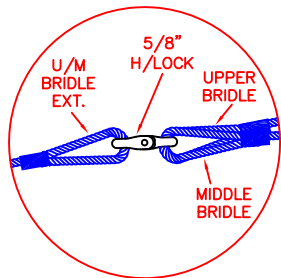


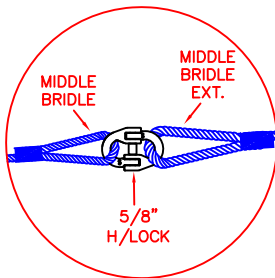
# SECTION 1 – RIGGING

NOTE:  
- HAMMERLOCKS ARE NOT INCLUDED  
IN LENGTH MEASUREMENTS

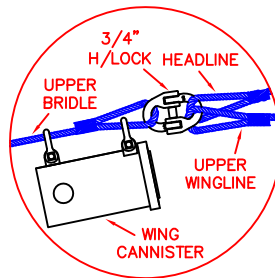
DETAIL 'A'



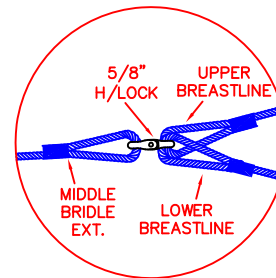
DETAIL 'B'



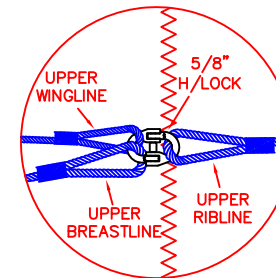
DETAIL 'C'



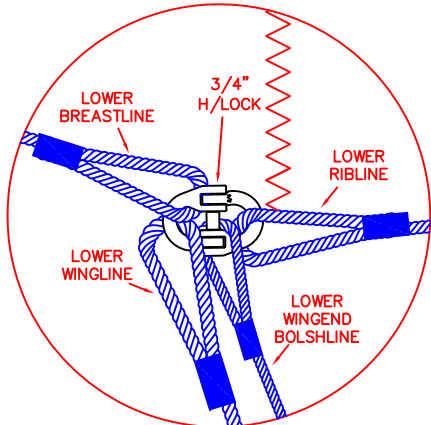
DETAIL 'D'



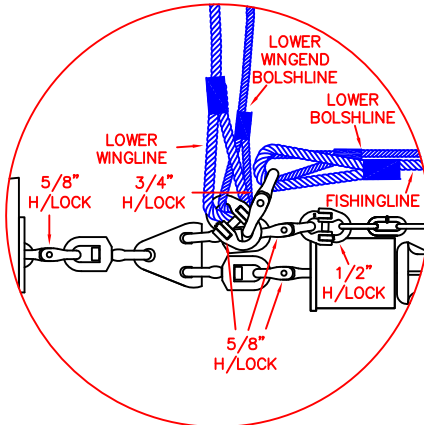
DETAIL 'E'



DETAIL 'F'

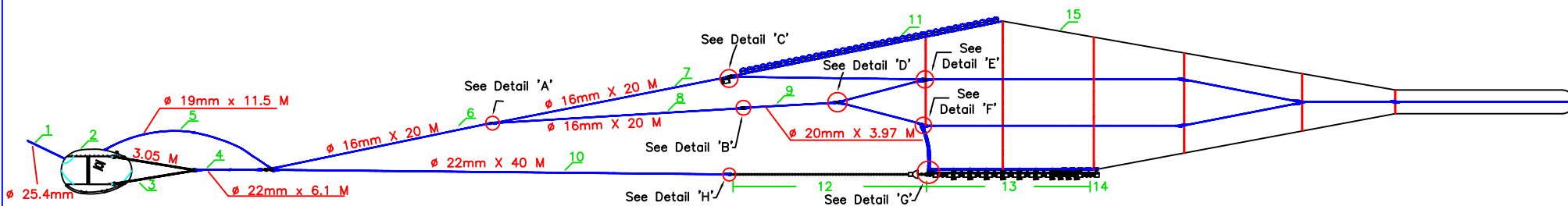
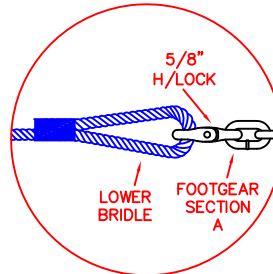


DETAIL 'G'



SEE APPENDIX B

DETAIL 'H'



| #  | COMPONENT          | MATERIALS         | QTY | PAGE NO.  | PART NO. |
|----|--------------------|-------------------|-----|-----------|----------|
| 1  | Warp               | Wire 6 x 19       | 2   | 1-3       | CT01     |
| 2  | 4.58 sqm Door      | 1400 kg Oval      | 2   | 1-3,13-14 | CT02     |
| 3  | Door Legs          | 16mm Chain        | 4   | 1-3       | CT03     |
| 4  | Door Leg Extn      | Wire 6 x 19       | 2   | 1-3       | CT04     |
| 5  | Pennant Wire       | Wire 6 x 19       | 1   | 1-3       | CT05     |
| 6  | U/M Bridle Ext.    | Wire 6 x 19       | 2   | 1         | CT06     |
| 7  | Upper Bridle       | Wire 6 x 19       | 2   | 1         | CT07     |
| 8  | Middle Bridle      | Wire 6 x 19       | 2   | 1         | CT08     |
| 9  | Middle Bridle Ext. | Comb. Rope        | 2   | 1         | CT09     |
| 10 | Lower Bridle       | Wire 6 x 19       | 2   | 1         | CT10     |
| 11 | Floats (203mm)     | Plastic           | 100 | 1,7       | CT11     |
| 12 | F/Gear Sect. A     | Chain 16mm $\phi$ | 2   | 1,10-12   | CT12     |
| 13 | F/Gear Sect. B     | Chain 16mm $\phi$ | 2   | 1,10-12   | CT13     |
| 14 | F/Gear Sect. C     | Chain 16mm $\phi$ | 1   | 1,10-12   | CT14     |
| 15 | Trawl Body         | PE Netting        | 1   | 1,4       | CT15     |



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## CAMPELEN 1800 SURVEY TRAWL RIGGING PROFILE

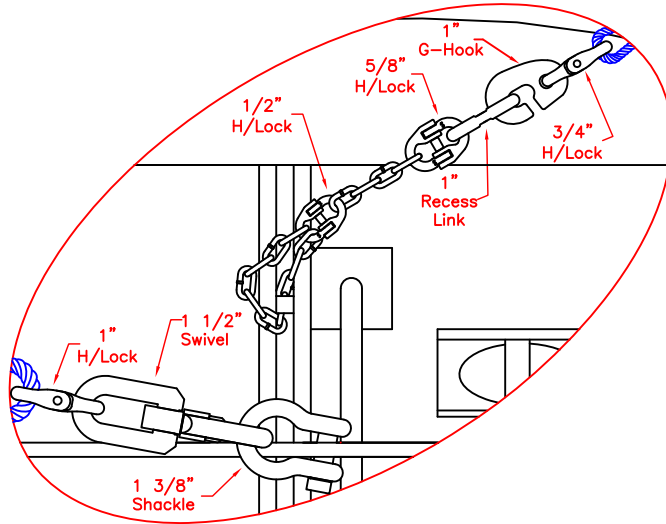
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|-------------|-----------------------|------|--------|
| DATE DRAWN: | DWG NO.:              | REV. | SCALE: |
| 12/01/15    | CAM*1.0 PG 1 OF 28 PG | 4    | NTS    |

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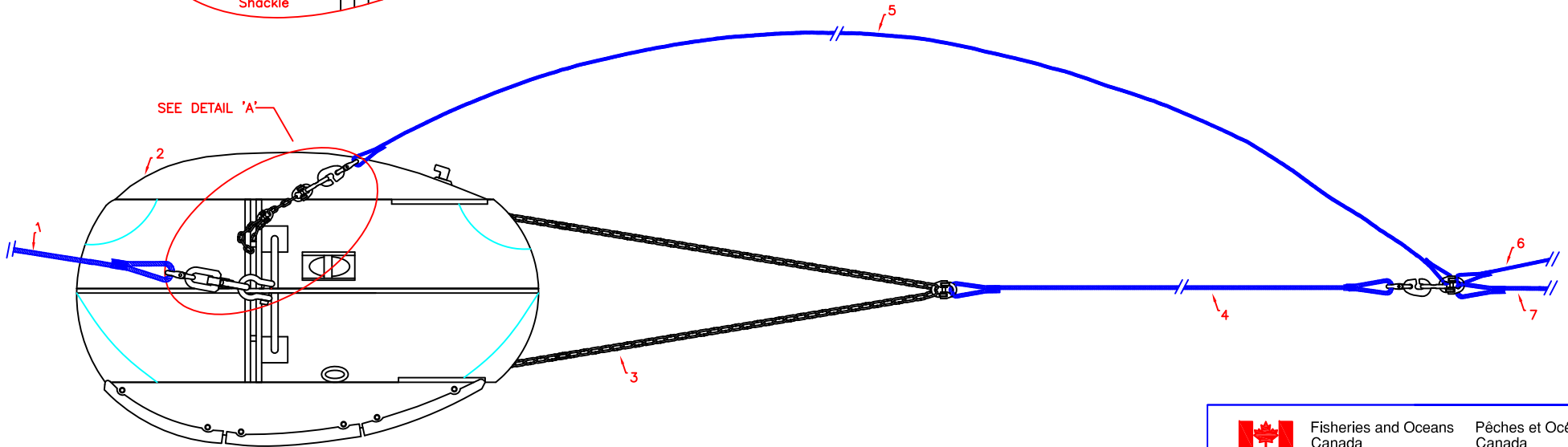




DETAIL 'A'



SEE DETAIL 'A'



FRONT VIEW  
STBD DOOR

| #  | COMPONENT         | MATERIALS    | LENGTH(m) |
|----|-------------------|--------------|-----------|
| 1  | WARP              | 6 x 19 WIRE  | N/A       |
| 2  | TRAWL DOOR        | 1400 kg OVAL | 3.10      |
| 3  | DOOR LEGS         | 16mm CHAIN   | 3.05      |
| 4A | WT DOOR LEG EXT.  | 6 x 19 WIRE  | 6.1       |
| 4B | TEL DOOR LEG EXT. | 6 x 19 WIRE  | 7.62      |
| 5A | WT PENNANT WIRE   | 6 x 19 WIRE  | 12.82     |
| 5B | TEL PENNANT WIRE  | 6 x 19 WIRE  | 13.8      |
| 6  | U/M BRIDLE EXT.   | 6 x 19 WIRE  | 20        |
| 7  | LOWER BRIDLE      | 6 x 19 WIRE  | 40        |



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# CAMPELEN 1800 SURVEY TRAWL PENNANT CHAIN CONNECTION

| DATE DRAWN: | DWG NO.:              | REV. | SCALE: |
|-------------|-----------------------|------|--------|
| 12/01/15    | CAM*1.2 PG 3 OF 28 PG | 2    | NTS    |

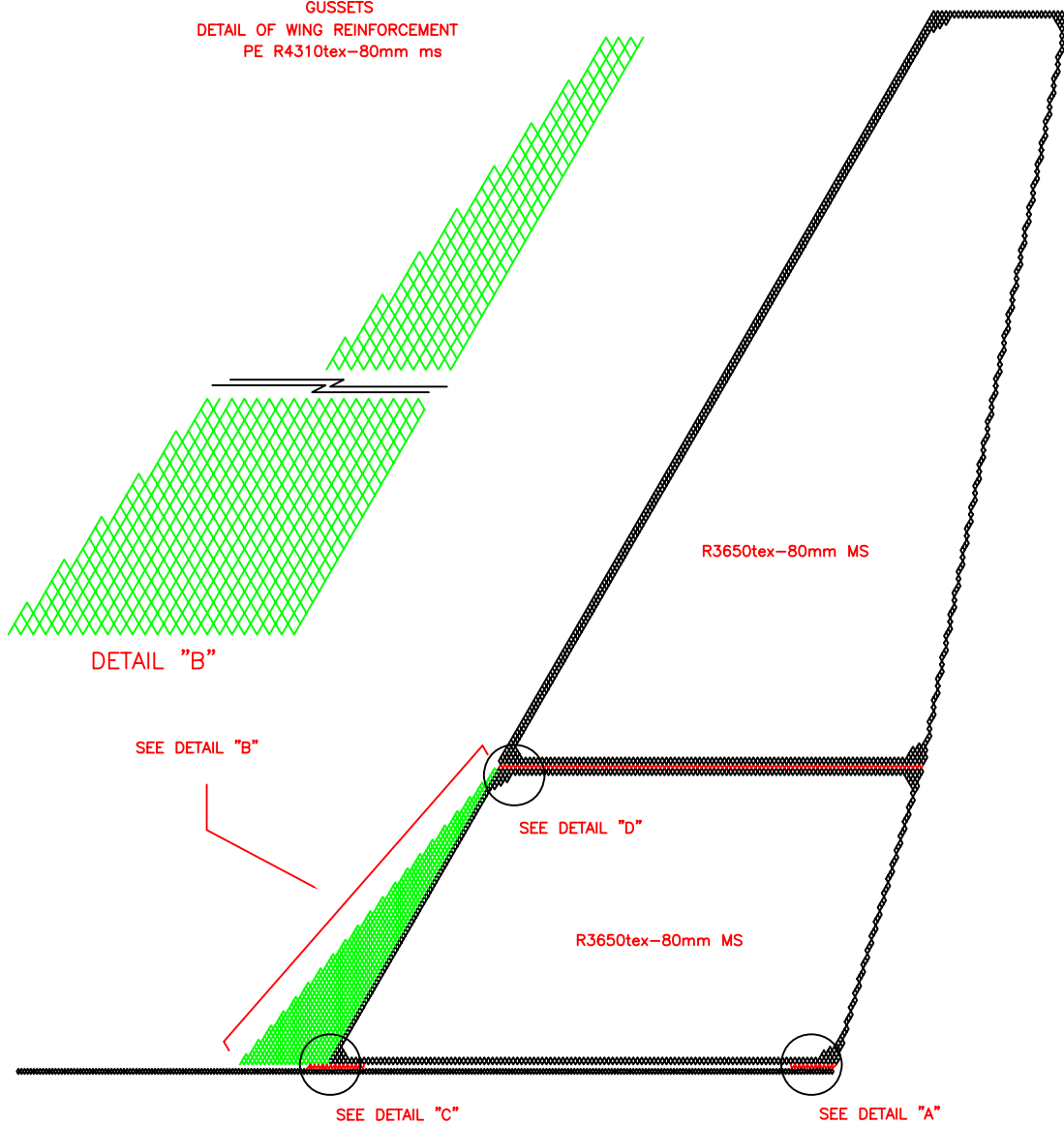
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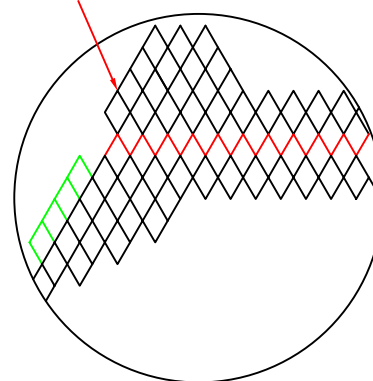
## SECTION 2 – NETTING



GUSSETS  
DETAIL OF WING REINFORCEMENT  
PE R4310tex-80mm ms

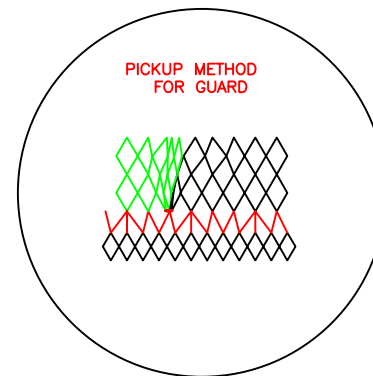


CUT POINT TAPER THEN BALANCE  
ALL BARS TO ENABLE 2 KNOTS TO  
BE TAKEN UP ON FRAMEROPE



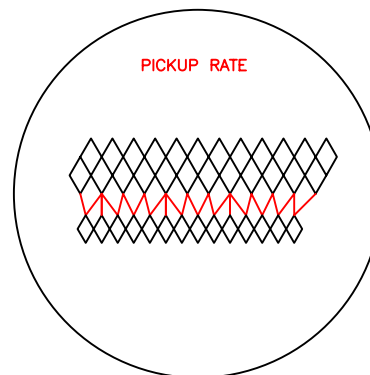
DETAIL "D"

PICKUP METHOD  
FOR GUARD



DETAIL "C"

PICKUP RATE



DETAIL "A"

## REMARKS

|        |                     |
|--------|---------------------|
|        | DOUBLE NETTING      |
|        | JOINING ROUND       |
|        | SINGLE NETTING      |
|        | FRAMELINE & RIBLINE |
|        | UPPER PANEL         |
|        | LOWER PANEL         |
|        | DOUBLE MESH         |
| $\Phi$ | DIAMETER            |
| MS     | MESH SIZE           |
| MD     | MESHES DEEP         |
| PE     | POLYETHYLENE        |
| PP     | POLYPROPYLENE       |
| PA     | POLYAMIDE (NYLON)   |



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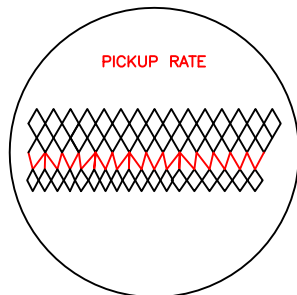
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|             |          |      |        |
|-------------|----------|------|--------|
| DATE DRAWN: | DWG NO.: | REV. | SCALE: |
| 24/03/06    | CAM*2.1  | 1    | NTS    |

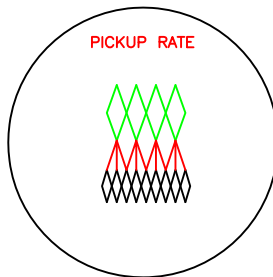
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DETAIL "C"



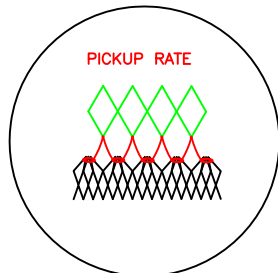
DETAIL "B"



PE BRAIDED R5263tex - 140mm MS

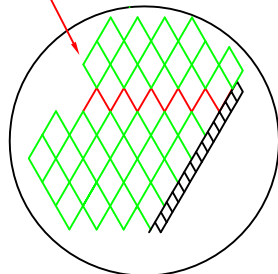
SEE DETAIL " B "

DETAIL "A"



CUT POINT TAPER THEN BALANCE  
ALL BARS TO ENABLE 2 KNOTS TO  
BE TAKEN UP ON FRAMEROPE.  
ALL BARS TO BE CUT IN HALF.

DETAIL "D"



SEE DETAIL " D "

PE BRAIDED  
R3650tex - 60mm MS

PE BRAIDED R5263tex - 140mm MS

PE BRAIDED  
R3650tex - 80mm MS

SEE DETAIL " C "

## REMARKS

|        |                     |
|--------|---------------------|
|        | DOUBLE NETTING      |
|        | JOINING ROUND       |
|        | SINGLE NETTING      |
|        | FRAMELINE & RIBLINE |
|        | UPPER PANEL         |
|        | LOWER PANEL         |
|        | DOUBLE MESH         |
| $\Phi$ | DIAMETER            |
| MS     | MESH SIZE           |
| MD     | MESHES DEEP         |
| PE     | POLYETHYLENE        |
| PP     | POLYPROPYLENE       |
| PA     | POLYAMIDE (NYLON)   |



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### CAMPELEN 1800 SURVEY TRAWL LOWER WING DETAIL

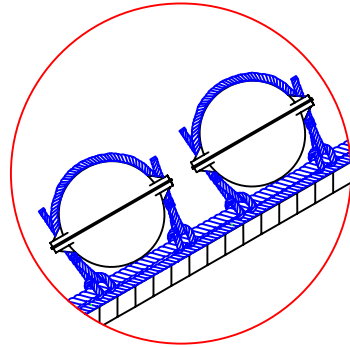
| DATE DRAWN: | DWG NO.:              | REV. | SCALE: |
|-------------|-----------------------|------|--------|
| 15/07/14    | CAM*2.2 PG 6 OF 28 PG | 3    | NTS    |

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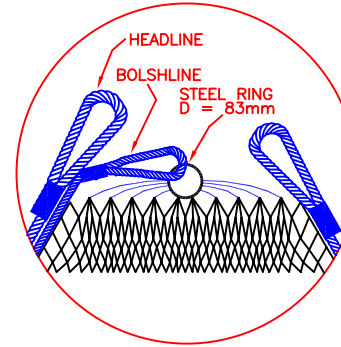




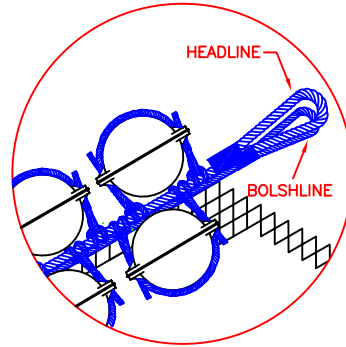
DETAIL 'C'



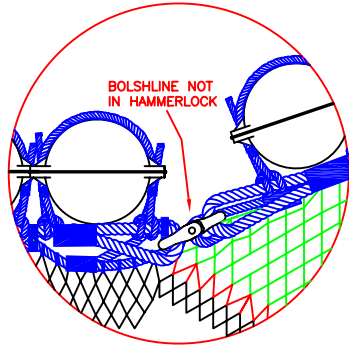
DETAIL 'E'



DETAIL 'D'



DETAIL 'B'

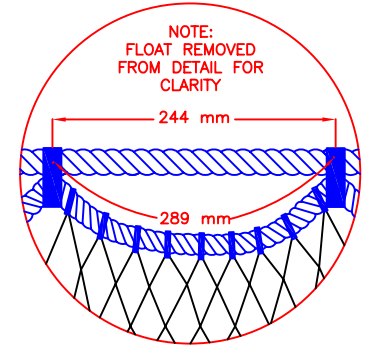


SEE DETAIL 'E'

SEE DETAIL 'D'

SEE DETAIL 'C'

DETAIL 'F'

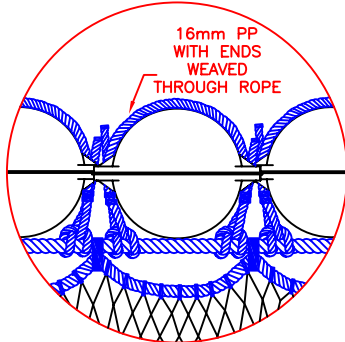


SEE DETAIL 'A'

SEE DETAIL 'F'

SEE DETAIL 'B'

DETAIL 'A'



## REMARKS

- DOUBLE NETTING
- JOINING ROUND
- SINGLE NETTING
- FRAMELINE & RIBLINE



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### CAMPELEN 1800 SURVEY TRAWL TOP WING HANGING DETAIL

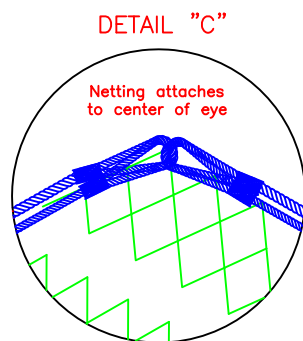
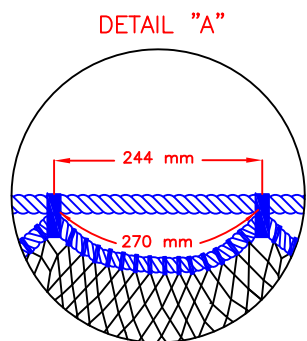
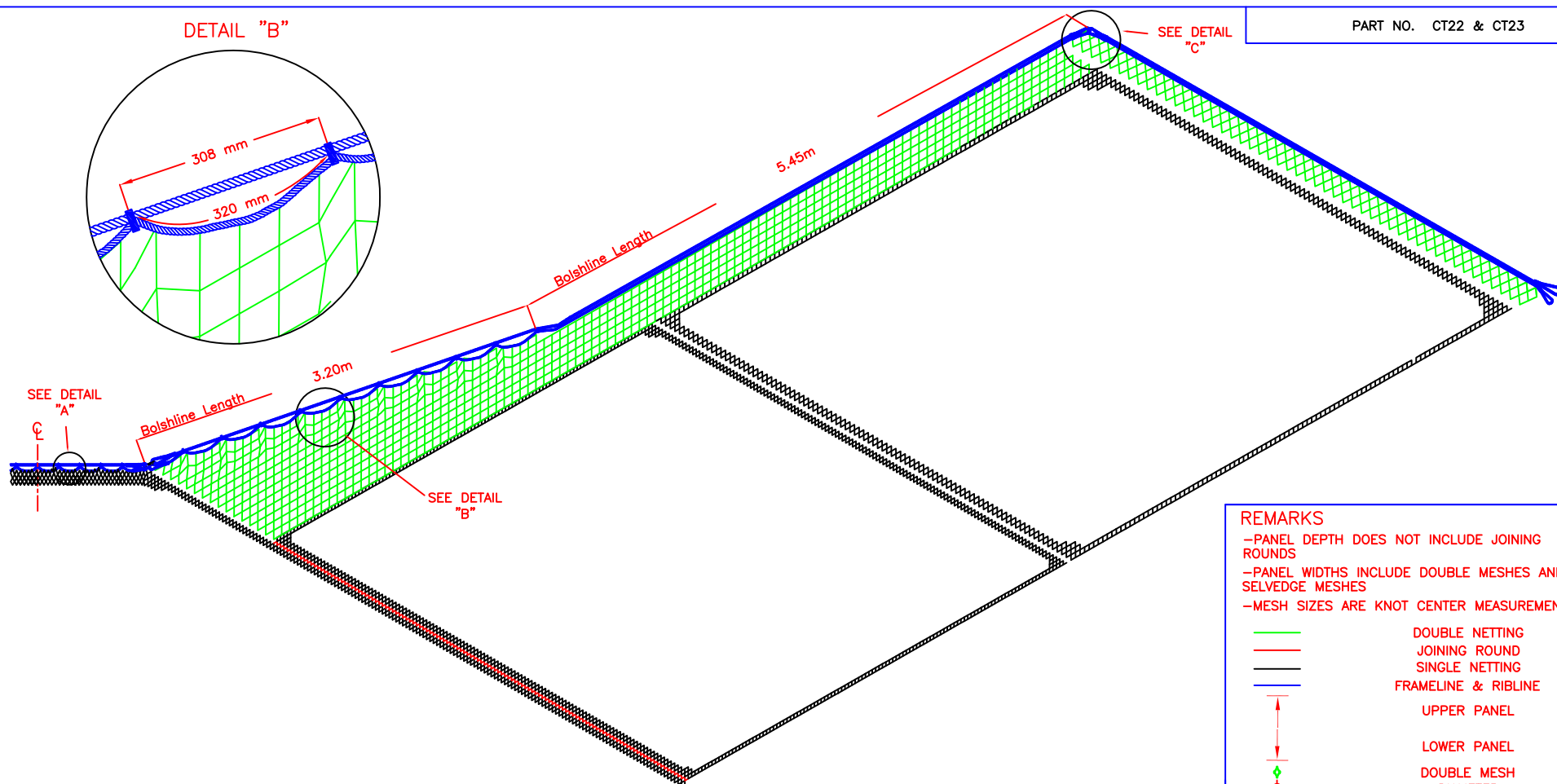
| DATE DRAWN: | DWG NO.:              | REV. | SCALE: |
|-------------|-----------------------|------|--------|
| 18/12/06    | CAM*2.3 PG 7 OF 28 PG | 2    | NTS    |

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PART NO. CT16

| PART # | COMPONENT  | BUOYANCY | QTY  |       |       |
|--------|------------|----------|------|-------|-------|
|        |            |          | WING | BOSUM | EXTRA |
| CT11   | 2080 FLOAT | 2.55 kg  | 2x39 | 10    | 2x6   |
| TOTAL  |            |          | 100  |       |       |

**REMARKS**

- PANEL DEPTH DOES NOT INCLUDE JOINING ROUNDS
- PANEL WIDTHS INCLUDE DOUBLE MESHES AND SELVEDGE MESHES
- MESH SIZES ARE KNOT CENTER MEASUREMENTS

|        |                     |
|--------|---------------------|
|        | DOUBLE NETTING      |
|        | JOINING ROUND       |
|        | SINGLE NETTING      |
|        | FRAMELINE & RIBLINE |
|        | UPPER PANEL         |
|        | LOWER PANEL         |
|        | DOUBLE MESH         |
| $\phi$ | DIAMETER            |
| MS     | MESH SIZE           |
| MD     | MESHES DEEP         |
| PE     | POLYETHYLENE        |
| PP     | POLYPROPYLENE       |
| PA     | POLYAMIDE (NYLON)   |



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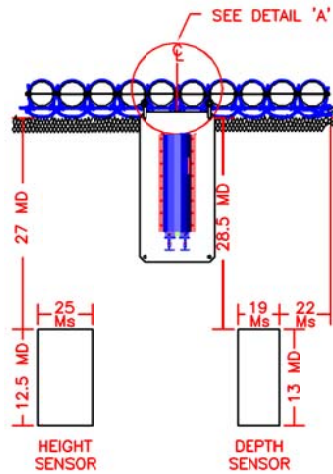
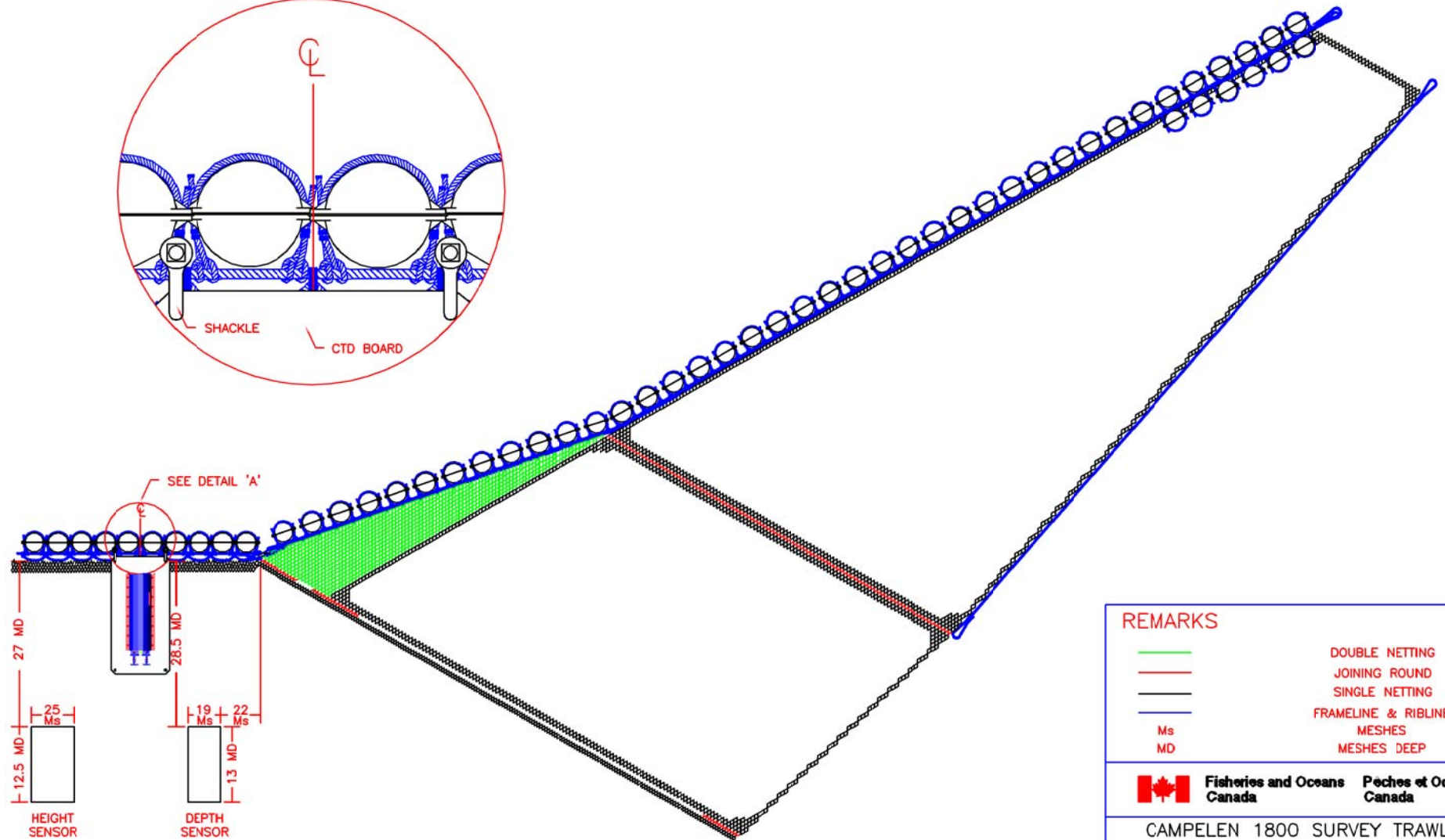
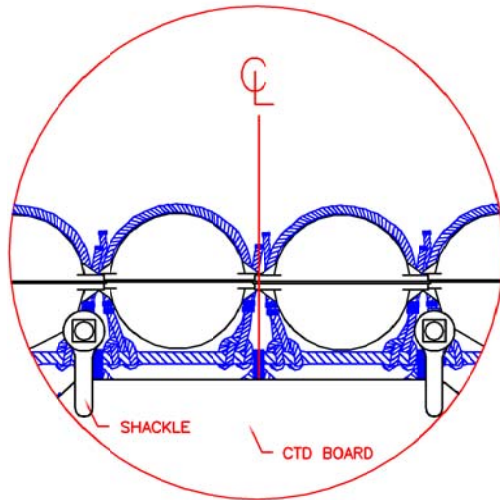
**CAMPELEN 1800 SURVEY TRAWL  
LOWER WING HANGING DETAIL**

|             |          |               |        |
|-------------|----------|---------------|--------|
| DATE DRAWN: | DWG NO.: | REV.          | SCALE: |
| 12/11/14    | CAM*2.4  | PG 8 OF 28 PG | 4 NTS  |

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DETAIL 'A'



REMARKS

- DOUBLE NETTING
- JOINING ROUND
- SINGLE NETTING
- FRAMELINE & RIBLINE
- Ms MESHES
- MD MESHES DEEP

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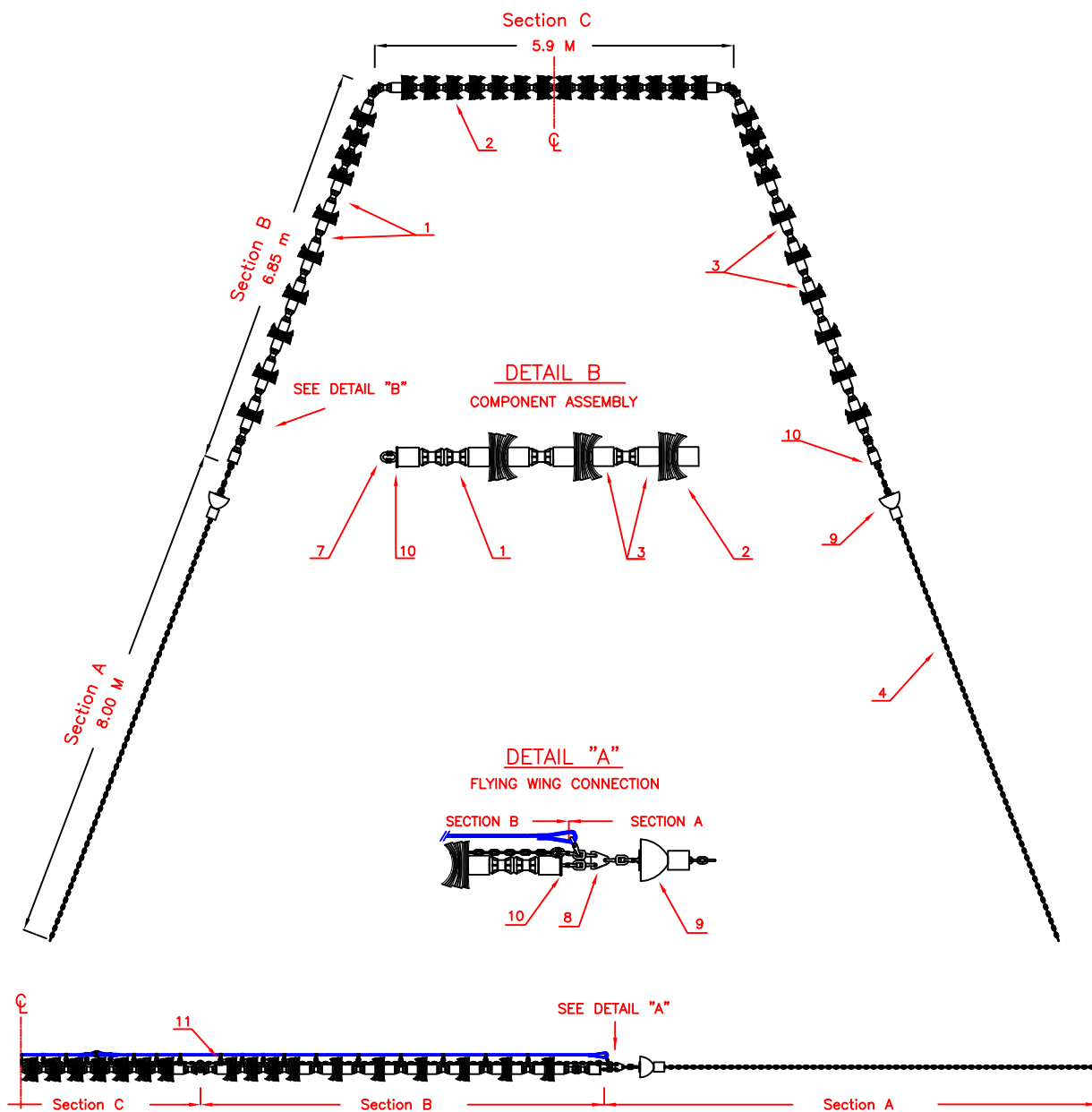
CAMPELEN 1800 SURVEY TRAWL  
CTD BOARD ATTACHMENT

|                         |                     |               |           |               |
|-------------------------|---------------------|---------------|-----------|---------------|
| DATE DRAWN:<br>18/12/06 | DWG NO.:<br>CAM*2.5 | PG 9 OF 28 PG | REV.<br>1 | SCALE:<br>NTS |
|-------------------------|---------------------|---------------|-----------|---------------|

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## SECTION 3 – FOOTGEAR



#### DRAWING NOTES:

- GROUND GEAR IS SYMMETRICAL ABOUT CENTERLINE.
- LENGTHS FOR SECTION B & C ARE MEASURED FROM CENTRE HAMMERLOCK TO CENTRE HAMMERLOCK.
- LENGTH OF SECTION A IS MEASURED FROM CENTRE HAMMERLOCK TO END OF CHAIN (SEE DETAIL A).

| #  | COMPONENT   | WEIGHT (KGS)<br>(IN SEAWATER) |        | NUMBERS |            |            |            | Page<br>NO. | PART<br>NO. |
|----|---|-------------------------------|--------|---------|------------|------------|------------|-------------|-------------|
|    |   | UNIT                          | TOTAL  | TOTAL   | SECT.<br>A | SECT.<br>B | SECT.<br>C |             |             |
| 1  |  8" (200mm)<br>Iron Spacer               | 5.29                          | 206.31 | 39      | 0          | 2x12       | 1x15       | 21          | CT44        |
| 2  |  14"(356mm) Rockhopper<br>Sets of 3 Disk | 0.43                          | 43.9   | 34X3    | 0          | 2x10       | 1x14       | 22          | CT45        |
| 3  |  7" (178mm)<br>Rubber Spacer             | 0.37                          | 12.58  | 34      | 2X1        | 2x15       | 1x2        | 23          | CT46        |
| 4  |  5/8" (16mm)<br>Mid Link Chain           | 4.96/M                        | 74.30  | 14.98   | 2x7.49m    |            |            | 11          | CT12        |
| 5  |  5/8" (16mm)<br>Mid Link Chain           | 4.96/M                        | 66.96  | 13.5m   |            | 2x6.75m    |            | 11          | CT13        |
| 6  |  5/8" (16mm)<br>Mid Link Chain           | 4.96/M                        | 28.76  | 5.80m   |            |            | 1X5.80m    | 11          | CT14        |
| 7  |  5/8" (16mm)<br>Hammerlock               | 1.0                           | 12.0   | 10      | 2x4        | 2x2        | 0          | 18          | CT48        |
| 8  |  Delta Plate<br>(441mm)                | 5.37                          | 10.74  | 2       | 2          | 0          | 0          | 24          | CT49        |
| 9  |  14"(356mm) Rubber<br>Bunt Bobbin      | 4.80                          | 9.6    | 2       | 2          | 0          | 0          | 25          | CT50        |
| 10 |  6" (152mm)<br>Washer                  | 0.42                          | 3.36   | 8       | 2x1        | 2x2        | 1x2        | 26          | CT51        |
| 11 |  15.5" (393mm)<br>Bobbin Chain         | 0.58                          | 20.3   | 35      | 0          | 2x10       | 1x15       | 27          | CT52        |

TOTAL WEIGHT

488.81



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### CAMPELEN 1800 SURVEY TRAWL FOOTGEAR

DATE DRAWN:  
06/11/14

DWG NO.:  
CAM\*3.0

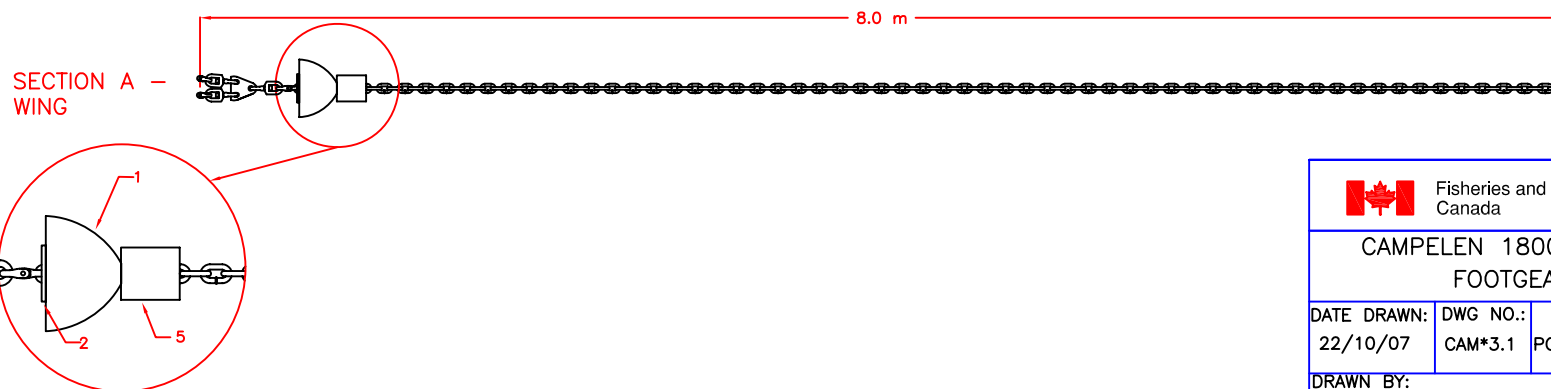
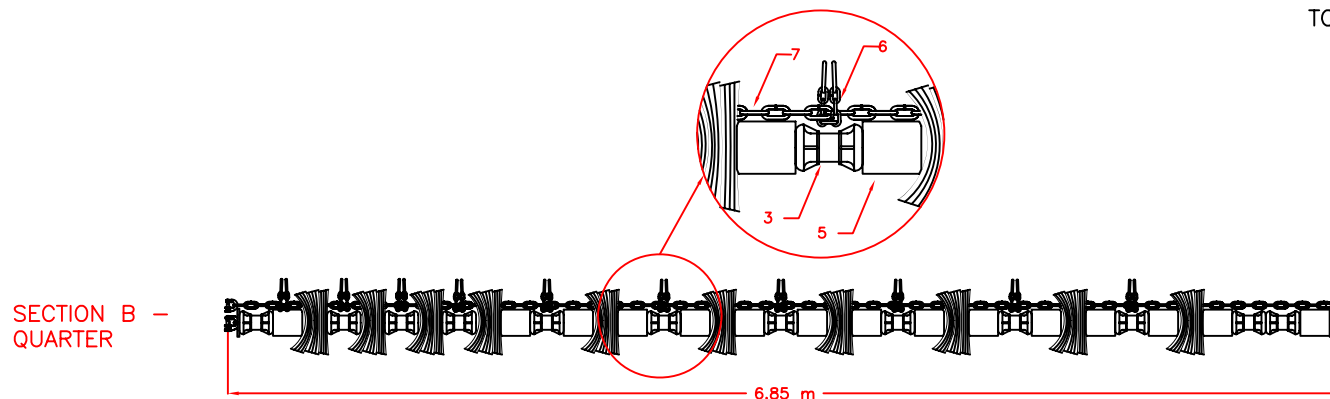
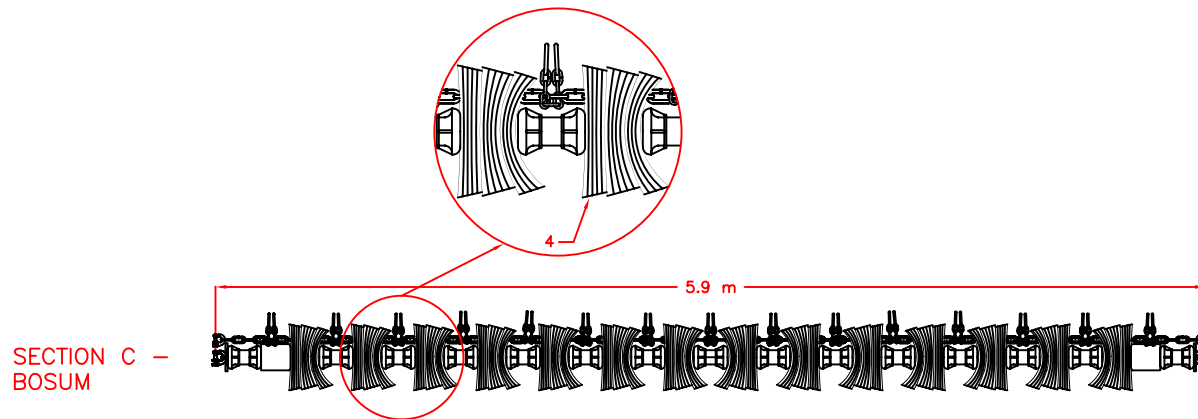
PG 10 OF 28 PG

REV. 3

SCALE:  
NTS

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| # | COMPONENT              | LENGTH (m) |
|---|------------------------|------------|
| 1 | 14" RUBBER BUNT BOBBIN | 0.226      |
| 2 | 6" WASHER              | 0.008      |
| 3 | 8" IRON SPACER         | 0.200      |
| 4 | 14" ROCKHOPPER DISK    | 0.054      |
| 5 | 7" RUBBER SPACER       | 0.178      |
| 6 | BOBBIN CHAIN           | 0.395      |
| 7 | TRAVEL CHAIN           | 19.5       |

NOTE:

MEASUREMENTS ARE CENTRE H/LOCK  
TO CENTRE H/LOCK



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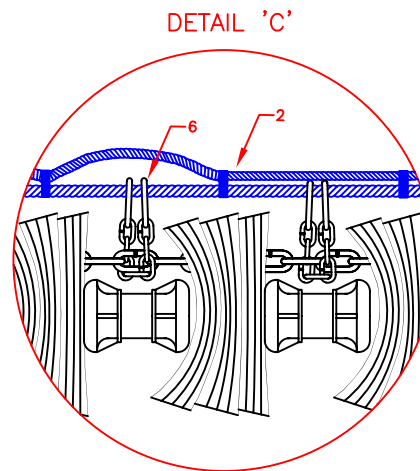
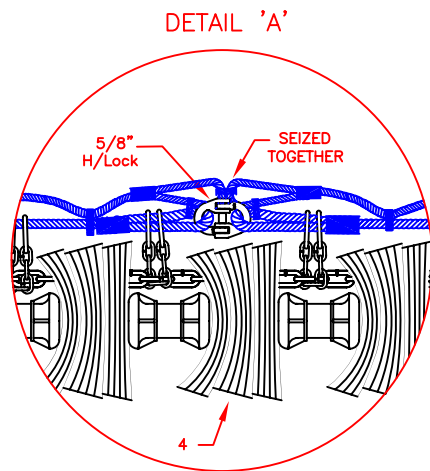
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# CAMPELEN 1800 SURVEY TRAWL FOOTGEAR DETAIL

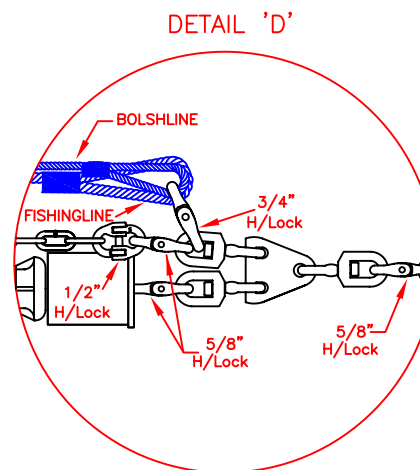
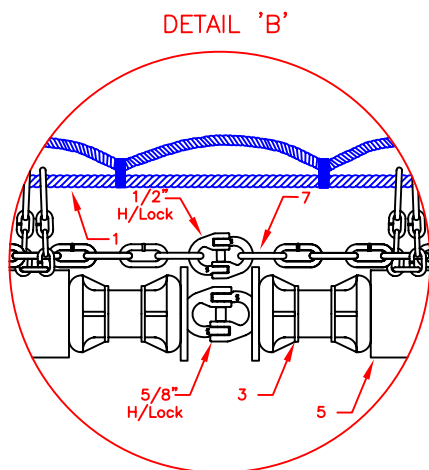
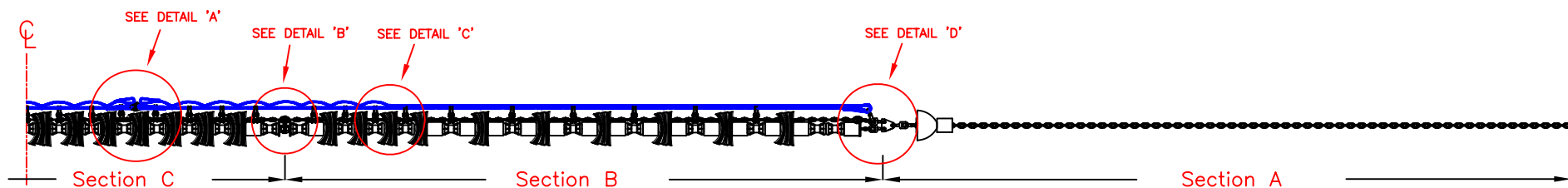
| DATE DRAWN: | DWG NO.: | PG          | REV. | SCALE: |
|-------------|----------|-------------|------|--------|
| 22/10/07    | CAM*3.1  | 11 OF 28 PG | 2    | NTS    |

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| # | COMPONENT                  | LENGTH (m) |
|---|----------------------------|------------|
| 1 | FISHINGLINE (INCL. H/LOCK) | 19.5       |
| 2 | L/BOLSHLINE (INCL. H/LOCK) | 20.0       |
| 3 | 8" IRON SPACER             | 0.200      |
| 4 | 14" ROCKHOPPER DISK        | 0.054      |
| 5 | 7" RUBBER SPACER           | 0.178      |
| 6 | BOBBIN CHAIN               | 0.395      |
| 7 | TRAVEL CHAIN               | 19.5       |



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# CAMPELEN 1800 SURVEY TRAWL FOOTGEAR ATTACHMENT METHOD

| DATE DRAWN: | DWG NO.:               | REV. | SCALE: |
|-------------|------------------------|------|--------|
| 22/10/07    | CAM*3.2 PG 12 OF 28 PG | 2    | NTS    |







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ST. JOHN'S, NEWFOUNDLAND



## APPENDIX A

### Symbols & Abbreviations

#### *Symbols*

|   |             |
|---|-------------|
|  | Upper Panel |
|  | Lower Panel |
|  | Side Panel  |
|  | Diameter    |
|  | Center line |
|  | Double Mesh |

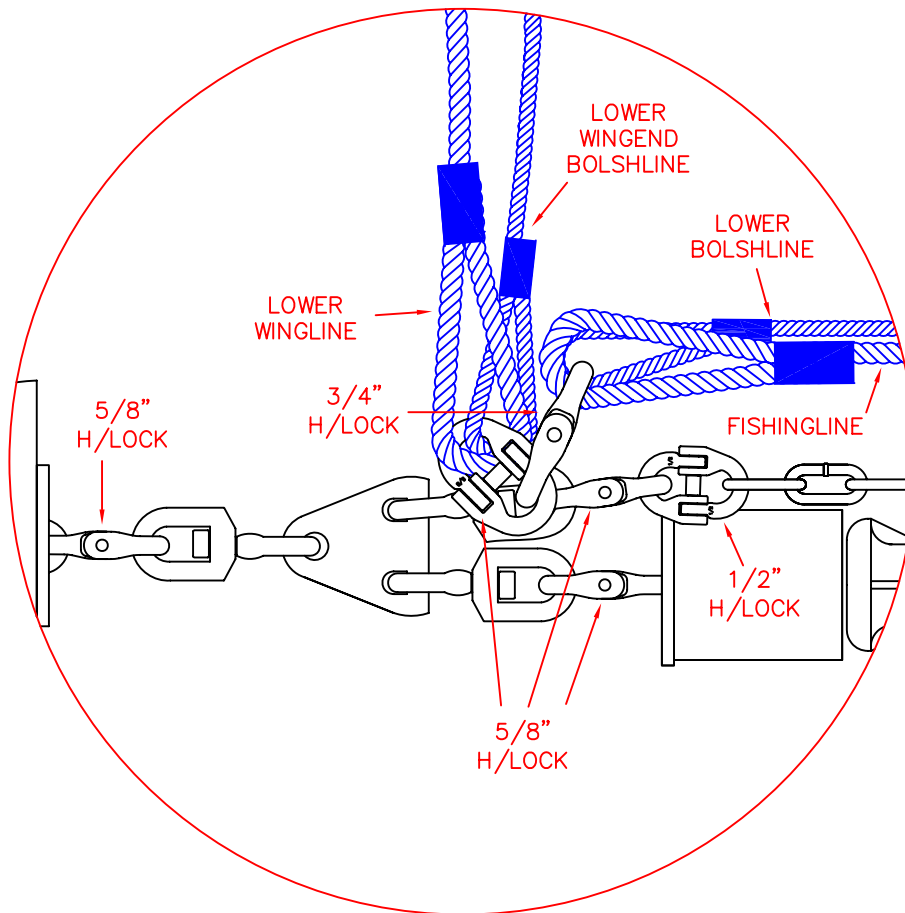
#### *Abbreviations*

|               |                                |               |                   |
|---------------|--------------------------------|---------------|-------------------|
| <b>Btm.</b>   | Bottom                         | <b>MS</b>     | Mesh size         |
| <b>Comb.</b>  | Combination                    | <b>MD</b>     | Meshes deep       |
| <b>CTD</b>    | Conductivity-Temperature-depth | <b>PE</b>     | Polyethylene      |
| <b>D</b>      | Diametre                       | <b>Pl.</b>    | Plastic           |
| <b>Dia.</b>   | Diametre                       | <b>PP</b>     | Polypropylene     |
| <b>Ext.</b>   | Extension                      | <b>R</b>      | Radius            |
| <b>F/Gear</b> | Footgear                       | <b>Stbd.</b>  | Starboard         |
| <b>H/Lock</b> | Hammerlock                     | <b>Sqm.</b>   | Square metre      |
| <b>in</b>     | Inches                         | <b>S.W.L.</b> | Safe working load |
| <b>KC</b>     | Knot center                    | <b>TEL</b>    | Teleost           |
| <b>Kg</b>     | Kilograms                      | <b>U/M</b>    | Upper middle      |
| <b>KR</b>     | Kraft Rope                     | <b>WT</b>     | Wilfred Templeman |
| <b>m</b>      | Metres                         |               |                   |
| <b>MBS</b>    | Minimum breaking strength      |               |                   |
| <b>mm</b>     | Millimetres                    |               |                   |



## APPENDIX B

### DELTA PLATE ASSEMBLY

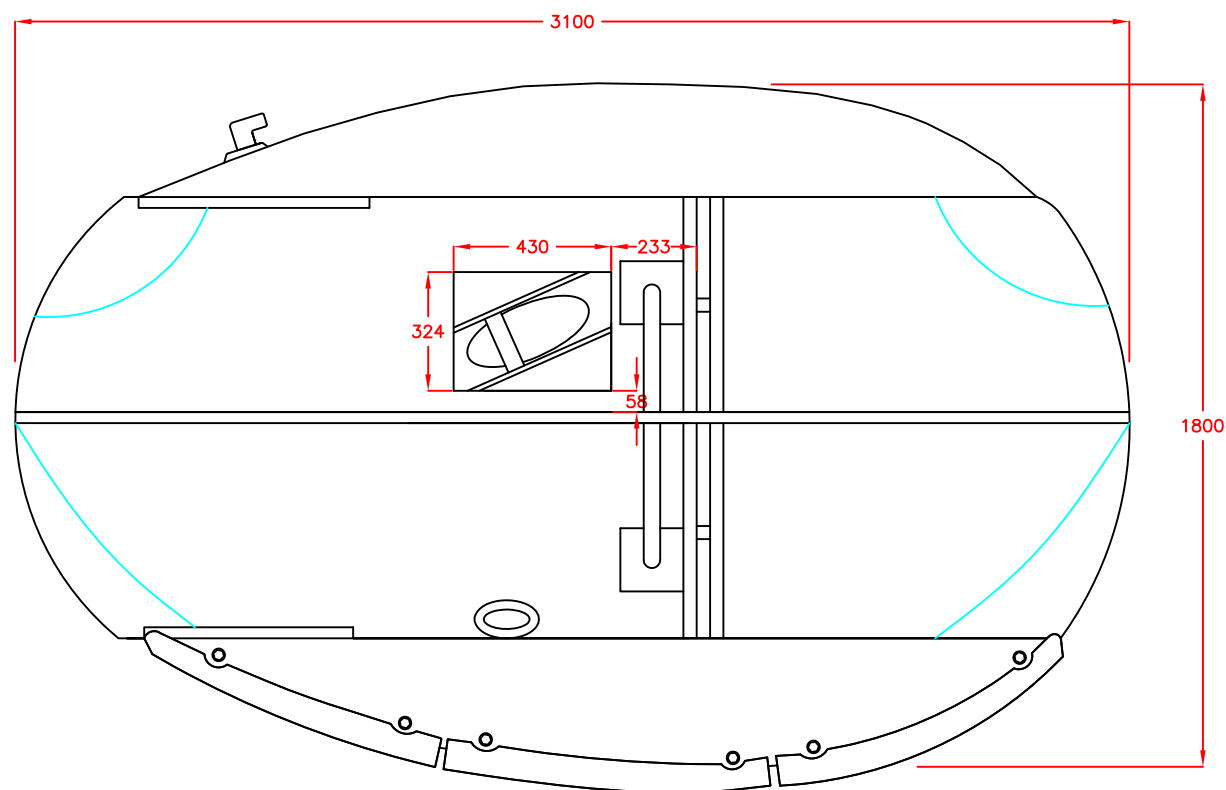


The delta plate has 3 hammerlocks, one for each swivel.

- The forward 5/8" hammerlock belonging to the delta plate is attached to the flying wing. The two aft 5/8" hammerlocks are attached to two different components of the footgear system.
- The lower 5/8" hammerlock attaches the footgear centre chain to the lower delta plate swivel;
- The upper 5/8" hammerlock attaches the upper delta plate swivel to the 1/2" travel chain hammerlock.
- A 3/4" hammerlock is used to connect the lower bolshline and fishing lines to the upper delta plate swivel.
- The lower wingline and lower wingend bolshline are attached to the 3/4" hammerlock (not attached directly to the delta plate) by the means of a 5/8" hammerlock. Both eyes of the lower wingline and lower wingend bolshline are connected to one end of the 5/8" hammerlock while the other end is connected to the forward section of the 3/4" hammerlock.



## SECTION 4 – PARTS

| SPECIFICATIONS |                    |
|----------------|--------------------|
| PART #         | WEIGHT IN AIR (kg) |
| CT02           | 1400               |

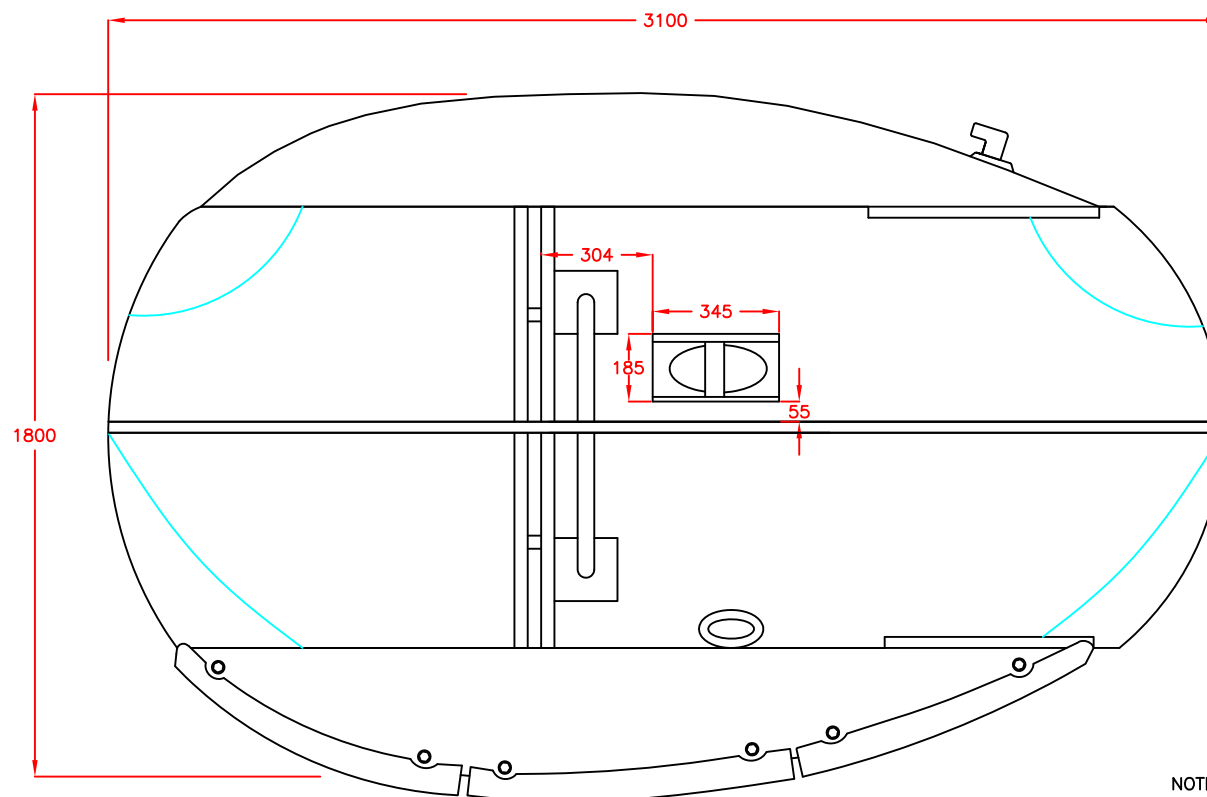


FRONT VIEW

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES

|  |                                |                            |   |              |
|--|--------------------------------|----------------------------|---|--------------|
|                 | Fisheries and Oceans<br>Canada | Pêches et Océans<br>Canada |   |              |
| PORT TRAWL DOOR  |                                |                            |   |              |
| DATE DRAWN:<br>12/01/15  | DWG NO.:<br>CAM*4.0            | PG 13 OF 28 PG             | REV.<br>1   | SCALE<br>NTS |
| DRAWN BY:<br>MARINE INSTITUTE<br>CENTRE FOR SUSTAINABLE AQUATIC RESOURCES<br>ST.JOHN'S, NEWFOUNDLAND |                                |                            | <br>MARINE INSTITUTE |              |

| SPECIFICATIONS |                    |
|----------------|--------------------|
| PART #         | WEIGHT IN AIR (kg) |
| CT02           | 1400               |



FRONT VIEW

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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# STARBOARD TRAWL DOOR

| DATE DRAWN: | DWG NO.: | REV. | SCALE: |
|-------------|----------|------|--------|
| 12/01/15    | CAM*4.1  | 1    | NTS    |

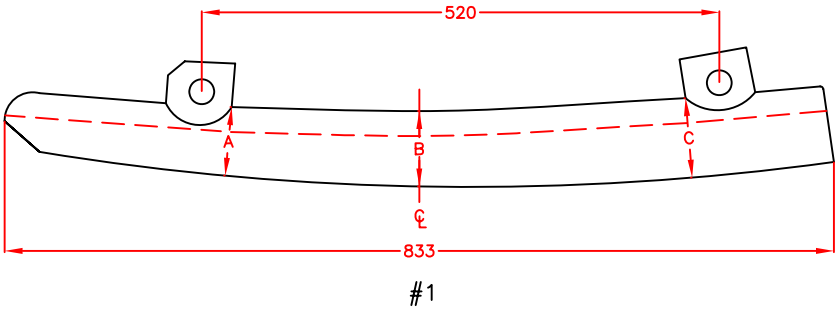
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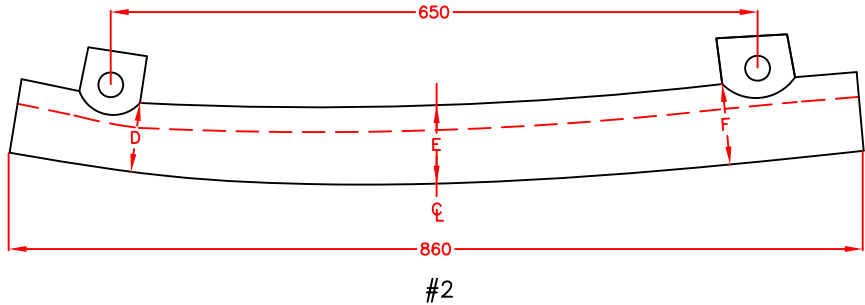
SPECIFICATIONS

| PART # | COMPONENT        | WEIGHT IN AIR (kg) |
|--------|------------------|--------------------|
| 28611  | SHOE #1 (AFT)    | 54.6               |
| 28610  | SHOE #2 (MIDDLE) | 59.28              |
| 28609  | SHOE #3 (FWD)    | 51.06              |

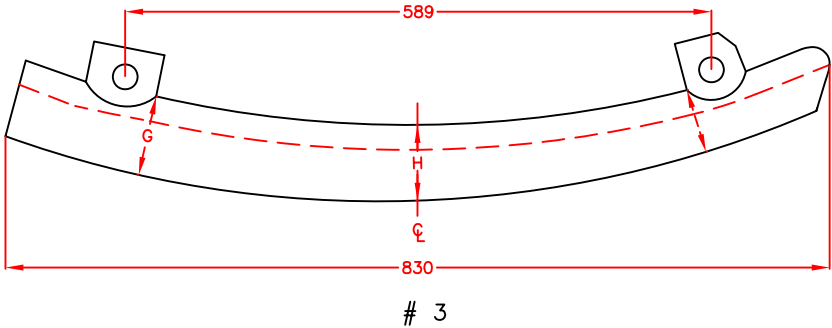
DEPTH  
A = 0.070 m  
B = 0.078 m  
C = 0.082 m



DEPTH  
D = 0.078 m  
E = 0.076 m  
F = 0.079 m



DEPTH  
G = 0.078 m  
H = 0.077 m  
I = 0.066 m



NOTES: - ALL SHOES ARE 138mm WIDE.  
- ALL DIMENSIONS ARE IN MILLIMETRES



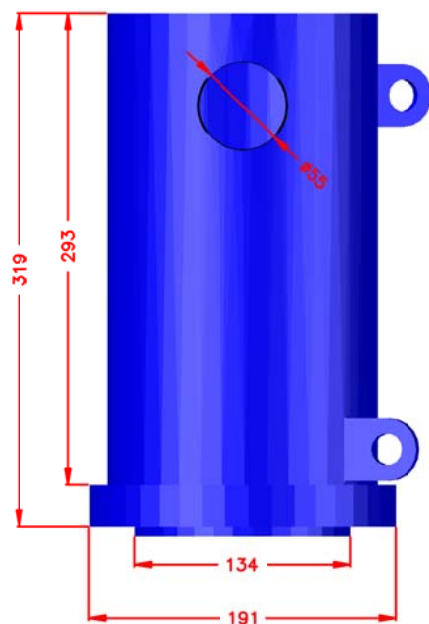
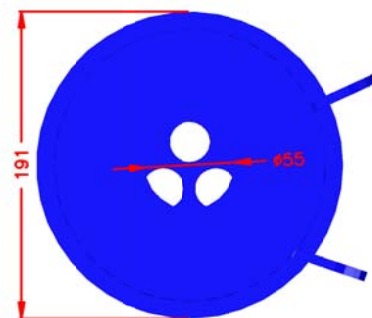
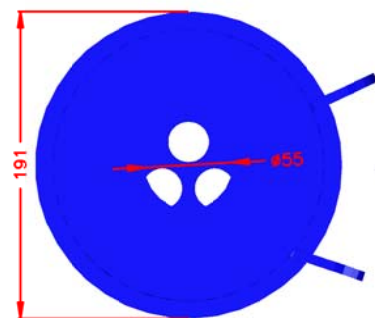
Fisheries and Oceans Canada  
Pêches et Océans Canada

DOOR SHOES

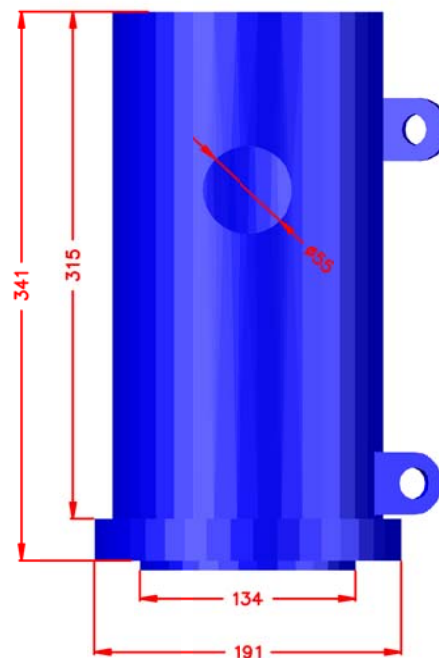
|                         |                     |                |           |               |
|-------------------------|---------------------|----------------|-----------|---------------|
| DATE DRAWN:<br>18/12/06 | DWG NO.:<br>CAM*4.2 | PG 15 OF 28 PG | REV.<br>1 | SCALE:<br>NTS |
|-------------------------|---------------------|----------------|-----------|---------------|

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WING CANNISTER – SLAVE



WING CANNISTER – MASTER

# SPECIFICATIONS

| MASTER             |                      | SLAVE              |                      |
|--------------------|----------------------|--------------------|----------------------|
| WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg) | WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg) |
| 13.664             | 11.907               | 13.408             | 11.684               |

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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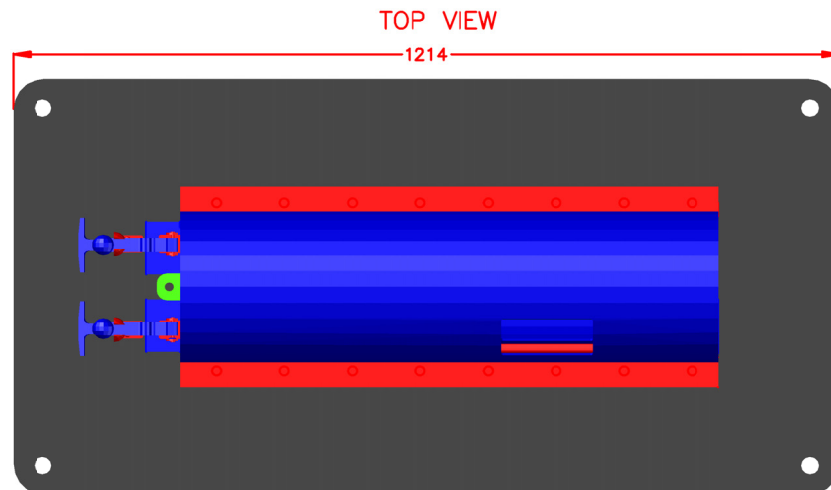
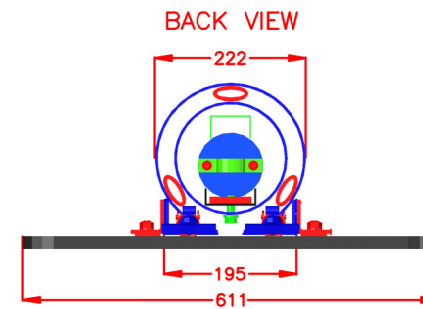
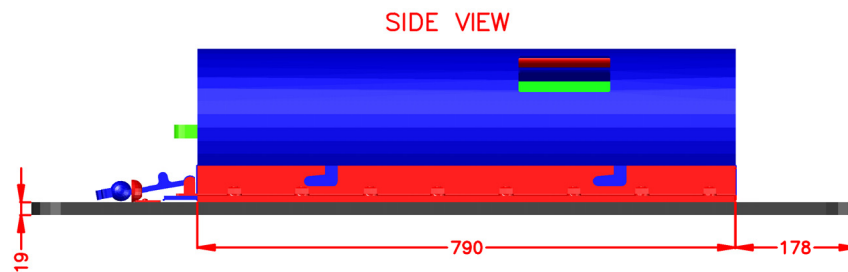
## WING CANNISTERS

| DATE DRAWN: | DWG NO.: | REV.           | SCALE: |
|-------------|----------|----------------|--------|
| 24/03/06    | CAM*4.3  | PG 16 OF 28 PG | NTS    |

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| SPECIFICATIONS |               |                    |                      |
|----------------|---------------|--------------------|----------------------|
| PART #         | COMPONENT     | WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg) |
|                | BOARD W/RAILS | 16.390             | 1.429                |
|                | PIPE SECTION  | 12.967             | 7.207                |
|                | CTD           | 10.265             | 4.848                |



NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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Canada**

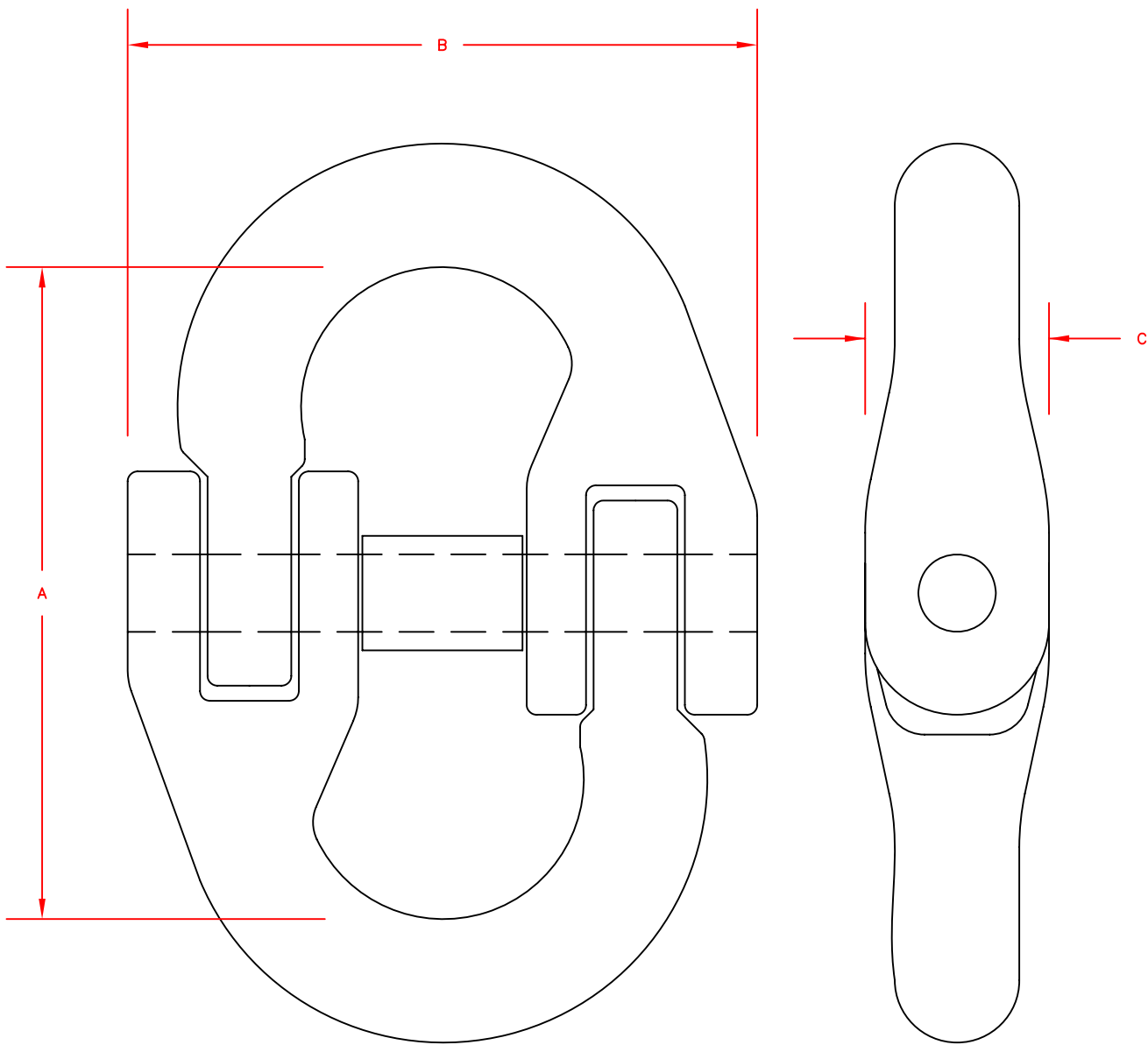
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Canada**

### CTD BOARD

| DATE DRAWN: | DWG NO.: | REV.           | SCALE: |
|-------------|----------|----------------|--------|
| 24/03/06    | CAM*4.4  | PG 17 OF 28 PG | NTS    |

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# SPECIFICATIONS

| NOMINAL SIZE<br>(in.) | DIMENSIONS (mm) |     |    | WEIGHT IN AIR<br>(kg) |
|-----------------------|-----------------|-----|----|-----------------------|
|                       | A               | B   | C  |                       |
| 1/2                   | 86              | 78  | 23 | 0.61                  |
| 5/8                   | 102             | 95  | 26 | 1.08                  |
| 3/4                   | 122             | 108 | 30 | 1.74                  |
| 7/8                   | 139             | 132 | 34 | 2.76                  |
| 1                     | 145             | 158 | 40 | 4.15                  |



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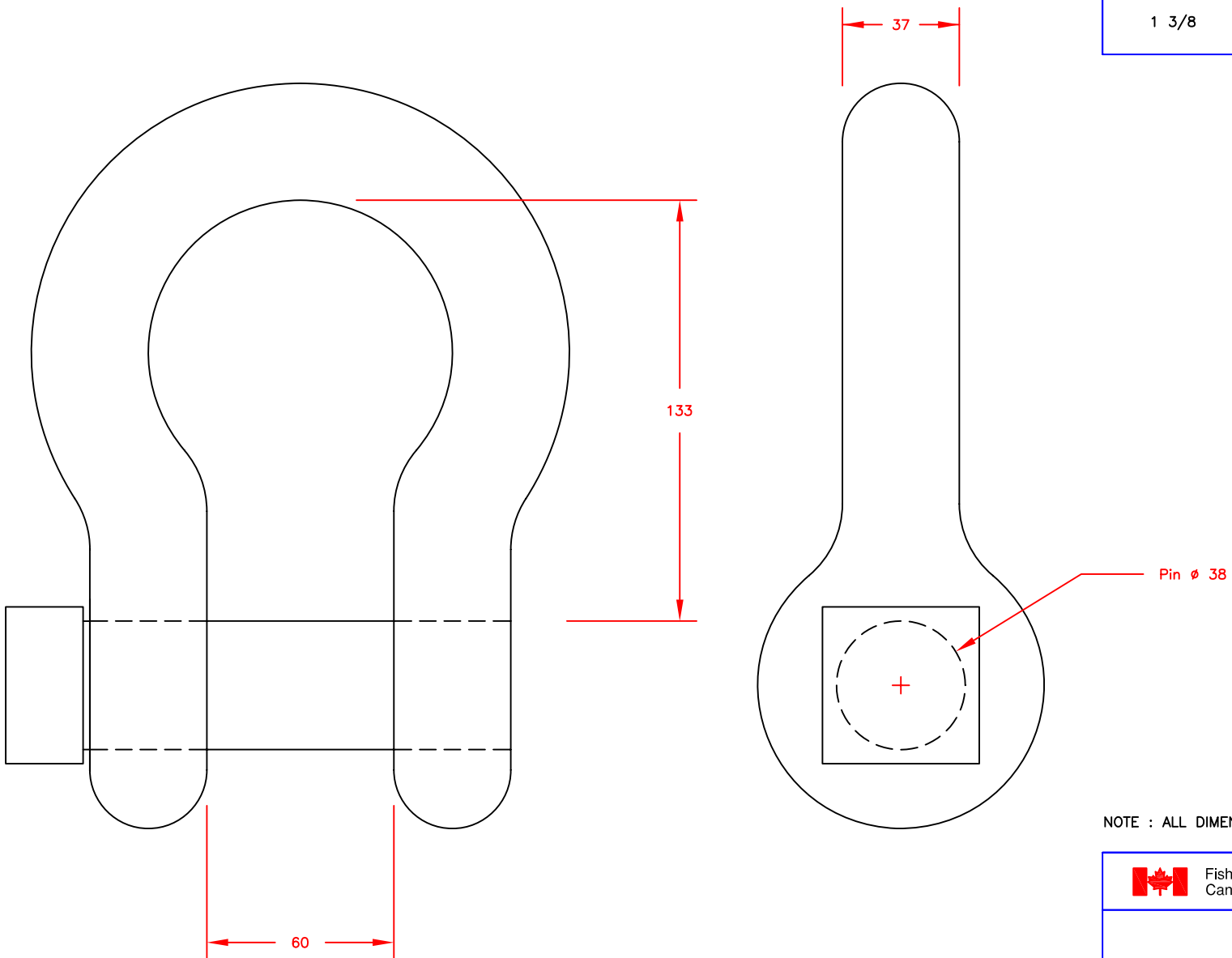
## HAMMERLOCK

|             |          |                |        |
|-------------|----------|----------------|--------|
| DATE DRAWN: | DWG NO.: | REV.           | SCALE: |
| 24/03/06    | CAM*4.5  | PG 18 OF 28 PG | NTS    |

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| SPECIFICATIONS     |                    |                       |
|--------------------|--------------------|-----------------------|
| NOMINAL SIZE (in.) | WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg): |
| 1 3/8              | 6.24               | 5.45                  |

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES




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Canada

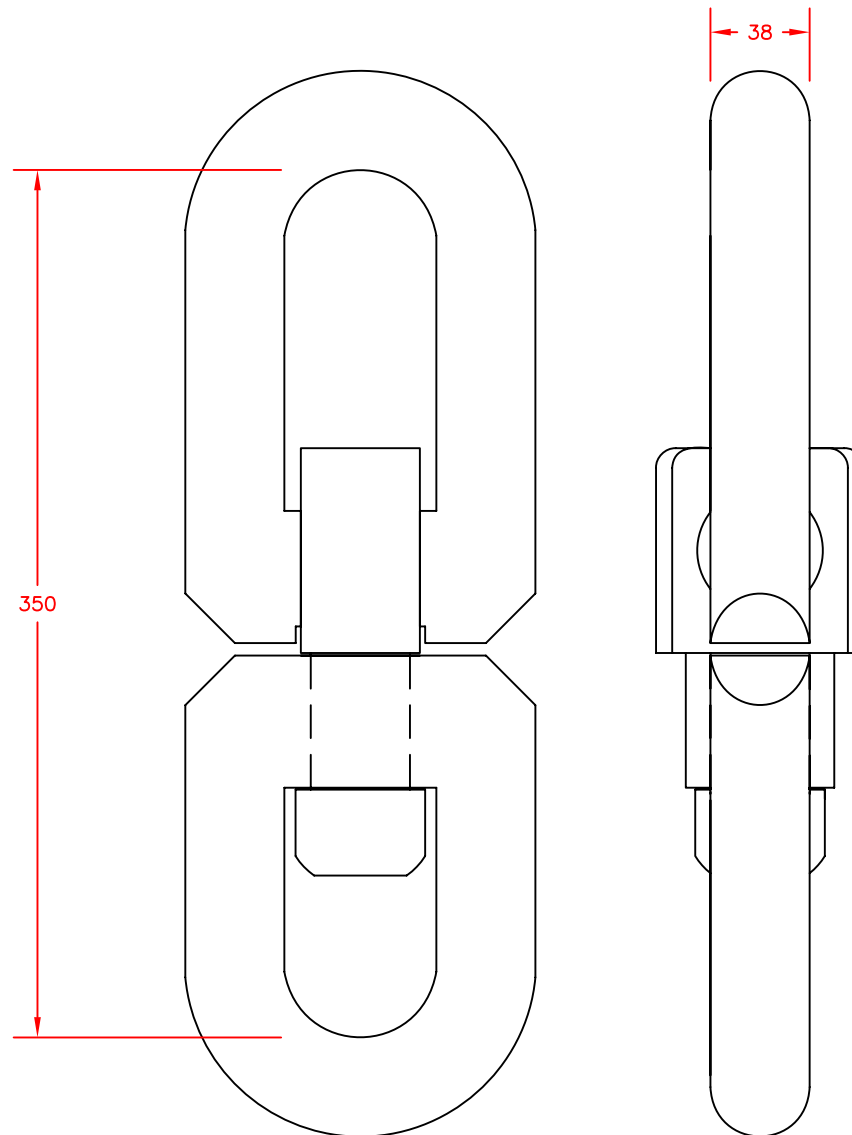
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Canada

SHACKLE

|                         |                     |                |      |               |
|-------------------------|---------------------|----------------|------|---------------|
| DATE DRAWN:<br>24/03/06 | DWG NO.:<br>CAM*4.6 | PG 19 OF 28 PG | REV. | SCALE:<br>NTS |
|-------------------------|---------------------|----------------|------|---------------|

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| SPECIFICATIONS     |                    |                       |
|--------------------|--------------------|-----------------------|
| NOMINAL SIZE (in.) | WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg): |
| 1 1/2              | 11.18              | 9.77                  |

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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# OVAL ACTION SWIVEL

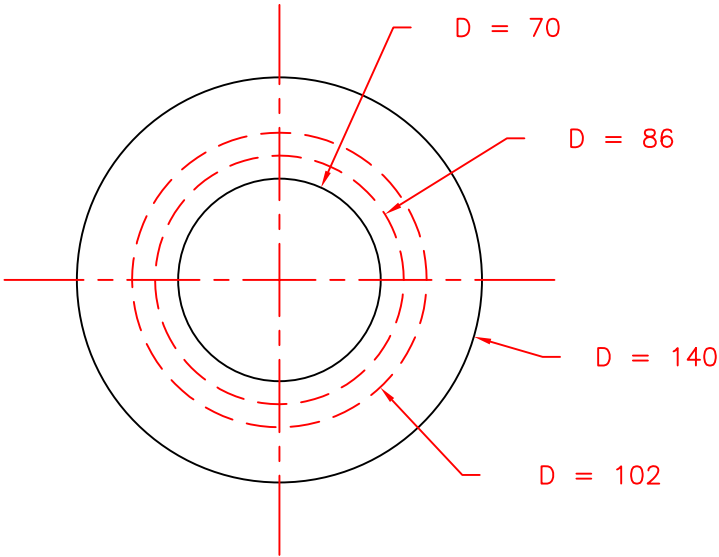
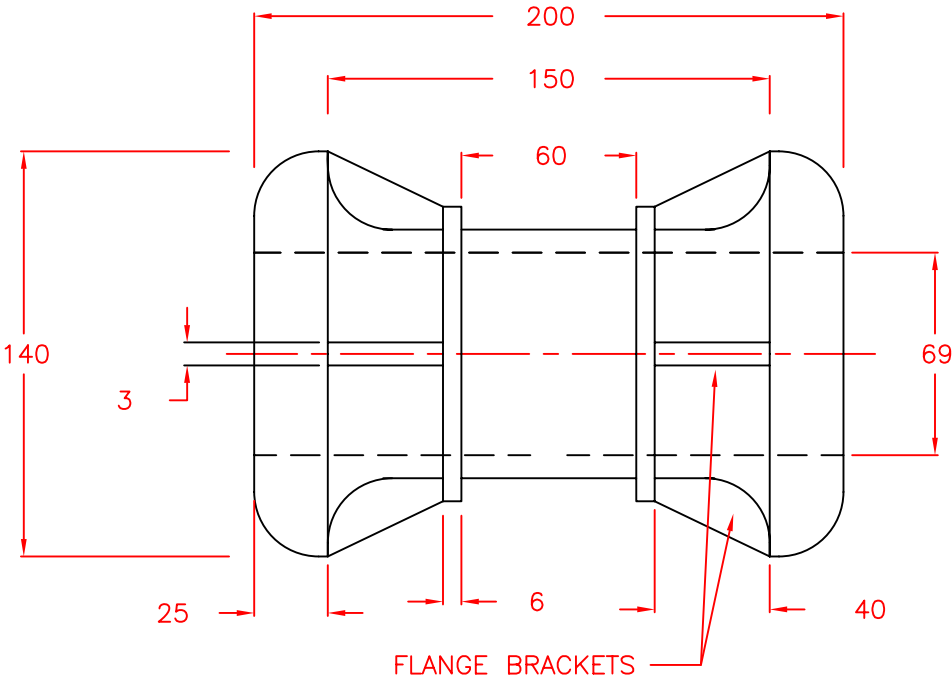
| DATE DRAWN: | DWG NO.:               | REV. | SCALE: |
|-------------|------------------------|------|--------|
| 24/03/06    | CAM*4.7 PG 20 OF 28 PG |      | NTS    |

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SPECIFICATIONS

| PART NO. | WEIGHT IN<br>AIR (KG) | WEIGHT IN<br>WATER (KG) |
|----------|-----------------------|-------------------------|
| CT44     | 6.57                  | 5.29                    |

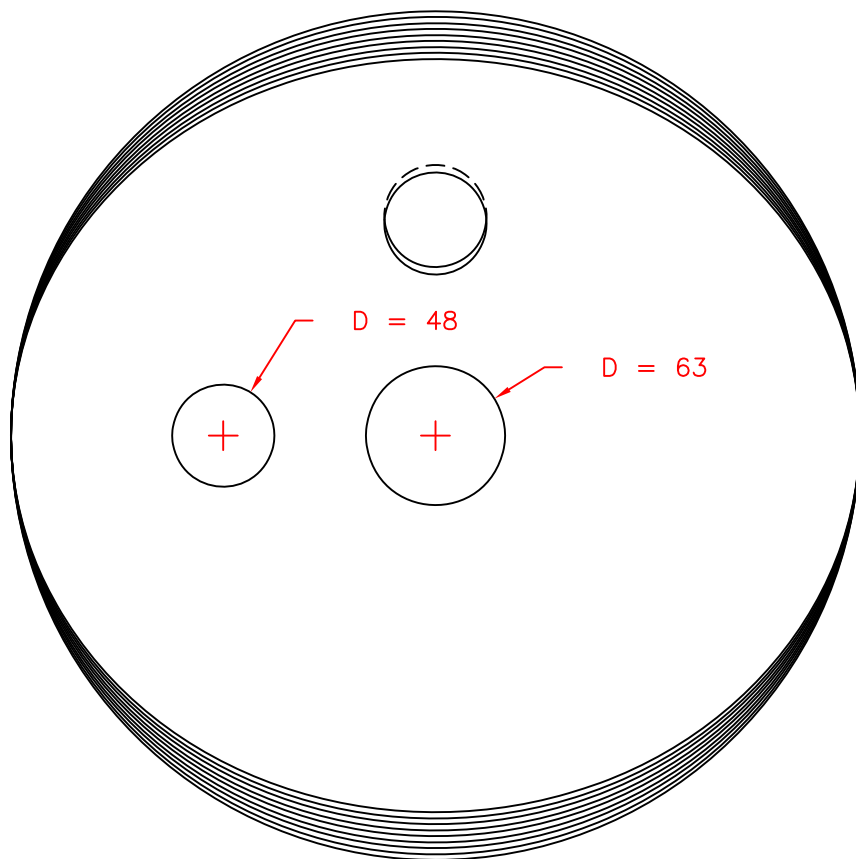
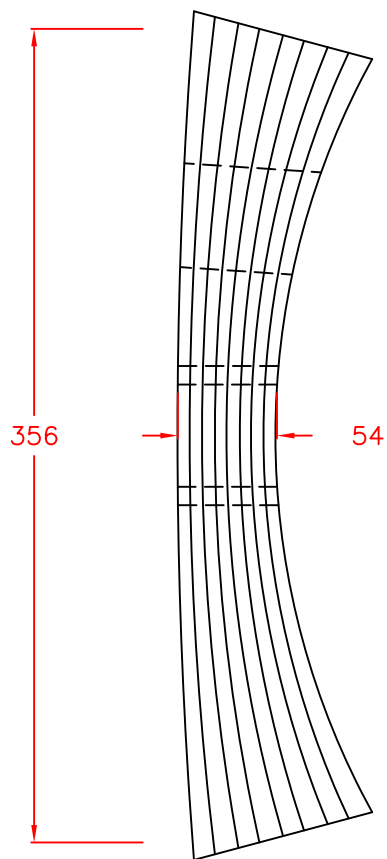


NOTE : ALL DIMENSIONS ARE IN MILLIMETRES

|  |                     |   |                            |
|--|---------------------|---|----------------------------|
|                 |                     | Fisheries and Oceans<br>Canada  | Pêches et Océans<br>Canada |
| 8" (200mm) IRON SPACER   |                     |   |                            |
| DATE DRAWN:<br>24/03/06  | DWG NO.:<br>CAM*4.8 | PG 21 OF 28 PG  | REV. 1<br>SCALE: NTS       |
| DRAWN BY:<br>MARINE INSTITUTE<br>CENTRE FOR SUSTAINABLE AQUATIC RESOURCES<br>ST. JOHN'S NEWFOUNDLAND |                     |  |                            |

# SPECIFICATIONS

| PART NO. | WEIGHT IN<br>AIR (KG) | WEIGHT IN<br>WATER (KG) |
|----------|-----------------------|-------------------------|
| CT45     | 6.11                  | 0.43                    |



NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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14" (356mm) ROCKHOPPER DISK

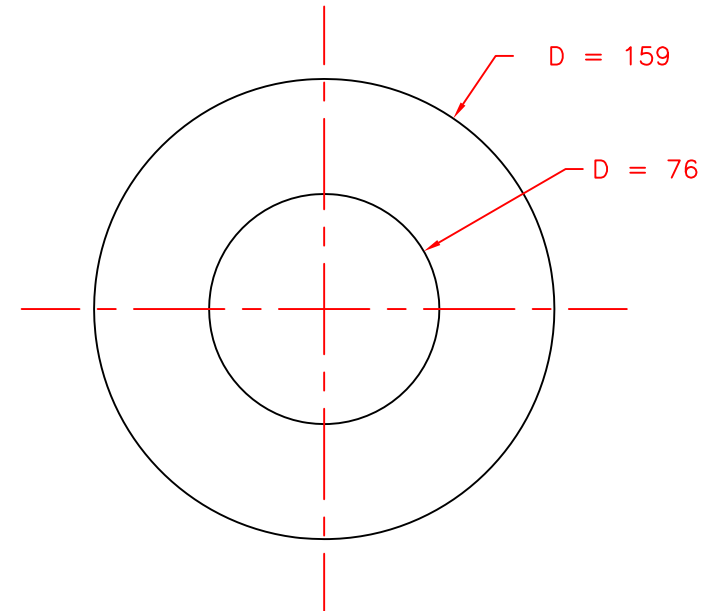
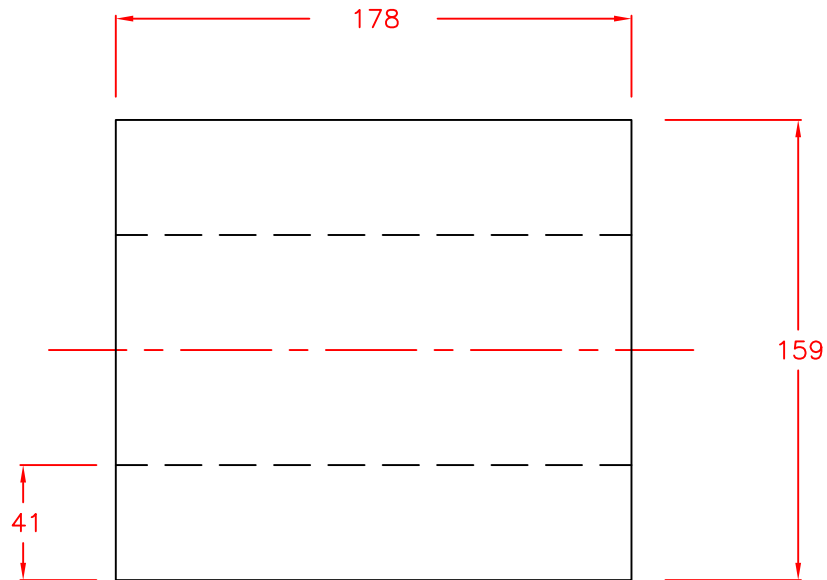
| DATE DRAWN: | DWG NO.: | REV.             | SCALE: |
|-------------|----------|------------------|--------|
| 06/11/14    | CAM*4.9  | PG 22 OF 28 PG 2 | NTS    |

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# SPECIFICATIONS

| PART NO. | WEIGHT IN AIR (KG) | WEIGHT IN WATER (KG) |
|----------|--------------------|----------------------|
| CT46     | 3.08               | 0.37                 |



NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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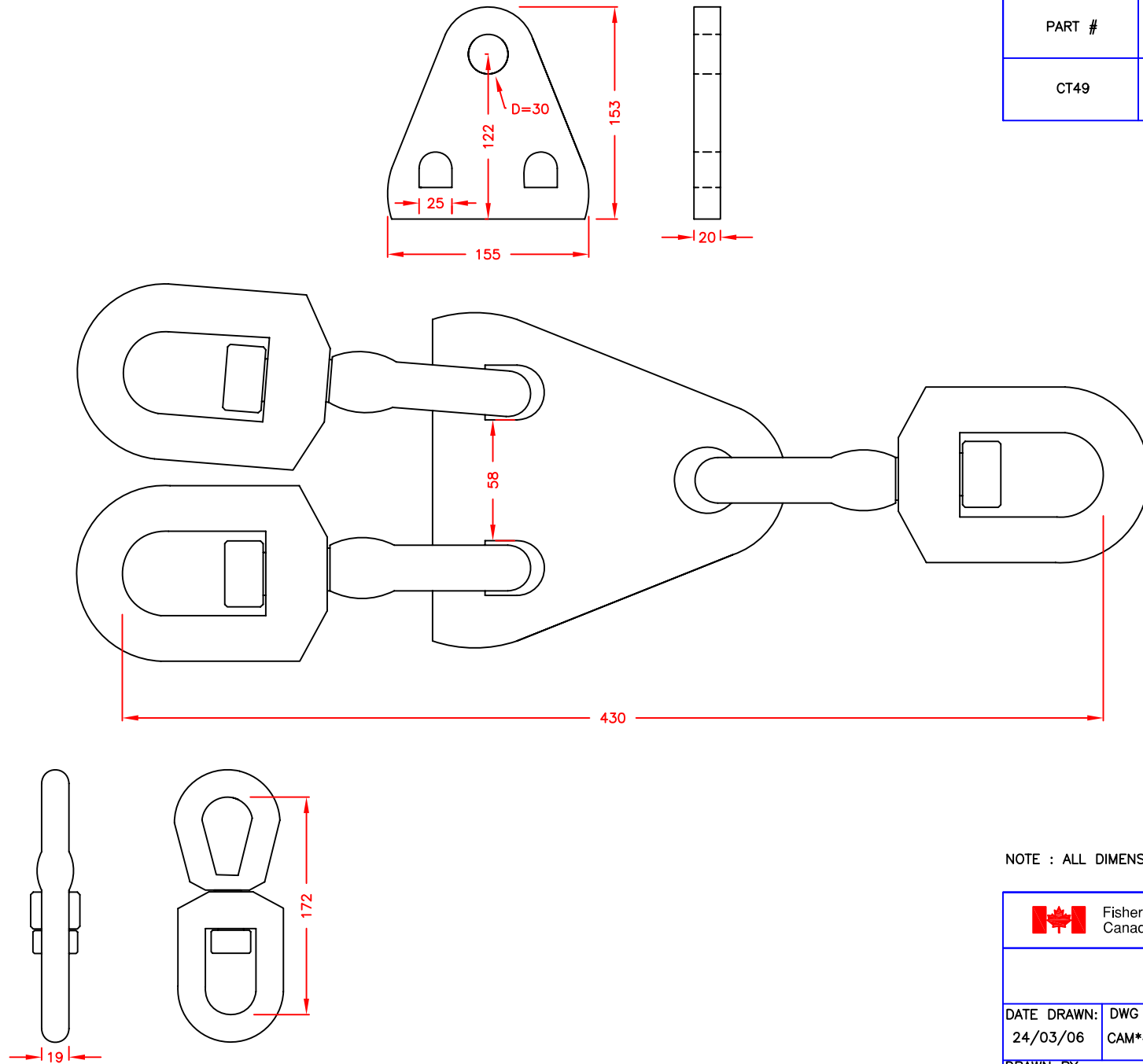
7" (178mm) RUBBER SPACER

| DATE DRAWN: | DWG NO.: | PG          | REV. | SCALE: |
|-------------|----------|-------------|------|--------|
| 06/11/14    | CAM*4.10 | 23 OF 28 PG | 2    | NTS    |

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| SPECIFICATIONS |                    |                       |
|----------------|--------------------|-----------------------|
| PART #         | WEIGHT IN AIR (kg) | WEIGHT IN WATER (kg): |
| CT49           | 6.17               | 5.39                  |



NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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# DELTA PLATE

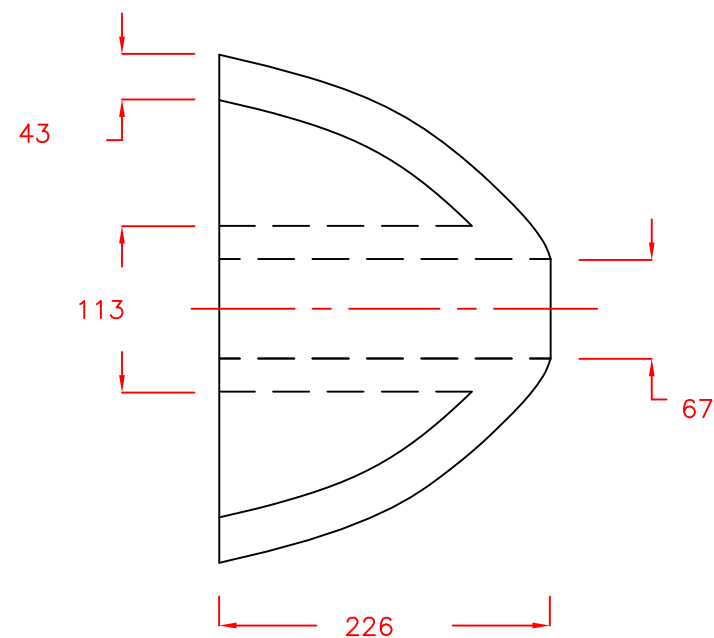
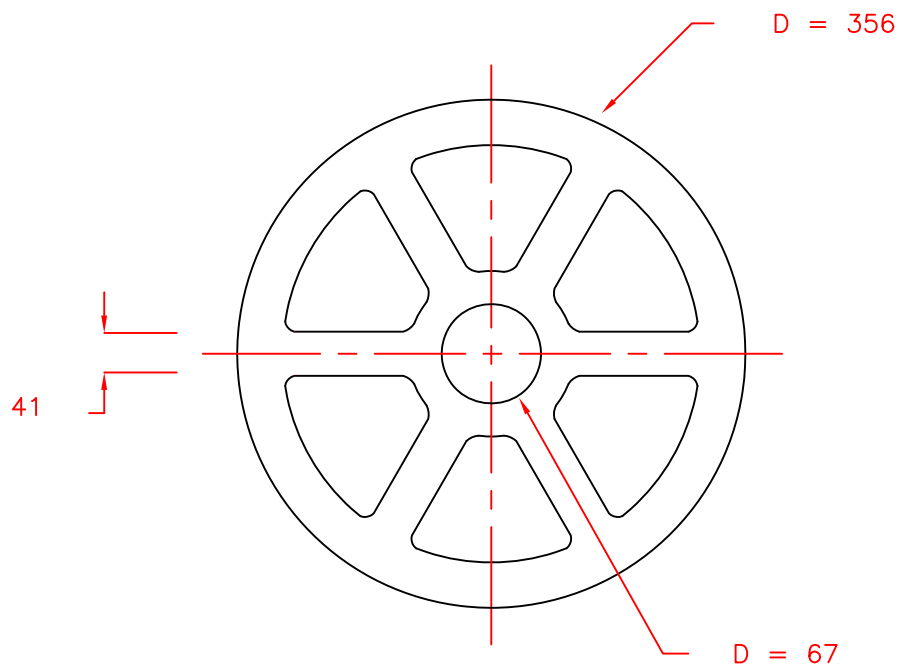
| DATE DRAWN: | DWG NO.: | REV.           | SCALE: |
|-------------|----------|----------------|--------|
| 24/03/06    | CAM*4.11 | PG 24 OF 28 PG | 1 NTS  |

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# SPECIFICATIONS

| PART NO. | WEIGHT IN<br>AIR (KG) | WEIGHT IN<br>WATER (KG) |
|----------|-----------------------|-------------------------|
| CT50     | 17.35                 | 4.80                    |



NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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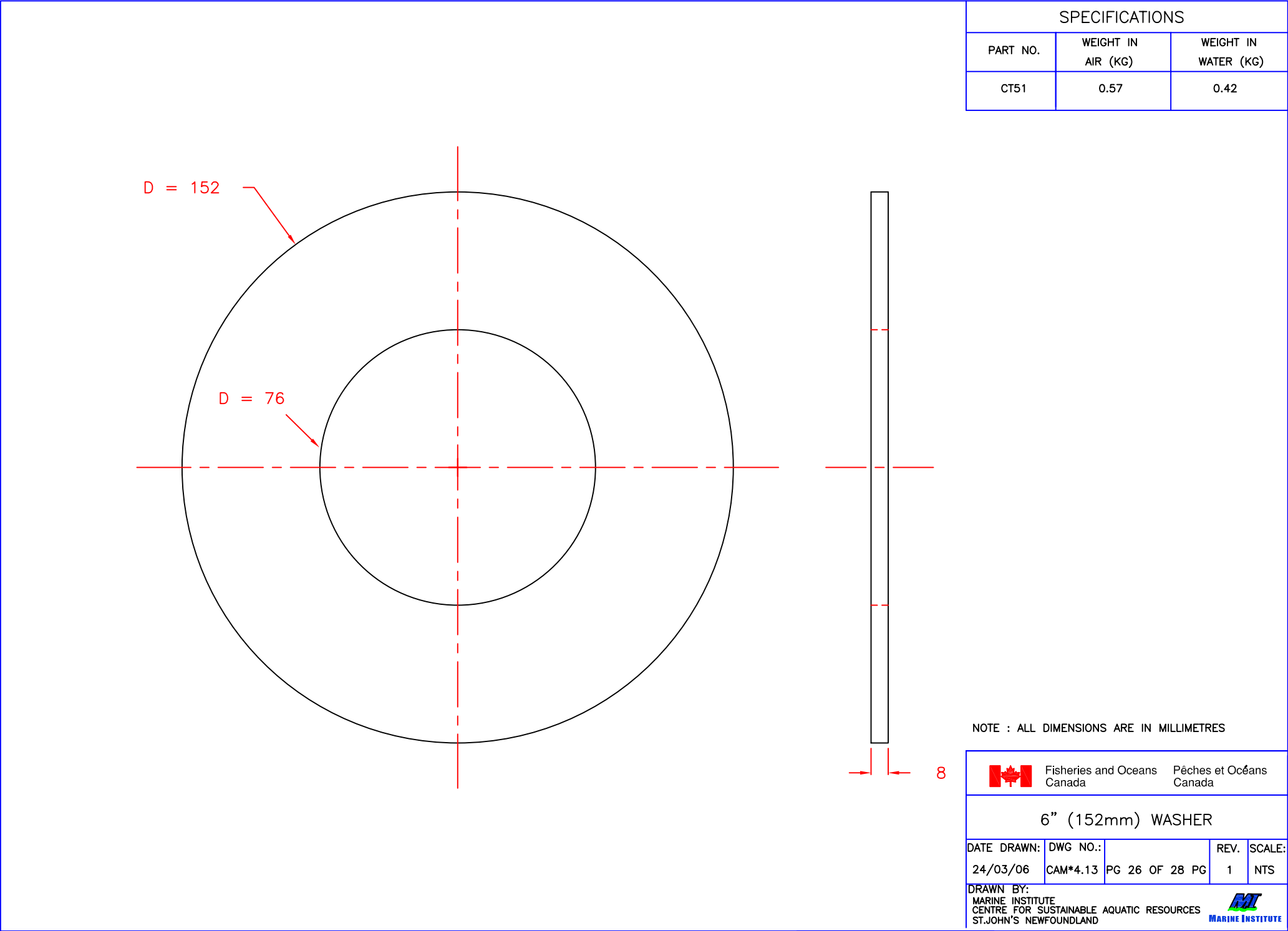
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14" (356mm) RUBBER BUNT BOBBIN

| DATE DRAWN: | DWG NO.: | PG          | REV. | SCALE: |
|-------------|----------|-------------|------|--------|
| 06/11/14    | CAM*4.12 | 25 OF 28 PG | 2    | NTS    |

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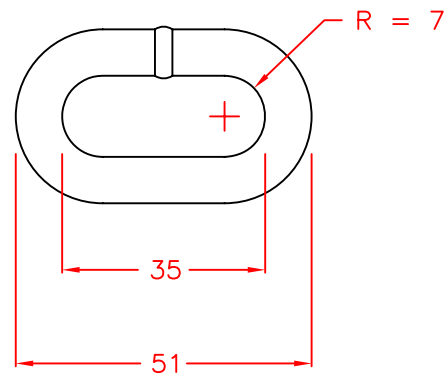
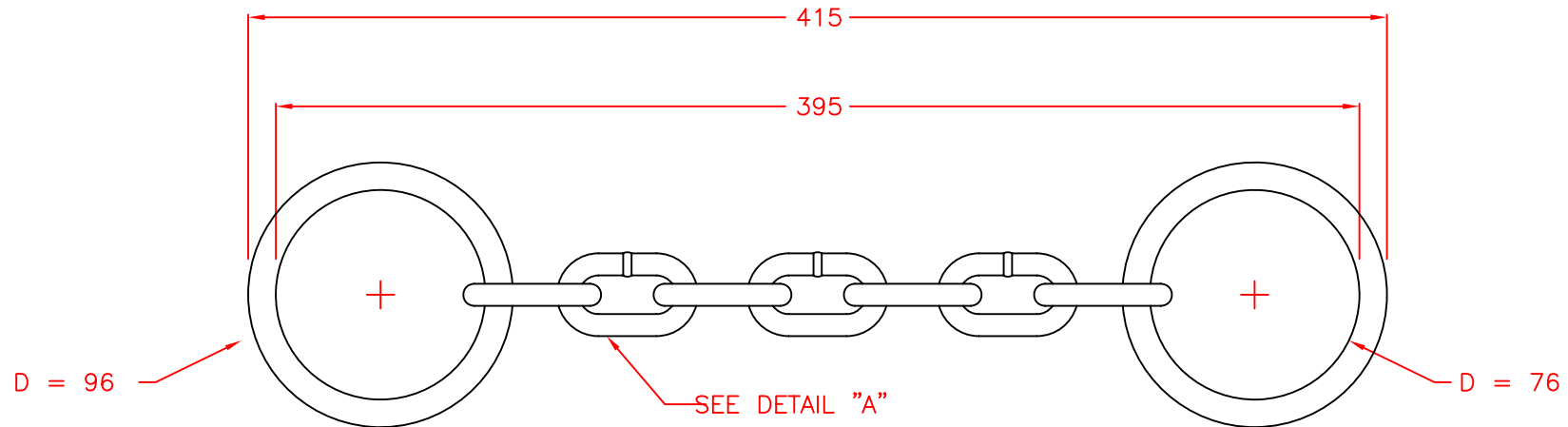






# SPECIFICATIONS

| PART NO. | WEIGHT IN AIR (KG) | WEIGHT IN WATER (KG) |
|----------|--------------------|----------------------|
| CT52     | 0.64               | 0.58                 |



DETAIL A

NOTE : ALL DIMENSIONS ARE IN MILLIMETRES



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## BOBBIN CHAIN

|             |          |      |        |
|-------------|----------|------|--------|
| DATE DRAWN: | DWG NO.: | REV. | SCALE: |
| 24/03/06    | CAM*4.14 | 1    | NTS    |

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| ORIGINAL<br>DRAWING # | REVISION # | ORIGINALLY<br>DRAWN | NEW<br>DRAWING # | DATE<br>REVISED | AUTHORIZED<br>BY | REVISION DESCRIPTION   | ORIGINAL<br>DRAWING # | REVISION # | ORIGINALLY<br>DRAWN | NEW<br>DRAWING # | DATE<br>REVISED | AUTHORIZED<br>BY | REVISION DESCRIPTION                         |
|-----------------------|------------|---------------------|------------------|-----------------|------------------|--|-----------------------|------------|---------------------|------------------|-----------------|------------------|--|
| CAM*1.0               | 1          | 02/08/93            | CAM*1.0          | 24/03/06        | S.J. Walsh       | Slight formatting changes, additional connection details added, scanmar sensors added.   | CAM*4.2               | 1          | 24/03/06            | CAM*4.2          | 18/12/06        | S.J. Walsh       | Depth measurements added.                    |
| CAM*1.0               | 2          | 24/03/06            | CAM*1.0          | 18/12/06        | S.J. Walsh       | Lower breastline eye splice moved to other half of hammerlock.   | CAM*4.9               | 2          | 24/03/06            | CAM*4.9          | 06/11/14        | S.J. Walsh       | Correction to the specified seawater weight. |
| CAM*1.0               | 3          | 18/12/06            | CAM*1.0          | 22/10/07        | S.J. Walsh       | Additional text added to Detail "G", Joining round added to separate side panel #3 and #4, note added.   | CAM*4.10              | 2          | 24/03/06            | CAM*4.10         | 06/11/14        | S.J. Walsh       | Correction to the specified seawater weight. |
| CAM*1.0               | 4          | 22/10/07            | CAM*1.0          | 12/01/15        | S.J. Walsh       | Text edit  | CAM*4.12              | 2          | 24/03/06            | CAM*4.12         | 06/11/14        | S.J. Walsh       | Correction to the specified seawater weight. |
| CAM*1.1               | 1          | 24/03/06            | CAM*1.1          | 22/10/07        | S.J. Walsh       | Door leg ext. listed as #4A and 4B, h/lock at bridle end of door leg ext. changed from a 3/4" to a 5/8", Side view of attachment bracket added.  |                       |            |                     |                  |                 |                  |  |
| CAM*1.1               | 2          | 22/10/07            | CAM*1.1          | 12/01/15        | S.J. Walsh       | Text edit  |                       |            |                     |                  |                 |                  |  |
| CAM*1.2               | 1          | 24/03/06            | CAM*1.1          | 22/10/07        | S.J. Walsh       | Door leg ext. listed as #4A and 4B, Door shackle shown as pin through door   |                       |            |                     |                  |                 |                  |  |
| CAM*1.2               | 2          | 22/10/07            | CAM*1.2          | 12/01/15        | S.J. Walsh       | Text edit  |                       |            |                     |                  |                 |                  |  |
| CAM*2.0               | 1          | 02/08/93            | CAM*2.0          | 24/03/06        | S.J. Walsh       | Slight formatting changes, additional remark added, headline shown in 3 pieces.  |                       |            |                     |                  |                 |                  |  |
| CAM*2.0               | 2          | 24/03/06            | CAM*2.0          | 18/12/06        | S.J. Walsh       | Stretched length measurements added, side panel (part #15) divided into two pieces now part 15a and 15b.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.0               | 3          | 18/12/06            | CAM*2.0          | 22/10/07        | S.J. Walsh       | PP ropes changed to KR, length of ribline #3 & 4 modified, item #25 is now 25a and 25b, attachment point of cover and liner indicated, extra remarks and notes.  |                       |            |                     |                  |                 |                  |  |
| CAM*2.0               | 4          | 22/10/07            | CAM*2.0          | 15/07/14        | S.J. Walsh       | CT23 depth (N-Direction) changed from 42.5 to 48.5 meshes deep.  |                       |            |                     |                  |                 |                  |  |
| CAM*2.1               | 1          | 02/08/93            | CAM*2.1          | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.2               | 1          | 02/08/93            | CAM*2.2          | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.2               | 2          | 24/03/06            | CAM*2.2          | 18/12/06        | S.J. Walsh       | Extra text added for tapering to detail "D".   |                       |            |                     |                  |                 |                  |  |
| CAM*2.2               | 3          | 18/12/06            | CAM*2.2          | 15/07/14        | S.J. Walsh       | CT23 (80mm) -changed from 42.5 to 48.5 meshes deep. Dimension lines drawn in to illustrates depth of guard netting for both the 1T4B and AB tapers   |                       |            |                     |                  |                 |                  |  |
| CAM*2.3               | 1          | 02/08/93            | CAM*2.3          | 24/03/06        | S.J. Walsh       | Slight formatting changes, float attachment detailed, h/line connection details added.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.3               | 2          | 24/03/06            | CAM*2.3          | 18/12/06        | S.J. Walsh       | Floats now attached to headline only, float attachment rope changed from twisted nylon to polypropylene.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.4               | 1          | 02/08/93            | CAM*2.4          | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.4               | 2          | 24/03/06            | CAM*2.4          | 22/10/07        | S.J. Walsh       | Stop attachment more detailed.   |                       |            |                     |                  |                 |                  |  |
| CAM*2.4               | 3          | 22/10/07            | CAM*2.4          | 15/07/14        | S.J. Walsh       | Added dimensionlines with values to clearly illustrate bolshline lengths for both tapers on the guard netting. Guard netting is now attached to the center of the eye. Added new detail drawing to represent this modification |                       |            |                     |                  |                 |                  |  |
| CAM*2.4               | 4          | 15/07/14            | CAM*2.4          | 12/11/14        | S.J. Walsh       | Corrected Bolshline length in "Detail B".  |                       |            |                     |                  |                 |                  |  |
| CAM*2.5               | 1          | 24/03/06            | CAM*2.5          | 18/12/06        | S.J. Walsh       | Floats now attached to headline only.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.0               | 1          | 02/08/93            | CAM*3.0          | 24/03/06        | S.J. Walsh       | Slight formatting changes, delta plate specification adjusted due to supplier modifications, travel wire redrawn to indicate chain, fishingline connection added to "Detail A".  |                       |            |                     |                  |                 |                  |  |
| CAM*3.0               | 2          | 24/03/06            | CAM*3.0          | 18/12/06        | S.J. Walsh       | Two Toggles added in bosum.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.0               | 3          | 18/12/06            | CAM*3.0          | 06/11/14        | S.J. Walsh       | Correction to the specified weight and total weight of footgear components.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.1               | 1          | 02/08/93            | CAM*4.8          | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.1               | 2          | 24/03/06            | CAM*3.1          | 18/12/06        | S.J. Walsh       | Two Toggles added in bosum.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.1               | 2          | 18/12/06            | CAM*3.1          | 22/10/07        | S.J. Walsh       | Note added.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.2               | 1          | 02/08/93            | CAM*4.9          | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.2               | 1          | 24/03/06            | CAM*3.2          | 18/12/06        | S.J. Walsh       | Toggle added in bosum.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.2               | 2          | 24/03/06            | CAM*3.2          | 22/10/07        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.3               | 1          | 02/08/93            | CAM*4.10         | 24/03/06        | S.J. Walsh       | Slight formatting changes, including page renumbering  |                       |            |                     |                  |                 |                  |  |
| CAM*3.4               | 1          | 02/08/93            | CAM*4.11         | 24/03/06        | S.J. Walsh       | Slight formatting changes, part modified by manufacturer, specifications updated.  |                       |            |                     |                  |                 |                  |  |
| CAM*3.5               | 1          | 02/08/93            | CAM*4.12         | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.6               | 1          | 02/08/93            | CAM*4.13         | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*3.7               | 1          | 02/08/93            | CAM*4.14         | 24/03/06        | S.J. Walsh       | Slight formatting changes.   |                       |            |                     |                  |                 |                  |  |
| CAM*4.0               | 1          | 24/03/06            | CAM*4.0          | 12/01/15        | S.J. Walsh       | Dimensions edited.   |                       |            |                     |                  |                 |                  |  |
| CAM*4.1               | 1          | 24/03/06            | CAM*4.1          | 12/01/15        | S.J. Walsh       | Dimensions edited.   |                       |            |                     |                  |                 |                  |  |

ADDITIONAL NOTES:

THE ORIGINAL DRAWING SET WAS UPGRADED IN MARCH 2006. THE ORIGINAL SET CONTAINED 14 DRAWINGS, THE MARCH 2006 UPGRADE CONSISTED OF THE ADDITION OF 13 DETAILED DRAWINGS AND A REVISIONS TABLE, GIVING A TOTAL OF 28 PAGES. THESE ADDITIONAL DRAWINGS AND THE MODIFICATIONS TO THE ORIGINAL DRAWINGS WERE APPROVED BY STEVE WALSH AND WILLIAM HICKEY, DFO.



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LIST OF REVISIONS

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| DATE DRAWN:<br>12/01/15 | DWG NO.:<br>CAM*5.0 | PG 28 OF 28 PG | REV.<br>5 | SCALE:<br>NTS |
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