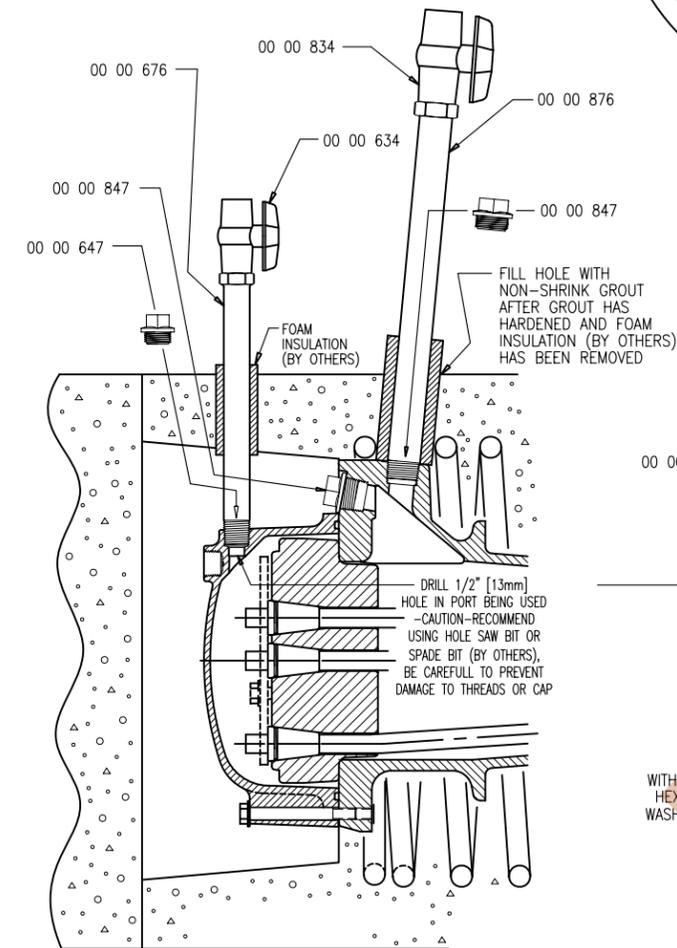
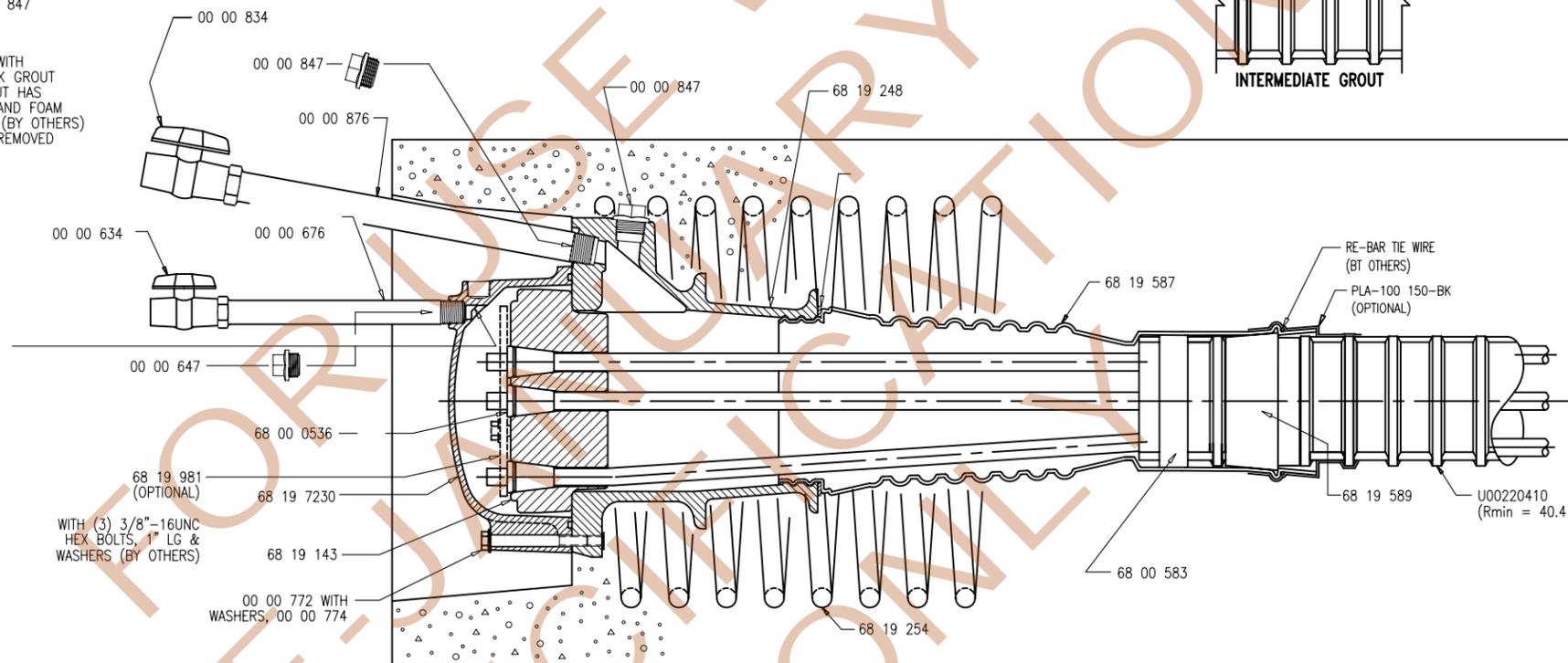


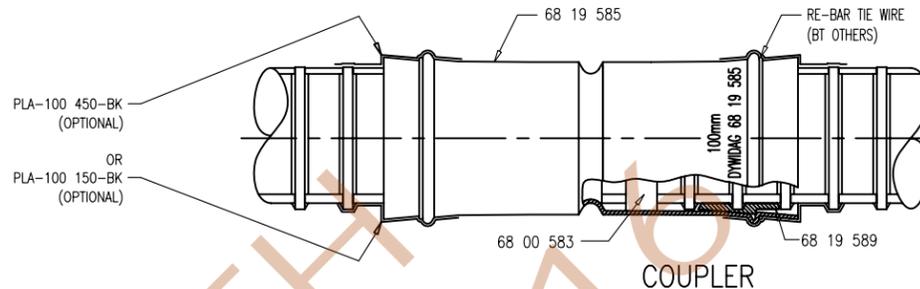
END VIEW
(WEDGE PLATE, MPA & SPIRAL ONLY)



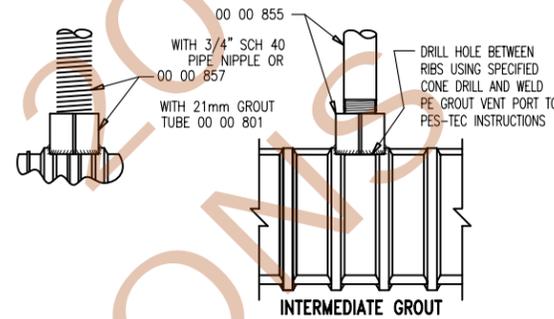
TOP GROUT ACCESS



FRONT GROUT ACCESS



COUPLER



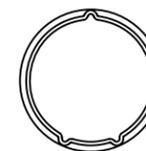
INTERMEDIATE GROUT

BILL OF MATERIALS		
PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
68 19 248	19-0.6" MULTI-PLANE ANCHOR CASTING, GALVANIZED	ASTM A536 GR 65-45-12 DUCTILE IRON HOT DIPPED GALV. TO ASTM A123
68 19 254	19-0.6" STANDARD SPIRAL	ASTM A615, GR. 60, #5, 1-7/8" PITCH 14-1/2" O.D., ~8 TURNS
68 19 143	19-0.6" FORGED WEDGE PLATE	STEEL FORGING, ASTM A-521-76, NORMALIZED, BHN = 180-220
68 19 981 (OPTIONAL)	19-0.6" KEEPER PLATE, USED ONLY FOR INACCESSIBLE DEAD END OR WHEN PRE-ASSEMBLED W/BOLT & WASHER BY OTHERS	AISI 1020 OR EQUIV. (3) 3/8"-16UNC BLACK HEX BOLTS, 1" LG WITH NARROW WASHERS
68 00 0536	3-PART WEDGE FOR 0.6" STRAND	AISI-C12L14 HEAT TREATED
68 19 587	19-0.6" PE TRUMPET	POLYETHYLENE
68 19 7230	PLASTIC GROUT CAP W/O-RING	NYLON 6, 20% GLASS FIBER FILLED
U00220410	4" (100mm) CORRUGATED PP DUCT	"PPEX3"
68 19 584	NEOPRENE SEAL	CLOSED CELL NEOPRENE BLEND
00 00 876	3/4" STEEL PIPE NIPPLE 12" LONG	SCH 40 BLACK WELDED STEEL
PLA-100-150-BK (OPTIONAL)	(OPTIONAL) HEAT SHRINK SLEEVE	Acc. to FDOT spec. P.T., section 462-4.2,6,3
PLA-100-450-BK (OPTIONAL)	(OPTIONAL) HEAT SHRINK SLEEVE	Acc. to FDOT spec. P.T., section 462-4.2,6,3

BILL OF MATERIALS		
PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
(BY OTHERS)	FOAM INSULATION FOR 1/2" & 3/4" PIPE NIPPLES	---
00 00 676	1/2" STEEL PIPE NIPPLE, 12" LONG	SCH 40 BLACK WELDED STEEL
00 00 834	3/4" NPT VALVE	---
00 00 634	1/2" NPT VALVE	---
00 00 847	3/4" BT PLUG (NIAGARA PLASTICS #BT0750)	NYLON
00 00 647	1/2" BT PLUG (NIAGARA PLASTICS #BT0500)	NYLON
00 00 585	COUPLER FOR 100mm GTI DUCT	POLYETHYLENE
68 00 583	SEAL	CLOSED CELL NEOPRENE BLEND
68 19 589	19-0.6" FILLER PIECE	HARD POLYETHYLENE
00 00 801	(OPTIONAL) 21mm GROUT TUBE	HARD POLYETHYLENE
00 00 772	3/8"-16UNC HEX BOLTS 3-1/2" LG	316L STAINLESS STEEL
00 00 774	NARROW WASHER FOR 3/8"-16UNC	---
00 00 855	3/4" NPT GROUT VENT PORT	PES-TEC PART NUMBER 254-2
OR		
00 00 857 (OPTIONAL)	21mm GROUT VENT PORT (FOR INTERMEDIATE GROUT VENT)	PES-TEC PART NUMBER 251-2 POLYPROPYLENE

NOTES:

3. GTI DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.

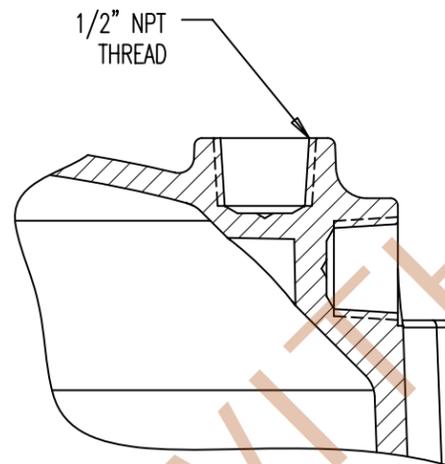
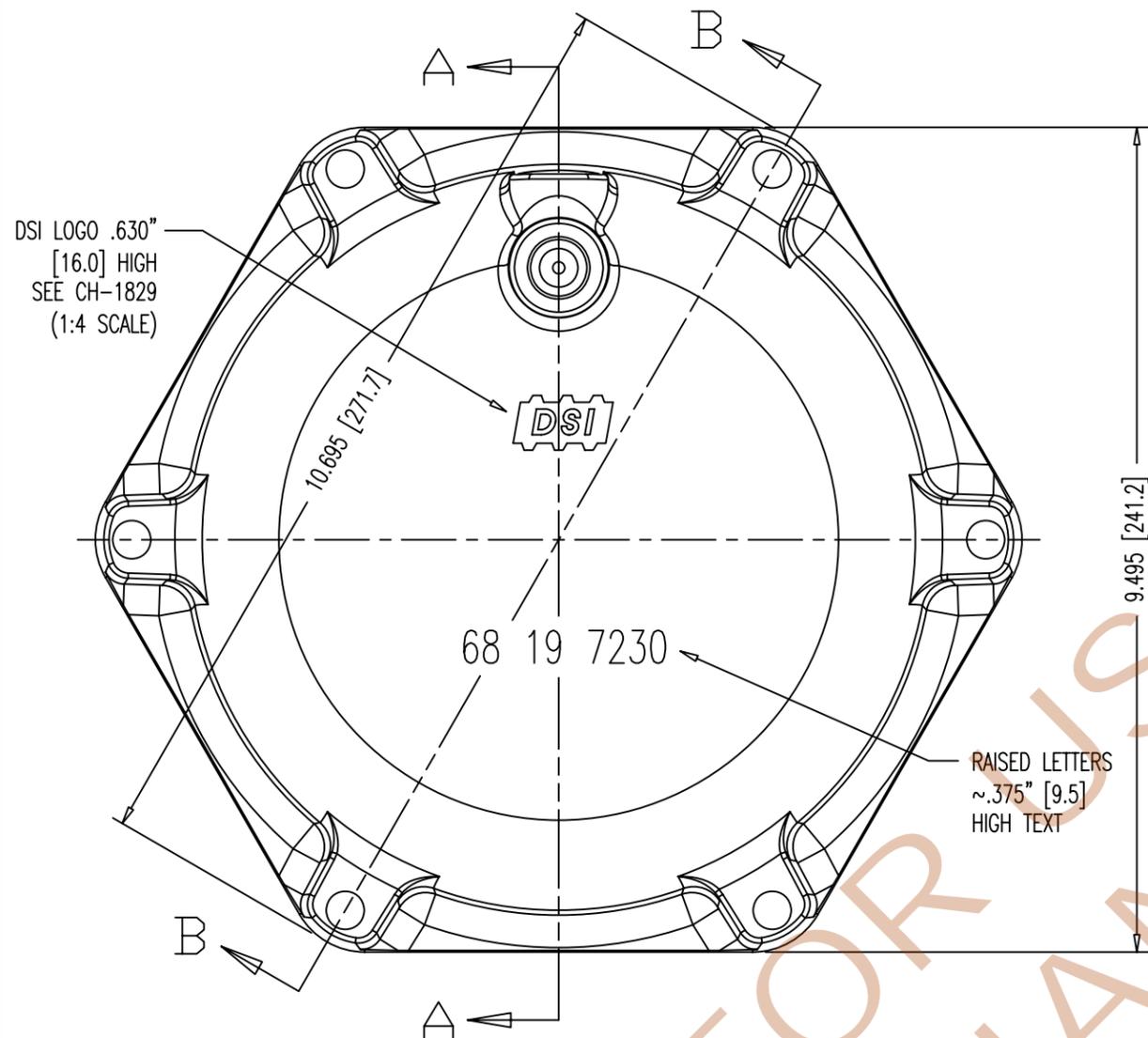


DUCT END VIEW

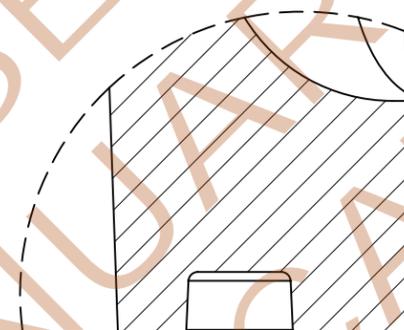
NOTE:
DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.

APPROVED BY FDOT 09-14-07

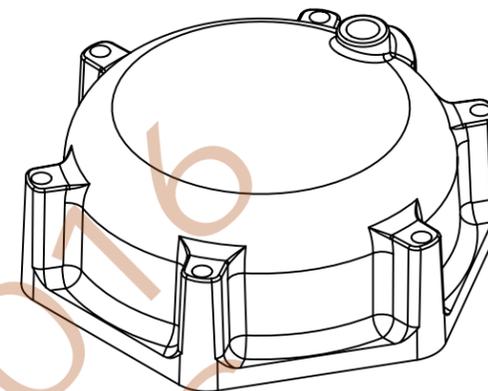
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		REV.		DATE	NAME	PART NUMBER:
INTERNAL 19-0.6" MA SYSTEM 100 ASSEMBLY DRAWING		SCALE 1:6		DRAWING NUMBER: MA 68 19 007		
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DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405						



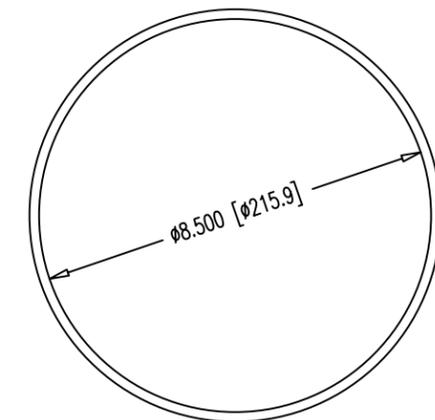
DETAIL C
SCALE: 4:3 IN COMPUTER
SCALE: 4:6 (11"x17" PLOT)



DETAIL D
SCALE: 5:1 IN COMPUTER
SCALE: 5:2 (11"x17" PLOT)



SCALE: 1:2 IN COMPUTER
SCALE: 1:4 (11"x17" PLOT)



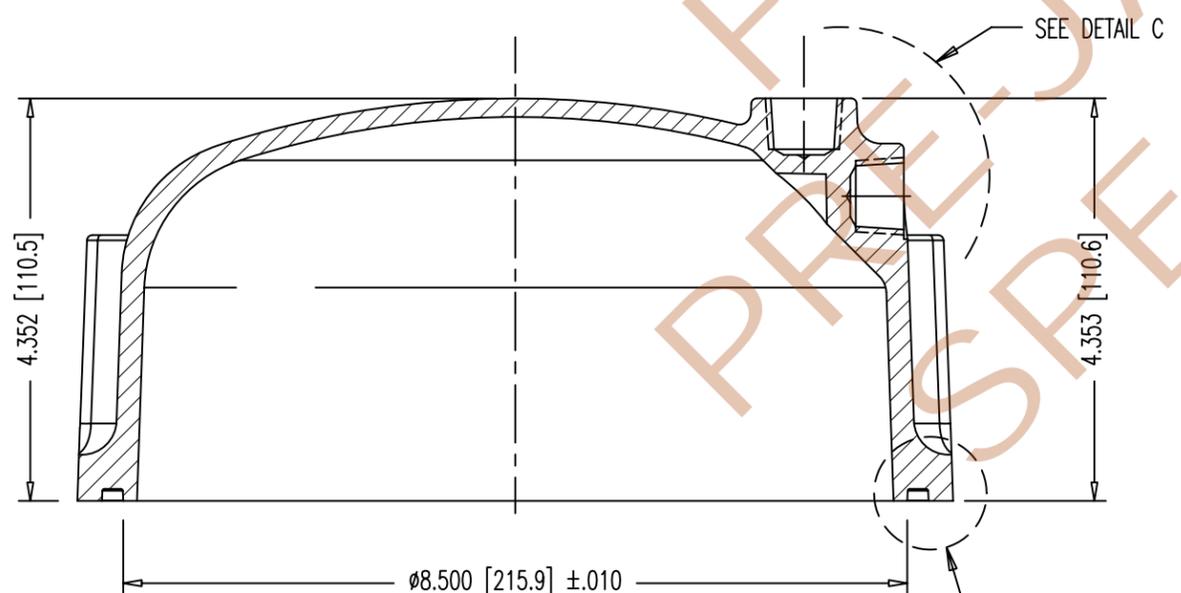
-.210 [5.3]

O-RING #371
8-1/2"x8-7/8"x3/16"
O-RING MATERIAL: BUNA "N"

SCALE: 1:2 IN COMPUTER (SCALE: 1:4 11"x17" PLOT)

- NOTES:
1. ALL DIMENSIONS DEPENDENT ON 3D DATA BASE USED FOR MOLD FABRICATION
 2. USE 3/8"-16UNC 316L S.S. HEX BOLTS, 3-1/2" LONG W/SMALL DIA. WASHER.
 3. INSTALL O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING. DON'T USE EXCESSIVE ADHESIVE. O-RING MUST STAY IN PLACE UNTIL INSTALLATION.
 4. THE CELL CLASSIFICATION SHALL CONFORM TO ASTM D5989 AND SHALL BE S-PA0141 (WEATHER RESISTANT), S-PA0231 OR S-PA0401 (TENSILE STRENGTH, YIELD 15000 PSI MIN., WITH UV STABILIZER ADDED).

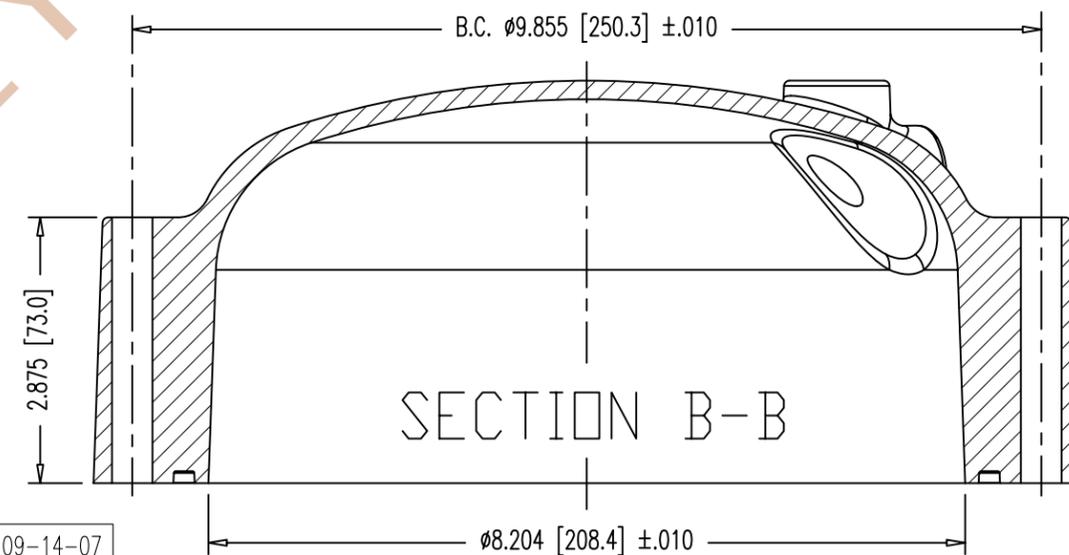
5. DRILL 1/2" [12.7] HOLE IN PORT BEING USED-CAUTION-RECOMMEND USING HOLE SAW BIT OR SPADE BIT (BY OTHERS), BE CAREFULL TO PREVENT DAMAGE TO THREADS OR CAP.
6. WHEN PRESSURIZING GROUT CAPS, DO NOT STAND BEHIND CAPS!



SECTION A-A

Tolerance Note:
All tolerances are based on SP/SPE and should be as follows unless specified otherwise:

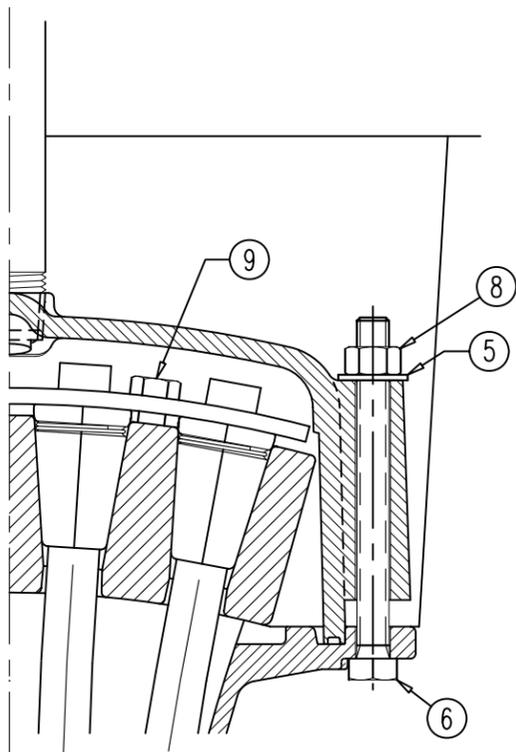
Dim.	Tolerance
0-1" =	+/- 0.005"
1-2" =	+/- 0.007"
2-3" =	+/- 0.009"
3-4" =	+/- 0.011"
4-5" =	+/- 0.013"
5-6" =	+/- 0.015"
6-7" =	+/- 0.017"
7-8" =	+/- 0.019"
8-9" =	+/- 0.021"
9-10" =	+/- 0.023"
10-11" =	+/- 0.025"
11-12" =	+/- 0.027"



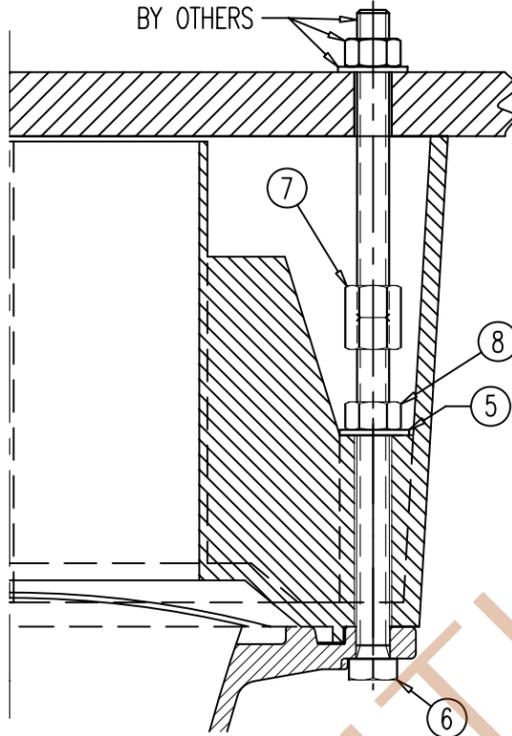
APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60072300P		TOLERANCES: SEE TOLERANCE NOTE	WEIGHT 2.57 LBS.	REV.	DATE	NAME	PART NUMBER: 68 19 7230
19-0.6" PLASTIC GROUT CAP				MATERIAL: NYLON 6 20% GLASS FIBER FILLED	SCALE 1:2 UNLESS NOTED				DRAWING NUMBER: 68 19 7230
DATE: 09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405					

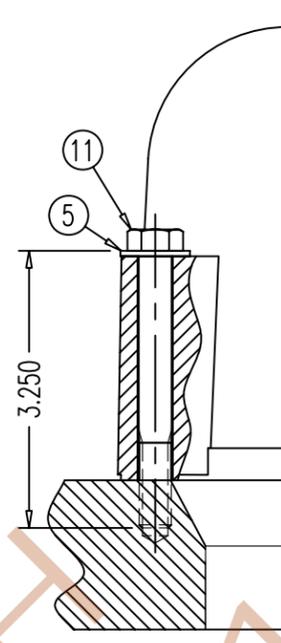




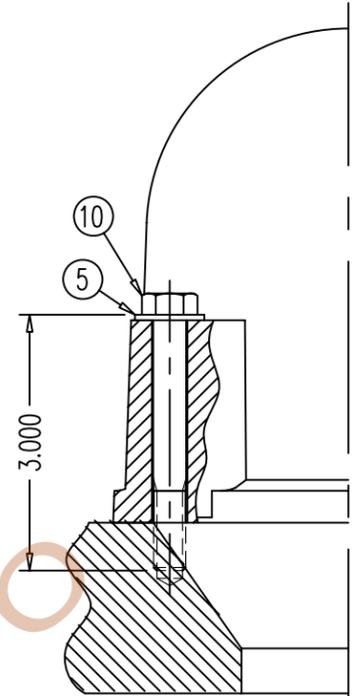
KEEPER PLATE 68 04 2637 ON
WEDGE PLATE 68 04 2534A &
GROUT CAP 68 04 2539 ON Δ
FLAT ANCHOR 68 04 2531



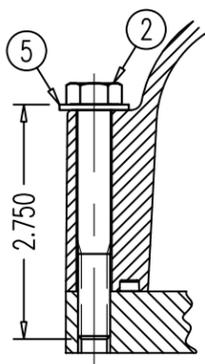
POCKET FORMER 68 04 2640
ON FLAT ANCHOR 68 04 2531



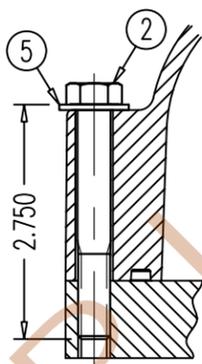
BAR GROUT CAP
B36E50700 & B65E50700



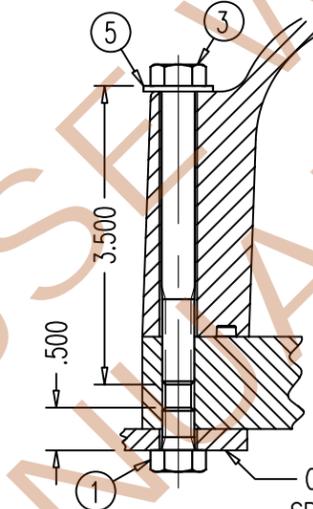
BAR GROUT CAP
B46E50700



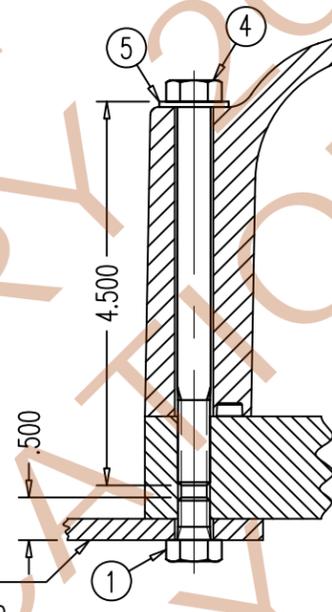
GROUT CAP 68 07 7230
ON MPA 68 07 216



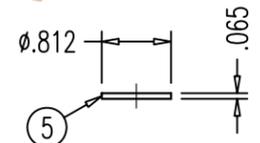
GROUT CAP 68 12 7230
ON MPA 68 12 216



GROUT CAP 68 19 7230
ON MPA 68 19 216



GROUT CAP 68 27 7230
ON MPA 68 27 216



TYPE A NARROW WASHER
FOR 3/8"-UNC BOLT

POS.	PART NUMBER	DISCRIPTION (ALL PARTS 316L STAINLESS STEEL UNLESS NOTED)
①	00 00 770	3/8"-16UNC HEX BOLT, 1/2" LONG, ZINC PLATED
②	00 00 771	3/8"-16UNC HEX BOLT, 2-3/4" LONG (1" LONG THREAD)
③	00 00 772	3/8"-16UNC HEX BOLT, 3-1/2" LONG (1" LONG THREAD)
④	00 00 773	3/8"-16UNC HEX BOLT, 4-1/2" LONG (1" LONG THREAD)
⑤	00 00 774	TYPE A NARROW WASHER FOR 3/8"-UNC BOLT
⑥	00 00 775	3/8"-16UNC HEX BOLT, 4" LONG (FULL THREAD)
⑦	00 00 776	3/8"-16UNC COUPLER, ZINC COATED
⑧	00 00 777	3/8"-16UNC HEX NUT
⑨	00 00 778	5/16"-18UNC HEX BOLT, 7/8" LONG, ZINC PLATED
⑩	00 00 782	3/8"-16UNC HEX BOLT, 3" LONG (1" LONG THREAD)
⑪	00 00 783	3/8"-16UNC HEX BOLT, 3-1/4" LONG (1" LONG THREAD)

NOTE:
THE 316L S.S. BOLTS ARE SPECIAL ORDER.
ALL WASHERS, HEX NUTS & COUPLERS HAVE
NO MARKINGS.

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH

QUALITY PLAN NUMBER:

STAINLESS STEEL 316L BOLTS AND WASHER FOR PLASTIC GROUT CAPS

DATE: 09-14-07 DWG: G. MALECKI CHK: E.A. APP: K.S.

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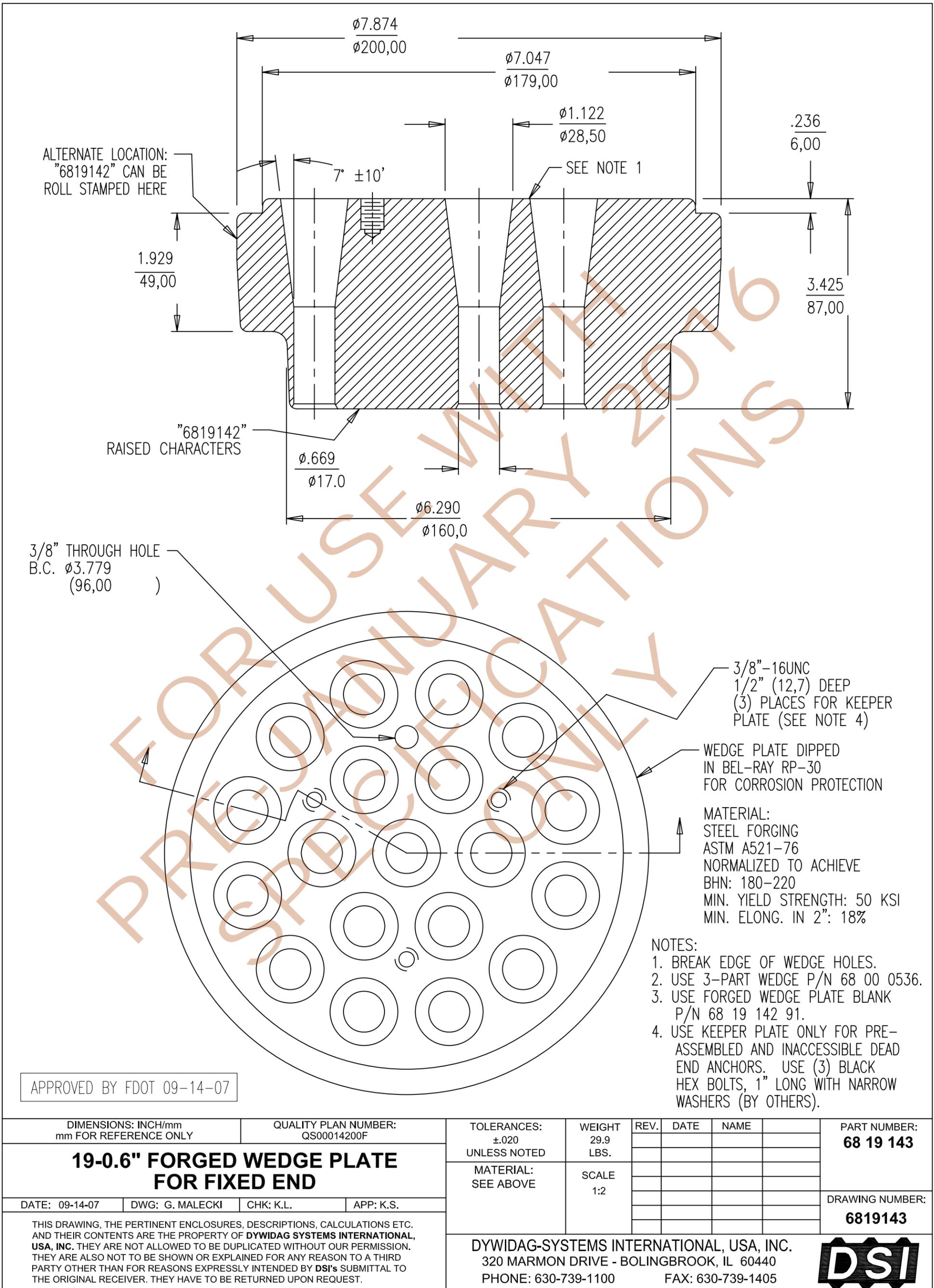
REV.	DATE	NAME	PART NUMBERS:
			00 00 770 00 00 776
			00 00 771 00 00 777
			00 00 772 00 00 778
			00 00 773 00 00 782
			00 00 774 00 00 783
			00 00 775

SCALE
1:3

DRAWING NUMBER:
00 00 770

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100
320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405





ALTERNATE LOCATION:
"6819142" CAN BE
ROLL STAMPED HERE

"6819142"
RAISED CHARACTERS

3/8" THROUGH HOLE
B.C. $\phi 3.779$
(96,00)

3/8"-16UNC
1/2" (12,7) DEEP
(3) PLACES FOR KEEPER
PLATE (SEE NOTE 4)

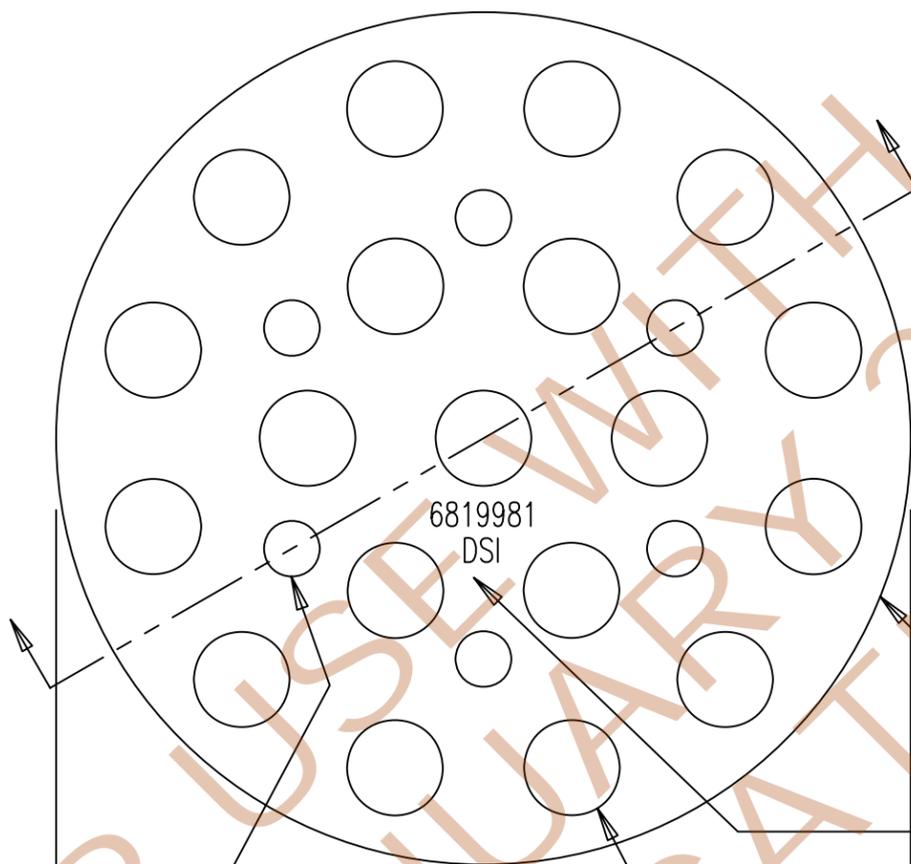
WEDGE PLATE DIPPED
IN BEL-RAY RP-30
FOR CORROSION PROTECTION

MATERIAL:
STEEL FORGING
ASTM A521-76
NORMALIZED TO ACHIEVE
BHN: 180-220
MIN. YIELD STRENGTH: 50 KSI
MIN. ELONG. IN 2": 18%

- NOTES:
1. BREAK EDGE OF WEDGE HOLES.
 2. USE 3-PART WEDGE P/N 68 00 0536.
 3. USE FORGED WEDGE PLATE BLANK P/N 68 19 142 91.
 4. USE KEEPER PLATE ONLY FOR PRE-ASSEMBLED AND INACCESSIBLE DEAD END ANCHORS. USE (3) BLACK HEX BOLTS, 1" LONG WITH NARROW WASHERS (BY OTHERS).

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS00014200F		TOLERANCES: $\pm .020$ UNLESS NOTED	WEIGHT 29.9 LBS.	REV.	DATE	NAME	PART NUMBER: 68 19 143
19-0.6" FORGED WEDGE PLATE FOR FIXED END				MATERIAL: SEE ABOVE	SCALE 1:2				DRAWING NUMBER: 6819143
DATE: 09-14-07	DWG: G. MALECKI	CHK: K.L.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					
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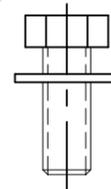
ROUND PLATE
WITHOUT HOLES
P/N 68 19 981 91

"6819981"
"DSI"
STAMPED

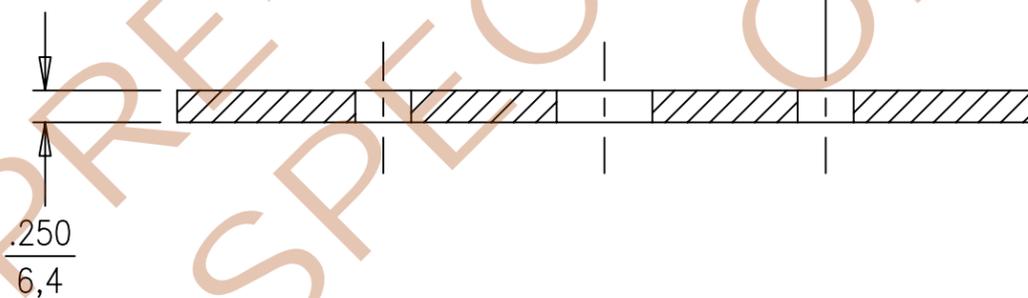
Ø.438
Ø11,1
6 PLACES

Ø.750
Ø19,1
19 PLACES

Ø6.693
Ø170,0



BLACK 3/8"-16UNC
HEX BOLT 1" LONG
WITH NARROW WASHER
(3) PLACES (BY OTHERS)

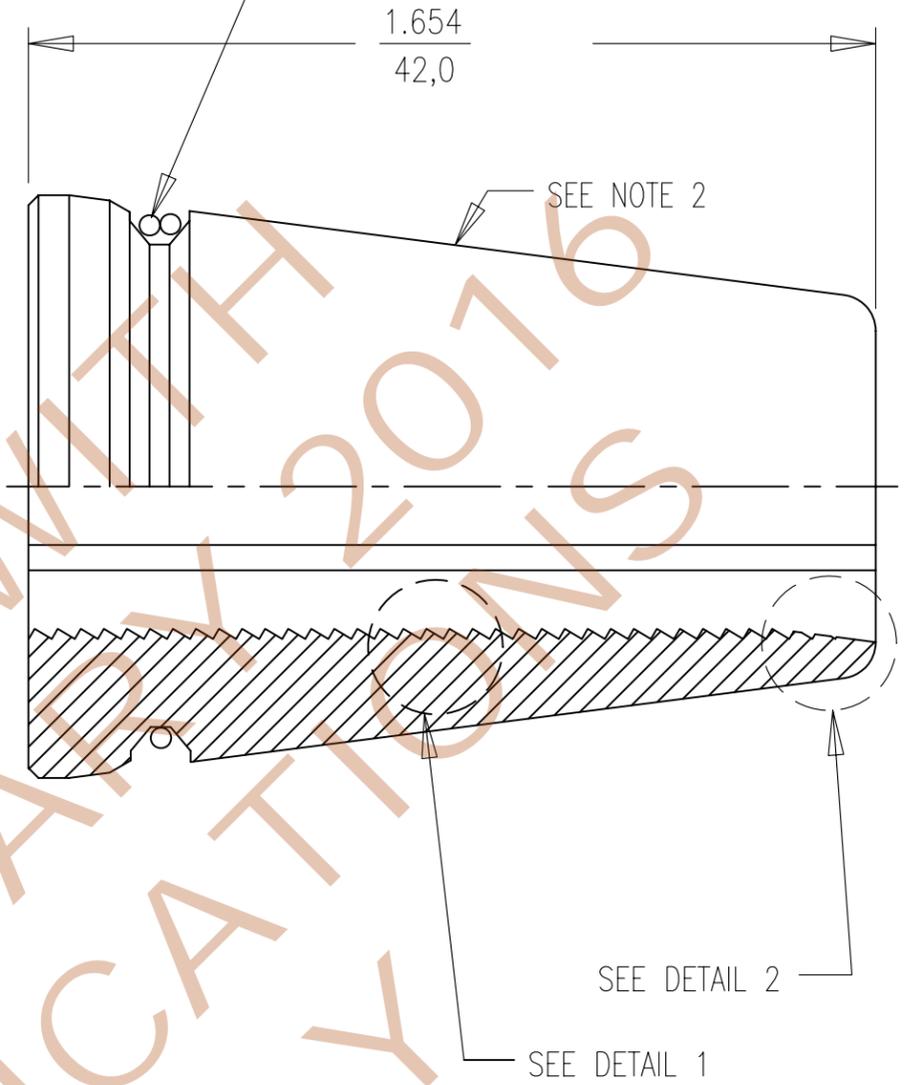
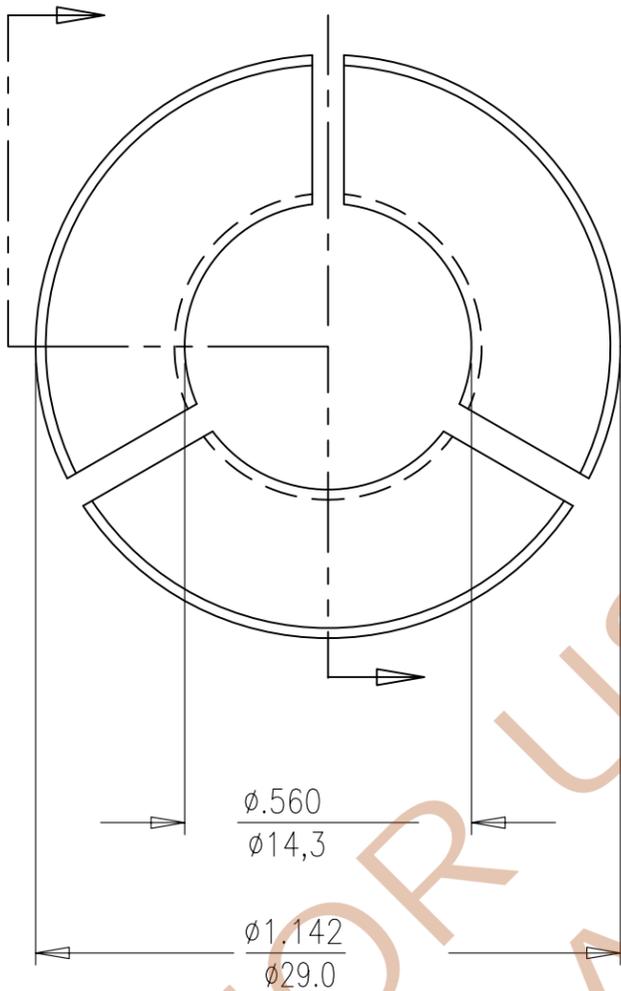


NOTE:
USE KEEPER PLATE ONLY FOR PRE-ASSEMBLED
AND INACCESSIBLE DEAD END ANCHORS.

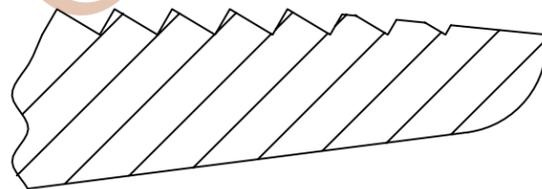
APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60098100L		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 1.9 LBS.	REV.	DATE	NAME	PART NUMBER: 68 19 981	
19-0.6" KEEPER PLATE				MATERIAL: AISI 1020 OR EQUIV.	SCALE 1:2				DRAWING NUMBER: 68 19 981	
				DATE: 09-14-07	DWG: G. MALECKI	CHK: K.L.	APP: K.S.			
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SPRING WIRE RING:
 WIRE $\phi = .040$ (1,0), ID = .905 (23.0)
 NO. OF TURNS: $1.5 \pm .25$
 WIRE QUALITY: ASTM 228



DETAIL 1
5:1



DETAIL 2
5:1

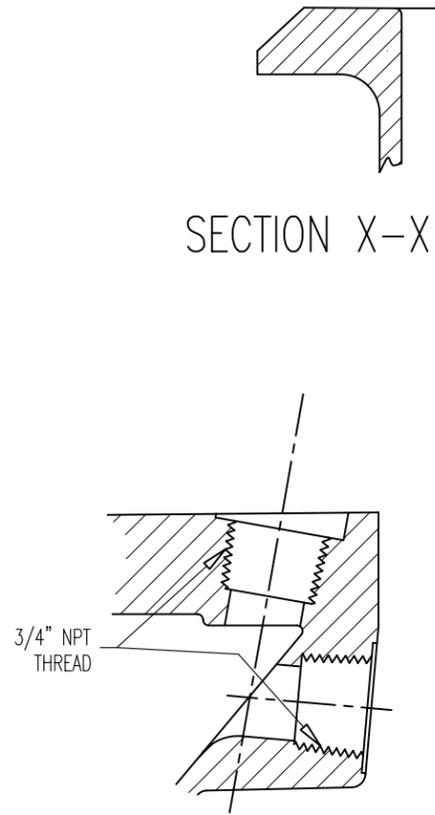
NOTES:

5. NO STAMPED PART NUMBER

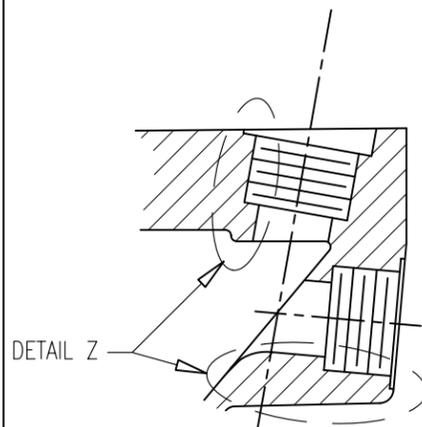
APPROVED BY FDOT 05-31-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS00000500DP2		TOLERANCES: $\pm .010$; $\pm 2^\circ$ UNLESS NOTED	WEIGHT 0.19 LBS.	REV.	DATE	NAME	PART NUMBER: 68 00 0536
3-PART WEDGE 7° x 29 mm x 42 mm 0.6" STRAND				MATERIAL: SEE MAT'L SPEC. PMU0005360B	SCALE 2:1 5:1				DRAWING NUMBER: 68 00 0536
				DATE: 05-31-07	DWG: G. MALECKI	CHK: C.S.	APP: K.L.		
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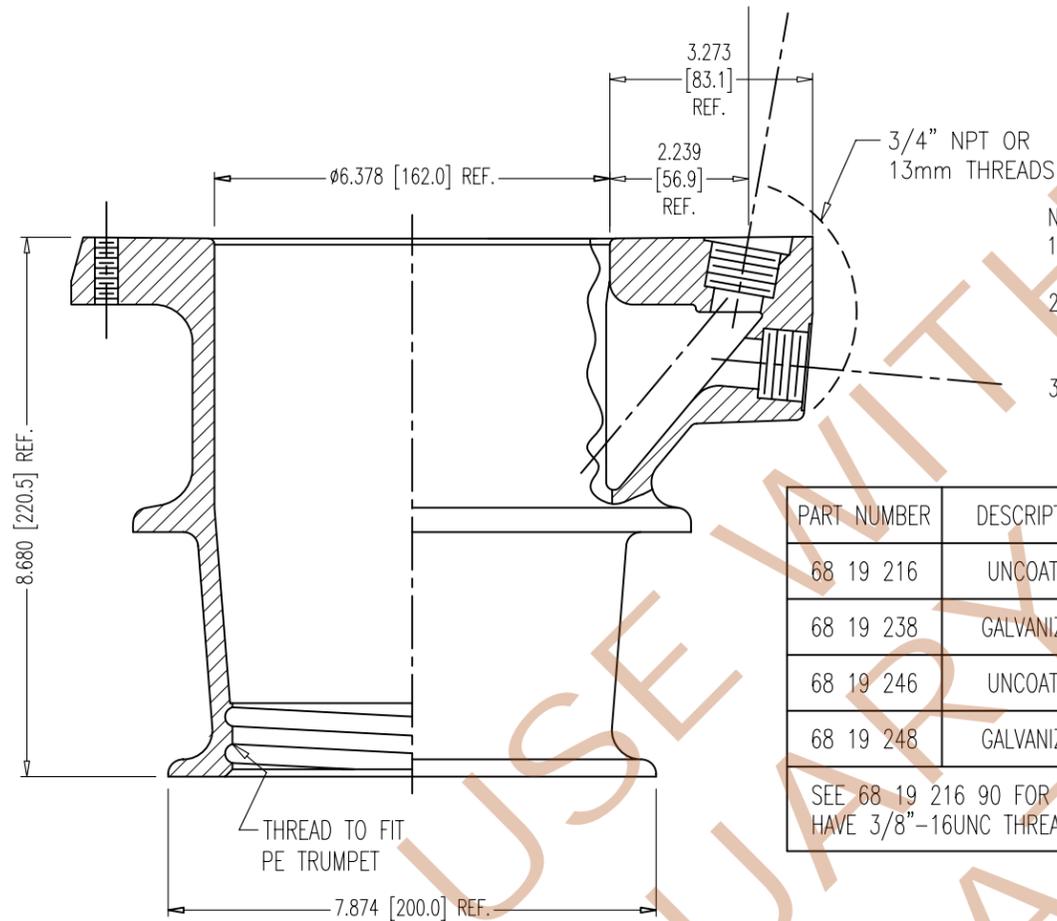
SECTION X-X



GROUT PORT THREADS WITH 3/4" NPT THREADS
SCALE 3:2 IN COMPUTER



GROUT PORT THREADS WITH 21mm THREADS
SCALE 3:2 IN COMPUTER

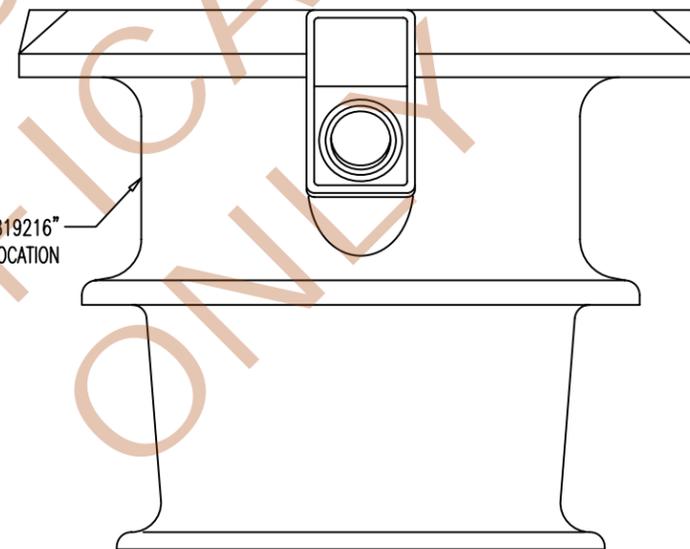


- NOTES FOR GALVANIZED PARTS:
1. HOT DIP GALV. ACCORD. TO ASTM A123.
 2. ASSURE THREADABILITY OF THREADED HOLES AFTER GALVANIZING.
 3. PROTECT THREADED HOLES WITH ZINC PAINT.

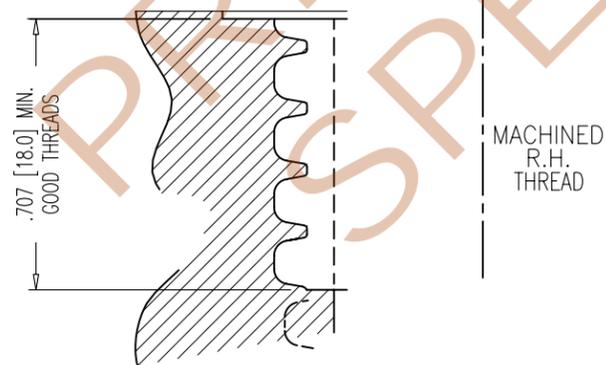
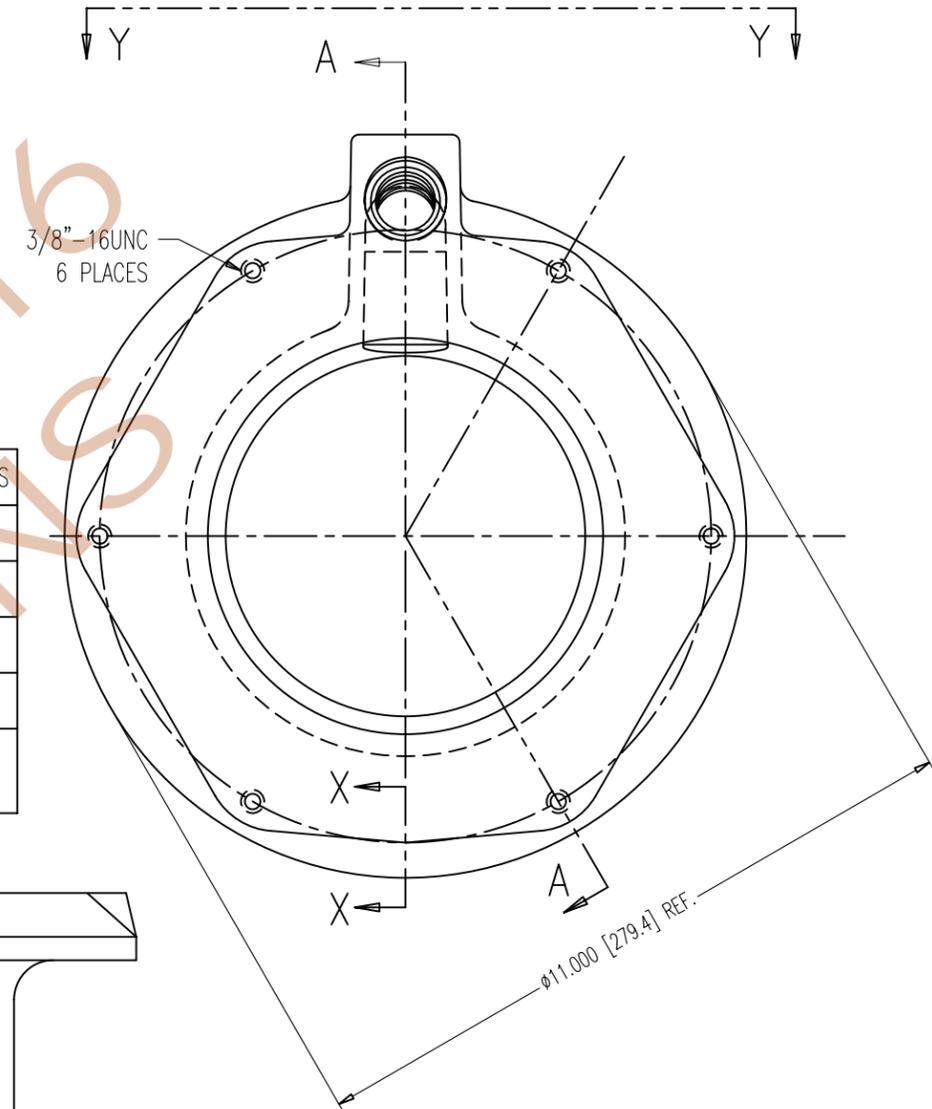
PART NUMBER	DESCRIPTION	GROUT PORT THREADS
68 19 216	UNCOATED	21mm
68 19 238	GALVANIZED	21mm
68 19 246	UNCOATED	3/4" NPT
68 19 248	GALVANIZED	3/4" NPT

SEE 68 19 216 90 FOR RAW CASTING. ALL PARTS HAVE 3/8"-16UNC THREADS ADDED TO RAW CASTING.

SECTION A-A
(SHOWN WITH 21mm GROUT PORT THREADS)



VIEW Y-Y

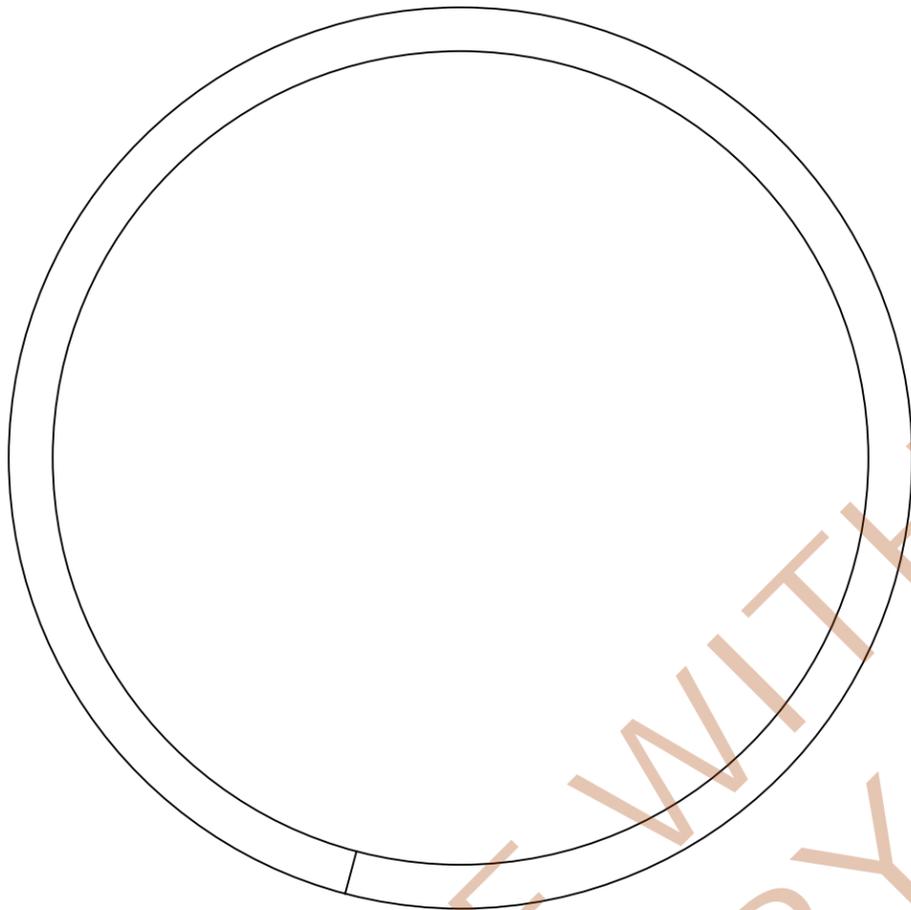


DETAIL Z
SCALE 6:1 IN COMPUTER

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60021200C		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 40 LBS.	REV.	DATE	NAME	PART NUMBER:
19-0.6"/27-0.5" MULTI-PLANE ANCHOR WITH TWO GROUT PORTS				MATERIAL: SEE MAT'L SPEC. PM0021200C	SCALE 1:3				68 19 216
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.						68 19 238
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.									
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405									
									68 19 246
									68 19 248
									68 19 216





NOTES:

1. SPIRAL IS MADE FROM STANDARD #5 REBAR, NO PART NUMBER MARKING IS SHOWN.
2. KEEP SPIRAL AND MPA AXIS ALIGNED, IF USING SIDE PORT, ROTATE SPIRAL TO CLEAR.

NO. OF FULL TURNS: 8
 DEVELOPED LENGTH: 29'-1" ±.250"
 WEIGHT: 30.4 LBS.

19-0.6"
 MPA CASTING
 68 19 216

19-0.6"
 SPIRAL
 CH-2357A

1.875 [47.6]
 ±.500 PITCH

8.680 [220.5]

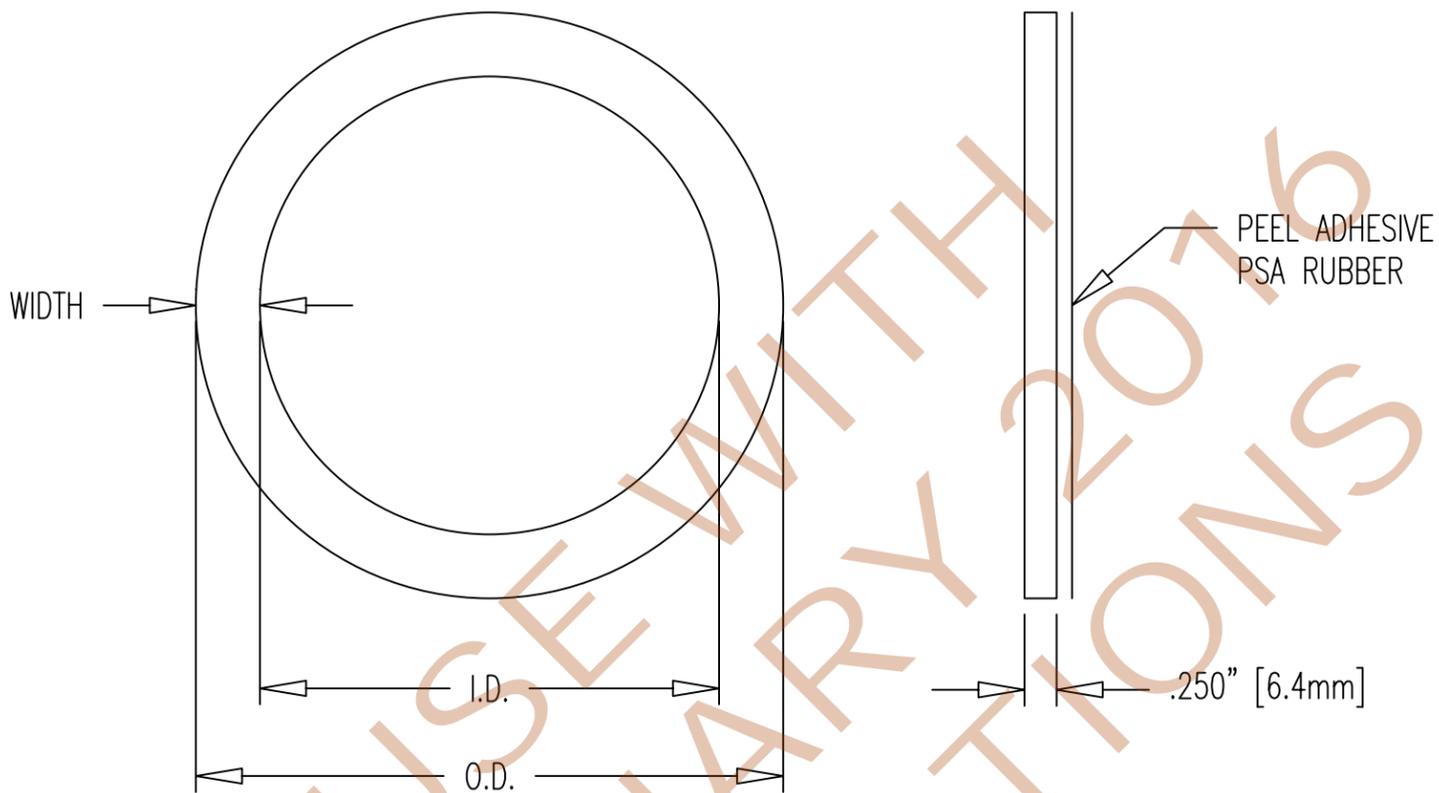
15.625 [396.9]
 ±1.000

0.888"
 ϕ

ϕ14.500 ±.500

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 30.4 WEIGHT	REV.	DATE	NAME	PART NUMBER: 68 19 254
STANDARD SPIRAL FOR 19-0.6"/27-0.5" MPA				MATERIAL: ASTM A615 SIZE #5, GR 60	SCALE 1:4				DRAWING NUMBER: 68 19 254
				DATE: 09-14-07	DWG: G. MALECKI	CHK: S.Y.	APP: E.A.		
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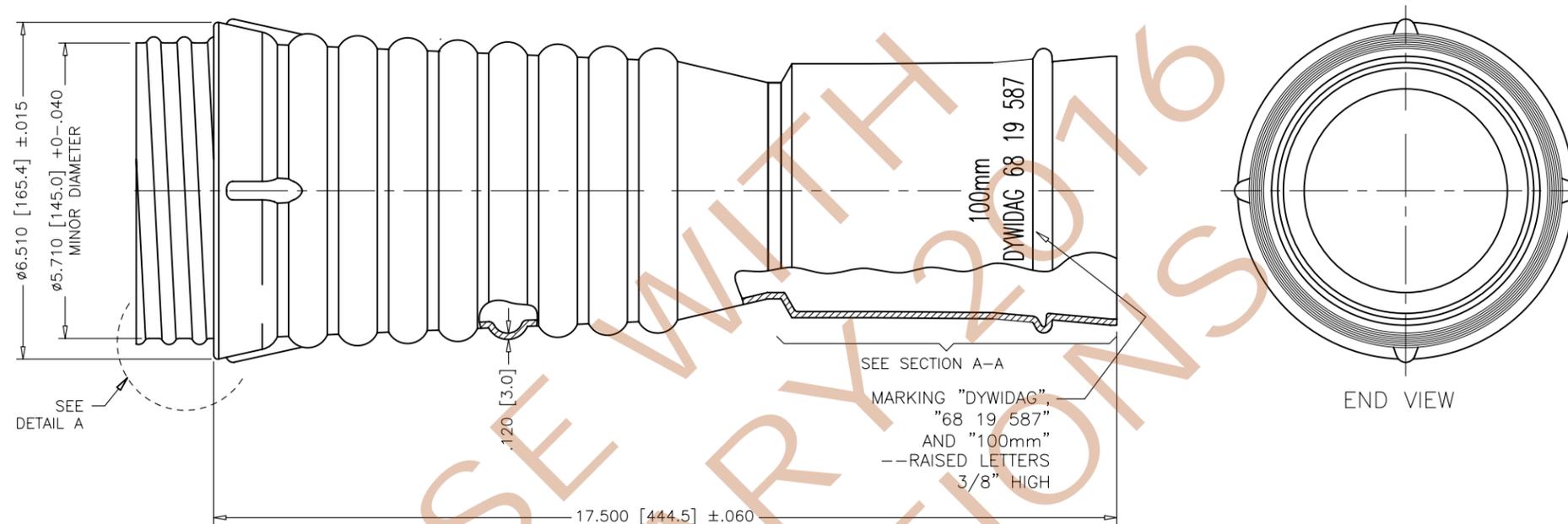


PART NUMBER	SYSTEM	O.D.	I.D.	WIDTH
68 07 584	7-0.6"	ø4.580" [116mm]	ø3.580" [91mm]	.500" [12.7mm]
68 12 584	12-0.6"	ø5.695" [145mm]	ø4.820" [122mm]	.438" [11.1mm]
68 19 584	19-0.6"	ø6.675" [170mm]	ø5.800" [147mm]	.438" [11.1mm]
68 27 584	27-0.6"	ø7.340" [186mm]	ø6.340" [161mm]	.500" [12.7mm]

NOTE:
SPECIAL ORDER
NO STAMPED PART NUMBER

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60063300R		TOLERANCES: ±.030 UNLESS NOTED		REV.	DATE	NAME	PART NUMBER: 68 07 584 68 12 584 68 19 584 68 27 584		
RUBBER SEAL BETWEEN MPA AND TRUMPET				MATERIAL: CLOSED CELL NEOPRENE BLEND		SCALE NTS				DRAWING NUMBER: 68 00 584	
				DATE: 09-14-07		DWG: G. MALECKI		CHK: C.N.			APP: E.A.
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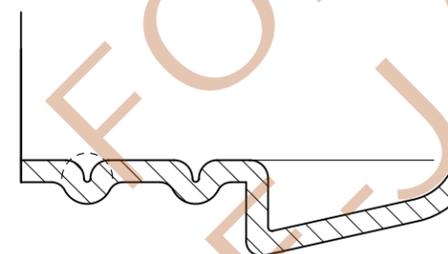


SEE
DETAIL A

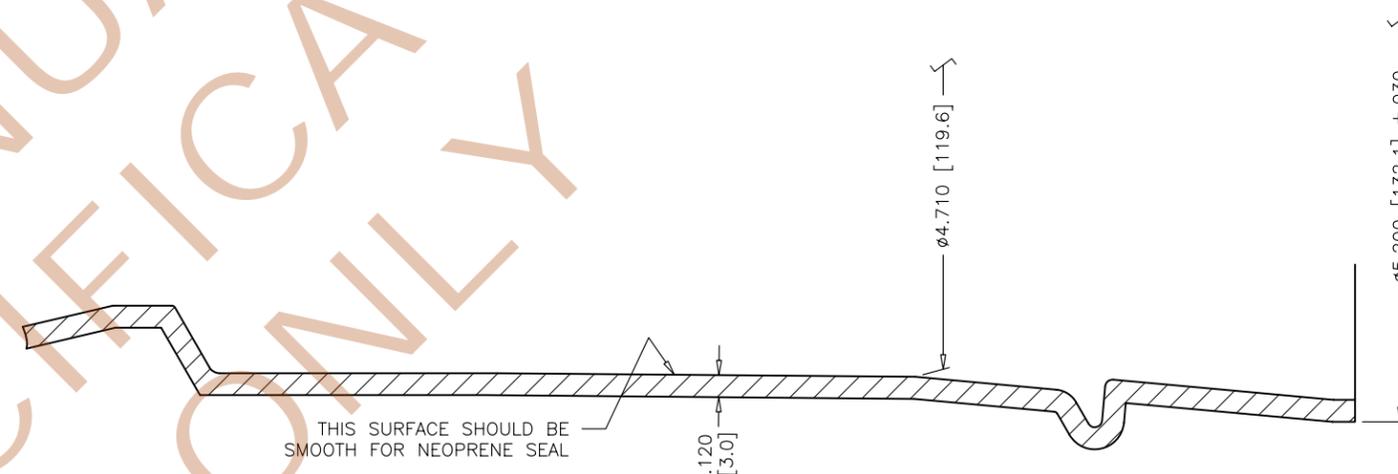
SEE SECTION A-A

MARKING "DYWIDAG",
"68 19 587"
AND "100mm"
--RAISED LETTERS
3/8" HIGH

END VIEW



DETAIL A-A
THREAD FITS INTO 19-0.6" MPA
CASTING (SEE DRAWING 68 19 216)



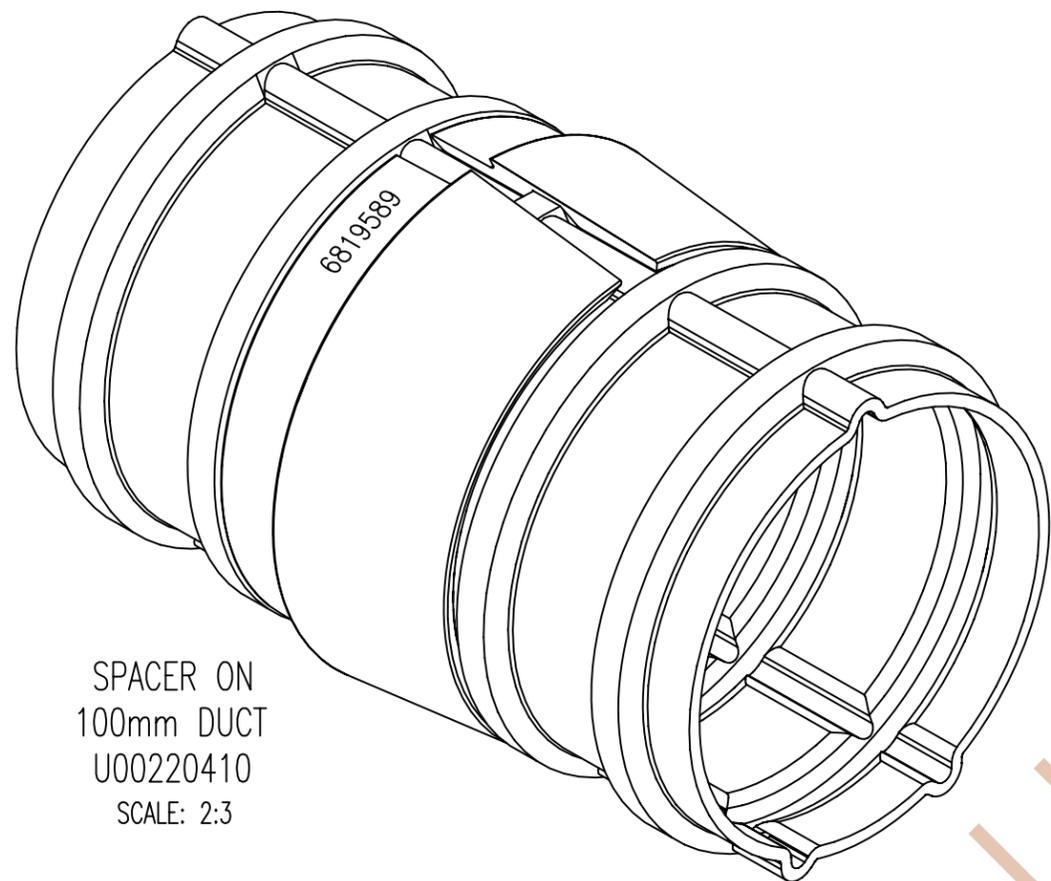
THIS SURFACE SHOULD BE
SMOOTH FOR NEOPRENE SEAL

SECTION A-A
(THESE INSIDE DIMENSIONS ARE MORE
IMPORTANT THAN OUTSIDE DIMENSIONS, MUST
FIT OVER 100mm GTI DUCT U00220410)

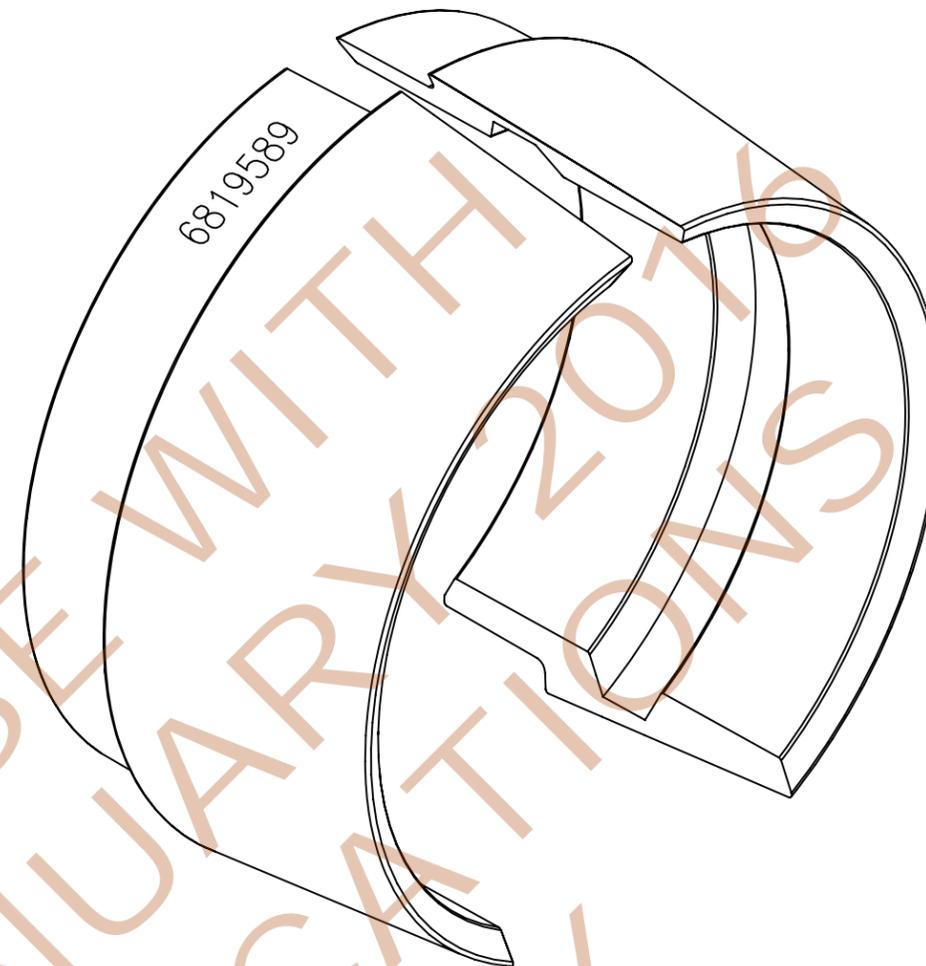
MATERIAL SPECIFICATIONS:
MANUFACTURE TRUMPETS FROM NON-COLORED,
UNFILLED POLYETHYLENE MEETING THE REQUIREMENTS
OF ASTM D4976. THE TRUMPET SHALL BE WHITE IN
COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM
OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM
D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING
LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF
THE TRUMPET SHALL RESULTS IN A MINIMUM FAILURE TIME OF
3 HOURS ACCORDING TO F 2136 AT AN APPLIED STRESS OF 348 PSI

APPROVED BY FDOT 09-14-07

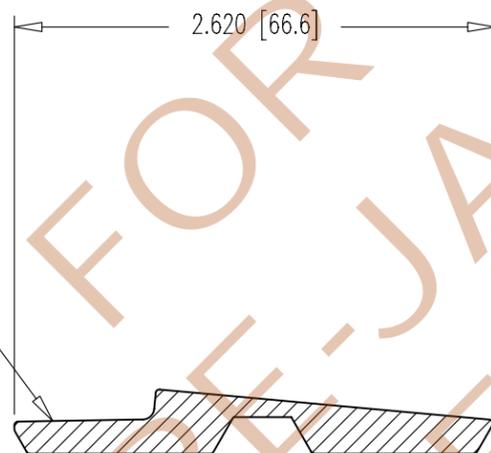
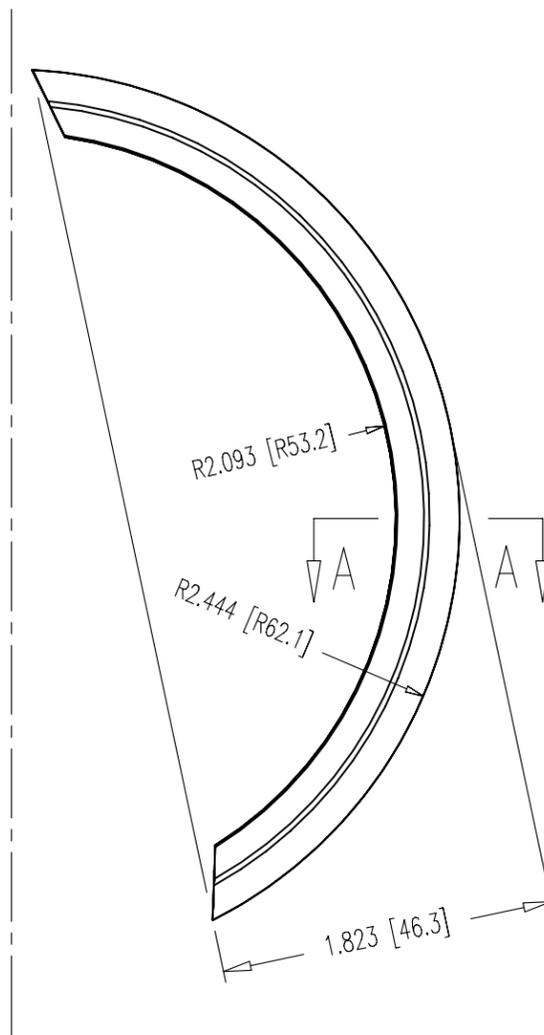
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT	REV.	DATE	NAME	PART NUMBER: 68 19 587
19-0.6"/27-0.5" TRUMPET FOR MPA TO 100mm DUCT				MATERIAL: SEE ABOVE	SCALE 1:3 1:1				DRAWING NUMBER: 68 19 587
DATE: 09-14-06	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405					
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SPACER ON
100mm DUCT
U00220410
SCALE: 2:3



SPACER 68 19 589
(TWO SEGMENTS REQUIRED)



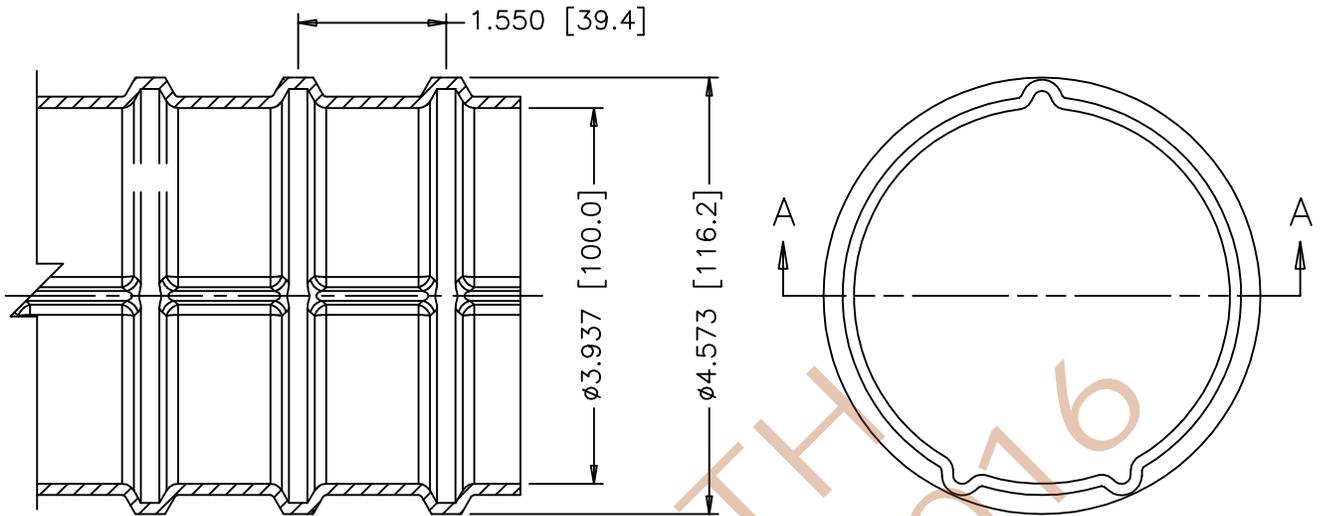
"DSI 68 19 589 100mm"
MARKING

SECTION A-A

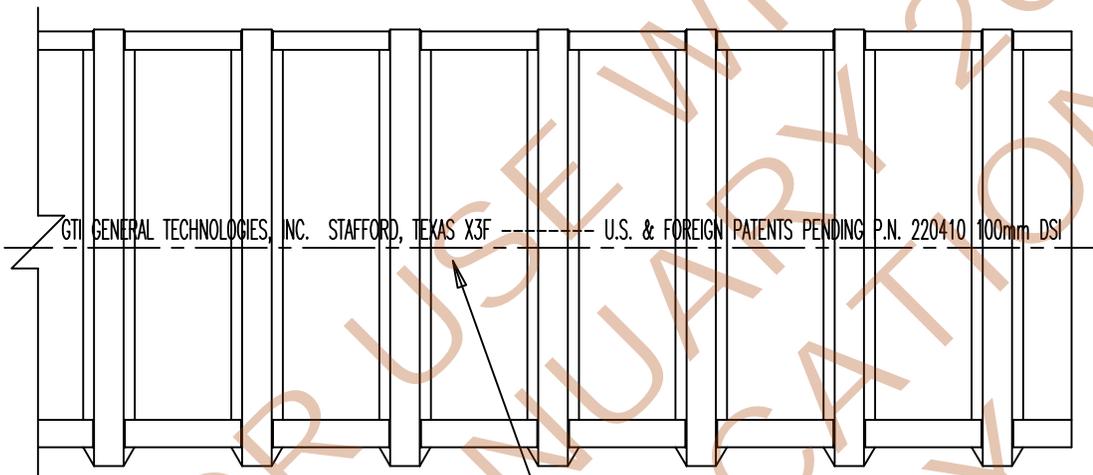
MATERIAL:
NYLON 6, 20% GLASS FIBER FILLED.
THE CELL CLASSIFICATION SHALL CONFORM
TO ASTM D5989 AND SHALL BE S-PA0141
(WEATHER RESISTANT), S-PA0231 OR
S-PA0401 (TENSILE STRENGTH, YIELD 15000
PSI MIN., WITH UV STABILIZER ADDED).

APPROVED BY FDOT 09-14-07

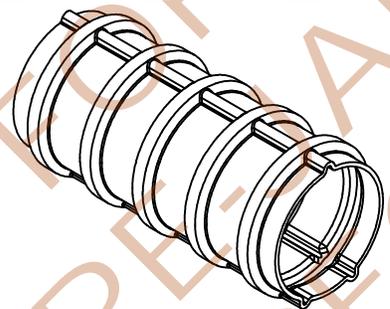
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT	REV.	DATE	NAME	PART NUMBER: 68 19 589
FILLER PIECE FOR 19-0.6" TRUMPET AND 4" (100mm) CORRUGATED PP DUCT				MATERIAL: SEE ABOVE	SCALE 1:1 2:3				DRAWING NUMBER: 68 19 589
DATE:09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					
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SECTION A-A



GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F ----- U.S. & FOREIGN PATENTS PENDING P.N. 220410 100mm DSI



RUNNING LATEX PRINT:
 ① "GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F ----- U.S. & FOREIGN PATENTS PENDING P.N. 220410 100mm DSI" (----- = BATCH NUMBER).

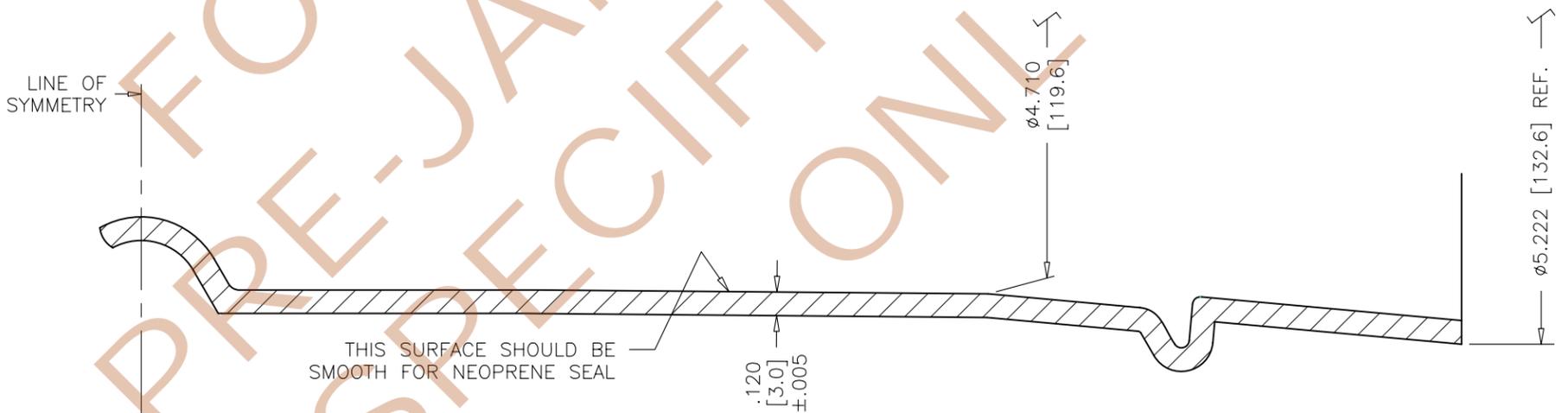
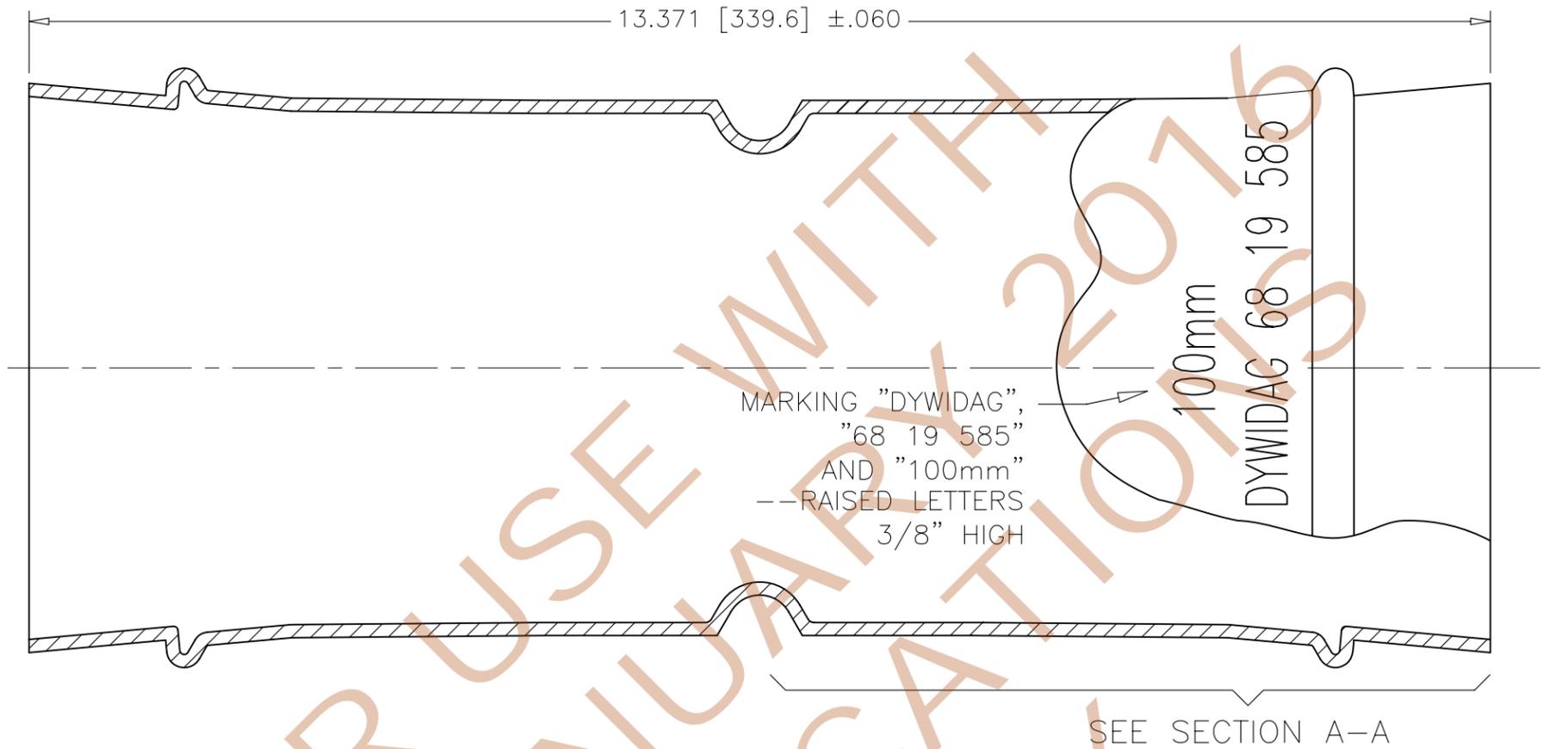
MATERIAL SPECIFICATIONS:
 MANUFACTURE DUCTS FROM NON-COLORED, UNFILLED POLYPROPYLENE MEETING THE REQUIREMENTS OF ASTM D4101 WITH A CELL CLASSIFICATION RANGE OF PP0340B44541 ③ TO PP0340B67884. THE DUCT SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER.

APPROVED BY FDOT 09-14-07

- NOTES:
- GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F
 ① ----- U.S. & FOREIGN PATENTS PENDING P.N. 220410 100mm DSI (----- IS BATCH NO.).
 - REFERENCE GTI DRAWING 220410.
 - STANDARD FIT FOR 15-0.6", 19-0.6", 20-0.5" & 27-0.5" STRANDS.
 - THIS DRAWING IS NOT INTENDED FOR MANUFACTURING PURPOSES.
 - ② MIN. BENDING RADIUS, $R_{min} = 23.6$ FT.
 - DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDEND TO BE COILED.

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QU00041110P		TOLERANCES: ±.010 UNLESS NOTED	WEIGHT 0.74 LBS.	REV.	DATE	NAME	PART NUMBER: U00220410
4" (100mm) CORRUGATED PP DUCT WITH FLOW CHANNELS				MATERIAL: SEE ABOVE	SCALE 1:2	1	08-04-08	S.N.	
						2	09-22-08	S.N.	
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.			3	01-28-13	S.N.	DRAWING NUMBER: U00220410
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MATERIAL SPECIFICATIONS:
 MANUFACTURE COUPLERS FROM NON-COLORED, UNFILLED POLYPROPYLENE MEETING THE REQUIREMENTS OF ASTM D4101 WITH A CELL CLASSIFICATION RANGE OF PP0340B14541 TO PP0340B67884. THE COUPLER SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF THE COUPLER SHALL RESULT IN A MINIMUM FAILURE TIME OF 3 HOURS ACCORDING TO ASTM F 2136 AT AN APPLIED STRESS OF 348 PSI.



SECTION A-A
 (THESE INSIDE DIMENSIONS ARE MORE IMPORTANT THAN OUTSIDE DIMENSIONS, MUST FIT OVER 100mm GTI DUCT U00220410)

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 0.86 LBS,	REV.	DATE	NAME	PART NUMBER: 68 19 585	
COUPLER FOR 100mm GTI DUCT FOR 19-0.6" STRANDS				MATERIAL: SEE ABOVE	SCALE 1:2 9:10				DRAWING NUMBER: 68 19 585	
				DATE: 09-14-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.			
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405						