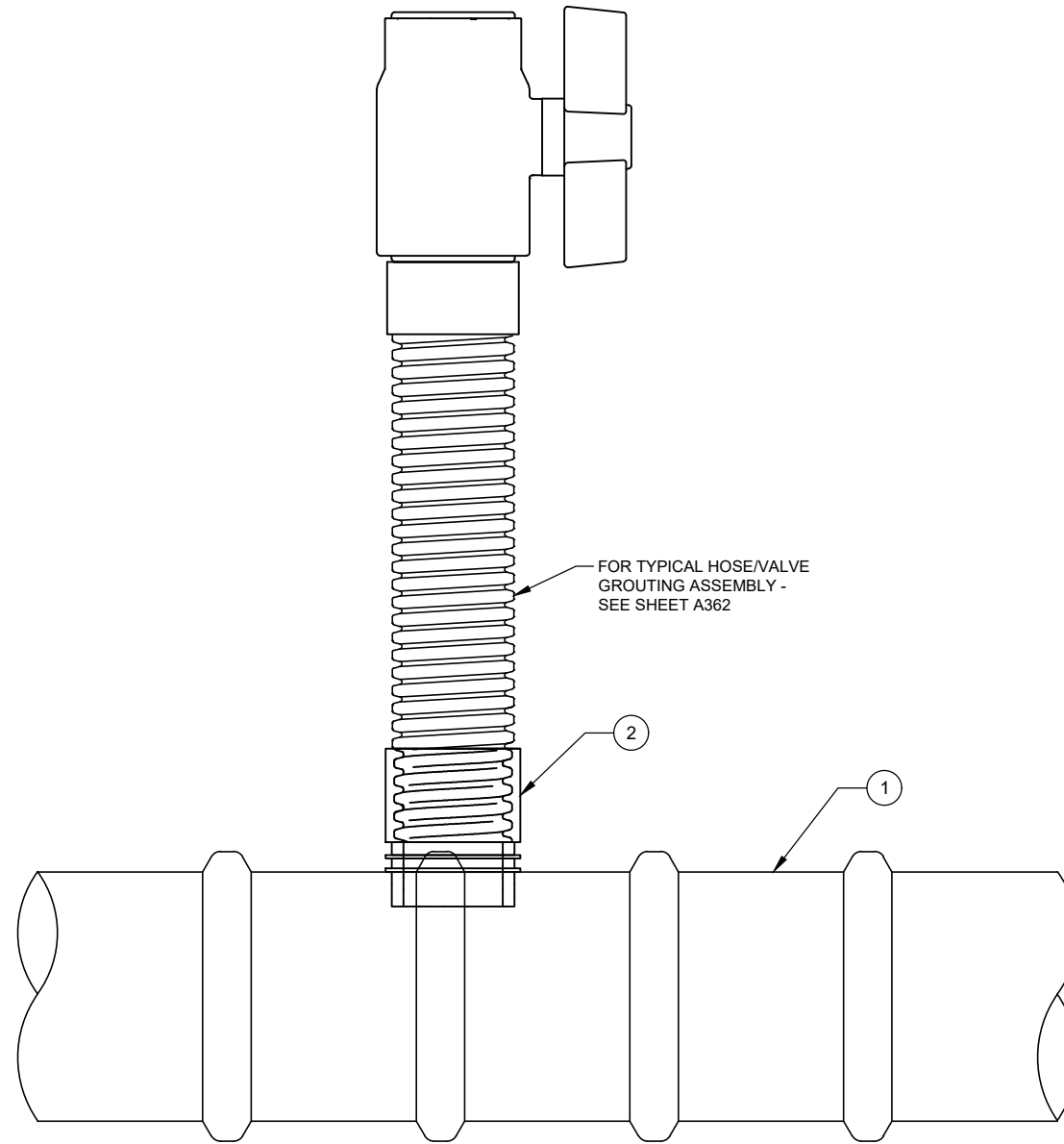
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 10150 OLD COLUMBIA RD  
 COLUMBIA, MD 21046

PHONE: (410) 850-7000  
 structuraltechnologies.com

PROJECT INFORMATION:	SYSTEM DRAWING
TITLE:	TYPICAL 76MM PT-PLUS DUCT TO DUCT CONNECTION
PROJECT NO:	SYSTEM
SHEET NO:	NTS
	<b>A426</b>

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System



**ELEVATION VIEW**

**23MM EXTERNAL GROUT PORT INSTALLATION**

1. CLEAN DUCT PRIOR TO GROUT PORT INSTALLATION.
2. DRILL Ø7/8" HOLE INTO DUCT AT CORRUGATED LOCATION (OPTIONAL).
3. CONNECT THE SOCKET WELDING DEVICE TO THE POWER SOURCE.
4. ALLOW THE SOCKET WELDING DEVICE TO REACH ITS WORKING TEMPERATURE.
5. SIMULTANEOUSLY, INSERT MALE ADAPTER OF SOCKET WELDING DEVICE FROM DRILLED HOLE AND GROUT PORT FROM FEMALE ADAPTER.
6. APPLY LIGHT PRESSURE FOR 20-25 SECONDS BY PUSHING THE GROUT PORT WITH THE PALM OF HAND.
7. SIMULTANEOUSLY, REMOVE SOCKET WELDING DEVICE FROM DRILLED HOLE AND GROUT PORT FROM FEMALE ADAPTER.
8. INSERT GROUT PORT INTO HOLE UNTIL THE SHOULDER IS REACHED.
9. THIS OPERATION SHOULD BE CARRIED OUT AS QUICKLY AND CAREFULLY AS POSSIBLE, WITHIN 5 SECONDS. FIRMLY HOLD THE PIECES TOGETHER FOR A MINIMUM OF 10 SECONDS.

**NOTES:**

1. MATERIALS MEET OR EXCEED FDOT SPECIFICATION 960.
2. FITTINGS ARE RATED TO 150 PSI.

ITEM	QTY	DESCRIPTION	MATERIAL	INVENTORY #	DWG #
1	-	DUCT WHT PP 76MM PT-PLUS	WHITE POLYPROPYLENE PER ASTM D4101	02DT0426	C684B
2	1	EXTERNAL GROUT PORT 23MM	BLACK POLYPROPYLENE PER ASTM D4101	02DT0250	C585

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWING

76MM PT-PLUS DUCT W/ GROUTING VENT

PROJECT NO:  
SYSTEM

SHEET NO:

SCALE:  
NTS

A435

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY

CDL ZX

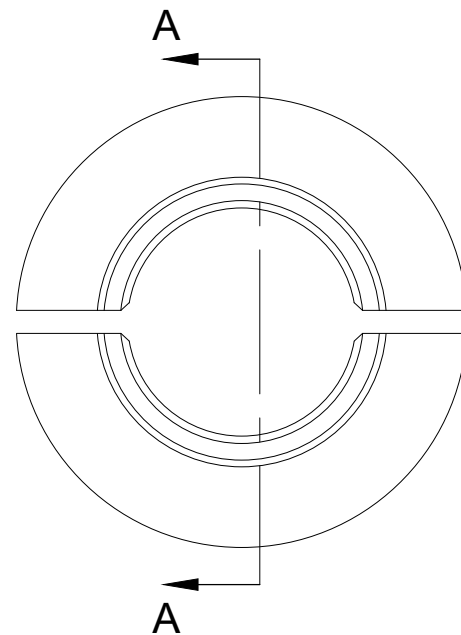
CHK

DATE

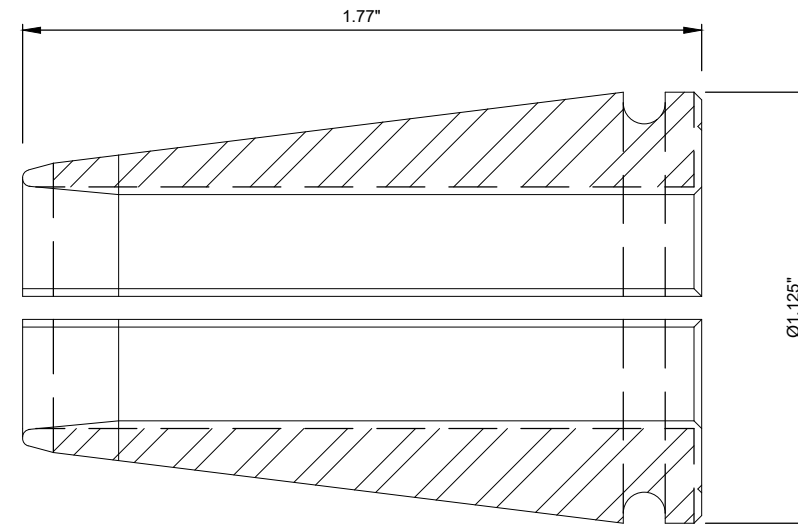
29JAN2020

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 PHONE: (410) 860-7000  
 structuraltechnologies.com  
 STRUCTURAL TECHNOLOGIES, LLC  
 10150 OLD COLUMBIA RD  
 COLUMBIA, MD 21046  
 CORPORATE OFFICE

ELECTRONIC FILE LOCATION: I:\VSL\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Strand



**0.6" DIA. MULTIWEDGES  
TYPE 1.6G**



**SECTION A-A**

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
0.6" MULTIWEDGE TYPE 1.6G	AISI 11-L-17/12L14 PER ASTM A108, PRODUCED IN STRICT ACCORDANCE WITH VSL MS 3.1.006, CASE HARDENED	02WG0008

PROJECT INFORMATION:

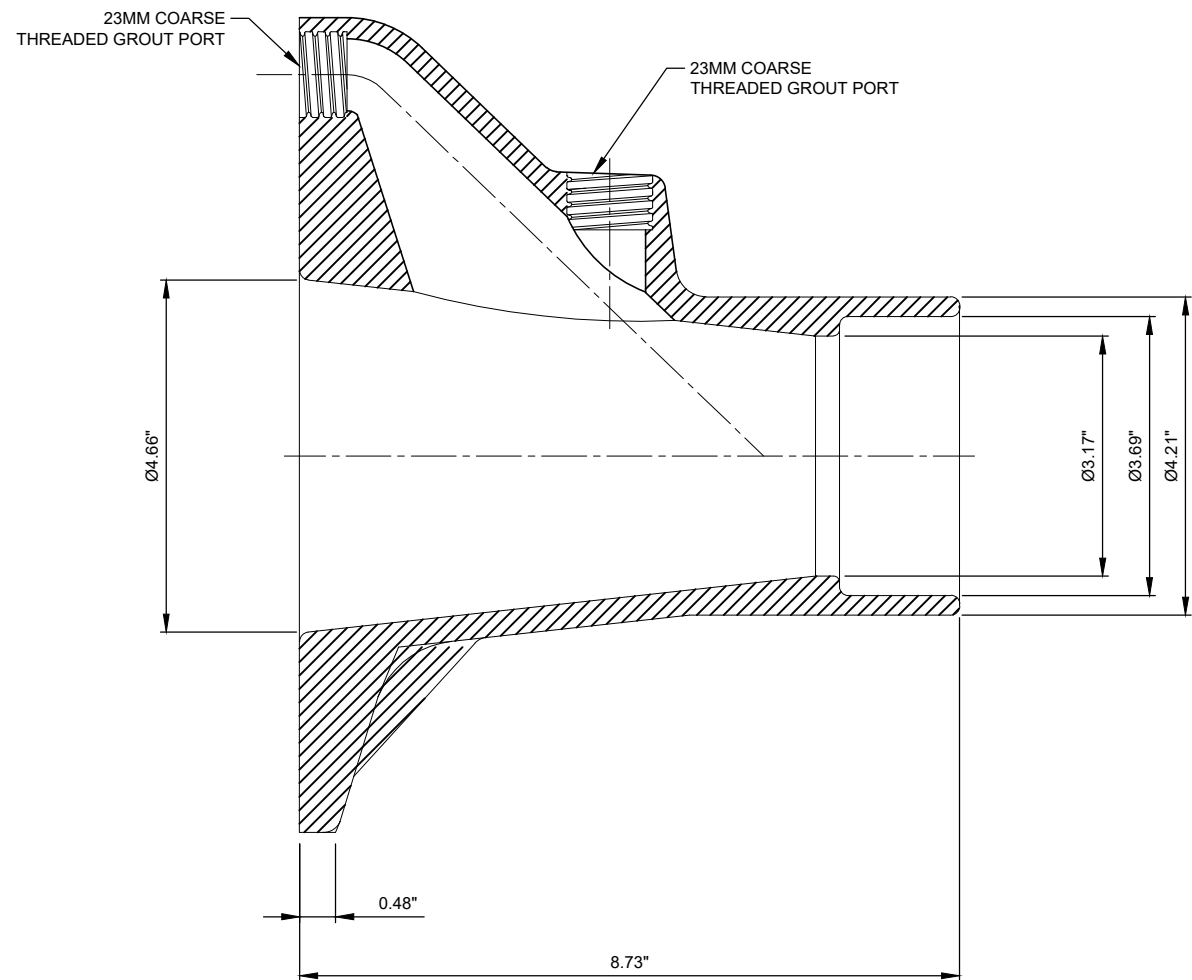
PROJECT NO:	SYSTEM
SHEET NO:	C218
TITLE:	0.6" MULTIWEDGE TYPE 1.6G

NO	APPROVED FOR CONSTRUCTION
----	---------------------------

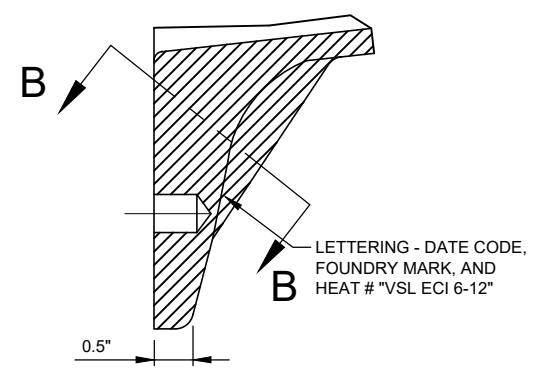
BY	CDL ZX	DATE	29JAN2020
DESCRIPTION	APPROVED FOR CONSTRUCTION		

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

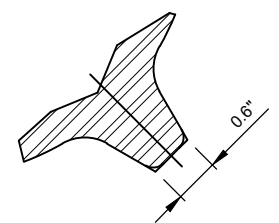
ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System



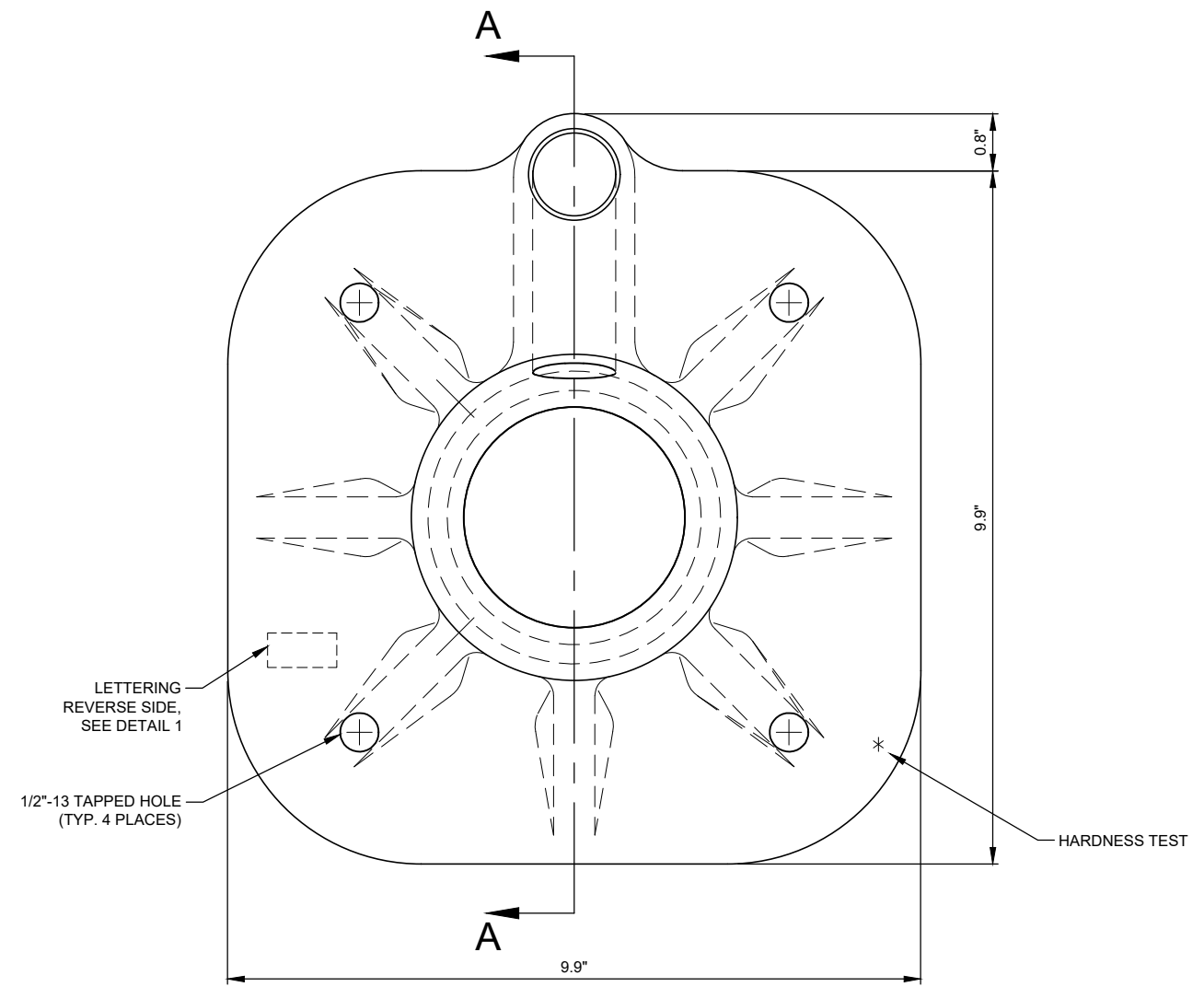
**SECTION A-A**



**DETAIL 1**



**SECTION B-B**



**BACK VIEW**

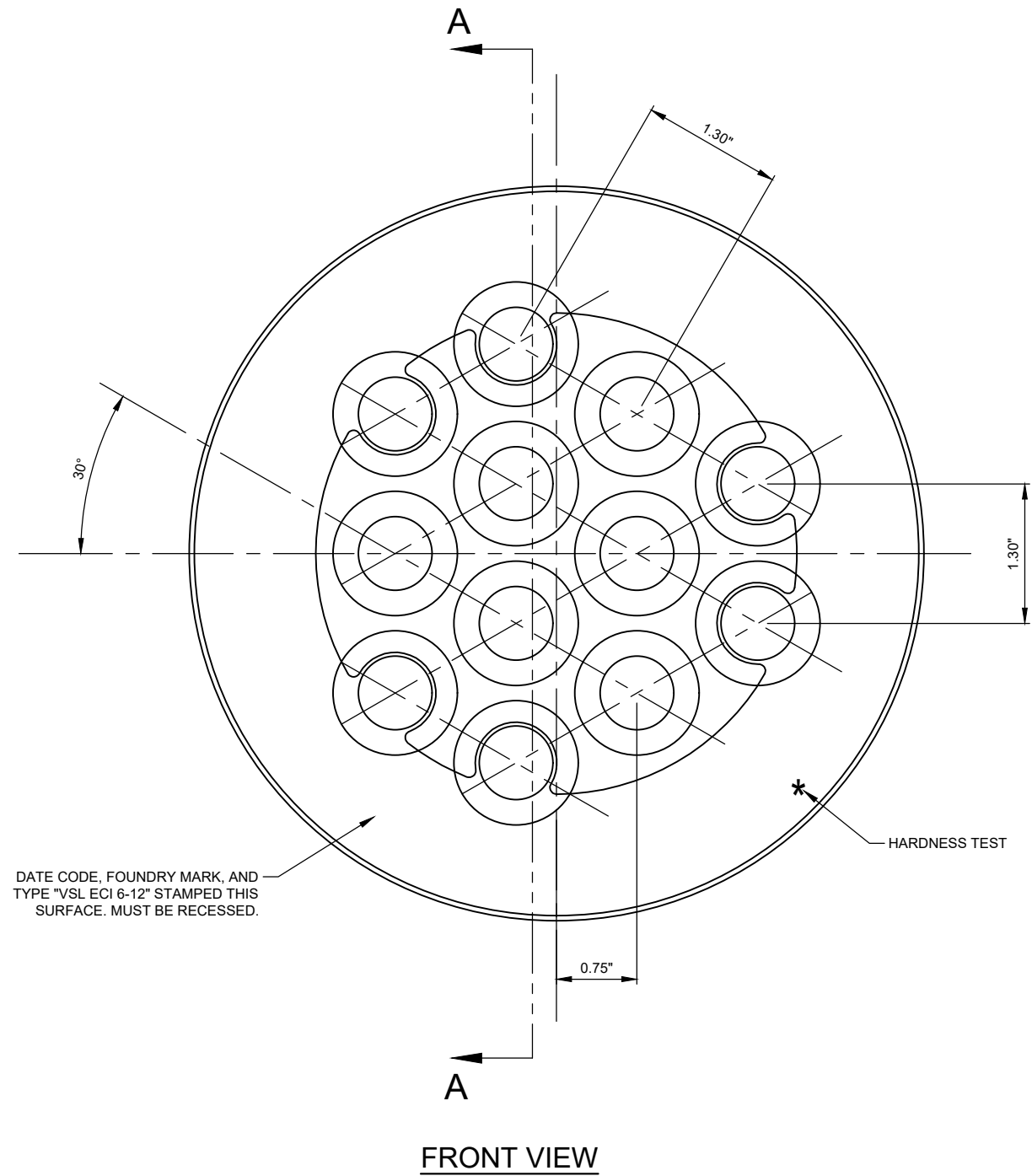
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
ECI 6-12 BEARING PLATE GALVANIZED PER ASTM A123	CAST IRON GR80-55-06 PER ASTM A536	02BP0037

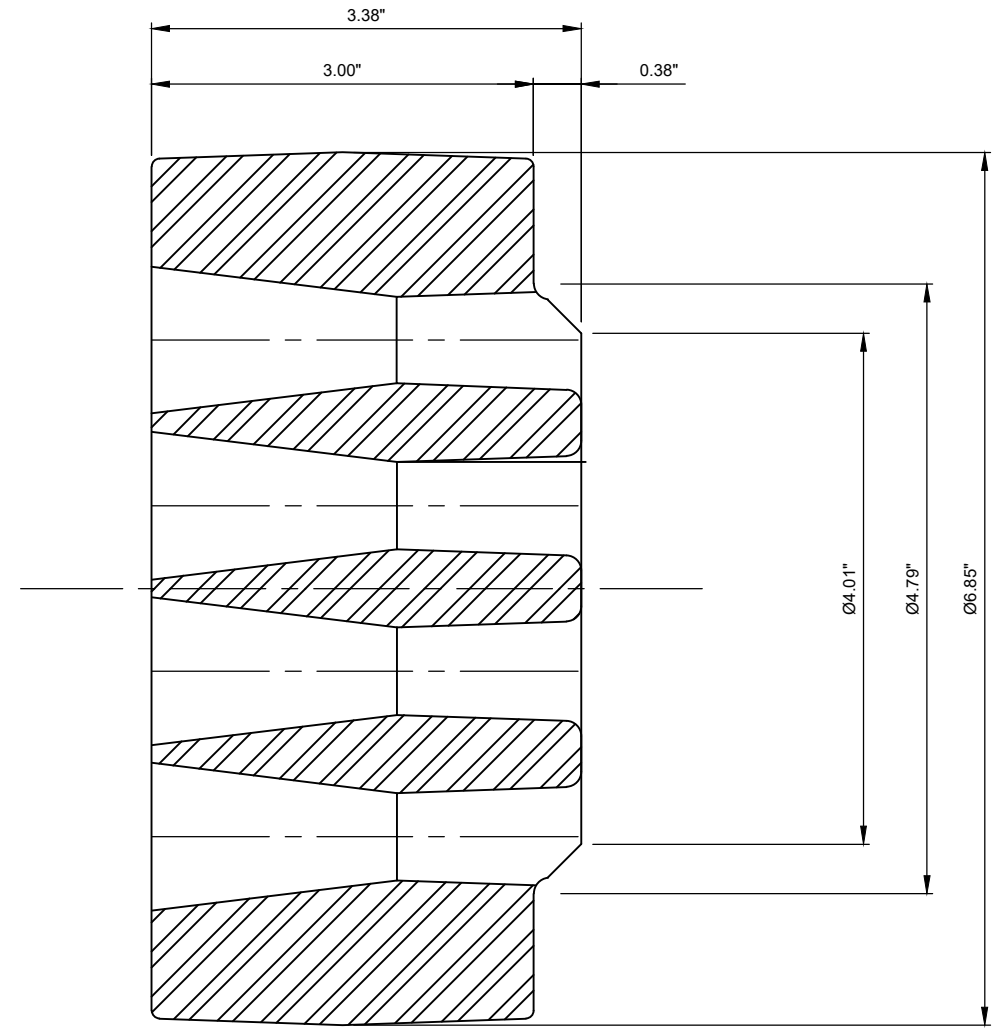
<p><b>structural TECHNOLOGIES</b></p> <p>Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL</p> <p>10150 OLD COLUMBIA RD COLUMBIA, MD 21046</p> <p>PHONE: (410) 850-7000 structuraltechnologies.com</p>		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		DESCRIPTION	BY	DATE
PROJECT INFORMATION:	SYSTEM DRAWING	NO	CHK	
TITLE:	ECI 6-12 BEARING PLATE	SCALE:	NTS	
SHEET NO:				<b>C553</b>

ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Flexible Filler Submittal



DATE CODE, FOUNDRY MARK, AND TYPE "VSL ECI 6-12" STAMPED THIS SURFACE. MUST BE RECESSED.

**FRONT VIEW**



**SECTION A-A**

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

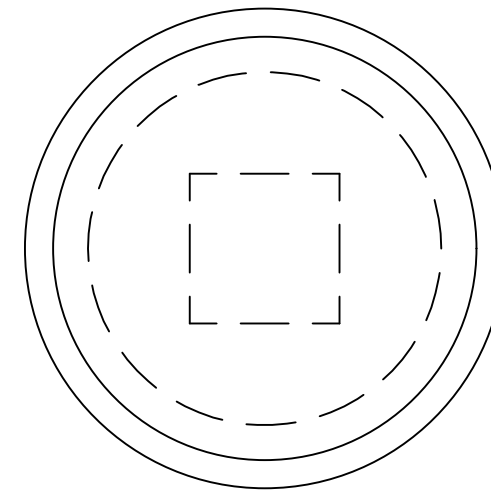
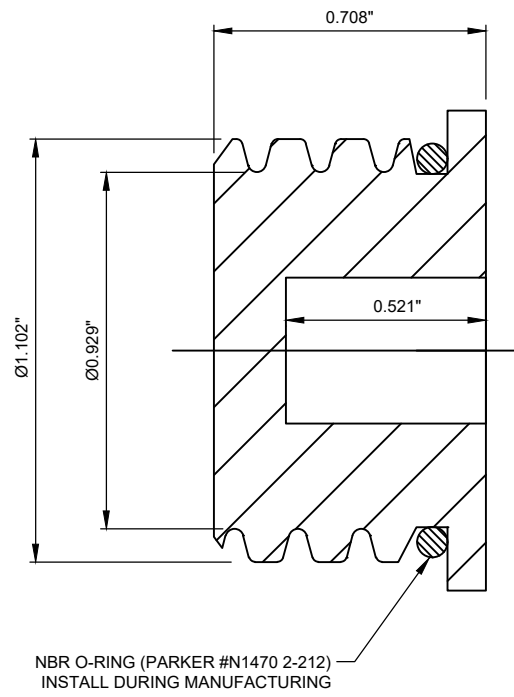
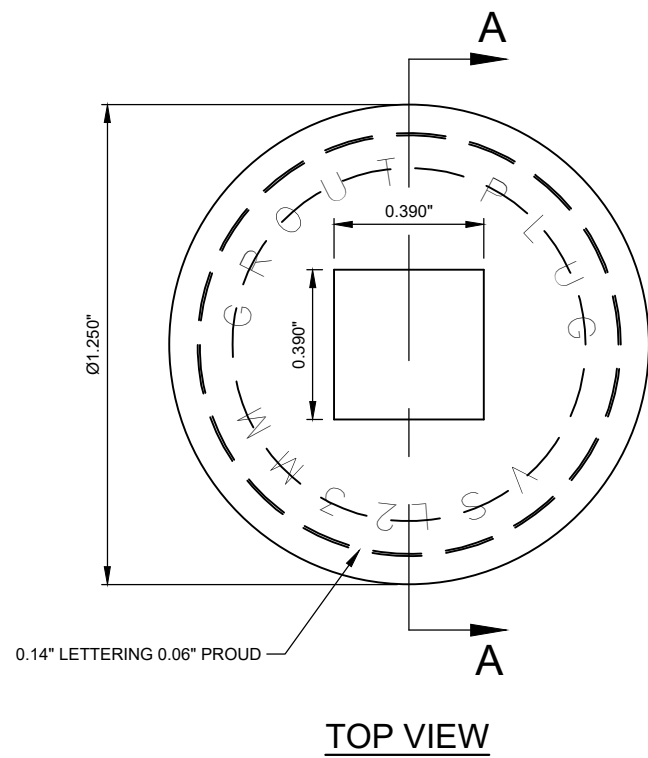
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
ECI 6-12 ANCHOR HEAD	IRON GR 80-55-06 PER ASTM A536	02AH0037

<p><b>structural TECHNOLOGIES</b>                  Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL                  STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046                  CORPORATE OFFICE PHONE: (410) 850-7000 structuraltechnologies.com</p>		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		DESCRIPTION	BY	CHK
PROJECT INFORMATION:	SYSTEM DRAWING	NO		
	ECI 6-12 ANCHOR HEAD			
PROJECT NO:	SYSTEM	SCALE:	NTS	
SHEET NO:				C556



ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Grouting Accessories



NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
BEARING PLATE GROUT PLUG 23MM	HDPE BLACK PER ASTM D3350	02DT0341

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:  
**BEARING PLATE GROUT PLUG 23MM**

PROJECT NO:  
**SYSTEM**

SCALE:  
**NTS**

SHEET NO:  
**C583**

NO

APPROVED FOR CONSTRUCTION  
DESCRIPTION

BY  
CDL ZX

CHK  
BY

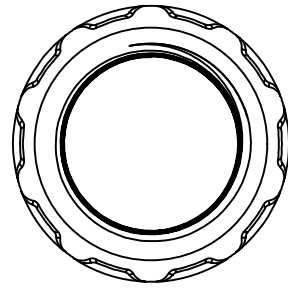
DATE  
29JAN2020

**structural TECHNOLOGIES**

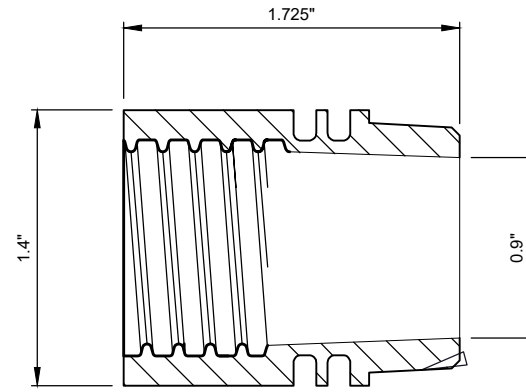
Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046

PHONE: (410) 860-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\VSLAB 6-4\_48mm\_Grouted



END VIEW



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
EXTERNAL GROUT PORT 23MM	BLACK POLYPROPYLENE PER ASTM D4101	02DT0250

PROJECT INFORMATION:

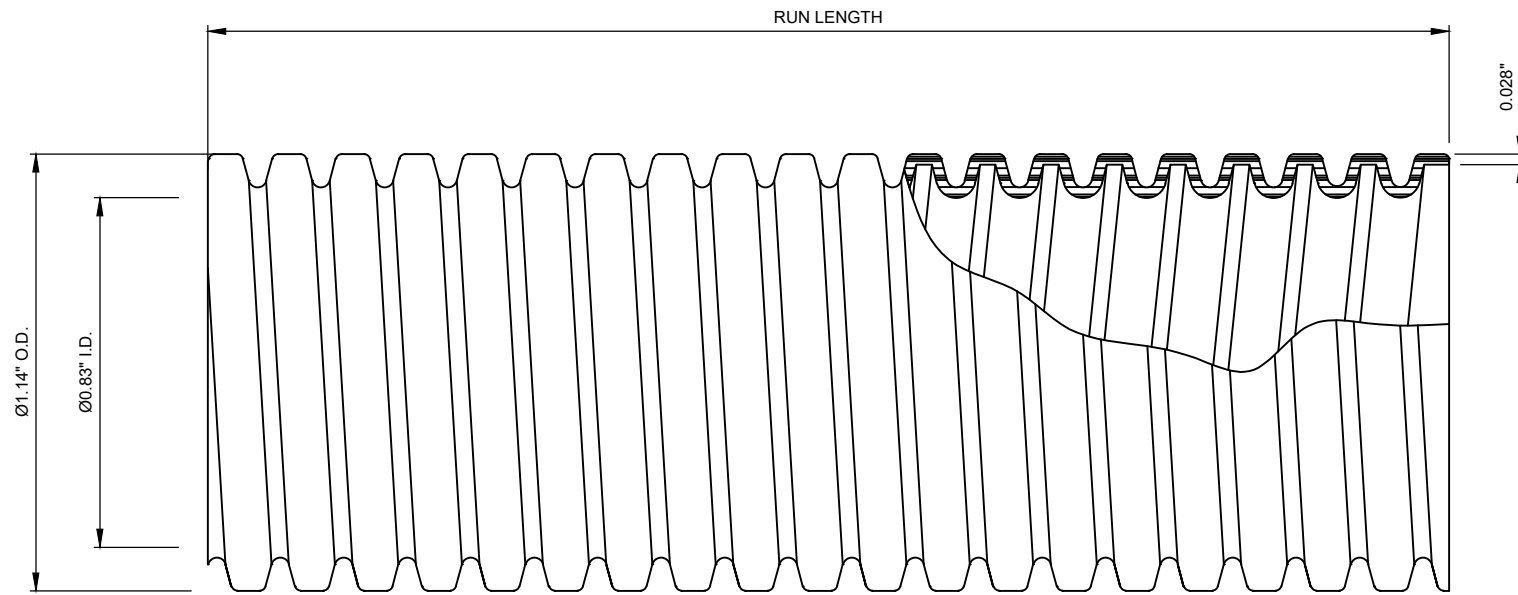
PROJECT NO:	SYSTEM
SHEET NO:	C585
TITLE:	EXTERNAL GROUT PORT 23MM

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
NO	DESCRIPTION	BY	CHK
			DATE



ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Grouting Accessories



SIDE VIEW

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
23MM GROUT HOSE	HDPE BLACK PER ASTM D3350	02DT0310

PROJECT INFORMATION:

SYSTEM DRAWING

23MM GROUT HOSE

PROJECT NO:  
SYSTEM

SCALE:  
NTS

SHEET NO:

C587

NO

APPROVED FOR CONSTRUCTION

CDL ZX

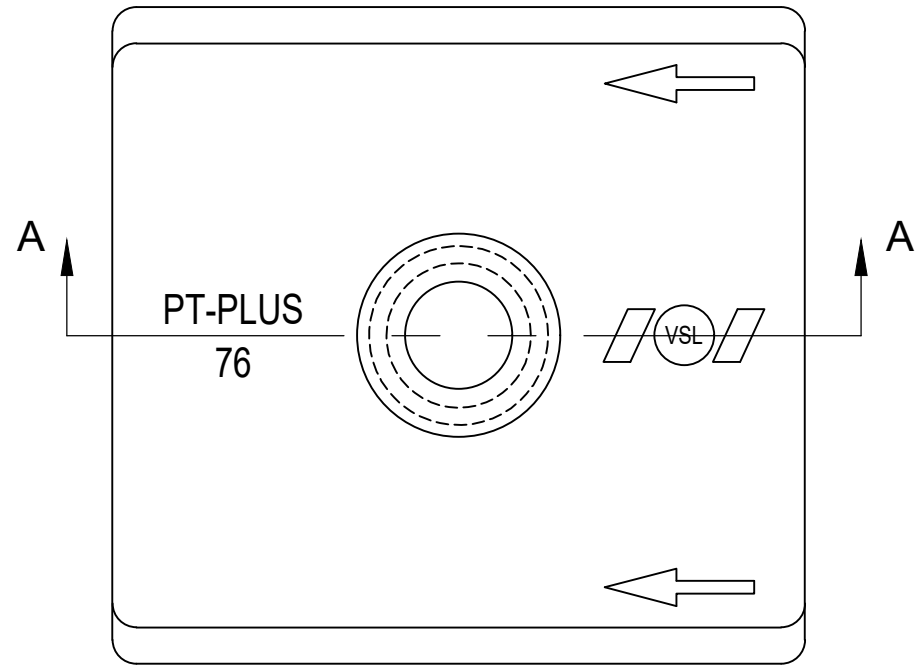
BY

CHK

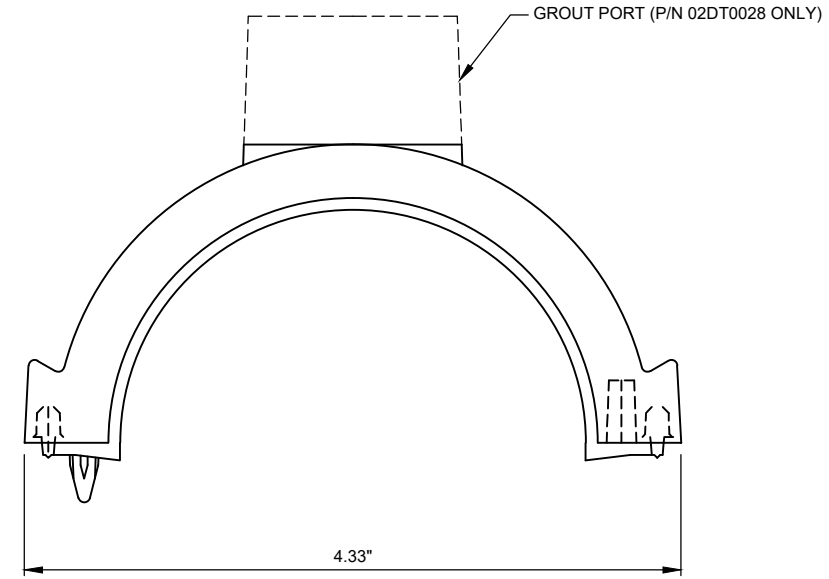
DATE

29JAN2020

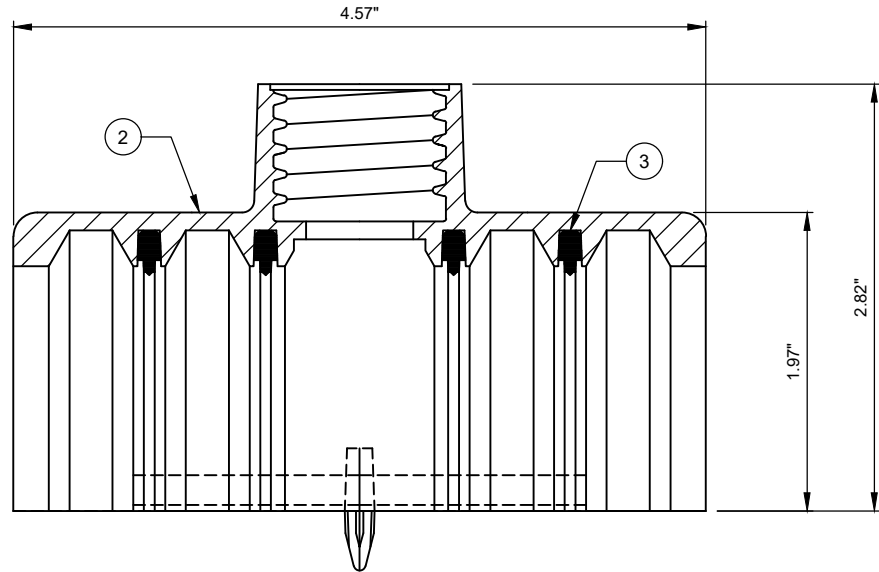
**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com



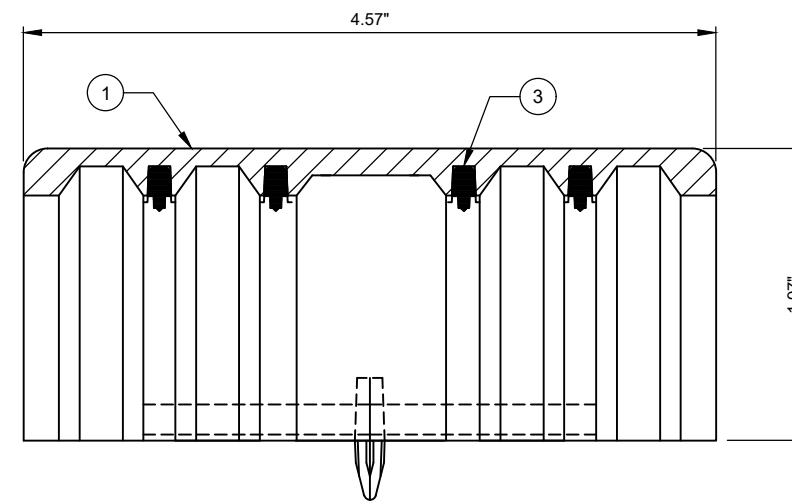
TOP VIEW



SIDE VIEW



HALF SHELL W/ VENT  
SECTION A-A



HALF SHELL W/O VENT  
SECTION A-A

ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System

ITEM	DESCRIPTION	MATERIAL	INVENTORY #
1	76MM PT-PLUS DUCT COUPLER HALF SHELL	BLACK POLYPROPYLENE PER ASTM D4101	02DT0027
2	76MM PT-PLUS DUCT COUPLER HALF SHELL W/ VENT	BLACK POLYPROPYLENE PER ASTM D4101	02DT0028
3	SEAL	SANTOPRENE PER FDOT 960 TABLE 2.2.1.7-2	INCLUDED

NOTES:

- MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960.
- USE TWO HALF-SHELLS W/O VENT (INV. #02DT0027) FOR STANDARD DUCT COUPLING.
- USE ONE HALF-SHELL W/O VENT (INV. #02DT0027) AND ONE HALF-SHELL W/ VENT (INV. #02DT0028) FOR DUCT COUPLING WHERE A GROUT VENT IS NEEDED.

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWING

76MM PT-PLUS DUCT COUPLER, HALF SHELL  
VENTED & NON-VENTED

PROJECT NO:  
SYSTEM

SHEET NO:

SCALE:  
NTS

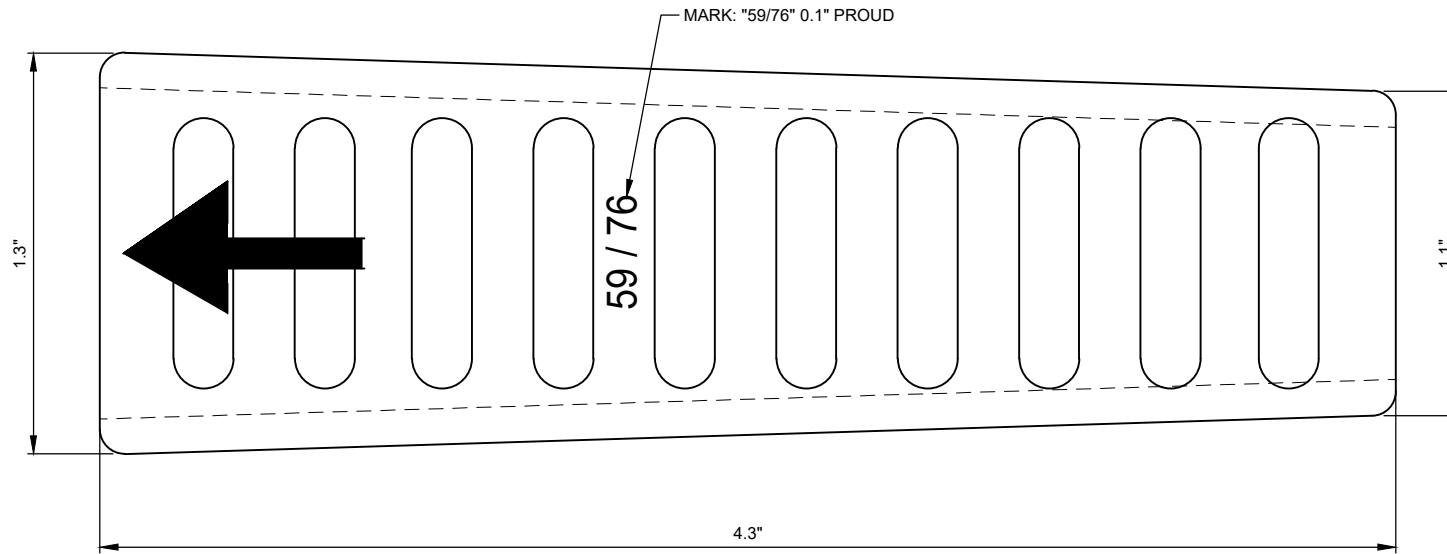
C626

**structural  
TECHNOLOGIES**

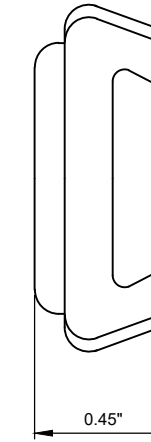
Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
CORPORATE OFFICE COLUMBIA, MD 21046  
PHONE: (410) 850-7000  
structuraltechnologies.com

APPROVED FOR CONSTRUCTION  
NO  
DESCRIPTION  
BY  
CDL ZX  
CHK  
DATE  
29JAN2020

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT\_Test 2017\ECI 6-12 Grouted System



TOP VIEW



SIDE VIEW

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
59/76MM PT-PLUS CLIP	BLACK POLYPROPYLENE PER ASTM D4101	02DT0029

PROJECT INFORMATION:

SYSTEM DRAWING

PROJECT NO:  
SYSTEM

SHEET NO:

59/76MM PT-PLUS CLIP

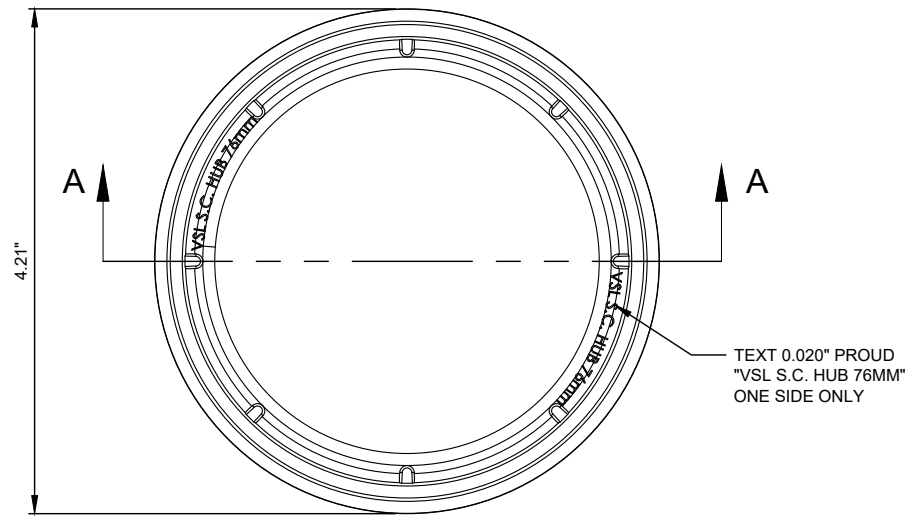
SCALE:  
NTS

C628

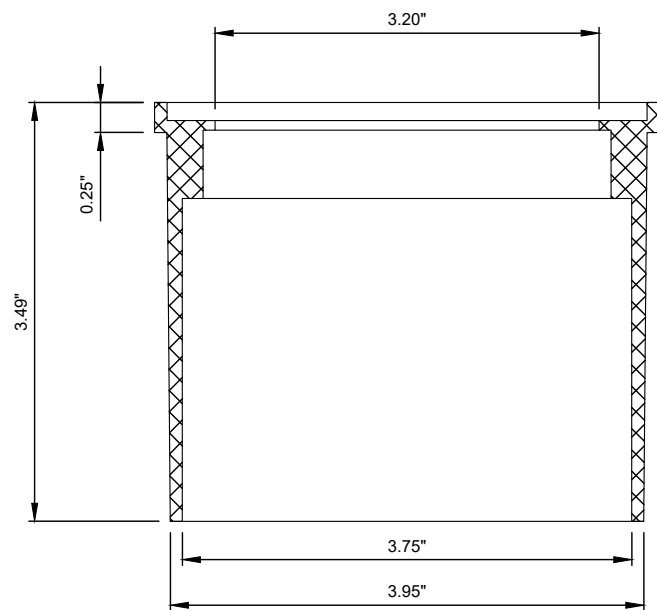
NO	APPROVED FOR CONSTRUCTION	BY	CDL ZX	DATE	29JAN2020
----	---------------------------	----	--------	------	-----------

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

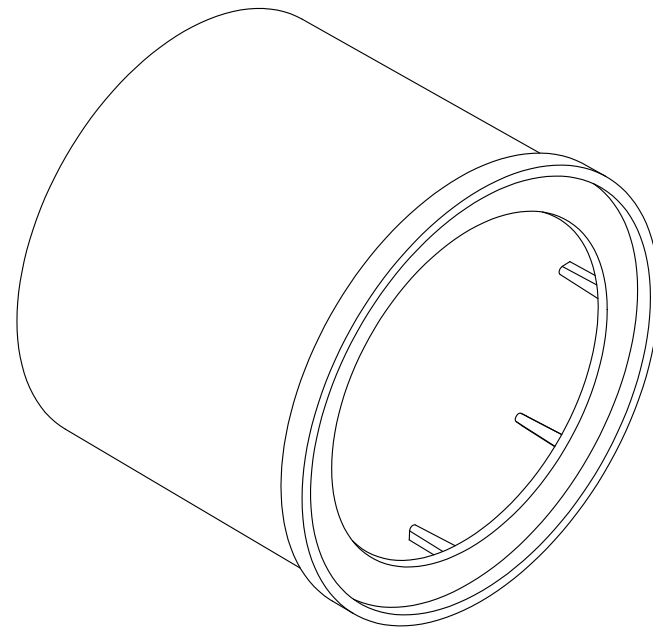
ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



**TOP VIEW**



**SECTION A-A**



**3D VIEW**

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
76MM HUB	WHITE POLYPROPYLENE PER ASTM D4101	02SC07601

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE: 76MM HUB

PROJECT NO: SYSTEM

SHEET NO: C646

SCALE: NTS

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY CDL ZX

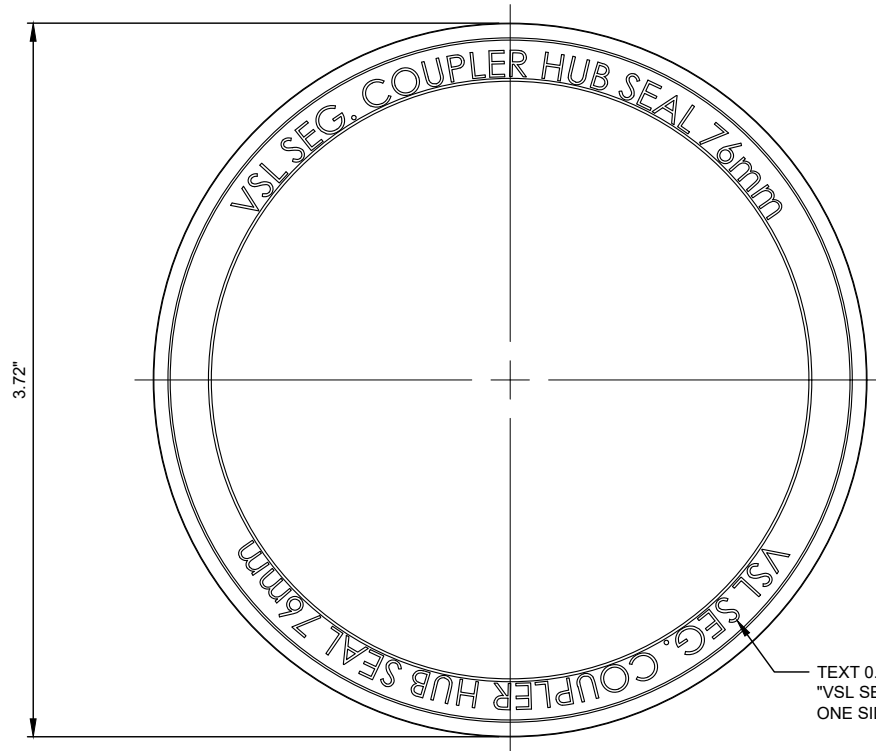
CHK

DATE 29JAN2020

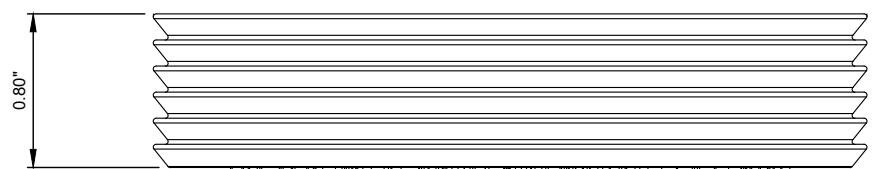
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler

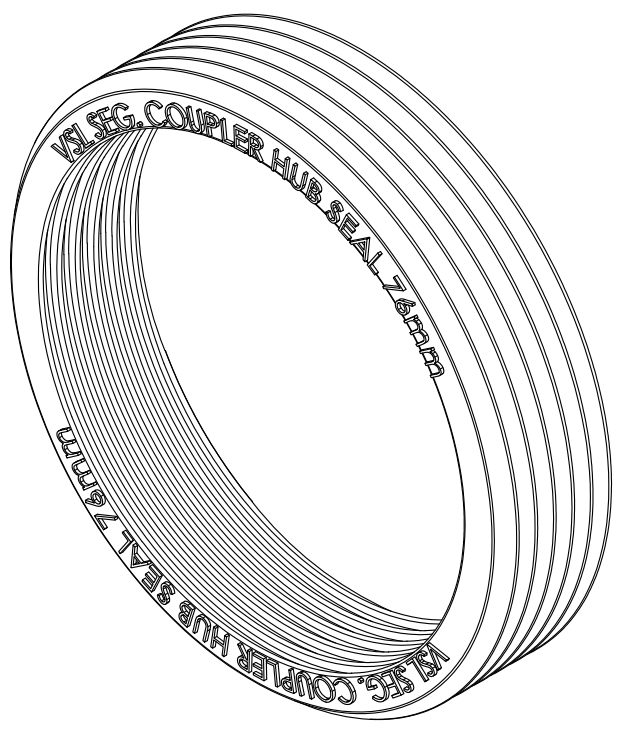


**TOP VIEW**



**SIDE VIEW**

TEXT 0.020" PROUD  
"VSL SEG. COUPLER HUB SEAL 76MM"  
ONE SIDE ONLY



**3D VIEW**

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

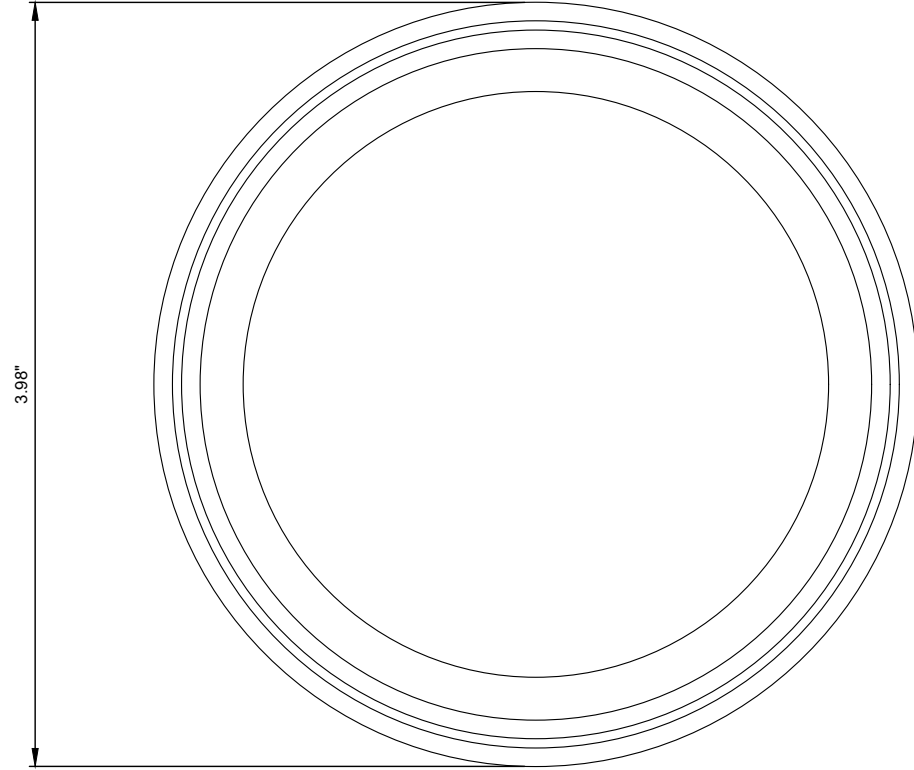
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
76MM HUB SEAL	SANTOPRENE PER FDOT 960 TABLE 2.2.1.7-2	02SC07602

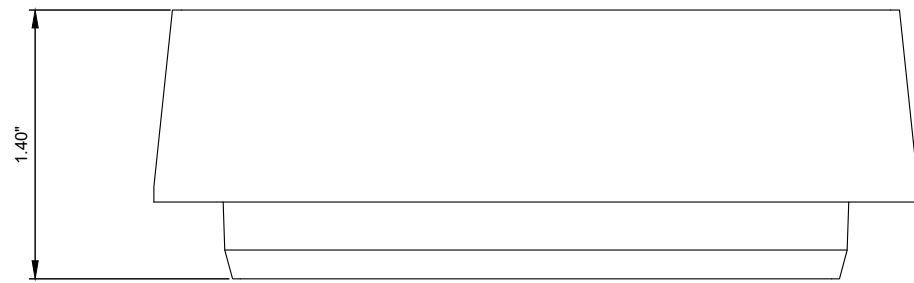
<p><b>structural TECHNOLOGIES</b>                  Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL                  STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046                  CORPORATE OFFICE                  PHONE: (410) 850-7000                  structuraltechnologies.com</p>		NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		NO	DESCRIPTION	BY	CHK
<p>PROJECT INFORMATION:</p>		<p>SYSTEM DRAWING</p>		<p>76MM HUB SEAL</p>	
<p>PROJECT NO: SYSTEM</p>		<p>SHEET NO: C647</p>		<p>SCALE: NTS</p>	



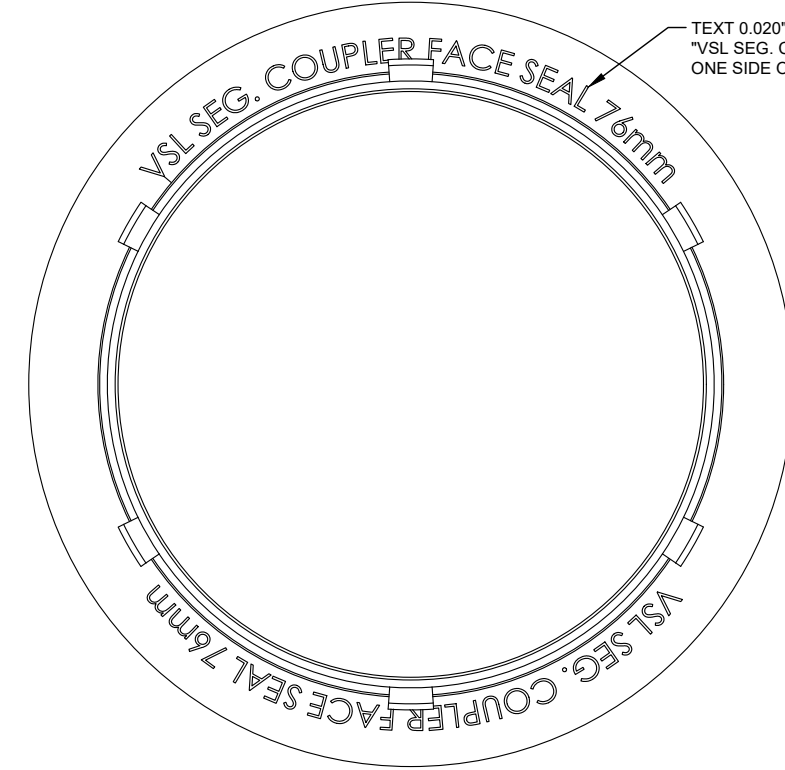
ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



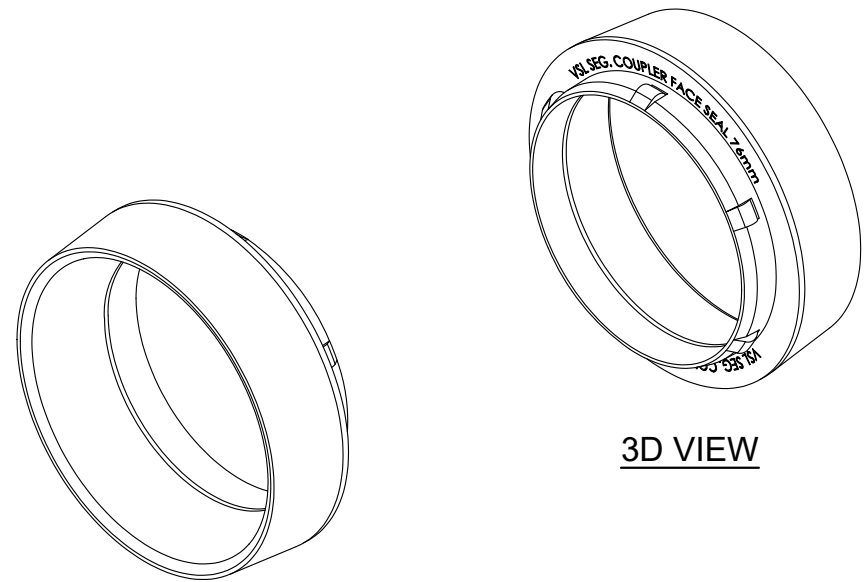
TOP VIEW



SIDE VIEW



BOTTOM VIEW



3D VIEW

3D VIEW

TEXT 0.020" RECESSED  
"VSL SEG. COUPLER FACE SEAL 76MM"  
ONE SIDE ONLY

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
76MM FACE SEAL	SANTOPRENE PER FDOT 960 TABLE 2.2.1.7-2	02SC07603

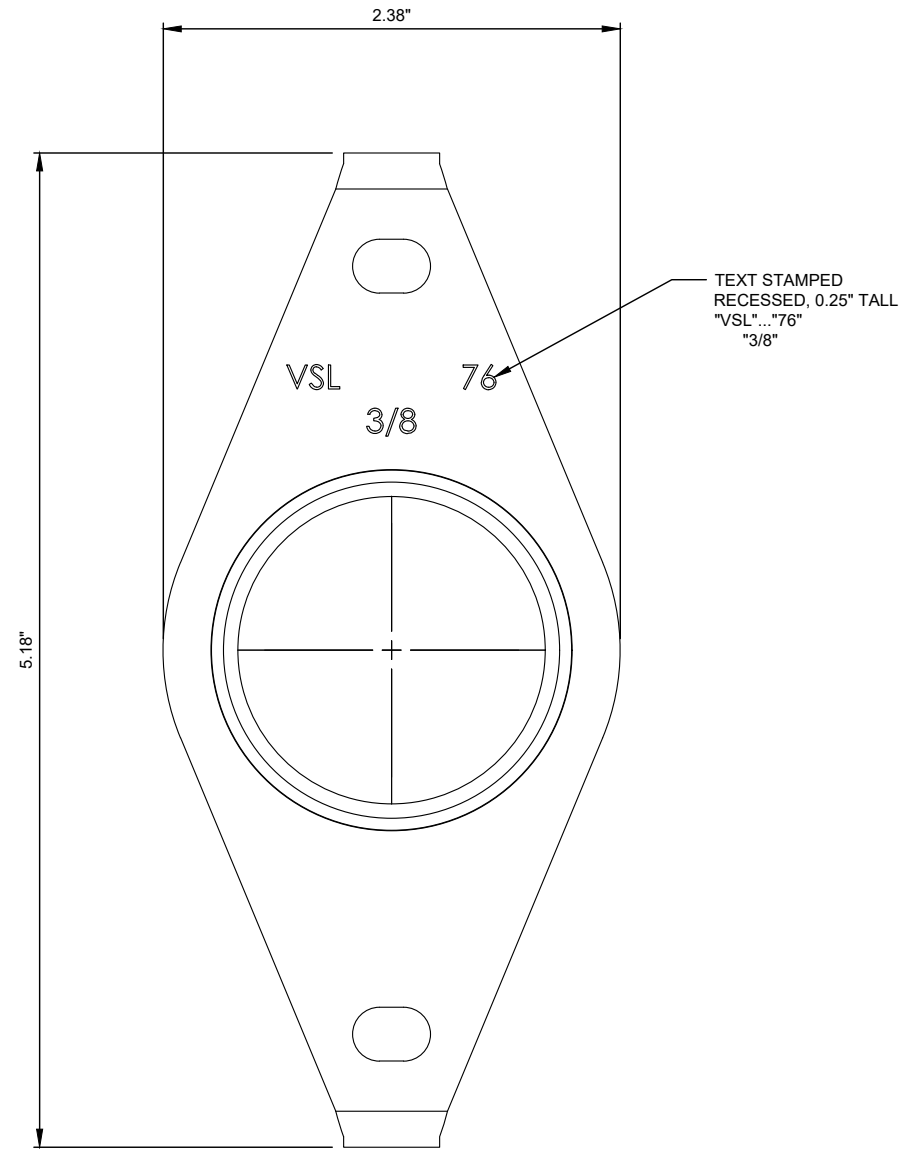
NO	APPROVED FOR CONSTRUCTION	CDL	ZX	29JAN2020
	DESCRIPTION	BY	CHK	DATE

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

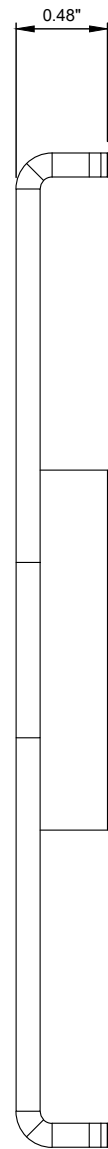
PROJECT INFORMATION:	SYSTEM DRAWING
TITLE:	76MM FACE SEAL
PROJECT NO:	SYSTEM
SHEET NO:	NTS
	<b>C648</b>



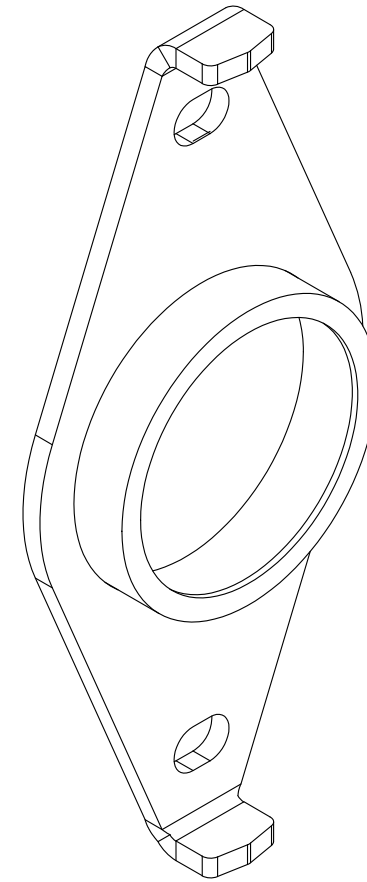
ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



**FRONT VIEW**



**SIDE VIEW**



**3D VIEW**

NOTE: THIS IS A TEMPORARY PART.

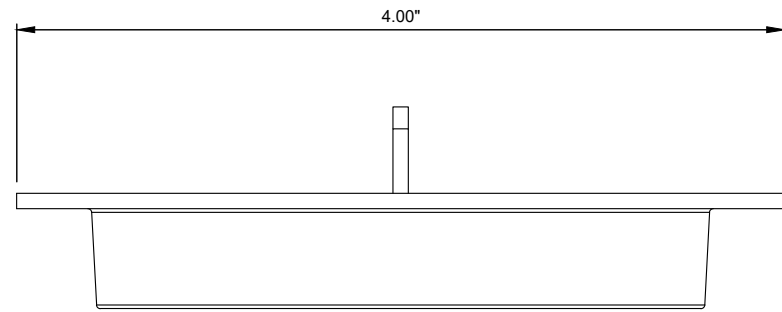
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

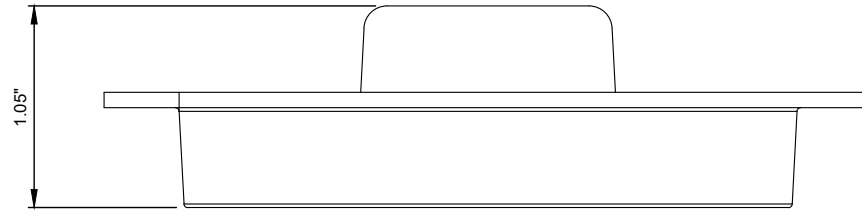
DESCRIPTION	MATERIAL	INVENTORY #
76MM FORM TOOL	STEEL PER ASTM A36	02SC07605

<p><b>structural TECHNOLOGIES</b>                  Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL                  STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD                  COLUMBIA, MD 21046                  PHONE: (410) 850-7000                  structuraltechnologies.com</p>		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		NO	BY	CHK
<p>PROJECT INFORMATION:</p>		DESCRIPTION		
<p>SYSTEM DRAWING</p>				
<p>76MM FORM TOOL</p>				
<p>PROJECT NO: SYSTEM</p>				
<p>SHEET NO: C651</p>				

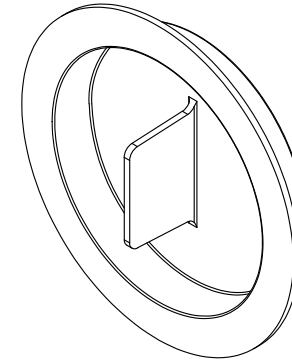
ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT\_Test 2017\Segmental Duct Coupler



FRONT VIEW



SIDE VIEW



3D VIEW

NOTE: THIS IS A TEMPORARY PART.

DESCRIPTION	MATERIAL	INVENTORY #
76MM PROTECTIVE CAP	LDPE	02SC07606

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWING

76MM PROTECTIVE CAP

PROJECT NO:  
SYSTEM

SHEET NO:

SCALE:  
NTS

C663

NO

APPROVED FOR CONSTRUCTION

CDL ZX

29JAN2020

BY

CHK

DATE

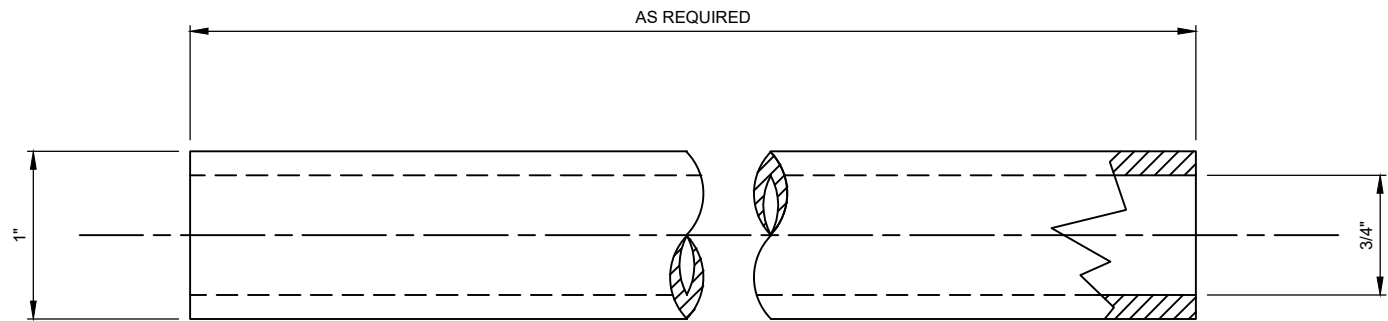
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com





ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

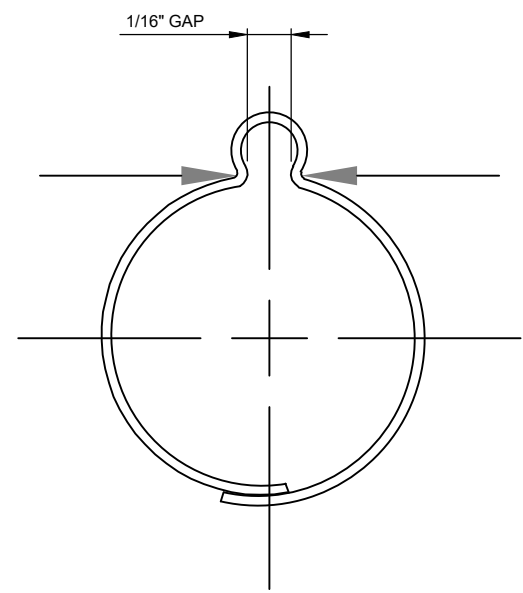
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

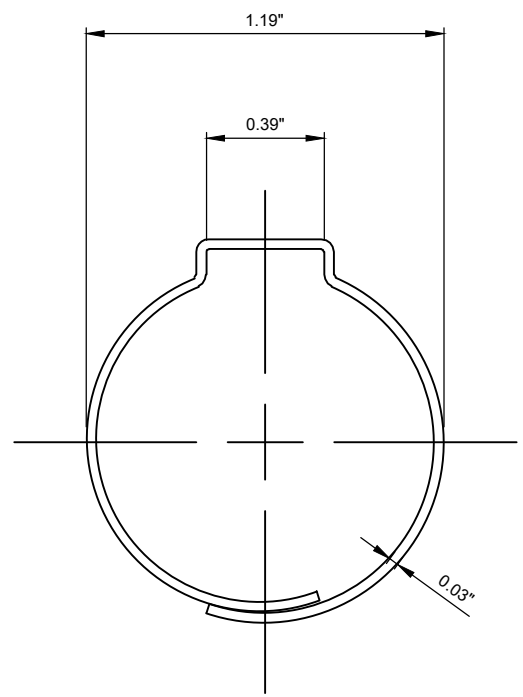
DESCRIPTION	MATERIAL	INVENTORY #
3/4" SMOOTH HOSE	HDPE BLACK PER ASTM D3350	02DT01901

<p><b>structural TECHNOLOGIES</b></p> <p>Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL</p> <p>STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046</p> <p>PHONE: (410) 850-7000 structuraltechnologies.com</p>		NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		NO	DESCRIPTION	BY	CHK
<p>PROJECT INFORMATION:</p> <p>SYSTEM DRAWING</p> <p>3/4" SMOOTH HOSE</p>		<p>PROJECT NO: SYSTEM</p> <p>SHEET NO: NTS</p> <p>C685</p>			

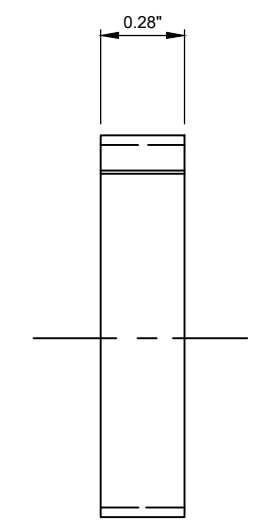
ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



**INSTALLED**  
**[AFTER CRIMPING]**



**OPEN**  
**[AS SUPPLIED]**



**SIDE VIEW**

**INSTALLATION INSTRUCTIONS:**

1. SLIDE BAND OVER HOSE AND ALIGN OVER BARBS ON FITTING
2. CRIMP EAR ON BAND WITH PLIERS USING EITHER DIAGONAL CUTTERS OR END NIPPERS

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
3/4" ONE EAR BAND CLAMP	316 STAINLESS STEEL PER ASTM A240	02DT01905

PROJECT INFORMATION:

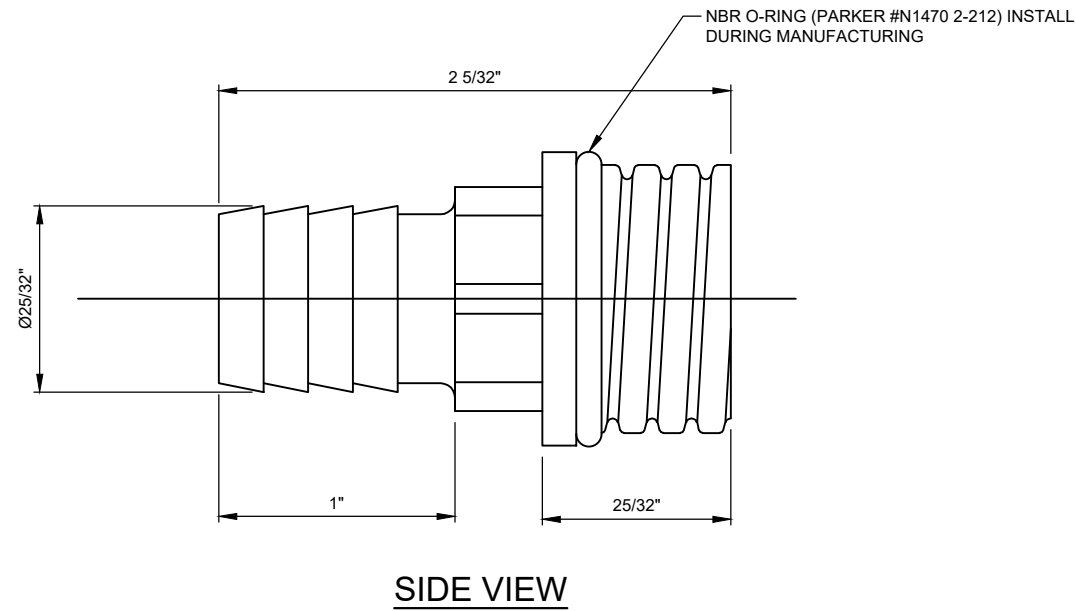
PROJECT NO:	SYSTEM
SHEET NO:	NTS
TITLE:	3/4" ONE EAR BAND CLAMP

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

APPROVED FOR CONSTRUCTION	NO
DESCRIPTION	BY
	CDL ZX
	CHK
	DATE
	29JAN2020



ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



**SIDE VIEW**

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
3/4" HOSE BARB TO 23MM FITTING	BLACK POLYPROPYLENE PER ASTM D4101	02DT01903

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:  
**3/4" HOSE BARB TO 23MM FITTING**

PROJECT NO:  
**SYSTEM**

SHEET NO:

SCALE:  
**NTS**

**C692**

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY

CDL ZX

CHK

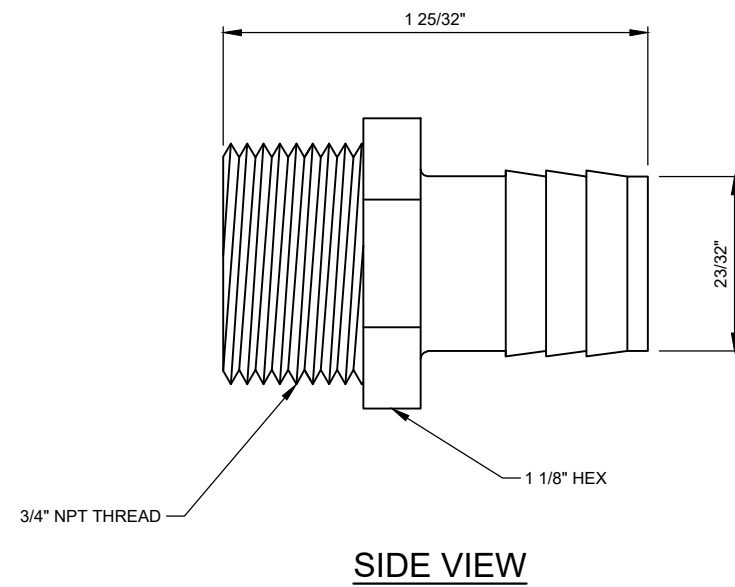
DATE

29JAN2020

**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



**SIDE VIEW**

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
3/4" HOSE BARB TO 3/4" NPT FITTING	BLACK POLYPROPYLENE PER ASTM D4101	02DT01908

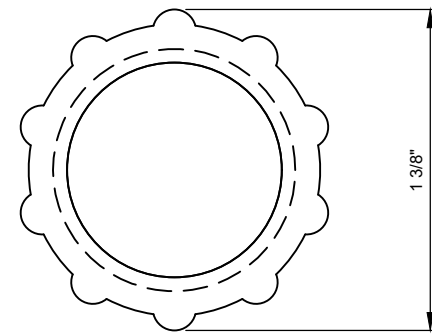
PROJECT INFORMATION:

PROJECT NO:	SYSTEM
TITLE:	3/4" HOSE BARB TO 3/4" NPT FITTING
SHEET NO:	C694

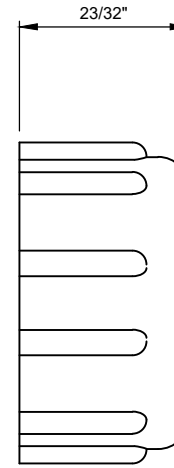
**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
	DESCRIPTION	BY	CHK
			DATE

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Grouting Accessories



TOP VIEW



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
RIBBED CAP W/ 3/4" FNPT	BLACK POLYPROPYLENE PER ASTM D4101	02DT01912

PROJECT INFORMATION:

SYSTEM DRAWING

RIBBED CAP W/ 3/4" FNPT

PROJECT NO:  
SYSTEM

SCALE:  
NTS

SHEET NO:

C701

NO

APPROVED FOR CONSTRUCTION

CDL ZX

BY

CHK

DESCRIPTION

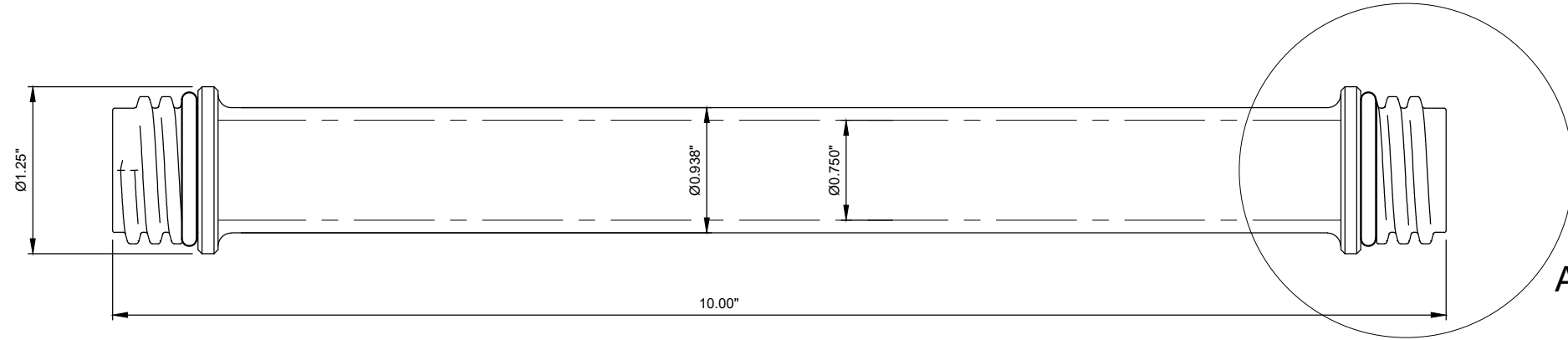
DATE

29JAN2020

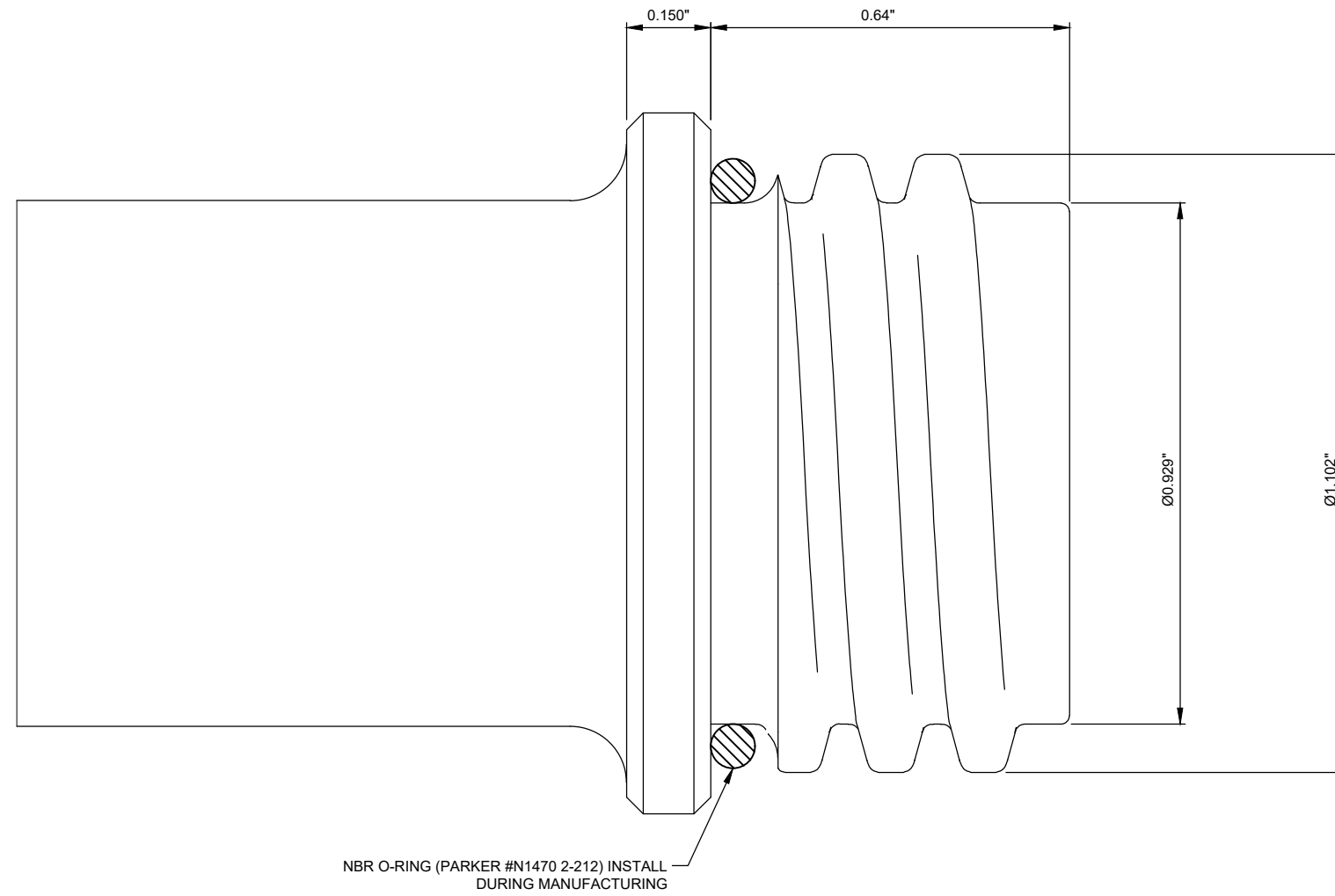
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 860-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Grouting Accessories



**SIDE VIEW**



**DETAIL A**

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

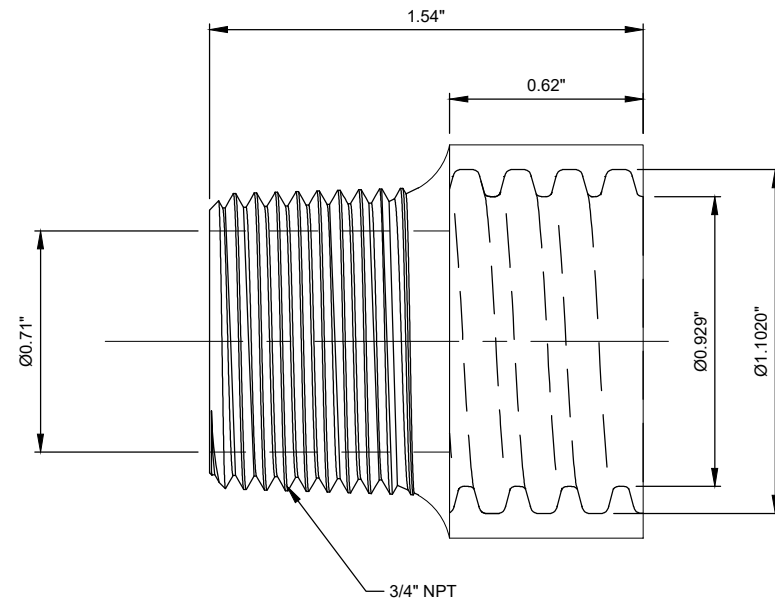
DESCRIPTION	MATERIAL	INVENTORY #
BEARING PLATE GROUT EXTENSION	WHITE POLYPROPYLENE PER ASTM D4101	02DT0318

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
	DESCRIPTION	BY	DATE

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046  
 PHONE: (410) 850-7000 structuraltechnologies.com

PROJECT INFORMATION:	SYSTEM DRAWINGS
TITLE:	23MM BP GROUT EXTENSION
PROJECT NO:	SYSTEM
SCALE:	NTS
SHEET NO:	C714

ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



**SECTION VIEW**

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
BR PLATE BUSHING 3/4" NPT 23MM	BLACK POLYPROPYLENE PER ASTM D4101	02DT0316

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:  
**BR PLATE BUSHING 3/4" NPT 23MM**

PROJECT NO:  
**SYSTEM**

SHEET NO:

SCALE:  
**NTS**

**C715**

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

CDL ZX

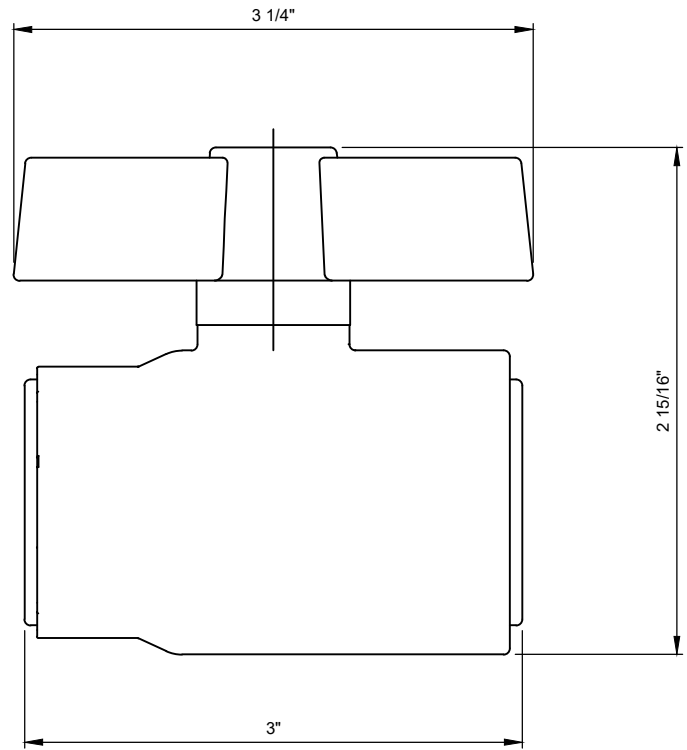
29JAN2020

DATE

**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crafting Accessories



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960 THIS IS A TEMPORARY ITEM

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
PVC 1/4 TURN BALL VALVE W/ 3/4" FNPT	WHITE SCH 80 PVC	02DT01916

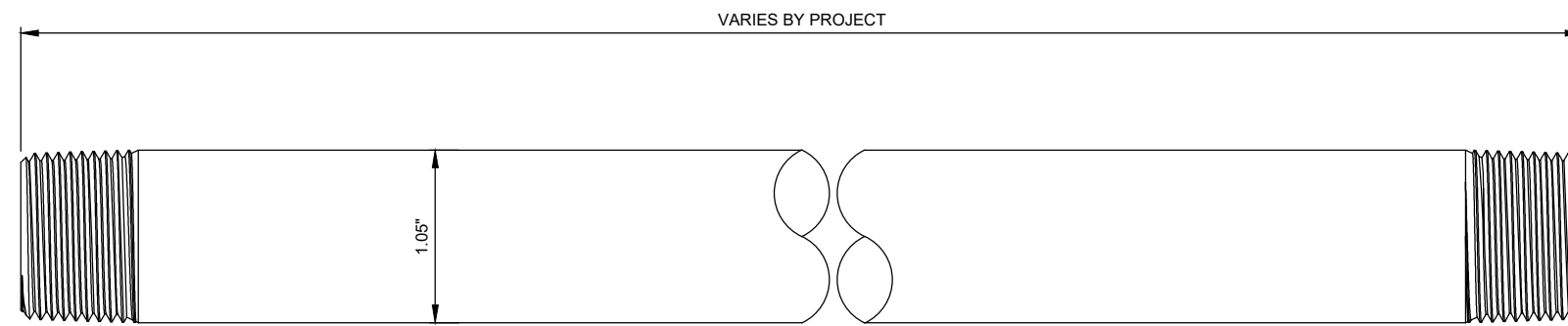
PROJECT INFORMATION:

PROJECT NO:	SYSTEM
SHEET NO:	C720
TITLE:	PVC 1/4 TURN BALL VALVE W/ 3/4" FNPT
SCALE:	NTS

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046  
 PHONE: (410) 850-7000 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
NO	DESCRIPTION	BY	CHK
			DATE

ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL
3/4" NPT PP NIPPLE	SCH 80 BLACK POLYPROPYLENE PER ASTM D4101

PROJECT INFORMATION:

SYSTEM DRAWING

3/4" NPT PP NIPPLE

PROJECT NO:  
SYSTEM

SCALE:  
NTS

SHEET NO:

C723

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY

CHK

CDL ZX

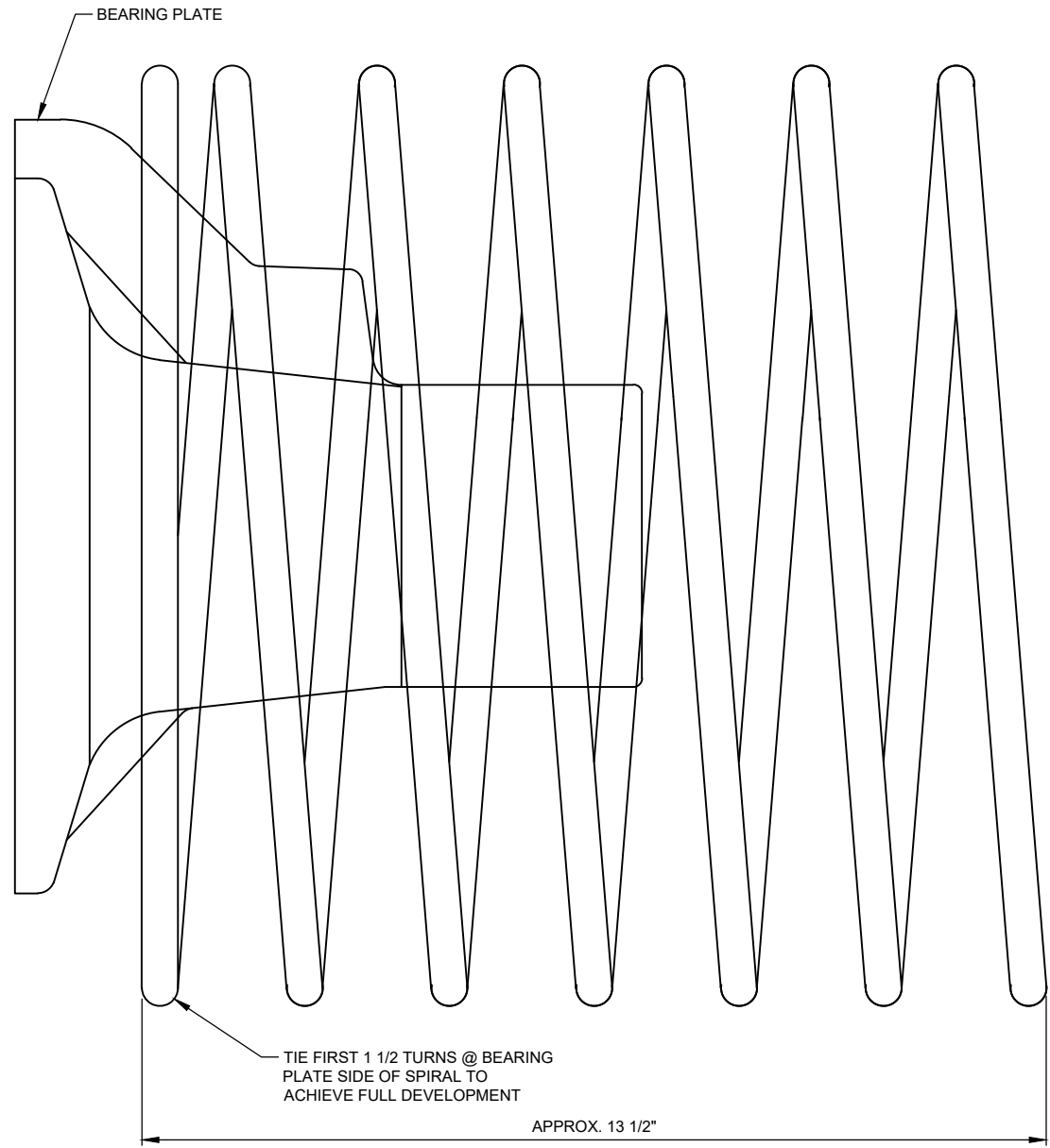
29JAN2020

DATE

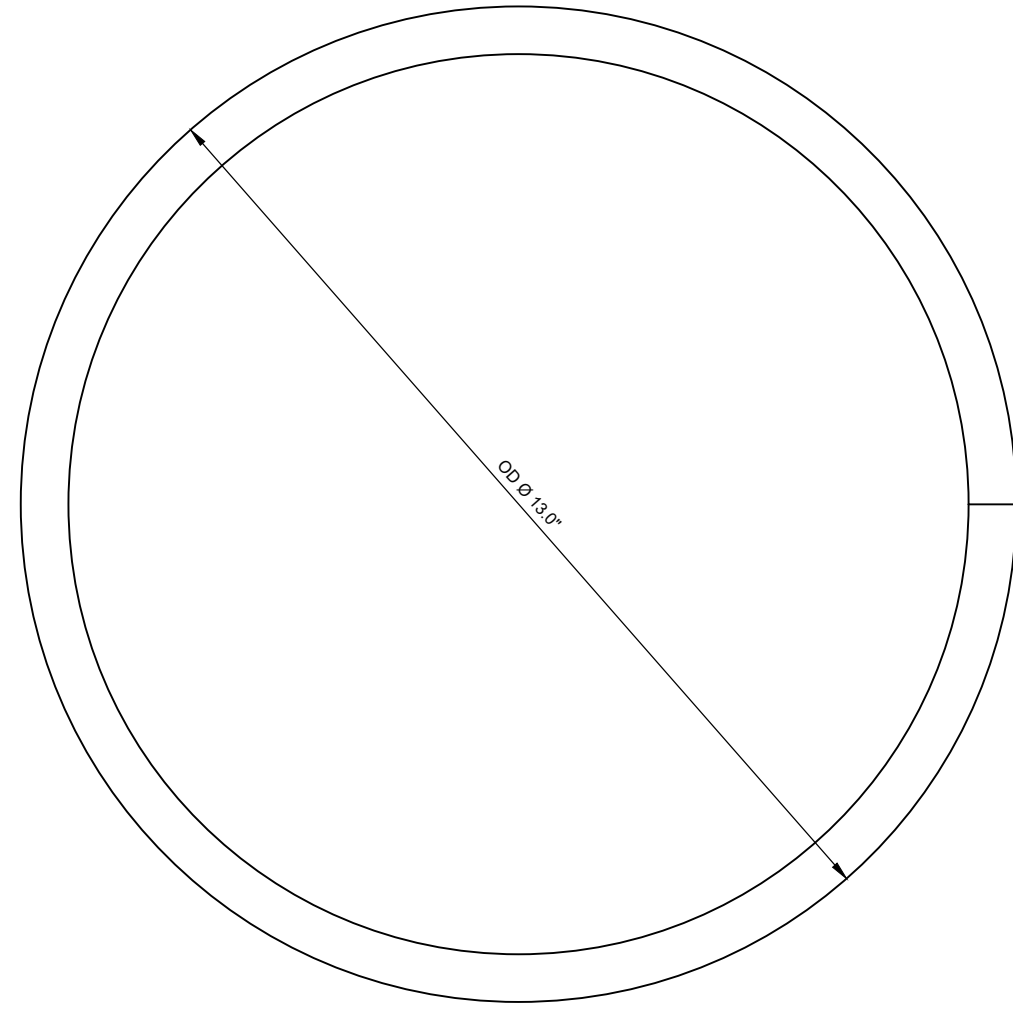
**structural TECHNOLOGIES**

Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT\_Test 2017\ECI 6-12 Flexible Filler Submittal



**SIDE VIEW**



**FRONT VIEW**

DESCRIPTION	MATERIAL	INVENTORY #
ECI 6-12 SPIRAL #3500 (#5, DIA. 13", 2" PITCH, 7 TURNS)	GR 60 STEEL AS PER ASTM A615	02BP0096
ECI 6-12 SPIRAL #5500 (#4, DIA. 13", 2" PITCH, 7 TURNS)	GR 60 STEEL AS PER ASTM A615	02BP0097

**NOTE:**  
 1. THESE SPIRALS ARE TO BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS AND CONTRACT DRAWINGS  
 2. CONCRETE STRENGTH SHOWN IN SPIRAL NAME AS #XXXX WHERE # = PSI

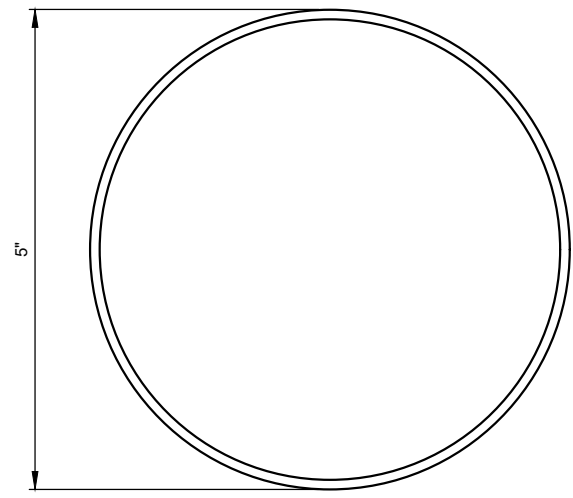
THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

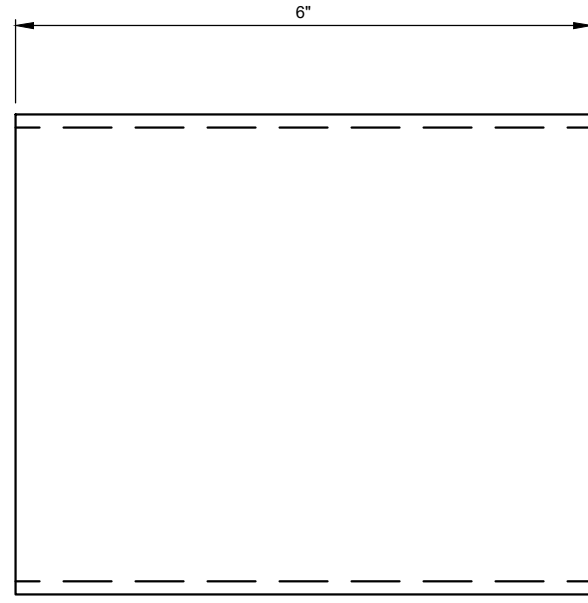
		STRUCTURAL TECHNOLOGIES, LLC CORPORATE OFFICE Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL 10150 OLD COLUMBIA RD COLUMBIA, MD 21046 PHONE: (410) 860-7000 structuraltechnologies.com	
PROJECT INFORMATION: <b>SYSTEM DRAWING</b>	TITLE: <b>ECI 6-12 SPIRAL</b>		
PROJECT NO: <b>SYSTEM</b>	SCALE: <b>NTS</b>		
SHEET NO: <b>C729</b>			
APPROVED FOR CONSTRUCTION NO	DESCRIPTION NO		
CDL ZX	BY CHK		
DATE	DATE		



ELECTRONIC FILE LOCATION: I:\VSI\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\EC 6-12 Grouded System



END VIEW



SIDE VIEW

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
CANUSA PLA-90-YE x 6" HEAT SHRINK SLEEVE	POLYOLEFIN PER TABLE 960 2.2.1.8-1	02DT0505

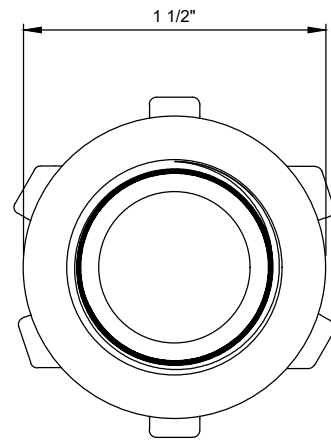
PROJECT INFORMATION:

PROJECT NO:	SYSTEM
SHEET NO:	NTS
TITLE:	PLA-90-YE 90MMx6" HEAT SHRINK SLEEVE

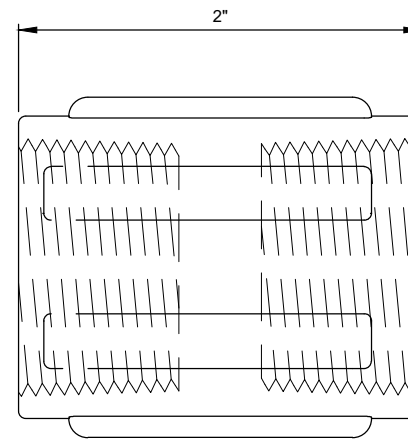
**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
	DESCRIPTION	BY	CHK
			DATE

ELECTRONIC FILE LOCATION: I:\S1\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



END VIEW



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
3/4" NPT PP F/F COUPLER	SCH 80 BLACK POLYPROPYLENE PER ASTM D4101	02DT01931

PROJECT INFORMATION:

PROJECT NO:	SYSTEM
TITLE:	3/4" NPT PP F/F COUPLER
SHEET NO:	C775

**structural TECHNOLOGIES**

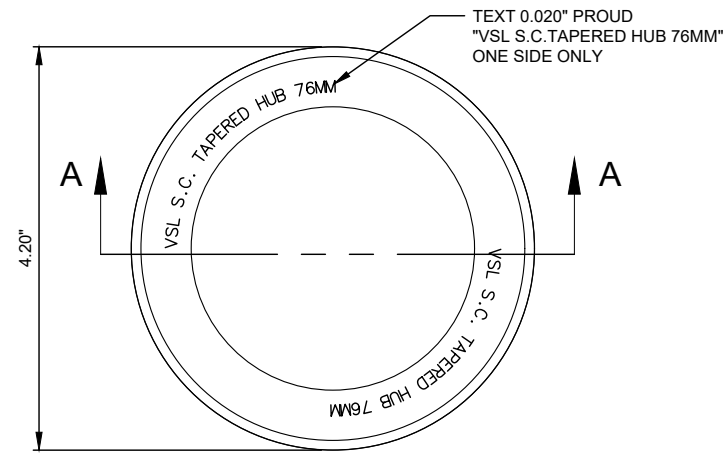
Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL

STRUCTURAL TECHNOLOGIES, LLC    10150 OLD COLUMBIA RD  
CORPORATE OFFICE    COLUMBIA, MD 21046

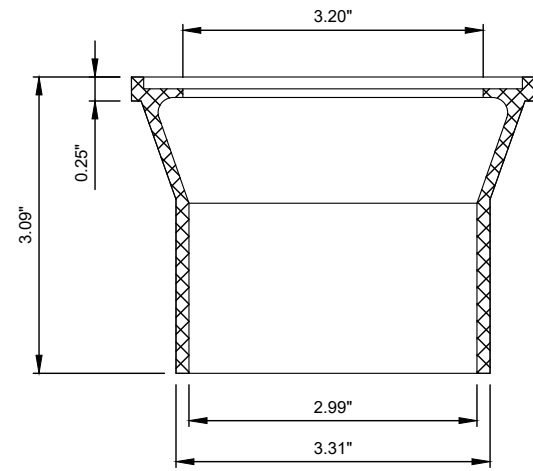
PHONE: (410) 850-7000  
structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
	DESCRIPTION	BY	CHK
			DATE

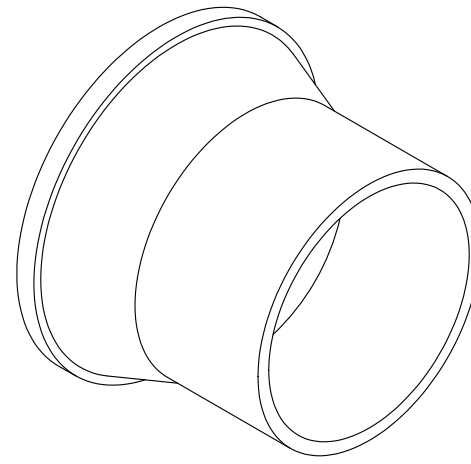
ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Segmental Duct Coupler



TOP VIEW



SECTION A-A



3D VIEW

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

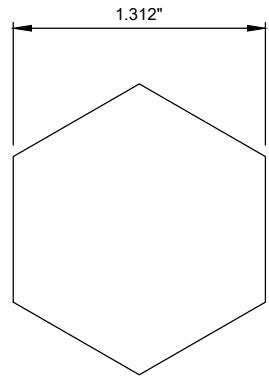
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
76MM TAPERED HUB	WHITE POLYPROPYLENE PER ASTM D4101	02SC07610

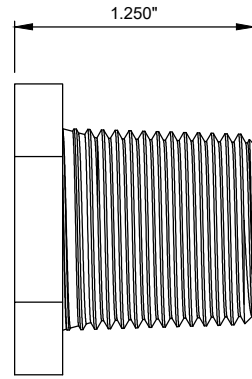
PROJECT INFORMATION:		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
SYSTEM DRAWING	76MM TAPERED HUB	NO	BY	CHK
PROJECT NO:	SYSTEM	SCALE:	NTS	C779
SHEET NO:		C779		

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



END VIEW



SIDE VIEW

NOTE: MATERIAL MEETS OR EXCEEDS FDOT SPECIFICATION 960

DESCRIPTION	MATERIAL	INVENTORY #
3/4" NPT PE PLUG	BLACK HDPE PER ASTM D3350	02DT01913

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

PROJECT NO:	SYSTEM
TITLE:	3/4" NPT PE PLUG
SHEET NO:	C787

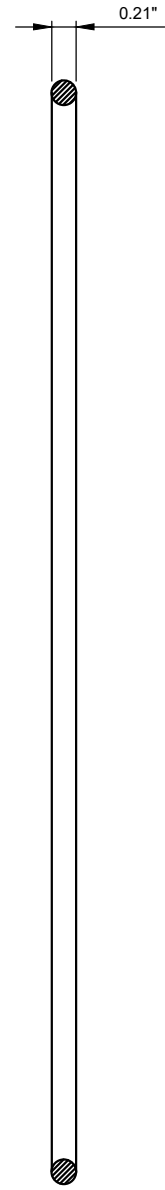
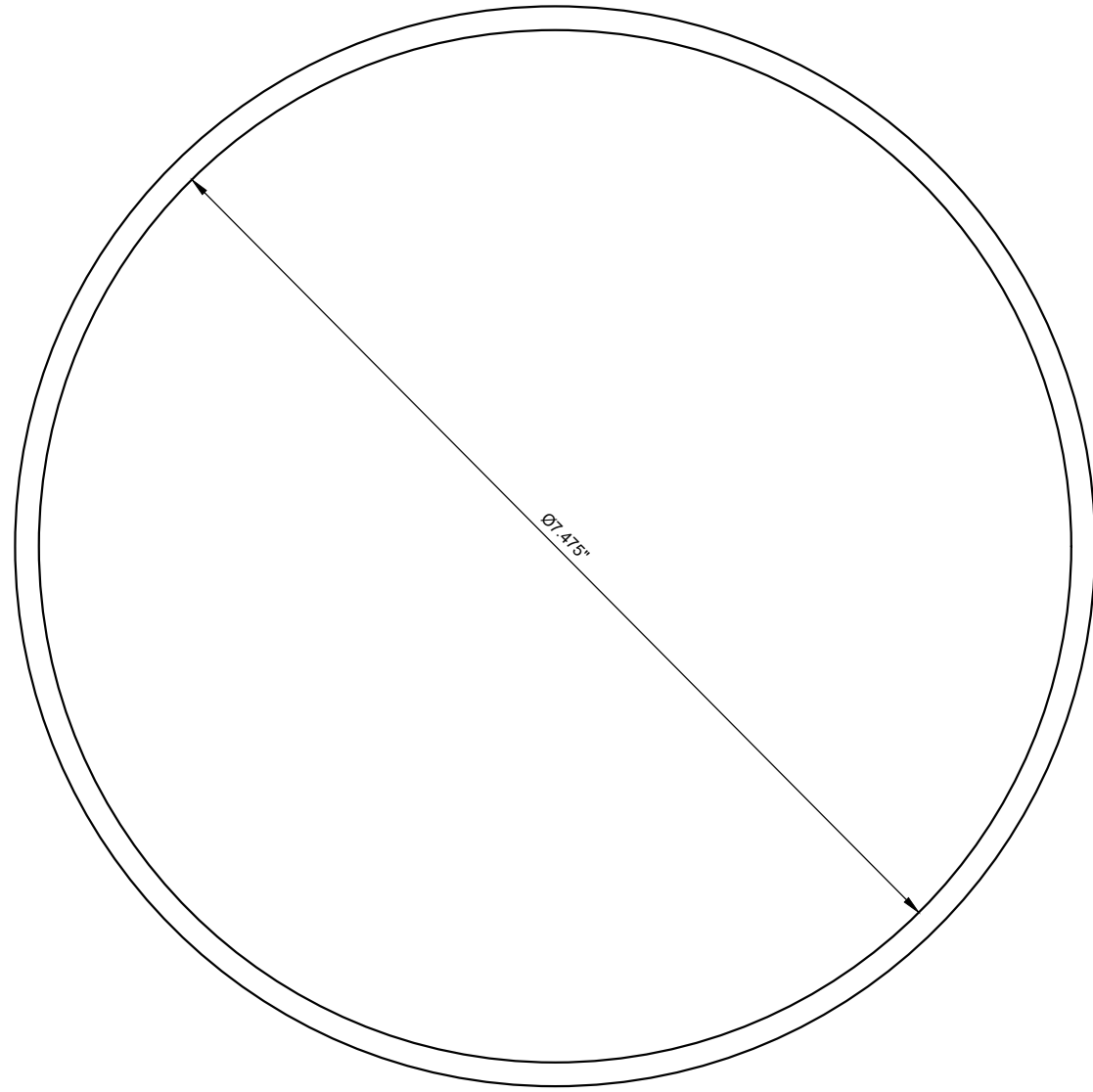
**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION
----	---------------------------

BY	CDL ZX
DESCRIPTION	

CHK	BY	DATE
		29JAN2020

ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System



THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	SIZE	MATERIAL	INVENTORY #
ECI 6-12 GROUT CAP O-RING	7.475"x7.895"x0.21"	BUNA-N 70 D PER FDOT 960 TABLE 2.2.1.7-1	02WX5020

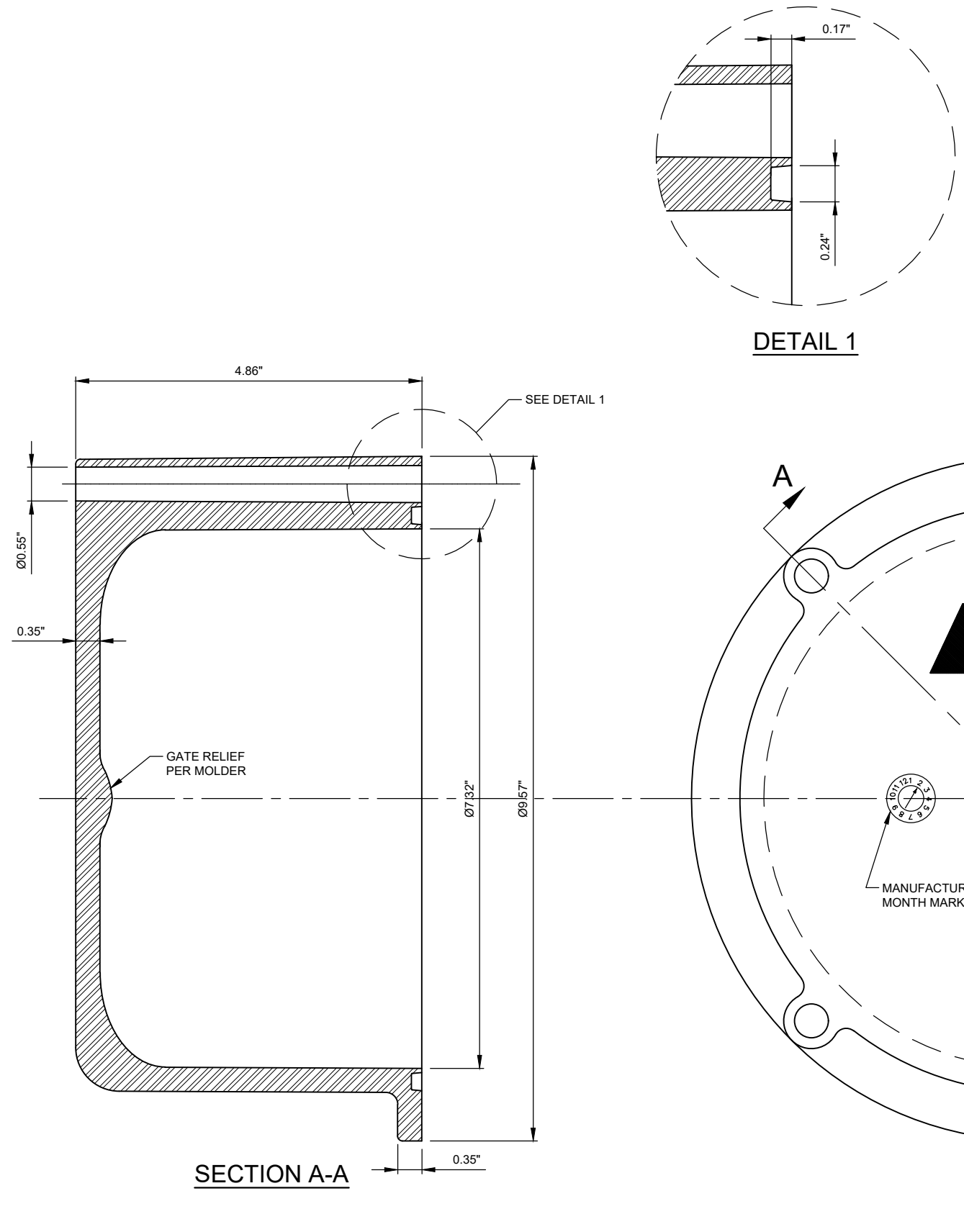
PROJECT INFORMATION:

PROJECT NO:	SYSTEM
SHEET NO:	NTS
TITLE:	ECI16-12 GROUT CAP BUNA-N 70 D O-RING

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC  
 CORPORATE OFFICE  
 10150 OLD COLUMBIA RD  
 COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com

NO	APPROVED FOR CONSTRUCTION	NO
DESCRIPTION	BY	CHK
	CDL ZX	29JAN2020
		DATE

ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT Test 2017\ECI 6-12 Grouted System



THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

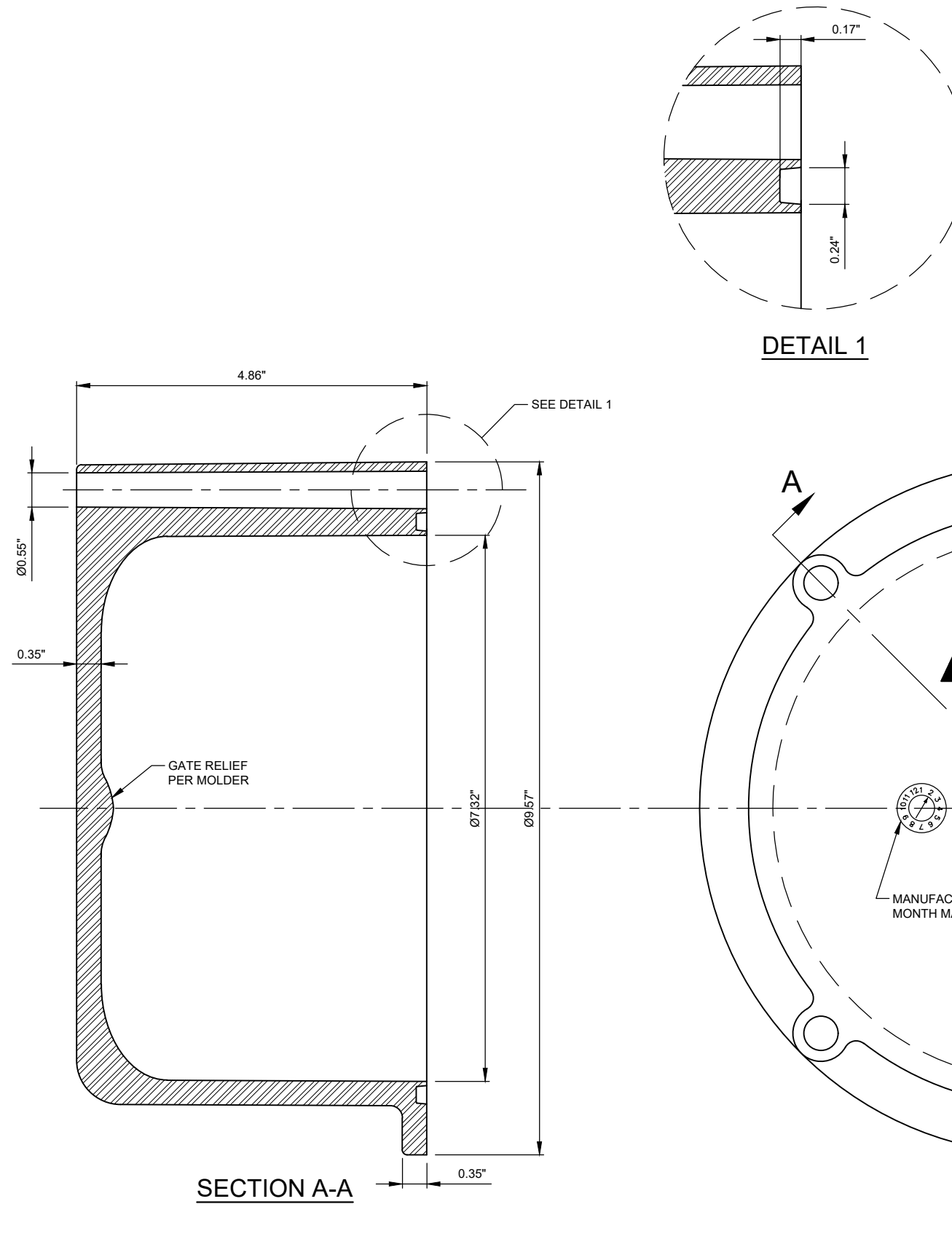
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
ECI 6-12 GROUT CAP W/ 3/4" HORIZONTAL PORT	ABS LUSTRAN 633 PER ASTM D4673	02GC61201V

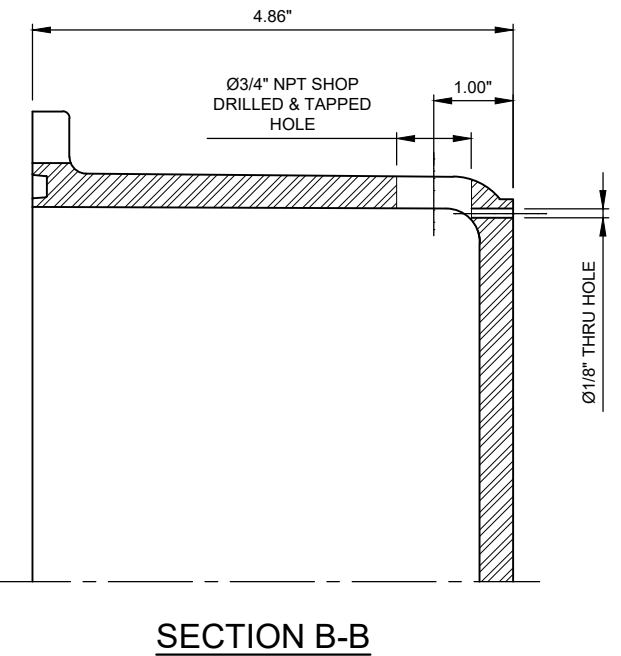
<b>structural TECHNOLOGIES</b> Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL PHONE: (410) 850-7000 structuralltechnologies.com		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		NO	BY	CHK
PROJECT INFORMATION: SYSTEM DRAWING		TITLE: ECI 6-12 GROUT CAP W/ 3/4" HORIZONTAL PORT		
PROJECT NO: SYSTEM		SCALE: NTS		
SHEET NO: C801		DESCRIPTION		



ELECTRONIC FILE LOCATION: I:\VSL\_System Drawings\Work In Progress Drawings\Florida DOT\_Test 2017\ECI 6-12\_Grouted System



FRONT VIEW



SECTION B-B

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

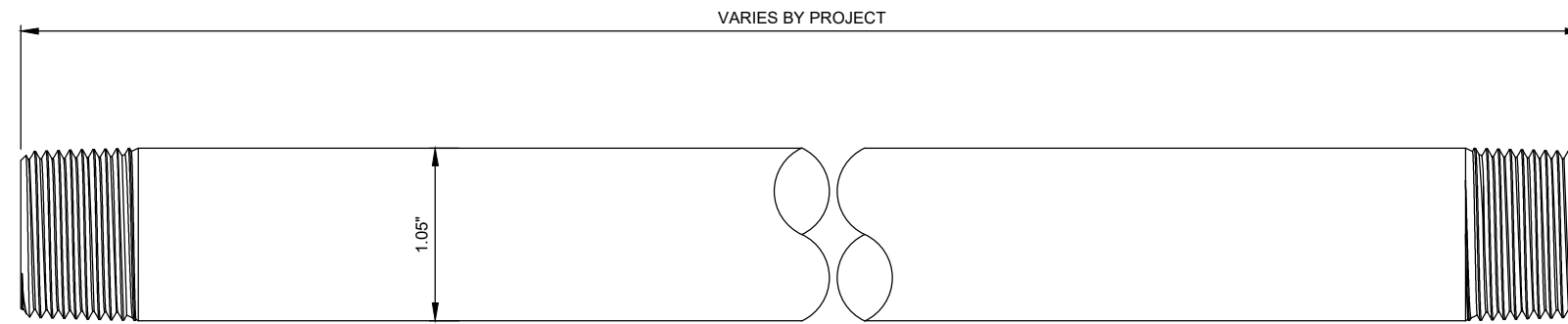
THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

DESCRIPTION	MATERIAL	INVENTORY #
ECI 6-12 GROUT CAP W/ 3/4" VERTICAL PORT	ABS LUSTRAN 633 PER ASTM D4673	02GC61201

<p><b>structural TECHNOLOGIES</b></p> <p>Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL</p> <p>STRUCUTRAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD COLUMBIA, MD 21046</p> <p>PHONE: (410) 860-7000 structuraltechnologies.com</p>		APPROVED FOR CONSTRUCTION	CDL ZX	29JAN2020
		NO	BY	CHK
<p>PROJECT INFORMATION:</p> <p>SYSTEM DRAWING</p> <p>ECI 6-12 GROUT CAP W/ 3/4" VERTICAL PORT</p>		DESCRIPTION	NO	DATE
<p>TITLE:</p> <p>PROJECT NO: SYSTEM</p> <p>SHEET NO: C860</p>		SCALE: NTS		



ELECTRONIC FILE LOCATION: I:\SVI\System Drawings\Work In Progress Drawings\Florida DOT Test 2017\Crouching Accessories



SIDE VIEW

DESCRIPTION	MATERIAL
3/4" NPT PVC NIPPLE	SCH 80 WHITE PVC

THESE SHOP DRAWINGS ILLUSTRATE THE DETAILS OF THE STRUCTURAL TECHNOLOGIES, LLC POST-TENSIONING SYSTEM. THEY WERE PREPARED IN CONFORMANCE WITH THE STRUCTURAL DESIGN PROVIDED TO STRUCTURAL TECHNOLOGIES, LLC BY PROJECT OWNER OR ITS REPRESENTATIVE. STRUCTURAL TECHNOLOGIES, LLC TOOK NO PART IN THE PREPARATION OR REVIEW OF SAID STRUCTURAL DESIGN AND STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR IT. THE STAMP OR SEAL OF A STRUCTURAL TECHNOLOGIES, LLC EMPLOYEE ON THESE SHOP DRAWINGS PERTAINS ONLY TO THE TRANSFER OF THE FORCES REQUIRED BY THE ENGINEER OF RECORD ON THE STRUCTURAL DRAWINGS, AND NOT TO THE ADEQUACY OF THE STRUCTURAL DESIGN. NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ADEQUACY OF THE STRUCTURAL DESIGN IS MADE BY VIRTUE OF ANY SUCH STAMP OR SEAL.

THIS DOCUMENT, INCLUDING ANY DRAWINGS, SPECIFICATIONS, AND CALCULATIONS HEREIN, CONTAINS INFORMATION THAT IS PROPRIETARY TO STRUCTURAL TECHNOLOGIES, LLC. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, AND MAY NOT BE REPRODUCED OR DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF STRUCTURAL TECHNOLOGIES, LLC. FURTHER, THE USE OF THIS DOCUMENT OR ANY INFORMATION PRESENTED HEREIN IS RESTRICTED TO THE SPECIFIC PROJECT AND PURPOSE FOR WHICH IT WAS PREPARED. ANY OTHER USE IS STRICTLY PROHIBITED. STRUCTURAL TECHNOLOGIES, LLC DISCLAIMS ANY LIABILITY FOR ANY UNAUTHORIZED, UNINTENDED OR OTHER IMPERMISSIBLE USE OF THIS DOCUMENT OR ANY INFORMATION IT CONTAINS.

PROJECT INFORMATION:

SYSTEM DRAWING

TITLE:  
3/4" NPT PVC NIPPLE

PROJECT NO:  
SYSTEM

SCALE:  
NTS

SHEET NO:  
C887

NO

APPROVED FOR CONSTRUCTION

DESCRIPTION

BY

CDL ZX

CHK

DATE

29JAN2020

**structural TECHNOLOGIES**  
 Dallas, TX / Washington DC / Denver, CO / Pompano Beach, FL  
 STRUCTURAL TECHNOLOGIES, LLC 10150 OLD COLUMBIA RD  
 CORPORATE OFFICE COLUMBIA, MD 21046  
 PHONE: (410) 850-7000  
 structuraltechnologies.com