



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Réception des soumissions - TPSGC / Bid  
Receiving - PWGSC  
1550, Avenue d'Estimauville  
1550, D'Estimauville Avenue  
Québec  
Québec  
G1J 0C7

## REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

### Proposal To: Public Works and Government Services Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

### Proposition aux: Travaux Publics et Services Gouvernementaux Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

### Comments - Commentaires

<b>Title - Sujet</b> Capteur de fragments EFP		
<b>Solicitation No. - N° de l'invitation</b> W7701-166127/A	<b>Date</b> 2015-11-26	
<b>Client Reference No. - N° de référence du client</b> W7701-166127		
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$QCN-016-16613		
<b>File No. - N° de dossier</b> QCN-5-38214 (016)	<b>CCC No./N° CCC - FMS No./N° VME</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2016-01-11</b>		<b>Time Zone</b> <b>Fuseau horaire</b> Heure Normale du l'Est HNE
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>		
<b>Address Enquiries to: - Adresser toutes questions à:</b> Carrier, Bertrand		<b>Buyer Id - Id de l'acheteur</b> qcn016
<b>Telephone No. - N° de téléphone</b> (418) 649-2774 ( )		<b>FAX No. - N° de FAX</b> (418) 648-2209
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> RDDC-R et D Défense Canada-Valcartier DRDC-Defence R & D Canada-Valcartie BATISSE 53 2459 ROUTE DE LA BRAVOURE QUEBEC Québec G3J 1X5 Canada		

Instructions: See Herein

Instructions: Voir aux présentes

### Vendor/Firm Name and Address

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

### Issuing Office - Bureau de distribution

TPSGC/PWGSC  
601-1550, Avenue d'Estimauville  
Québec  
Québec  
G1J 0C7

<b>Delivery Required - Livraison exigée</b> VOIR DOC	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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Solicitation No. - N° de l'invitation  
W7701-166127/A  
Client Ref. No. - N° de réf. du client  
W7701-166127

Amd. No. - N° de la modif.  
File No. - N° du dossier  
QCN-5-38214

Buyer ID - Id de l'acheteur  
qcn016  
CCC No./N° CCC - FMS No./N° VME

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Requirement**

The requirement is detailed at article 6.2 of the Resulting Contract Clauses section.

### **1.2 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.3 Trade Agreements**

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2015-07-03) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 90 days

#### 2.1.1 SACC Manual Clauses

The following terms and conditions are incorporated herein

SACC Reference	Section	Date
B1000T	Condition of Material - Bid	2014-06-26

### 2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

### 2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Quebec.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1 Bid Preparation Instructions**

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Financial Bid (1 hard copy)

Section II: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### **Section I: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment – Annex B. The total amount of Applicable Taxes must be shown separately.

#### **3.1.1 Exchange Rate Fluctuation**

[C3011T \(2013-11-06\), Exchange Rate Fluctuation](#)

#### **3.1.2 SACC Manual Clauses**

#### **Section II: Certifications**

Bidders must submit the certifications required under Part 5.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### **4.1.1 Financial Evaluation**

*SACC Manual* Clause A0220T (2014-06-26), Evaluation of Price

### **4.2 Basis of Selection**

A bid must comply with all requirements of the bid solicitation to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

## PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### 5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

#### 5.1.1 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed [Declaration Form](http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>), to be given further consideration in the procurement process.

### 5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

#### 5.2.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

#### 5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list at the time of contract award.

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

6.1.1 There is no security requirement applicable to this Contract.

### 6.2 Requirement

The Contractor must manufacture, assemble, machine and deliver one (1) EFP fragment catcher (Explosive Formed Projectile), in accordance with the Requirement at Annex "A" and the drawings of Annex «C».

### 6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

2010C (2015-09-03), General Conditions - Services (Medium Complexity), apply to and form part of the Contract.

### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The contract period is from the date of the contract until the end of the guarantee period inclusive.

#### 6.4.2 Delivery Date

The contractor must have completed the delivery within six (6) weeks from the effective date of the contract.

### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Bertrand Carrier  
Title: Supply Specialist  
Public Works and Government Services Canada  
Acquisitions Branch  
Address: 1550 D'Estimauville Ave.,  
Quebec, Qc.  
G1J 0C7  
Telephone: 418-649-2774  
Facsimile: 418-648-2209  
E-mail address: Bertrand.Carrier@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.



## 6.5.2 Project Authority

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

## 6.5.3 Contractor's Representative

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6.6 Payment

### 6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a *firm price*, as specified in Annex B for a cost of \$ \_\_\_\_\_ *insert the amount at contract award*). Customs duties are *included* and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 6.6.2 Terms of payment

SACC Manual Clause H1000C, (2008-05-12) Single payment

## 6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:  
The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

## 6.8 Certifications

### 6.8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

## 6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Quebec.

## 6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the General Conditions 2010C (2015-09-03) Services (Medium Complexity);
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of payment;
- (e) Annex C, Drawings
- (f) Annex D, Pictures
- (g) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*)

## 6.11 SACC Manual Clauses

G1005C	2008-05-12	Insurance
A9006C	2012-07-16	Defence Contract
A1009C	2008-05-12	Work Site Access
D0018C	2007-11-30	Delivery and Unloading

## 6.12 Inspection and Acceptance

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment

## 6.13 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered DDP Delivered Duty Paid; Centre de Recherches de Valcartier, Bâtiment 53, 2459 Route de La Bravoure, Québec, Qc., Incoterms 2000 for shipments from commercial contractor.

## ANNEX A – STATEMENT OF WORK

### **EFP FRAGMENT CATCHER (EXPLOSIVE FORMED PROJECTILE)**

#### **1. BACKGROUND**

As part of the LOV (Land Operational Vehicle) Project, an EFP fragment sensor must be manufactured to protect the measuring equipment (cameras, X-ray devices, etc.) used during tests carried out to characterize this type of projectile in flight.

#### **2. REFERENCE DOCUMENTS**

The drawings describing the assemblies and parts to manufacture, and their requirements, are appended to this request in Annex «C».

2.1	Drawing package for the parts of the « <b>CAPTEUR DE FRAGMENTS POUR PROJECTILES EFP</b> »
	<ul style="list-style-type: none"><li>• 140730-11</li><li>• 140730-12</li><li>• 140730-13</li><li>• 140730-15</li><li>• 140730-16</li></ul>
2.2	Drawing package for the parts of the « <b>SABOT TRAP POUR PROJECTILES EFP</b> »
	<ul style="list-style-type: none"><li>• 140730-03</li><li>• 140730-04</li><li>• 140730-06</li><li>• 140730-07</li><li>• 140730-08</li><li>• 140730-09</li><li>• 140730-18</li></ul>
2.3	Drawing package for the 50 inches ring « <b>ANNEAU 50 POUCES (ASM).pdf</b> » (Assembly)
	<ul style="list-style-type: none"><li>• 140730-14</li><li>• 140730-25</li><li>• 140730-28</li></ul>
2.4	Drawing package for the 56 inches ring « <b>ANNEAU 56 POUCES (ASM).pdf</b> »
	<ul style="list-style-type: none"><li>• 140730-10</li><li>• 140730-26</li><li>• 140730-27</li><li>• 140730-29</li></ul>
2.5	Drawings of the 14-ft. guide tube ( <b>TUBE GUIDE 14 PIEDS.pdf</b> )
	<ul style="list-style-type: none"><li>• 140730-19</li></ul>

#### **3. TASKS**

##### **3.1 MANUFACTURING**

The Contractor shall manufacture the following parts as per the requirements and instructions indicated on the related drawings:

<b>3.1.1 Parts for the EFP projectiles fragments catcher " CAPTEUR DE FRAGMENTS POUR PROJECTILES EFP "</b>		
<b>TITLE / PARTS</b>	<b>REFERENCE (Drawing)</b>	<b>QUANTITY</b>
SUPPORT D'ANNEAU 56 POUCES	140730-11	<b>6</b>
BASE DE CAPTEUR DE FRAGMENT EFP	140730-12	<b>1</b>
BASE 58 X 24	140730-13	<b>1</b>
TUBE 6 X 6 X 23	140730-15	<b>4</b>
BUTÉE	140730-16	<b>1</b>

<b>3.1.2 Parts for the EFP projectiles sabot trap " SABOT TRAP POUR PROJECTILES EFP "</b>		
<b>TITLE / PARTS</b>	<b>REFERENCE (Drawing)</b>	<b>QUANTITY</b>
TUBE 6 X 6 X 92	140730-06	<b>4</b>
SUPPORT 28 POUCES	140730-07	<b>4</b>
SUPPORT 18 POUCES	140730-08	<b>1</b>
TUBE 6 X 6 X 23	140730-09	<b>4</b>
GUIDE 10 POUCES	140730-18	<b>2</b>

<b>3.1.3 14 feet guide tube</b>		
<b>TITLE / PARTS</b>	<b>REFERENCE (Drawing)</b>	<b>QUANTITY</b>
TUBE GUIDE 14 PIEDS	140730-19	<b>2</b>

### **3.2 MANUFACTURING AND ASSEMBLY**

The Contractor shall manufacture the following parts and assemble them as per the requirements and instructions indicated on the related drawings:

<b>3.2.1 ANNEAUX</b>		
<b>TITLE / PARTS</b>	<b>REFERENCE (Drawing)</b>	<b>QUANTITY</b>
ANNEAU 50 POUCES (ASM)	140730-28	<b>1</b>
ANNEAU 56 POUCES (ASM)	140730-29	<b>1</b>

### 3.3 MACHINING

The contractor shall machine the items circled in red as per the requirements and instructions indicated on the related drawings, on the following parts:

3.3.1 BASE and SABOT		
TITLE / PARTS	REFERENCE (Drawing)	QUANTITY
<b>BASE POUR SABOT TRAP (Annexe D- Picture #1)</b>  <b>Note 1:</b> The "BASE POUR SABOT TRAP" (drawing 140730-03) will be provided by DRDC. Only those items circled in RED are to be machined, i.e. the four 3-inch holes and the four cut-outs shown in detail "A."	140730-03	1
<b>SABOT TRAP POUR EFP (Annexe D- Picture #2)</b>  <b>Note 2:</b> The "SABOT TRAP EFP" (drawing 140730-04) will be provided by DRDC. Only those items circled in RED are to be machined, i.e. the six 1.062 inches holes, the four 1.125 inches holes and the four cut-outs shown in detail "A."	140730-04	1

### 3.4 TRANSPORTATION

- 3.4.1 The Contractor shall be responsible for transporting the DRDC-provided parts (140730-03, 140730-04) from DRDC Valcartier to its own shop.
- 3.4.2 The Contractor shall be responsible for transporting all parts to be delivered to DRDC Valcartier.

## 4. DELIVERABLES

### 4.1 PARTS

Deliverables for tasks 3.1 à 3.3 :

4.1.1	SUPPORT D'ANNEAU 56 POUCES	(Quantité : 6)	Référence : 140730-11
4.1.2	BASE DE CAPTEUR DE FRAGMENT EFP	(Quantité : 1)	Référence : 140730-12
4.1.3	BASE 58 X 24	(Quantité : 1)	Référence : 140730-13
4.1.4	TUBE 6 X 6 X 23	(Quantité : 4)	Référence : 140730-15
4.1.5	BUTÉE	(Quantité : 1)	Référence : 140730-16
4.1.6	TUBE 6 X 6 X92	(Quantité : 4)	Référence : 140730-06
4.1.7	SUPPORT 28 POUCES	(Quantité : 4)	Référence : 140730-07
4.1.8	SUPPORT 18 POUCES	(Quantité : 1)	Référence : 140730-08
4.1.9	GUIDE 6 POUCES	(Quantité : 4)	Référence : 140730-09
4.1.10	GUIDE 10 POUCES	(Quantité : 2)	Référence : 140730-18
4.1.11	TUBE GUIDE 14 PIEDS	(Quantité : 2)	Référence : 140730-19
4.1.12	ANNEAU 50 POUCES (ASM)	(Quantité : 1)	Référence : 140730-28
4.1.13	ANNEAU 56 POUCES (ASM)	(Quantité : 1)	Référence : 140730-29
4.1.14	BASE POUR SABOT TRAP (Machined)	(Quantité : 1)	Référence : 140730-03
4.1.15	SABOT TRAP POUR EFP (Machined)	(Quantité : 1)	Référence : 140730-04

## 4.2 DOCUMENTATION REQUISE À LA LIVRAISON

- 4.2.1 A certificate of compliance stating the type of steel used, as per the drawings, to manufacture the parts not provided by DRDC, for the EFP projectiles fragments catcher "CAPTEUR DE FRAGMENTS POUR PROJECTILES "EFP" (3.1.1), for the EFP projectiles sabot trap " SABOT TRAP POUR PROJECTILES EFP " (3.1.2), for the 50 inches ring " ANNEAU 50 POUCES (ASM) " (140730-28)(3.2.1), and for the 56 inches ring " ANNEAU 56 POUCES (ASM) " (140730-29)(3.2.1).
- 4.2.2 An X-ray or ultrasound inspection report confirming that the 50-in. and 56-in. ring joint welds (drawings 140730-10 and 140730-14) meet the acceptance criteria stated in the CSA document entitled "W59-13 - Welded steel construction (metal arc welding)," available for purchase at the following address: <http://shop.csa.ca/search?q=w59&categories=shop&searchsubmit=Search>
- 4.2.3 A Canadian Welding Bureau (CWB)-compliant "Welding Procedure Data Sheet" (WPDS) describing the welding procedure used (which must be compliant with CSA document W59-13) for the 50-in. and 56-in. ring joint welds (drawings 140730-10 and 140730-14).

## 5. GOVERNMENT FURNISHED MATERIAL

- 5.1 The Base for Sabot Trap (drawing 140730-03) shall be provided (see Note 1, item 3.3.1).  
**(Annexe D- Picture #1)**
- 5.2 The EFP SABOT TRAP (drawing 140730-04) shall be provided (see Note 2, item 3.3.1).  
**(Annexe D- Picture #2)**

---

## ANNEX B – BASIS OF PAYMENT

ITEM	DESCRIPTION	FIRM TOTAL PRICE
1	<b>EFP FRAGMENT CATCHER</b> As described in Annex A and the contract, as per the drawings of Annex C, including : <ul style="list-style-type: none"><li>• Manufacturing</li><li>• Material</li><li>• Assembly</li><li>• Machining</li><li>• Transportation</li><li>• Documentation</li></ul>	\$

Solicitation No. - N° de l'invitation  
W7701-166127/A  
Client Ref. No. - N° de réf. du client  
W7701-166127

Amd. No. - N° de la modif.  
File No. - N° du dossier  
QCN-5-38214

Buyer ID - Id de l'acheteur  
qcn016  
CCC No./N° CCC - FMS No./N° VME

---

## **ANNEX C – DRAWINGS**

[ see attachment ]



Solicitation No. - N° de l'invitation  
W7701-166127/A  
Client Ref. No. - N° de réf. du client  
W7701-166127

Amd. No. - N° de la modif.  
File No. - N° du dossier  
QCN-5-38214

Buyer ID - Id de l'acheteur  
qcn016  
CCC No./N° CCC - FMS No./N° VME

## ANNEX D – PICTURES

### Picture #1 – Base for Sabot Trap



Solicitation No. - N° de l'invitation  
W7701-166127/A  
Client Ref. No. - N° de réf. du client  
W7701-166127

Amd. No. - N° de la modif.  
File No. - N° du dossier  
QCN-5-38214

Buyer ID - Id de l'acheteur  
qcn016  
CCC No./N° CCC - FMS No./N° VME

## ANNEX D – PICTURES

### Picture #2 – EFP Sabot Trap



ANNEXE / ANNEX C - ENSEMBLE DE DESSINS / DRAWING PACKAGE

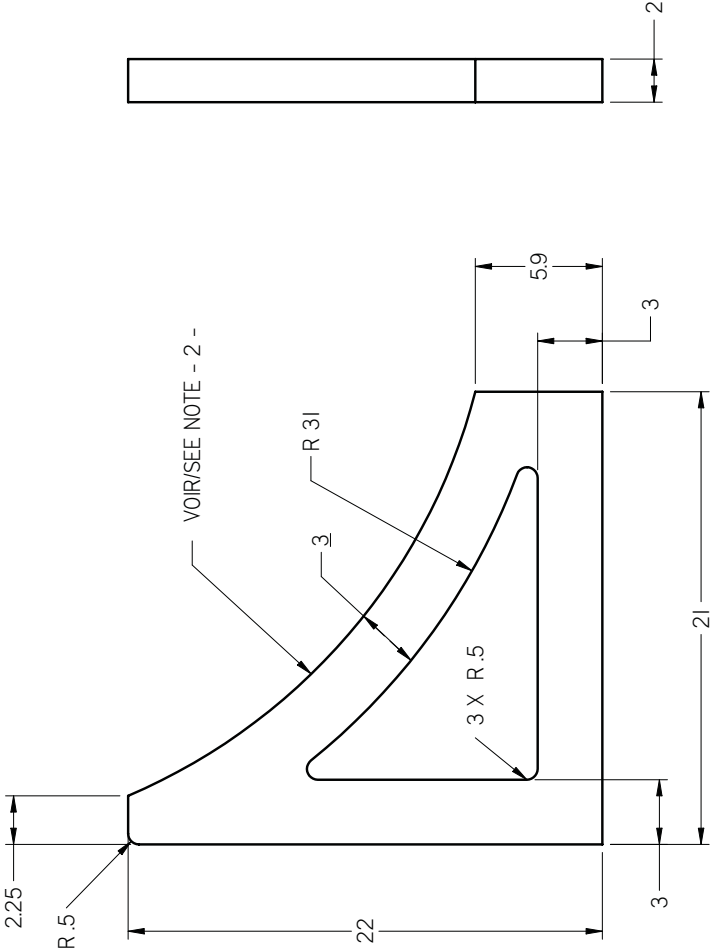
2.1 PIÈCES / PARTS: CAPTEUR DE FRAGMENTS EFP

CE DESSIN EST LA PROPRIÉTÉ DE DRDC VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF DRDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

CE DESSIN EST CONFORME AUX NORMES AS/NZS  
THIS DRAWING COMPLETS WITH CSA STANDARDS

B 78.1 & 78.2

- 1- MAT. : ACIER/STEEL A514 OU/OR ÉQUIVALENT
- 2 - AJUSTER LE RAYON SELON LE DIAMÈTRE EXTÉRIEUR MESURÉ DE L' ANNEAU 56 POUCES (DESSIN NO. 140730-10), DE FAÇON À OBTENIR UN JEU DE .03 À .05 ENTRE L'ANNEAU ET LE SUPPORT.
- ADJUST THE RADIUS ACCORDING TO THE MEASURED EXTERIOR 56 INCHES RING DIAMETER (DRAWING NBR. 140730-10), TO OBTAIN A .03 TO .05 GAP BETWEEN THE RING AND THE SUPPORT.



DIMENSIONS SONT EN POUCES DIMENSIONS ARE IN INCHES ETAT DE SURFACE SURFACES INDIQUÉES 125		2499, 1 BOUL. PIERRE XI VALCARTIER, QUÉBEC NORD, QUÉBEC H7N 1A6		DRDC VALCARTIER R & D POUR LA DEFENSE CANADA - VALCARTIER DEFENCE R & D CANADA - VALCARTIER	
TOLERANCES / TOLERANCES FRACTIONS / FRACTIONS 1 (X) ± .02 2 (X) ± .05 3 (X) ± .05 FRACTIONS ± .02 1 (X) ± .02 2 (X) ± .05 3 (X) ± .05 FORMES A. FORMES AT 90° ± 1/2° FORMES B. FORMES AT 90° ± 1/2° REMAINE SHARP EDGES AND CORNERS SAUF INDICATION CONTRAIRE UNLESS OTHERWISE SPECIFIED		PROTECTION ET EFFETS D'ARMES WEAPONS EFFECTS AND PROTECTION		TITRE / TITLE SUPPORT D'ANNEAU 56 POUCES	
COMPLI / DESIGNED K. GOULET		DESSEIN / DRAWN K. GOULET		VERIFIÉ / CHECKED	
ACCEPTÉ / ACCEPTED		SECURITE / SECURITY		ECHELLE / SCALE	
				NUMERO DU DESSIN / DRAWING NUMBER	
				FORMAT	
				1 / 4	
				140730-11	
				C	

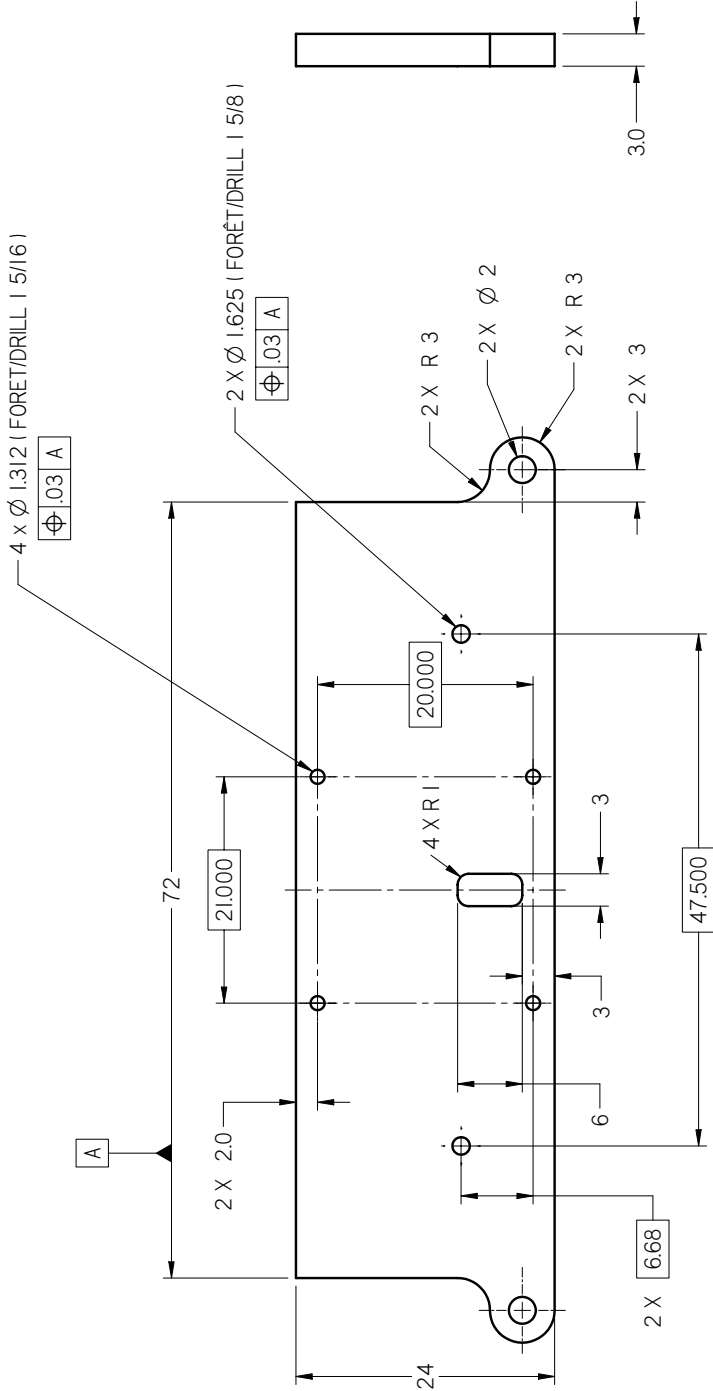


CE DESSIN EST LA PROPRIÉTÉ DE DRDC VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF DRDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

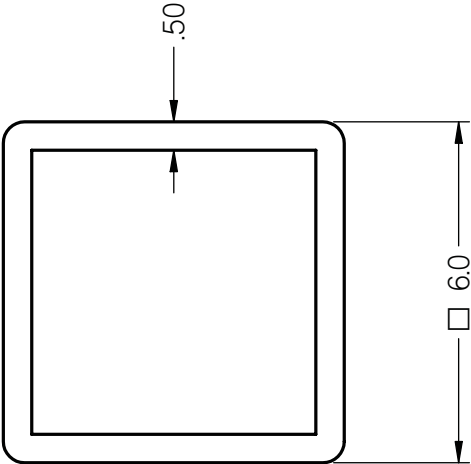
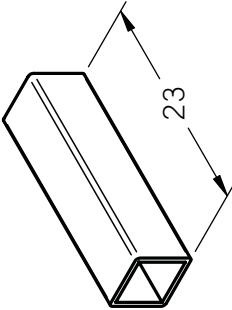
DESSIN CONFORME AUX NORMES ACNOR  
THIS DRAWING COMPLES WITH CSA STANDARDS

B 78.1 & 78.2

I-MAT : ACIER / STEEL 44W



RDRC VALCARTIER R & D POUR LA DEFENSE CANADA - VALCARTIER DEFENSE R & D CANADA - VALCARTIER		2490, BOUL. PIE XI, NORD, N VAL-BELAIR, QUEBEC, G3J 1X5, CANADA		DRDC VALCARTIER R & D POUR LA DEFENSE CANADA - VALCARTIER DEFENSE R & D CANADA - VALCARTIER	
PROTECTION ET EFFETS D'ARMES		WEAPONS EFFECTS AND PROTECTION		TITRE / TITLE	
CONÇU / DESIGNED K. GOULET		DESSEINÉ / DRAWN K. GOULET		BASE 58 X 24	
VERIFIÉ / CHECKED		SECURITE / SECURITY		ECHELLE / SCALE 1 / 8	
ACCEPTÉ / ACCEPTED		NUMERO DU DESSIN / DRAWING NUMBER		140730-13	
FORMAT / SIZE		C		C	

CE DESSIN EST LA PROPRIETE DE RDDC VALCARTIER ET NE DOIT PAS ETRE UTILISE OU REPRODUIT SANS AUTORISATION THIS DRAWING IS THE PROPERTY OF DRDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED		B 78.1 & 78.2	
1- MAT. : TUBE H.S.S. CARRÉ 6 X 6, PAROI .500 H.S.S. SQUARE TUBE 6 X 6, .500 WALL THICKNESS			
			
08		RDDC VALCARTIER 2459, BOUL. PIERRE XI, NORD / NORTH VAL-BELAIR, QUEBEC, G3J 1X5, CANADA DRDC VALCARTIER	
DIMENSIONS SONT EN POUCES DIMENSIONS ARE IN INCHES ETAT DE SURFACE 125 SURFACES ROUGHNESS TOLERANCES / TOLERANCES DECIMALES / DECIMALS 1 (X) ± .02 2 (X) ± .01 3 (X X) ± .005 FRACTIONS ± 1/32" ANGLES FORMES A / FORMED AT 90° ± 12° AUTRES / OTHERS 1:1 ENLÈVEMENTS / CORNERS REINFORCEMENTS / REINFORCEMENTS BISEAUX / CHAMFERS 45° SAUF INDICATIONS CONTRAIRES UNLESS OTHERWISE SPECIFIED		R & D POUR LA DEFENSE CANADA - VALCARTIER DEFENCE R & D CANADA - VALCARTIER	
PROTECTION ET EFFETS D'ARMES		WEAPONS EFFECTS AND PROTECTION	
CONÇU / DESIGNED K. GOULET		TITRE / TITLE TUBE 6 X 6 X 23	
DESSINÉ / DRAWN K. GOULET		SECURITE / SECURITY -----	
VERIFIE / CHECKED		ECHELLE SCALE 1 / 4	
ACCEPTÉ / ACCEPTED		NUMERO DU DESSIN / DRAWING NUMBER 140730-15	
		FORMAT SIZE B	

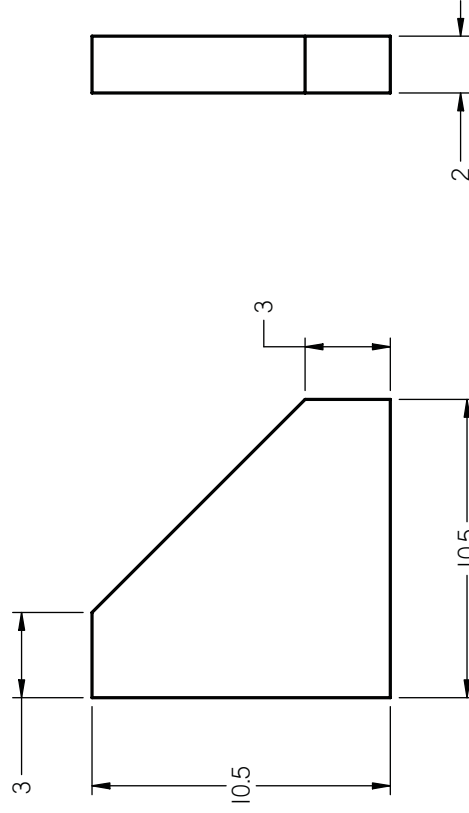


CE DESSIN EST LA PROPRIÉTÉ DE RDC VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF RDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

B 78.1 &amp; 78.2

CE DESSIN EST CONFORME AUX NORMES ACNOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

I-MAT.: ACIER / STEEL A514 0U/OR EQUIVALENT



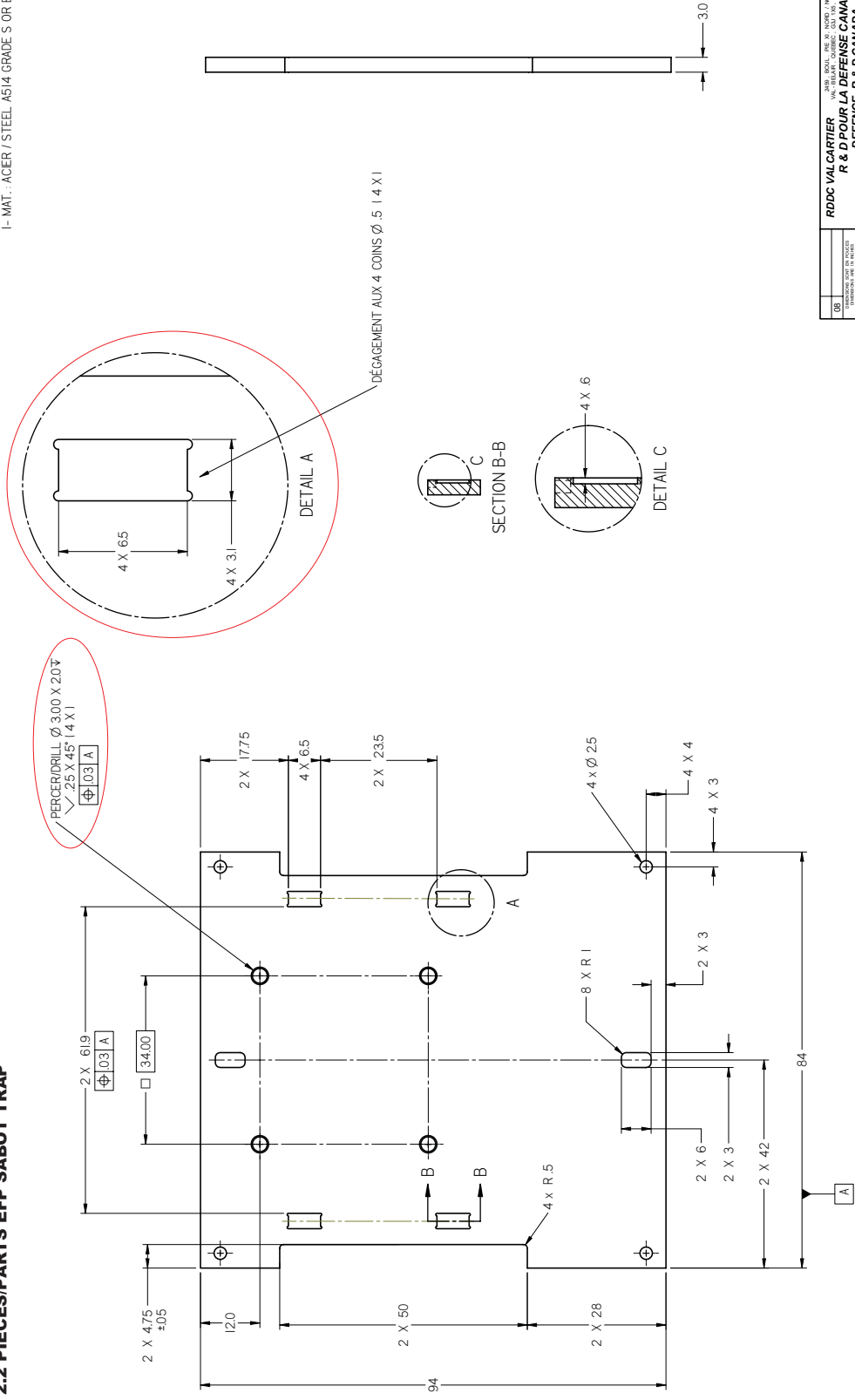
08	<b>RDDC VALCARTIER</b>		<b>DRDC VALCARTIER</b>
2459, BOUL. PIE XI, NORD / NORTH VAL-BELAIR, QUEBEC, G3J 1X5, CANADA			
<b>R &amp; D POUR LA DEFENSE CANADA - VALCARTIER</b> <b>DEFENCE R &amp; D CANADA - VALCARTIER</b>			
PROTECTION ET EFFETS D'ARMES WEAPONS EFFECTS AND PROTECTION		TITRE / TITLE <b>BUTÉE</b>	
CONCU / DESIGNED K. GOULET		ECHELLE / SCALE 1 / 4	
DESSINE / DRAWN K. GOULET		NUMERO DU DESSIN / DRAWING NUMBER <b>140730-16</b>	
VERIFIE / CHECKED _____		SECURITE / SECURITY _____	
ACCEPTÉ / ACCEPTED _____		FORMAT SIZE <b>B</b>	

# ANNEXE/ANNEX C - ENSEMBLE DE DESSINS/DRAWINGS PACKAGE

## 2.2 PIÈCES/PARTS EFP SABOT TRAP

I- MAT: ACIER / STEEL A514 GRADE S OR EQUIVALENT

USE DRAWING IN THE PRESENCE OF CONFLICTS WITH THE DRAWING INFORMATION  
 LE DSSIN EST CONFORME AUX NORMES A514 GRADE S OR EQUIVALENT  
 B 78.1 & 78.2



00	DDC VALCARTIER	VALCARTIER	RE 20 / NORTH	DDC VALCARTIER
	R & D POUR LA DEFENSE CANADA - VALCARTIER			R & D POUR LA DEFENSE CANADA - VALCARTIER
	DEFENSE R & D CANADA - VALCARTIER			DEFENSE R & D CANADA - VALCARTIER
	SERVICE DE PROTECTION			SERVICE DE PROTECTION
	SECURITE / SECURITY			SECURITE / SECURITY
	VERIFIER / CHECKED			VERIFIER / CHECKED
	ACCEPTER / ACCEPTED			ACCEPTER / ACCEPTED
	DATE / DATE			DATE / DATE
	1 / 1			1 / 1
	140730-03			140730-03
	D			D









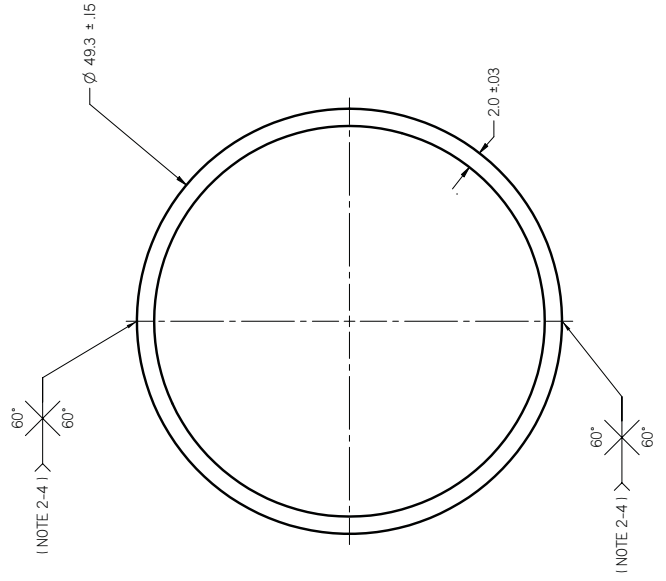






**ANNEXE / ANNEX C - ENSEMBLE DE DESSINS / DRAWING PACKAGE**

## 2.3 PIÈCES / PARTS ANNEAU 50 POUCES (ASM)



CE DESSIN EST LA PROPRIETE DE RDC VALCARTIER ET NE DOIT PAS ETRE UTILISE OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF RDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED IN LESS AUTHORIZED

CE DESSIN EST LA PROPRIÉTÉ DE RDC VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF RDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

CE DESSIN EST CONFORME AUX NORMES ACNOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

CE DESSIN EST CONFORME AUX NORMES ACNOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

---

B 78.1 & 78.2

| -MAT.: ACIER/STEEL A514 GRADE 50/10R EQUIVALENT

2 - SOUDURES: LES PROCÉDURES DÉFINIES DANS LE DOCUMENT W59-03 DE LA CSA POUR L'ACIER A514 DOIVENT ÊTRE SUIVIES.  
WELDING: THE PROCEDURES DEFINED IN THE CSA STANDARD W59-03 FOR THE A514 STEEL MUST BE FOLLOWED

3 - SOUDURES: UN RAPPORT SUR LES PROCÉDURES DE SOUDAGE ( WPDS ) SELON LE CWB DEVRA ÊTRE FOURNI.  
WELDING: A WELDING PROCEDURE DATA SHEET ( WPDS ) ACCORDING TO THE CWB MUST BE SUPPLIED

4 - SOUDURES: UN RAPPORT D'INSPECTION AUX RAYONS X OU À  
ULTRASON DES SOUDURES DEVRA ÊTRE FOURNI.  
WELDING: AN X-RAY OR ULTRASONIC REPORT OF THE WELDS MUST  
BE SUPPLIED.

DIMENSIONS SONT EN POUCES  
DIMENSIONS ARE IN INCHES  
ETAT DE LA SURFACE 125  
ROUGHNESS  
TOLERANCES / TOLERANCES  
DECIMALES / DECIMALS  
1 (X) = .02  
2 (X X) = .01  
3 (X X X) = .005  
FRACTIONS 1/32"  
ANGLES  
FORMES A / FORMED AT 90° ± 1/2°  
AUTRES / OTHERS ± 1/2°  
ENLEVER ARÊTES ET COINS VIFS  
REMOVE SHARP EDGES AND CORNERS  
SAUF INDICATION CONTRAIRE  
UNLESS OTHERWISE NOTED

<b>RDDC VALCARTIER</b> <b>R &amp; D POUR LA DEFENSE CANADA - VALCARTIER</b> <b>DEFENCE R &amp; D CANADA - VALCARTIER</b>		<b>DRDC VALCARTIER</b> <b>DRDC VALCARTIER</b>	
2480 J. BOUL. PEI XI / NORTH VALCARTIER, QUEBEC		2480 J. BOUL. PEI XI / NORTH VALCARTIER, QUEBEC	
PROTECTION ET EFFETS D'ARMES		WEAPONS EFFECTS AND PROTECTION	
CONÇU / DESIGNED K. GOULET		TITRE / TITLE <b>ANNEAU 50 POUCES</b>	
DESSINE / DRAWN K. GOULET			
VERIFIE / CHECKED		SECURITE / SECURITY	NUMERO DU DESSIN / DRAWING NUMBER <b>140730-14</b>
ACCEPTE / ACCEPTED		ECHELLE / SCALE <b>1 / 10</b>	FORMAT / SIZE <b>C</b>

CE DESSIN EST LA PROPRIÉTÉ DE RODCVALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF RODCVALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

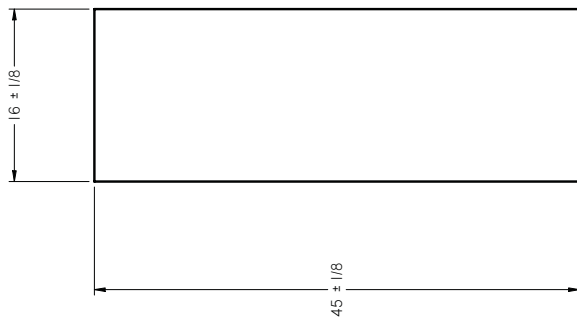
CE DESSIN EST CONFORME AUX NORMES ANCOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

**B 78.1 & 78.2**

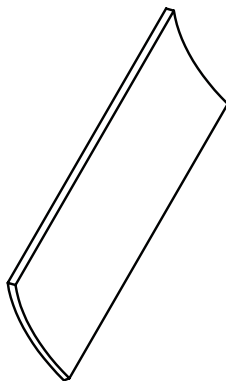
B 78.1 &amp; 78.2

I - MAT.: ACIER/STEEL A514 GRADE S OU/OR ÉQUIVALENT

2. - AJUSTER LE RAYON AU DIAMÈTRE INTÉRIEUR  
MESURÉ DE L'ANNEAU 50 POUCES (DESSIN NO. 140730-14) À  $+0U - 05"$



—R: VOIR NOTE -2-  
: SEE NOTE -2-



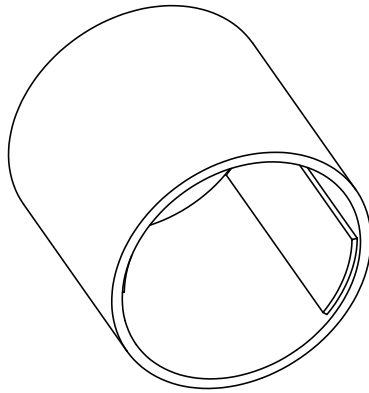
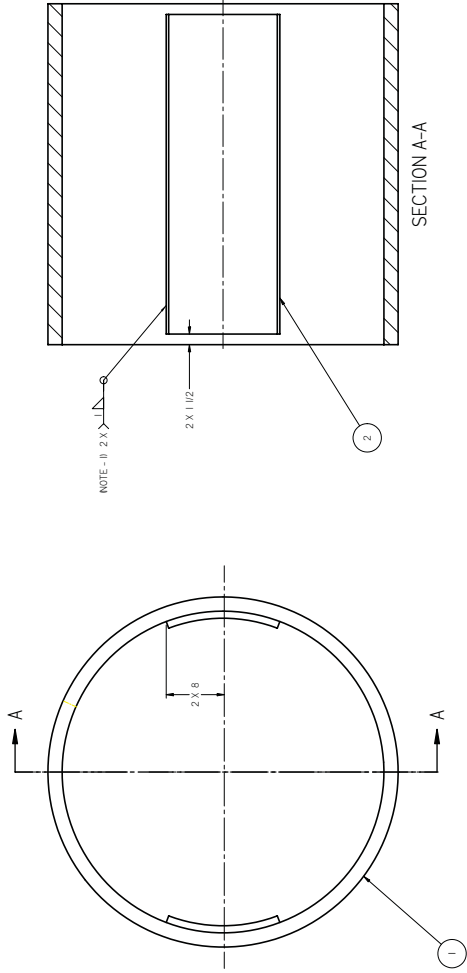
RDDC VALCARTIER		2486, BOUL., P.E. XI VAL-BELAIR, QUÉBEC G3J 1K3 CANADA		DRDC VALCARTIER	
R & D POUR LA DÉFENSE CANADA - VALCARTIER				R & D POUR LA DÉFENSE CANADA - VALCARTIER	
DEFENSE R & D CANADA - VALCARTIER				DEFENSE R & D CANADA - VALCARTIER	
PROTECTION ET EFFETS D'ARMES				WEAPONS EFFECTS AND PROTECTION	
CONÇU / DESIGNED		TITRE / TITLE		RENFORT POUR ANNEAU 50 POUCES	
K. COULET					
DÉSSINÉ / DRAWN					
K. COULET					
VÉRIFIÉ / CHECKED					
ACCEPTÉ / ACCEPTED		SECURITE / SECURITY		ÉCHELLE / SCALE	
		SECURITE / SECURITY		1 / 8	
				NUMÉRO DU DESSIN / DRAWING NUMBER	
				140730-25	
				C	



CE DSSIN ET LA REPRÉSENTATION GRAPHIQUE SONT LA PROPRIÉTÉ DE VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT DANS AUCUN AUTRE DOCUMENT SANS LAutorisation écrite de VALCARTIER.		
THIS DRAWING COMPRISES PART OF THE STANDARDS		
B 78.1 & 78.2		
ARTICLE / ITEM	DSSIN / DRAWING	DESCRIPTION
1"	H0730-14	ANNEAU 50 POUCES
2"	H0730-25	REINFORTE POUR ANNEAU 50 POUCES
		QTE / QTY
		1
		2

1- SOUDURES: LES PROCÉDURES DE SoudAGE DÉFINIES DANS LE DOCUMENT W59-03 DE LA CSA POUR L'ACIER A514 DOIVENT ÊTRE SUIVIES.

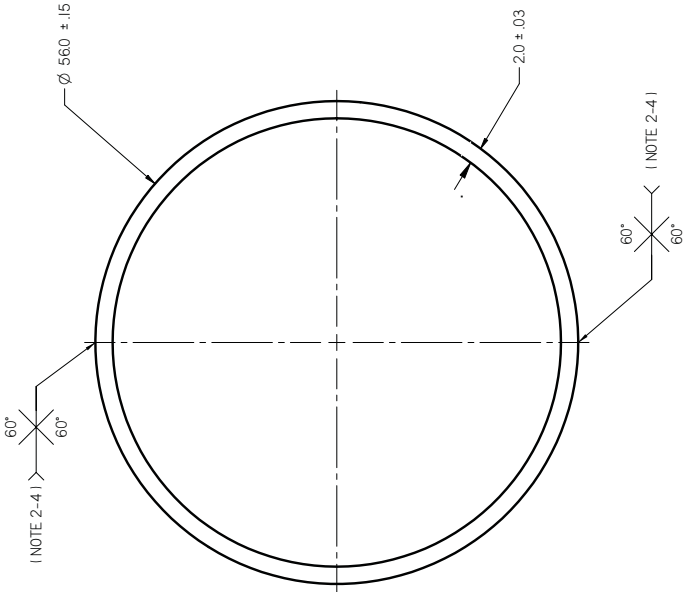
WELDING: THE WELDING PROCEDURES DEFINED IN THE CSA STANDARD W59-03 FOR THE A514 STEEL MUST BE FOLLOWED.



DRDC VALCARTIER		DRDC VALCARTIER	
R & D POUR LA DÉFENSE CANADA - VALCARTIER		R & D POUR LA DÉFENSE CANADA - VALCARTIER	
DEFENSE R & D CANADA - VALCARTIER		DEFENSE R & D CANADA - VALCARTIER	
PROJET / PROJECT		PROJET / PROJECT	
CONCÉPTEUR / DESIGNER		CONCÉPTEUR / DESIGNER	
VÉRIFIÉ / CHECKED		VÉRIFIÉ / CHECKED	
APPROUVÉ / APPROVED		APPROUVÉ / APPROVED	
ANNEAU 50 POUCES (ASM)		ANNEAU 50 POUCES (ASM)	
ÉCHELLE / SCALE		ÉCHELLE / SCALE	
1 / 10		1 / 10	
140730-28		140730-28	
D		D	

ANNEXE / ANNEX C - ENSEMBLE DE DESSINS / DRAWING PACKAGE

2.4 PIÈCES / PARTS ANNEAU 56 POUCES (ASM)



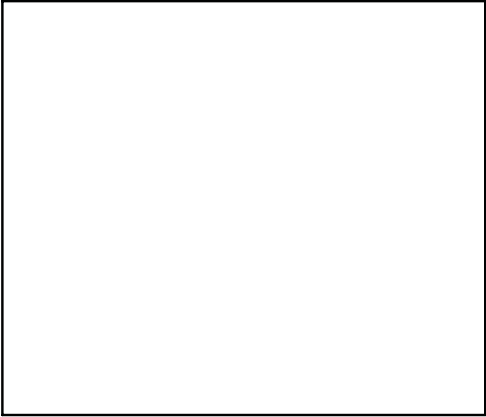
48 ± 1/8

CE DESSIN EST LA PROPRIÉTÉ DE DRDC VALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF DRDC VALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

DESSIN CONFORME AUX NORMES AS/NZS  
THIS DRAWING COMPLES WITH CSA STANDARDS

B 78.1 & 78.2

- 1 - MAT : ACIER / STEEL A514 GRADE S OUIR EQUIVALENT
- 2 - SOUDURES : LES PROCÉDURES DÉFINIES DANS LE DOCUMENT W59-03 DE LA CSA POUR L'ACIER A514 DOIVENT ÊTRE SUIVIES. WELDING THE PROCEDURES DEFINED IN THE CSA STANDARD W59-03 FOR THE A514 STEEL MUST BE FOLLOWED.
- 3 - SOUDURES : UN RAPPORT SUR LES PROCÉDURES DE SOUDAGE (WPDS) SELON LE CMB DE VRA ÊTRE FOURNI. WELDING A WELDING PROCEDURE DATA SHEET (WPDS) ACCORDING TO THE CMB MUST BE SUPPLIED.
- 4 - SOUDURES : UN RAPPORT D'INSPECTION AUX RAYONS X OU À L'ULTRASON DES SOUDURES DE VRA ÊTRE FOURNI. WELDING AN X-RAY OR ULTRASONIC REPORT OF THE WELDS MUST BE SUPPLIED.



DIMENSIONS SONT EN POUCES DIMENSIONS ARE IN INCHES ÉTAT DE SURFACE : 125 ROUNDED		2499, BOULEVARD VALCARTIER, OTTAWA, ONTARIO K1A 0S6		NORTH VALCARTIER, OTTAWA, ONTARIO K1A 0S6		DRDC VALCARTIER R & D POUR LA DEFENSE CANADA - VALCARTIER DEFENCE R & D CANADA - VALCARTIER	
TOLERANCES / TOLERANCES FRACTIONS / FRACTIONS 1 (X) ± .02 2 (X) ± .03 3 (X) ± .05 FRACTIONS : 1/32 1 (X) ± .02 2 (X) ± .03 3 (X) ± .05 FORMES A / FORMES A : 60° ± 1/2° FORMES B / FORMES B : 1° ± 1/2° REMAINE SHARP EDGES AND CORNERS SAUF INDICATION CONTRAIRE UNLESS OTHERWISE SPECIFIED		PROTECTION ET EFFETS D'ARMES WEAPONS EFFECTS AND PROTECTION		TITRE / TITLE ANNEAU 56 POUCES		EFFECTS D'ARMES EFFECTS OF WEAPONS	
COMPLIÉ / DESIGNED K. GOULET		DESSEINÉ / DRAWN K. GOULET		VERIFIÉ / CHECKED		ACCEPTÉ / ACCEPTED	
SECURITE / SECURITY		EFFECTS D'ARMES EFFECTS OF WEAPONS		EFFECTS D'ARMES EFFECTS OF WEAPONS		EFFECTS D'ARMES EFFECTS OF WEAPONS	
NUMERO DU DESSIN / DRAWING NUMBER		EFFECTS D'ARMES EFFECTS OF WEAPONS		EFFECTS D'ARMES EFFECTS OF WEAPONS		EFFECTS D'ARMES EFFECTS OF WEAPONS	
1 / 10		1 / 10		1 / 10		1 / 10	
140730-10		140730-10		140730-10		140730-10	
C		C		C		C	

CE DESSIN EST LA PROPRIÉTÉ DE RODCVALCARTIER ET NE DOIT PAS ÊTRE UTILISÉ OU REPRODUIT SANS AUTORISATION  
THIS DRAWING IS THE PROPERTY OF RODCVALCARTIER AND SHALL NOT BE USED OR REPRODUCED UNLESS AUTHORIZED

CE DESSIN EST CONFORME AUX NORMES ANCOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

**B 78.1 & 78.2**

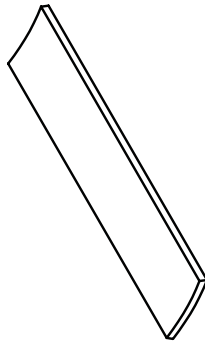
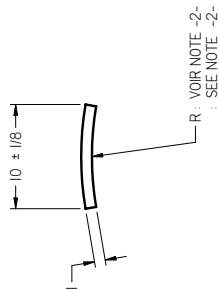
CE DESSIN EST CONFORME AUX NORMES ACNOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

B 78.1 &amp; 78.2

I - MAT.: ACIERSTEEL A514 GRADE S OU/OR ÉQUIVALENT

2 - AJUSTER LE RAYON AU DIAMÈTRE EXTÉRIEUR  
MESURÉ DE L'ANNEAU 56 POUCES (DESSIN NO. 140730-10) À 0.0 - .050"

ADJUST THE RADIUS TO THE MEASURED EXTERIOR DIAMETER  
OF THE 56 INCHES RING (DWG. NBR. 140730-10) AT +0R - .05"

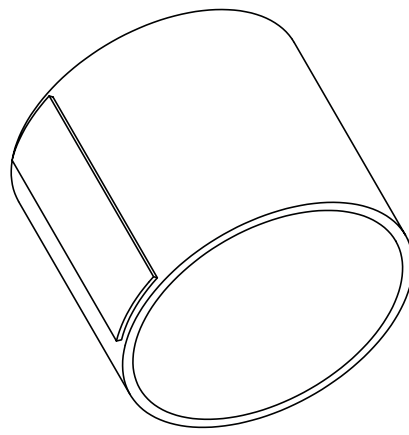
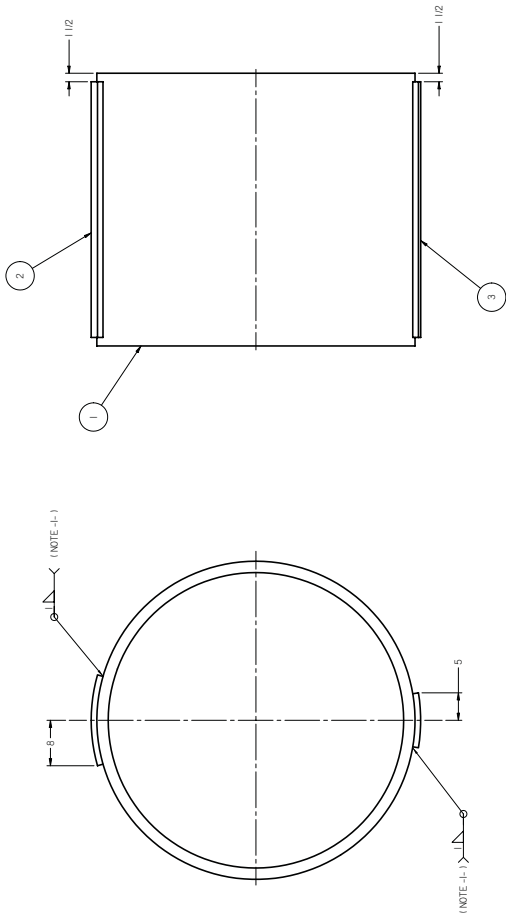


<p> <small> DIMENSIONS DONNÉES EN POUCES  ETAT DE SURFACE  POUR DES  POUR DES  TOUS LES  TOUS LES </small> </p> <p> <small> 1 (X) 1  2 (X) 2  3 (X) 3  4 (X) 4  5 (X) 5  6 (X) 6  7 (X) 7  8 (X) 8  9 (X) 9  10 (X) 10  11 (X) 11  12 (X) 12  13 (X) 13  14 (X) 14  15 (X) 15  16 (X) 16  17 (X) 17  18 (X) 18  19 (X) 19  20 (X) 20  21 (X) 21  22 (X) 22  23 (X) 23  24 (X) 24  25 (X) 25  26 (X) 26  27 (X) 27  28 (X) 28  29 (X) 29  30 (X) 30  31 (X) 31  32 (X) 32  33 (X) 33  34 (X) 34  35 (X) 35  36 (X) 36  37 (X) 37  38 (X) 38  39 (X) 39  40 (X) 40  41 (X) 41  42 (X) 42  43 (X) 43  44 (X) 44  45 (X) 45  46 (X) 46  47 (X) 47  48 (X) 48  49 (X) 49  50 (X) 50  51 (X) 51  52 (X) 52  53 (X) 53  54 (X) 54  55 (X) 55  56 (X) 56  57 (X) 57  58 (X) 58  59 (X) 59  60 (X) 60  61 (X) 61  62 (X) 62  63 (X) 63  64 (X) 64  65 (X) 65  66 (X) 66  67 (X) 67  68 (X) 68  69 (X) 69  70 (X) 70  71 (X) 71  72 (X) 72  73 (X) 73  74 (X) 74  75 (X) 75  76 (X) 76  77 (X) 77  78 (X) 78  79 (X) 79  80 (X) 80  81 (X) 81  82 (X) 82  83 (X) 83  84 (X) 84  85 (X) 85  86 (X) 86  87 (X) 87  88 (X) 88  89 (X) 89  90 (X) 90  91 (X) 91  92 (X) 92  93 (X) 93  94 (X) 94  95 (X) 95  96 (X) 96  97 (X) 97  98 (X) 98  99 (X) 99  100 (X) 100  101 (X) 101  102 (X) 102  103 (X) 103  104 (X) 104  105 (X) 105  106 (X) 106  107 (X) 107  108 (X) 108  109 (X) 109  110 (X) 110  111 (X) 111  112 (X) 112  113 (X) 113  114 (X) 114  115 (X) 115  116 (X) 116  117 (X) 117  118 (X) 118  119 (X) 119  120 (X) 120  121 (X) 121  122 (X) 122  123 (X) 123  124 (X) 124  125 (X) 125  126 (X) 126  127 (X) 127  128 (X) 128  129 (X) 129  130 (X) 130  131 (X) 131  132 (X) 132  133 (X) 133  134 (X) 134  135 (X) 135  136 (X) 136  137 (X) 137  138 (X) 138  139 (X) 139  140 (X) 140  141 (X) 141  142 (X) 142  143 (X) 143  144 (X) 144  145 (X) 145  146 (X) 146  147 (X) 147  148 (X) 148  149 (X) 149  150 (X) 150  151 (X) 151  152 (X) 152  153 (X) 153  154 (X) 154  155 (X) 155  156 (X) 156  157 (X) 157  158 (X) 158  159 (X) 159  160 (X) 160  161 (X) 161  162 (X) 162  163 (X) 163  164 (X) 164  165 (X) 165  166 (X) 166  167 (X) 167  168 (X) 168  169 (X) 169  170 (X) 170  171 (X) 171  172 (X) 172  173 (X) 173  174 (X) 174  175 (X) 175  176 (X) 176  177 (X) 177  178 (X) 178  179 (X) 179  180 (X) 180  181 (X) 181  182 (X) 182  183 (X) 183  184 (X) 184  185 (X) 185  186 (X) 186  187 (X) 187  188 (X) 188  189 (X) 189  190 (X) 190  191 (X) 191  192 (X) 192  193 (X) 193  194 (X) 194  195 (X) 195  196 (X) 196  197 (X) 197  198 (X) 198  199 (X) 199  200 (X) 200  201 (X) 201  202 (X) 202  203 (X) 203  204 (X) 204  205 (X) 205  206 (X) 206  207 (X) 207  208 (X) 208  209 (X) 209  210 (X) 210  211 (X) 211  212 (X) 212  213 (X) 213  214 (X) 214  215 (X) 215  216 (X) 216  217 (X) 217  218 (X) 218  219 (X) 219  220 (X) 220  221 (X) 221  222 (X) 222  223 (X) 223  224 (X) 224  225 (X) 225  226 (X) 226  227 (X) 227  228 (X) 228  229 (X) 229  230 (X) 230  231 (X) 231  232 (X) 232  233 (X) 233  234 (X) 234  235 (X) 235  236 (X) 236  237 (X) 237  238 (X) 238  239 (X) 239  240 (X) 240  241 (X) 241  242 (X) 242  243 (X) 243  244 (X) 244  245 (X) 245  246 (X) 246  247 (X) 247  248 (X) 248  249 (X) 249  250 (X) 250  251 (X) 251  252 (X) 252  253 (X) 253  254 (X) 254  255 (X) 255  256 (X) 256  257 (X) 257  258 (X) 258  259 (X) 259  260 (X) 260  261 (X) 261  262 (X) 262  263 (X) 263  264 (X) 264  265 (X) 265  266 (X) 266  267 (X) 267  268 (X) 268  269 (X) 269  270 (X) 270  271 (X) 271  272 (X) 272  273 (X) 273  274 (X) 274  275 (X) 275  276 (X) 276  277 (X) 277  278 (X) 278  279 (X) 279  280 (X) 280  281 (X) 281  282 (X) 282  283 (X) 283  284 (X) 284  285 (X) 285  286 (X) 286  287 (X) 287  288 (X) 288  289 (X) 289  290 (X) 290  291 (X) 291  292 (X) 292  293 (X) 293  294 (X) 294  295 (X) 295  296 (X) 296  297 (X) 297  298 (X) 298  299 (X) 299  300 (X) 300  301 (X) 301  302 (X) 302  303 (X) 303  304 (X) 304  305 (X) 305  306 (X) 306  307 (X) 307  308 (X) 308  309 (X) 309  310 (X) 310  311 (X) 311  312 (X) 312  313 (X) 313  314 (X) 314  315 (X) 315  316 (X) 316  317 (X) 317  318 (X) 318  319 (X) 319  320 (X) 320  321 (X) 321  322 (X) 322  323 (X) 323  324 (X) 324  325 (X) 325  326 (X) 326 </small></p>
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USE DRAWING FOR INFORMATION ONLY. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FABRICATION OF ANY PART OF THE PROJECT. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THIS DRAWING IS THE PROPERTY OF DRDC VALCARTIER AND SHALL BE RETURNED TO THE ISSUING OFFICE UPON REQUEST.			B 78.1 & 78.2		
CE DESIN ET CONFORME AUX NORMES ADOPTÉES			DESCRIPTION		
ARTICLE / ITEM	DESSIN / DRAWING				QTE / QTY
1"	140790-10	ANNEAU 56 POUCES			1
2"	140790-27	REINFORT SUPÉRIEUR POUR ANNEAU 56 POUCES			1
3"	140790-28	REINFORT INFÉRIEUR POUR ANNEAU 56 POUCES			1

1- Soudures: Les procédures de soudage définies dans le document W69-03 de la CSA pour l'acier A514 doivent être suivies.  
WELDING: THE WELDING PROCEDURES DEFINED IN THE CSA STANDARD W69-03 FOR THE A514 STEEL MUST BE FOLLOWED.



DRDC VALCARTIER R & D POUR LA DÉFENSE CANADA - VALCARTIER DEFENCE R & D CANADA - VALCARTIER		DRDC VALCARTIER R & D POUR LA DÉFENSE CANADA - VALCARTIER DEFENCE R & D CANADA - VALCARTIER	
PROJET / PROJECT		PROJET / PROJECT	
CONÇU / DESIGNED		CONÇU / DESIGNED	
VÉRIFIÉ / CHECKED		VÉRIFIÉ / CHECKED	
APPROBÉ / APPROVED		APPROBÉ / APPROVED	
ÉCHELLE / SCALE		ÉCHELLE / SCALE	
1 / 10		1 / 10	
ANNEAU 56 POUCES (ASM)		ANNEAU 56 POUCES (ASM)	
140730-29		140730-29	
D		D	

**ANNEXE / ANNEX C - DESSIN / DRAWING**

## 2.5 TUBE GUIDE 14 PIEDS

CE DESIN EST LA PROPRIETE DE RODCVALCARTIER ET NE DOIT PAS ETRE UTILISE OU REPRODUIT SANS AUTORISATION  
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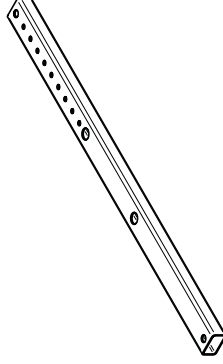
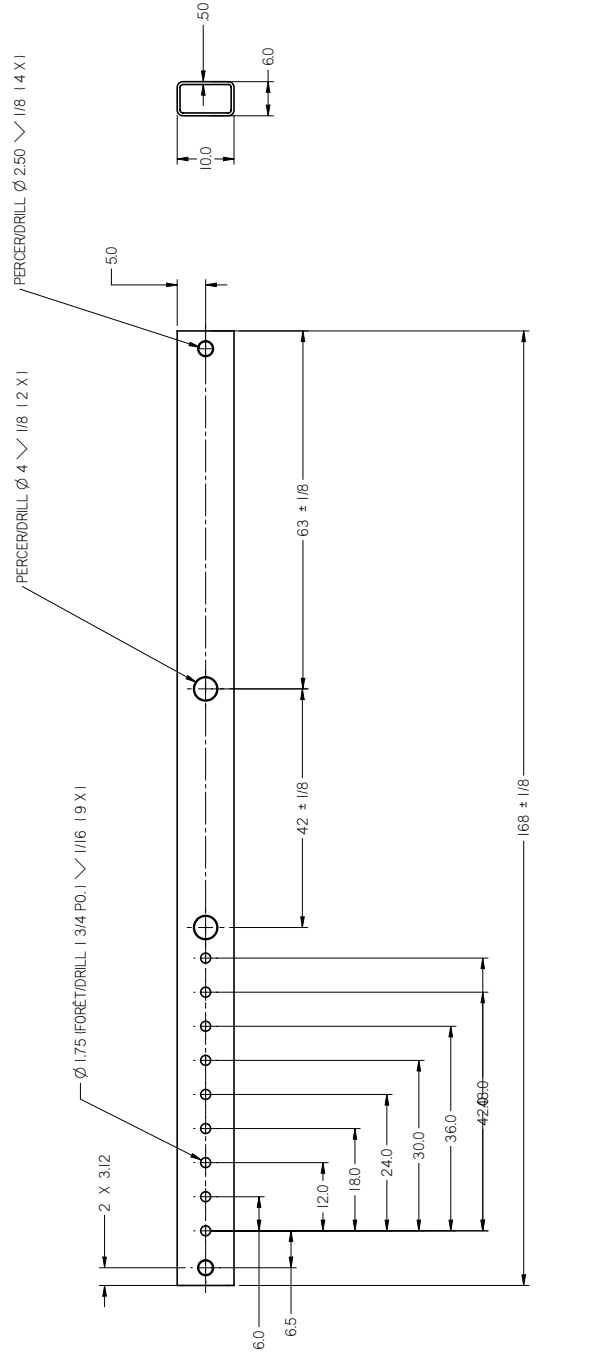
CE DESIN EST CONFORME AUX NORMES AZNOR  
THIS DRAWING COMPLIES WITH CSA STANDARDS

**B 78.1 & 78.2**

B 78.1 &amp; 78.2

1 - MAT : TUBE H.S. CARRÉ 6 X 10, PAROI 500  
H.S.S. SQUARE TUBE 6 X 10, 500 WALL THICKNESS

2 - FINI PROTECTEUR : APPLICATION UN APPRÊT GRS AMERLOCK  
UN ADDITIF AMERCOAT 880 GLASS FLAKE ADDITIVE FIBRE  
PGI Protective & Marine Coating OR EQUIVALENT  
- PROTECTIVE FINISH - APPLY A GREY PRIMER AMERLOCK 40  
(GLASS FLAKE ADDITIVE) MADE BY PGI PROTECTIVE & MARINE

[illegible]

**RDDC VALCARTIER**  
2489, BOUL. PE XI, NORD / NORTH  
VAL-LEBELLE, QUÉBEC, G3J 1Y6, CANADA

**DRDC VALCARTIER**  
**R & D POUR LA DÉFENSE CANADA - VALCARTIER**  
**DEFENCE R & D CANADA - VALCARTIER**

WEAPON EFFECTS AND PROTECTION

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DE 14 DIENS

OF 14 FIELDS

NUMERO DU DESSIN / DRAWING NUMBER	FORMAT SIZE
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140730-19 D