





Greater Toronto Airports Authority

Howard Eng

President and Chief Executive Officer

November 12, 2019

Re: Avro Arrow Installation in the Malton Community

At Toronto Pearson, we are incredibly proud of the role our industry has played in lifting our surrounding communities. In addition to creating jobs, our investments in eco-related projects at local parks, and in the arts and culture placemaking activities, we are helping to create stronger, healthier, and happier communities.

The Avro Installation initiative, spear-headed by Councillor Parrish, is one such community-building project for Malton and the surrounding community of Mississauga. We have been pleased to offer our financial support towards this project and ask that your organization, as important leader in our aviation community, consider supporting this important initiative as well.

The GTAA is proud to have been able to invest in Malton's vitality on many fronts, most recently through our contributions of limestone slabs from the former Avro Arrow building to enhance the pathway adjacent to Paul Coffey Arena and a significant investment towards the building of an aviation themed platform in Mississauga's Darville Park.

We continue to look for ways to invest in the communities we serve and encourage your organization to join us supporting the Avro Arrow initiative that not only honours Malton's history but enables the community to thrive.

Best,



Howard Eng

*Hazel McCallion
5202 Chamwood Crescent
Mississauga, Ontario
L5M 2J9*

Telephone: (905) 826-7116

May 15, 2019

Dear Carolyn,

I would like to offer my support for your efforts, along with the Malton B.I.A., to build a full scale AVRO Arrow for display in Legion Gardens beside the restored CF 100 in Malton.

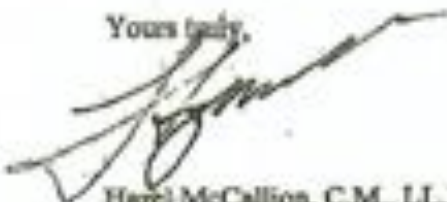
These two jets are part of the proud history of Malton's enormous success in aviation that began in World War II when the British entrusted Canada with building her Lancaster Bombers. Farm fields and shops yielded more than 9000 workers for Victory Aircraft, which became A.V.Roe., where the magnificent super sonic jet, the AVRO Arrow was designed and built.

We all know the sad history of Prime Minister John Diefenbaker's cancellation of the Arrow. I recall well the devastation it caused to the economies of villages like Malton and Streetsville as well as the huge blow to Canada's national pride. Black Friday, February 20, 1959 was indeed a sad day.

Unfortunately, Malton has remained one of the least prosperous areas of Mississauga. I know displaying the Arrow replica will draw tourists from all over Canada and put Malton back on the map. More importantly it will record the glory that was one of Canada's finest moments, for generations to come.

I wholeheartedly support this project and would be pleased to offer any help I can to make it a reality.

Yours truly,



Hazel McCallion, C.M., LL.D. B.A.Sc.
Mayor of Mississauga, 1978-2014

May 10, 2019

Councillor Carolyn Parrish
Ward 5, City of Mississauga
300 City Centre Drive
Mississauga, Ontario
L5B 3C1

Dear Councillor Parrish,

Re: Avro Arrow Project

On behalf of the Mississauga Board of Trade, I am writing to offer our support for the proposed Avro Arrow replica planned for Malton in the Paul Coffey Park off Derry Road East in Mississauga.

Having this display will recognize the long history of aviation in Mississauga and our strong contribution to military aircraft for the Royal Canadian Air Force.

Many successful Mississauga businesses have a connection back to the development of the Arrow and many other aircraft over decades of aviation history in our City.

Having this replica as a permanent display in Mississauga for local residents and thousands of visitors each year will help with tourism and support of our local businesses.

We would encourage businesses in Mississauga to consider making a donation to the "Malton BIA Avro Arrow Fund" to ensure this project becomes a reality.

Yours truly,



David Wojcik
President & CEO
Mississauga Board of Trade
ceo@mbot.com



MALTON HISTORICAL SOCIETY, INC.

6390 Northwest Drive
Mississauga, Ontario L4V 1S1

May 16, 2019

Malton Business Improvement Area
Victory Hall
3091 Victory Crescent
Mississauga, ON
L4T 1L5

As a long-time past resident of Malton, and a current aerospace employer in the community, I would like to take this opportunity to add my support for the re-furbishing and installation of the AVRO Arrow model in Malton. I am proud of the rich aerospace heritage that we have created and would like to have this history on display for future generations to appreciate.

My personal story began in Malton as I was born and raised here, and continues to this day within the Malton community. My professional career began in aerospace in the McDonnell Douglas Canada plant in the 1970s where I worked with friends and family. From there, I moved to Boeing Canada for many years and oversaw the closure of that plant and its history in 2005. Today, I am the Chairman of the Board of MHI Canada Aerospace, Inc and employ more than 800 people who build wings and centre fuses for Bombardier's Global 5000/6000 and Challenger 350 business aircraft.

Our employees are proud of their work and their accomplishments, and are proud to be part of Malton's aerospace heritage. I believe the celebration of the AVRO Arrow and the unique accomplishments of Canadians in creating this aircraft should be remembered and recognized in perpetuity.

This is our history.

Sincerely,

Michael McCarthy
Chairman

c. Carolyn Parrish, City of Mississauga Councillor, Ward 5

Drawings, Man Hours, Materials, Preliminary Engineering and Costing to Build Full Size Avro Arrow RL- 201 to go on Pedestal in Malton.



In this study included are the preliminary engineered drawings of the Avro Arrow which includes all structural and cosmetic "skin" drawings and dimensions. It also includes cost of all materials, post/stand and painting and graphics. Delivery to site plus costs for crane and on site crew for assembly is also included. We have used all information available to us, including scans of one of the original Avro Arrow aircraft sections available at the Space and Aviation museum in Ottawa. From these scans we were able to create the most accurate recreation of the aircraft to date. With the help of original employees of Avro that worked on the Arrow project we were able to fill in the missing details that were lost during the decommission of the original program. Through hundreds of hours and countless phone calls and conversations with past employees and suppliers of the original aircraft we are able to keep the memory of what could have been alive. It has been a pleasure and honour to do this work and I believe it will bring hope and dreams to future generations. Thank you for keeping this project alive and for allowing future generations to keep the memory of this great accomplishment in Canadian history.

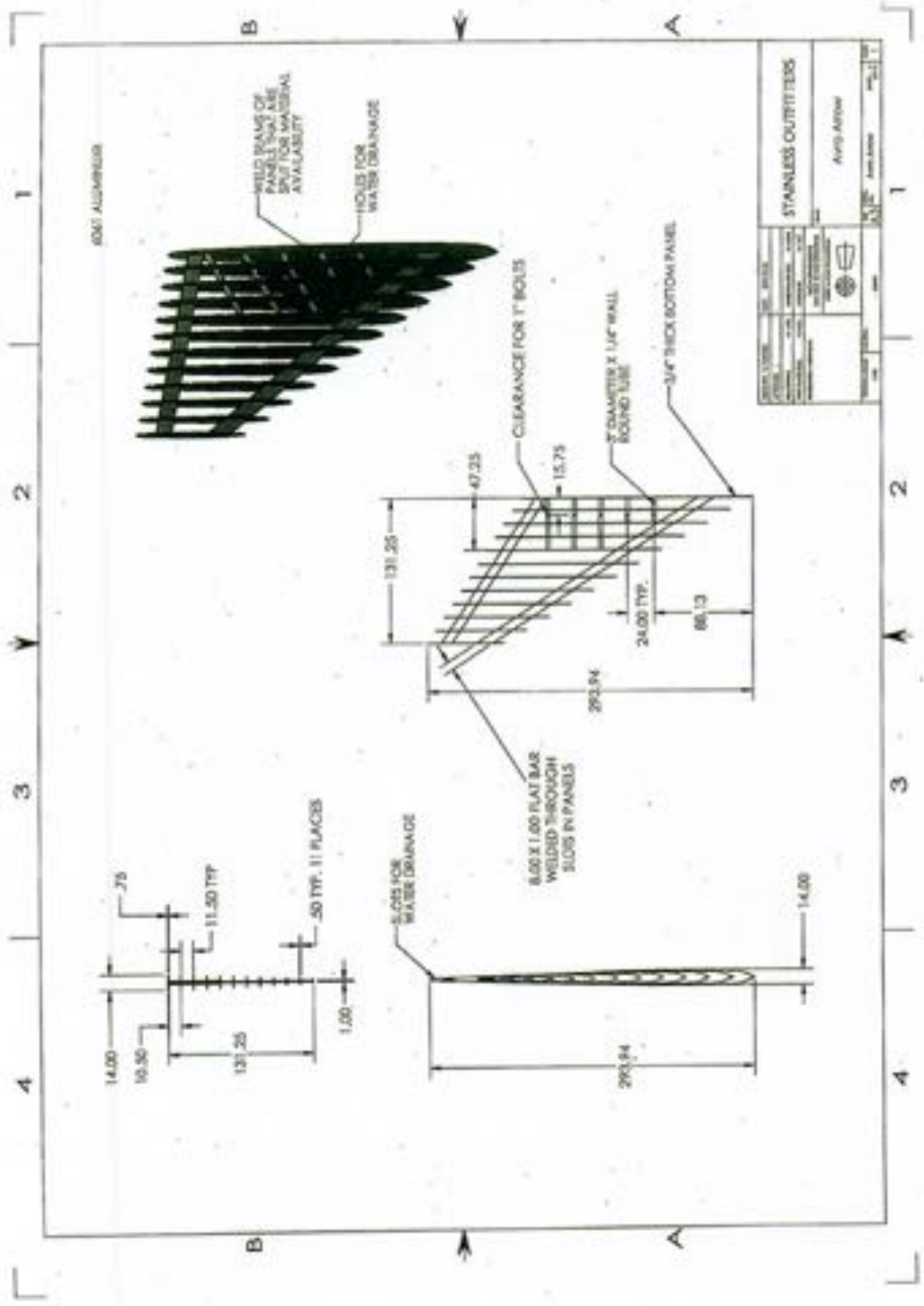
Through this process we have done our absolute best to keep all costs at a minimum while still maintaining the integrity of the original plane. We are building a piece that will be here for generations, and it will withstand the test of time. We are proud of this work and hope that it meets everyone's satisfaction. If there are any questions please feel free to contact me at any time.

Pricing is as follows;

1 – Cost of raw materials 30,390.689kg (67,000 lbs.) of Aluminum in type 6061 for structure and 5052 for skin	\$312,000
2 – Nose Cone and Exhaust Nozzles	\$32,000
3 – Waterjet Cutting	\$118,000
4 – Labor for Welding 8230 hrs	\$832,000
5 – Labor for outside Skin of plane 9,600 hrs	\$960,000
6 – Jigs and Fixtures	\$90,000
7 – Secure storage of plane sections during fabrication	\$15,000
8- Lighting as per original plane marker lights	\$4,700
Total Costs for Plane	\$2,363,700
9 - Post to support plane	\$115,000
10 - Anchor cage for post and footing engineering	\$18,000
11 – Priming, painting and etching of plane including materials	\$110,000
12 – Graphics	\$12,000
13 – Internal corrosion inhibitor	\$3,800
14 – Delivery to site	\$28,000
15 – On site assembly	\$22,000
16 – Crane Rental	\$16,000
17 – Insurance	\$5,500

18 - Permits	\$3,200
19 - Misc. fasteners, adhesives, tape, paper	\$45,000
20 - Contingency for unknowns and/or cost of material increases and such during the duration of the project	\$300,000
21 - Time required to build 30 months, part of this is material is 4 months once ordered	
22 - Engineering by Varcon Engineering	\$280,000
Total Costs for Additional Parts and Services	\$ 958,500
Total cost of plane delivered on pedestal complete	\$ 3,322,200

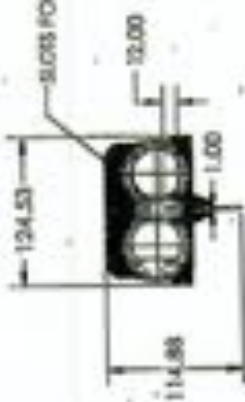
FUNDING - FABRICATION AND SITE INSTALLATION – AVRO ARROW	
City of Mississauga Funding Contribution	
Approved Funding:	Amount
33121 - Ward 5 Specific Special Projects	\$500,000
Requested Funding:	
35591 - Municipal Accommodation Tax Reserve Fund	1,000,000
33121 - Ward 5 Specific Special Projects	500,000
33121 - Ward 6 Specific Special Projects	100,000
33121 - Ward 11 Specific Special Projects	100,000
Sub Total Municipal Funds	\$2,200,000
BIA Funding Contribution	
Confirmed Donations:	
The Hazel McCallion Foundation	\$25,000
Private Donor	100,000
GTAA	10,000
Malton BIA	56,360
Confirmed In-Kind Contributions:	
Varcon – drawings	12,860
Varcon – engineering	280,000
Fram Development – foundation, base and onsite supervision	250,000
PPG Canada - paint, primer and sealant	110,000
3M – adhesives	Unknown
Sub Total Confirmed Donations and In-Kind Contributions	\$844,220
Pending Grants and Donations:	
Legacy Fund – Building Communities Through Arts and Heritage	500,000
Uncommitted	78,762
Sub Total Pending Grants and Donations	\$578,762
Sub Total BIA Funds	\$1,422,982
Grand Total	\$3,622,982



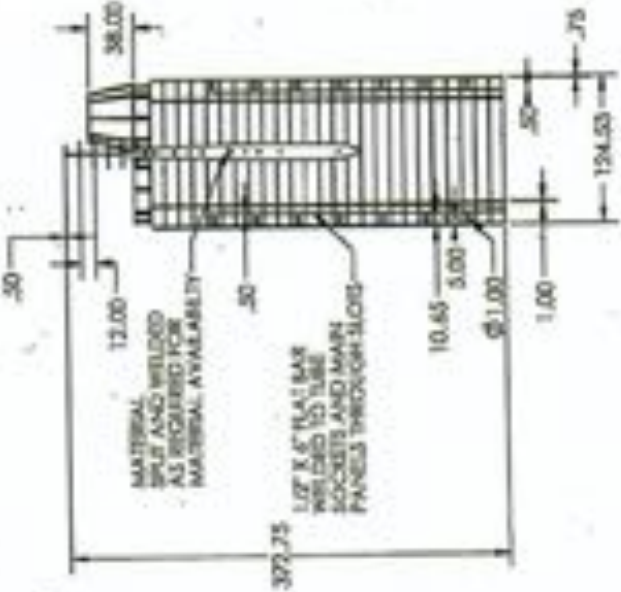
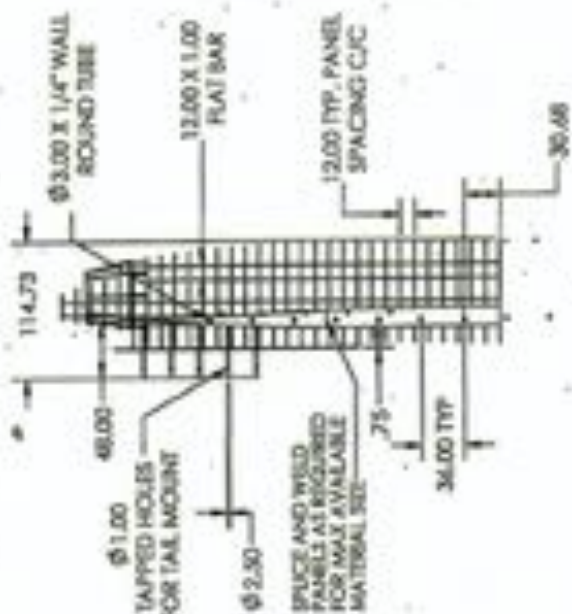
STAINLESS OUTFITTINGS	
ORDER NUMBER: _____ QUANTITY: _____ DATE: _____ DRAWN BY: _____ CHECKED BY: _____ APPROVED BY: _____	Avion-Airflow 10000 1st Avenue Seattle, WA 98148 (206) 461-1111 FAX: (206) 461-1112 WWW: WWW.AVION-AIRFLOW.COM

6061 ALUMINUM

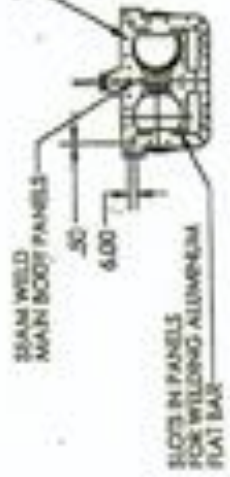
SLOTS FOR WATER DRAINAGE



EXHAUST COVER BOLT TO EXHAUST CORNER FOR FIRST CORNER WITH 1/2" BOLTS

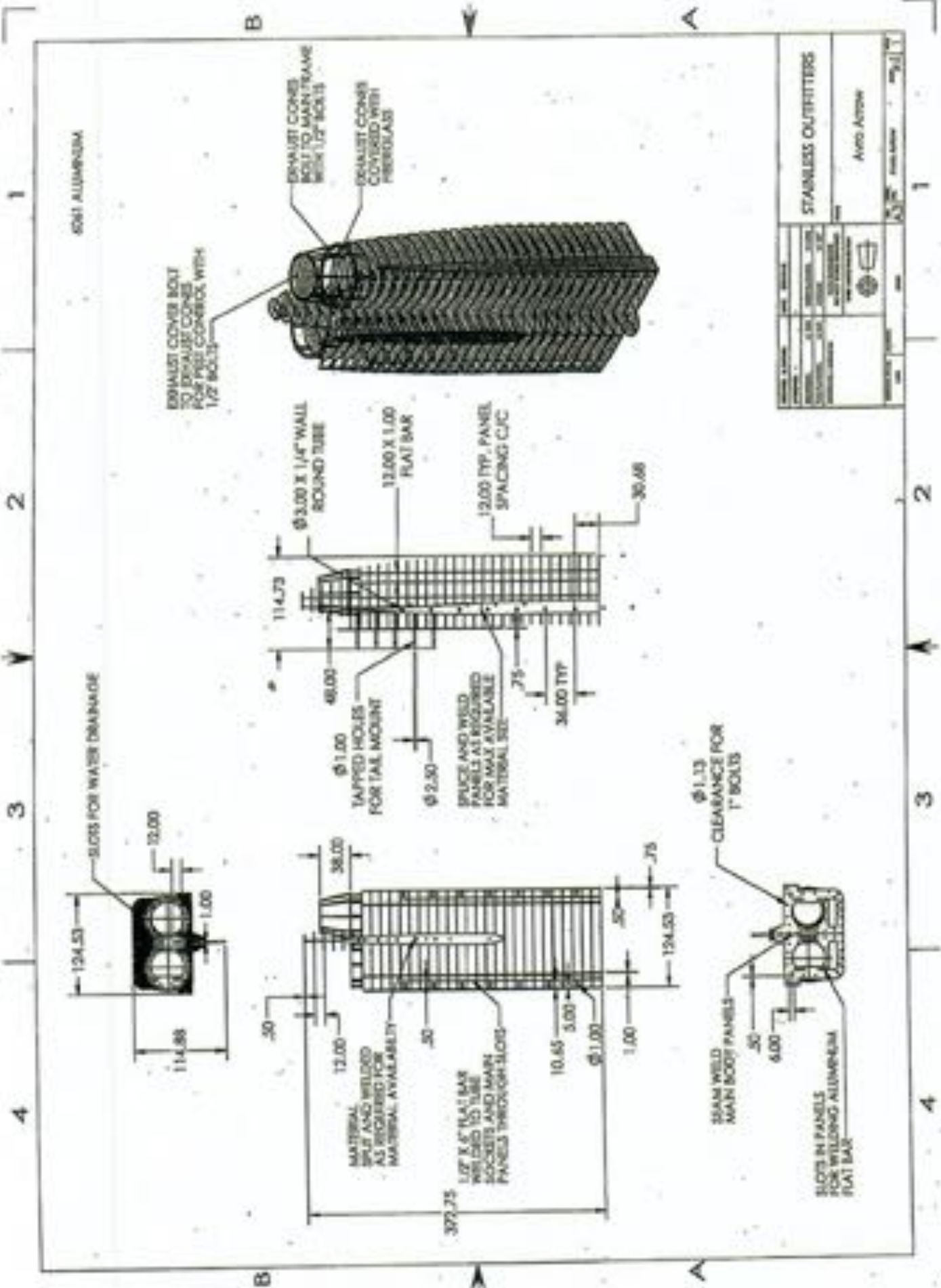


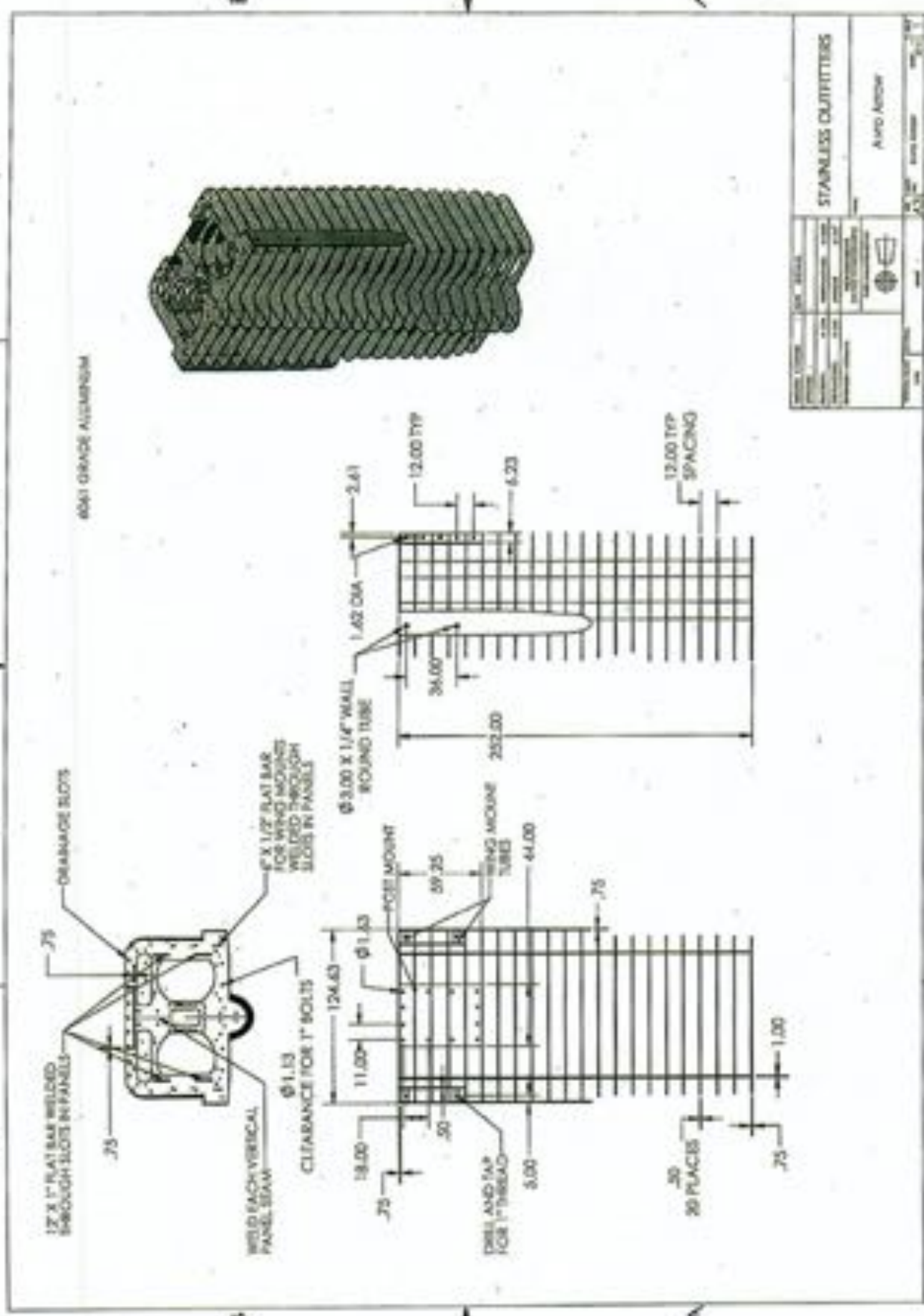
CLEARANCE FOR 1" BOLTS



STAINLESS OUTFITTERS

Avco Arrow





REV	DATE	BY	CHK	APP																								
1																												
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1
2
3
4

1
2
3
4

6061 GRADE ALUMINUM

12 X 1/2" FLAT BAR WELDED THROUGH SLOTS IN PANELS

DRAINAGE SLOTS

6" X 1/2" FLAT BAR FOR WIND MOUNTING WELDED THROUGH SLOTS IN PANELS

WELD EACH CYLINDRICAL PANEL SEAM

Ø 1.13

CLEARANCE FOR 1" BOLTS

Ø 3.00 X 1/4" WALL ROUND TUBE

1.62 OMA

12.00 TYP

6.23

12.00 TYP SPACING

34.00

252.00

FACE MOUNT

Ø 3.00

Ø 1.13

124.63

11.00

18.00

.75

59.25

WIND MOUNT TUBES

44.00

.75

DRILL AND TAP FOR 1" BOLT

3.00

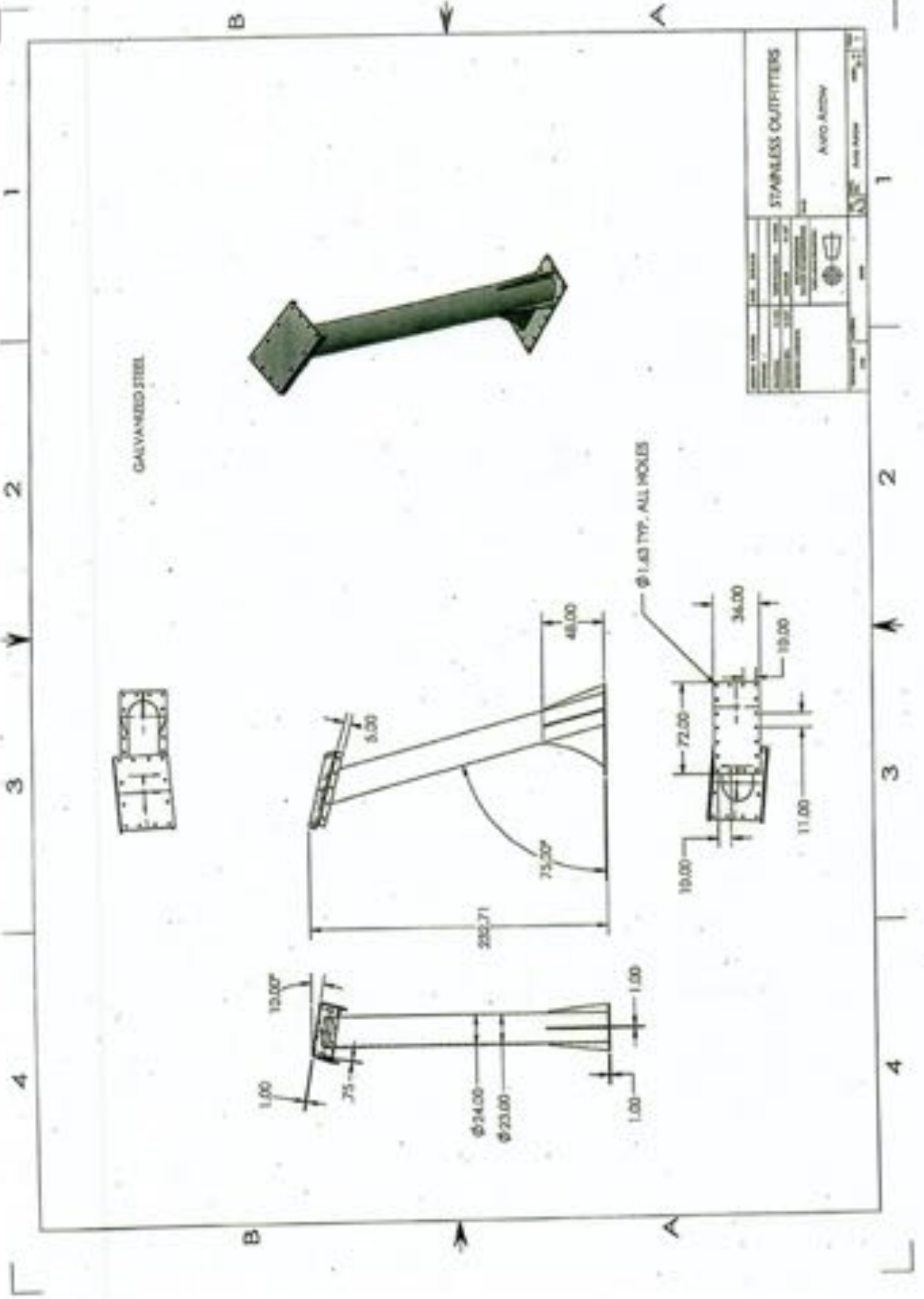
.50

20 PLACES

.75

1.00

B A



GALVANNEED STEEL

STAINLESS CUPLIFTERS AVGO ARDOR	
PROJECT NO. DATE DRAWN BY CHECKED BY APPROVED BY	300 15/11/2011 AVGO ARDOR AVGO ARDOR AVGO ARDOR

