

**ANNEX B  
BILL OF QUANTITIES (BOQ)**

<b>CONSTRUCTION OF MATERIAL RECOVERY FACILITY AT CEZA MULTI-PURPOSE BUILDING Cagayan Economic Zone Authority, Carig, Tuguegarao City, Cagayan</b>						
<b>BILL OF QUANTITIES</b>						
Item No.	Description	%	QTY	Unit	Unit Cost	Amount
<b>PART I: FACILITIES FOR THE ENGINEER</b>						
A.1.4 (1)	Provision of Progress Photographs		0.50	mo.		
<b>PART II: OTHER GENERAL REQUIREMENTS</b>						
B.7	Occupational Safety and Health Program		0.50	mo.		
B.9	Mobilization/Demobilization		1.00	Lump Sum		
<b>PART III-A: EARTHWORKS</b>						
800(2)	Clearing and Grubbing		24.50	Lump Sum		
803(1)a	Structure Excavation Common Soil		51.00	Cu.m.		
804(1)a	Embarkment from Structure Excavation		29.16	Cu.m.		
<b>PART III-B: PLAIN AND REINFORCED CONCRETE WORK</b>						
900(1)c2	Structural Concrete (Footings, Wall Footings and Slab-on-fill) "Class A"28 days		23.55	Cu.m.		
900(1)c4	Structural Concrete (Columns) "Class A"28 days		7.96	Cu.m.		
902(1)a1	Reinforcing Steel (Deformed) Grade 40		3790.53	Kg.		
903(2)	Formworks and Falseworks		193.29	Sq.m		
<b>PART III-C: FINISHINGS AND OTHER CIVIL WORKS</b>						
1027(1)	Cement Plaster Finish		410.73	Sq.m		
1032(1)a	Painting Works Masonry/Concrete		410.73	Sq.m		
1032(1)c	Painting Works Metal		34.00	Sq.m		

1046(1)	CHB Non-Load Bearing (including Reinforcing Steel) 100mm		67.14	Sq.m		
1047(2)c	Structural Steel Purlins		172.80	Kgs.		
1047(3)a	Metal Structure Accessories (Anchor Bolts)		16.00	Pcs.		
1047(5)	Metal Structure Accessories (Steel Plates)		7.54	Kgs.		
1014	Pre-painted Metal Sheets (Rib type, Short span/Long span, below 0.427 thk / above 0.427 thk)		25.00	Sq.m		
1013(2)c	Fabricated Metal Roofing Accessory (Gutter)		7.50	Sq.m		
1013(2)	Fabricated Metal Roofing Accessory (Ridge/Hip Rolls/Flashing/Counter Flashing/Valley Roll)		14.00	Pcs.		
1002(2)A	65mm-150mm diameter Galvanized Iron Pipe		2.00	Pcs.		
<b>TOTAL</b>						

**ANNEX A**  
**Scope of Work (SOW)**

**PROJECT TITLE:** CONSTRUCTION OF MATERIAL RECOVERY FACILITY AT CEZA  
MULTI-PURPOSE BUILDING

**LOCATION:** Cagayan Economic Zone Authority, Carig, Tuguegarao City,  
Cagayan

**I. PROJECT DESCRIPTION AND PURPOSE:**

The construction of material recovery facility at CEZA multi-purpose building is to address the pressing challenge of waste generation and management. This is also in compliance to the formulated and adopted Updated Ten (10) – Year Ecological Tuguegarao City Environment and Natural Resources Office (TCENRO) which is compliance to the provisions of Republic Act No. 9003 otherwise known as Ecological Solid Waste Management Act of 2000.

The construction procedure shall be done in accordance with the DPWH Standard Specifications Volume II, 2004 Edition, and in full compliance with the approved plans and specifications.

Pertinent notes appearing in the Contract Plans or Drawings shall also be considered as part of the technical specifications. Such notes shall take precedence over the General Specifications.

**II. SCOPE OF WORK**

**PART 1. Facilities for the Engineer**

- A.1.4(1) – Provision of Progress Photographs

**PART 2. Other General Requirements**

- B.7 – Occupational Safety and Health Program
- B.9 – Mobilization/Demobilization

**PART 3 – A. Earthworks**

- 800(2) – Clearing and Grubbing
- 803(1)a – Structure Excavation Common Soil
- 804(1)a – Embankment from Structure Excavation

### **PART 3 – B. Plain and Reinforced Concrete Work**

- 900(1)c2 - Structural Concrete (Footings, Wall Footings and Slab-on-fill) "Class A"28 days
- 900(1)c4 – Structural Concrete (Columns) "Class A"28 days
- 902(1)c4 – Reinforcing Steel (Deformed) Grade 40
- 903(2) – Formworks and Falseworks

### **PART 3 – C. Finishing and Other Civil Works**

- 1027(1) – Cement Plaster Finish
- 1032(1)a – Painting Works Masonry/Concrete
- 1032(1)c – Painting Works Metal
- 1046(1) – CHB Non-Load Bearing (including Reinforcing Steel) 100mm
- 1047(2)c – Structural Steel Purlins
- 1047(3)a – Metal Structure Accessories (Anchor Bolts)
- 1047(5) – Metal Structure Accessories (Steel Plates)
- 1014 – Pre-painted Metal Sheets (Rib type, Short span/Long span, below 0.427 thk / above 0.427 thk)
- 1013(2)c – Fabricated Metal Roofing Accessory (Gutter)
- 1013(2) – Fabricated Metal Roofing Accessory (Ridge/Hip Rolls/Flashing/Counter Flashing/Valley Roll)
- 1002(2)A – 65mm-150mm diameter Galvanized Iron Pipe

### **III. EQUIPMENT REQUIREMENTS**

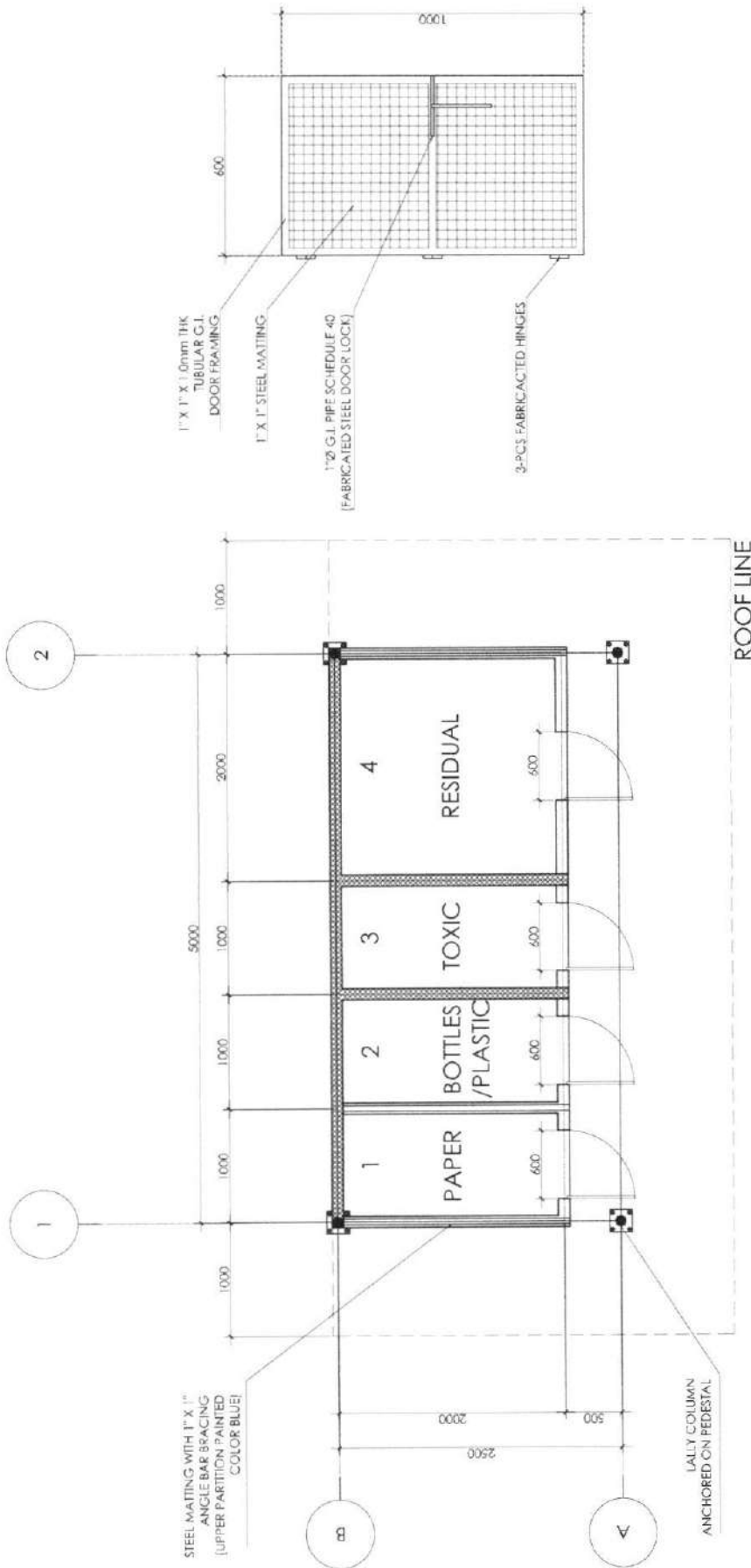
- 1 Photo Developing
- 1 Photo Album
- 4 Safety Shoes
- 4 Hard Hat
- 4 Safety Vest
- 1 First Aid Kit
- 1 Mixer (1 Bag)
- 1 Bar Cutter
- 1 Bar Bender
- 1 Welding Machine
- 1 Cutting Outfit
- 1 Truck Mounted Crane

### **IV. WARRANTY**

Should any defect being found in a period of thirty (30) days after the completion, due to faults in material and/or workmanship, the winning bidder shall make all repairs and do all necessary work to correct the defective work.

## **V. TIME SCHEDULE**

The Construction of Material Recovery Facility at CEZA Multi-purpose Building in CEZA, Carig, Tuguegarao City, Cagayan should be completed within Thirteen (13) Calendar days from the receipt of Notice to Proceed (NTP) or Acceptance of Purchase/ Job Order.



**FLOOR PLAN**  
SCALE 1:40m/s

**STEEL DOOR DETAIL**  
SCALE 1:15m/s



**OWNER:**  
CAGAYAN ECONOMIC  
ZONE AUTHORITY

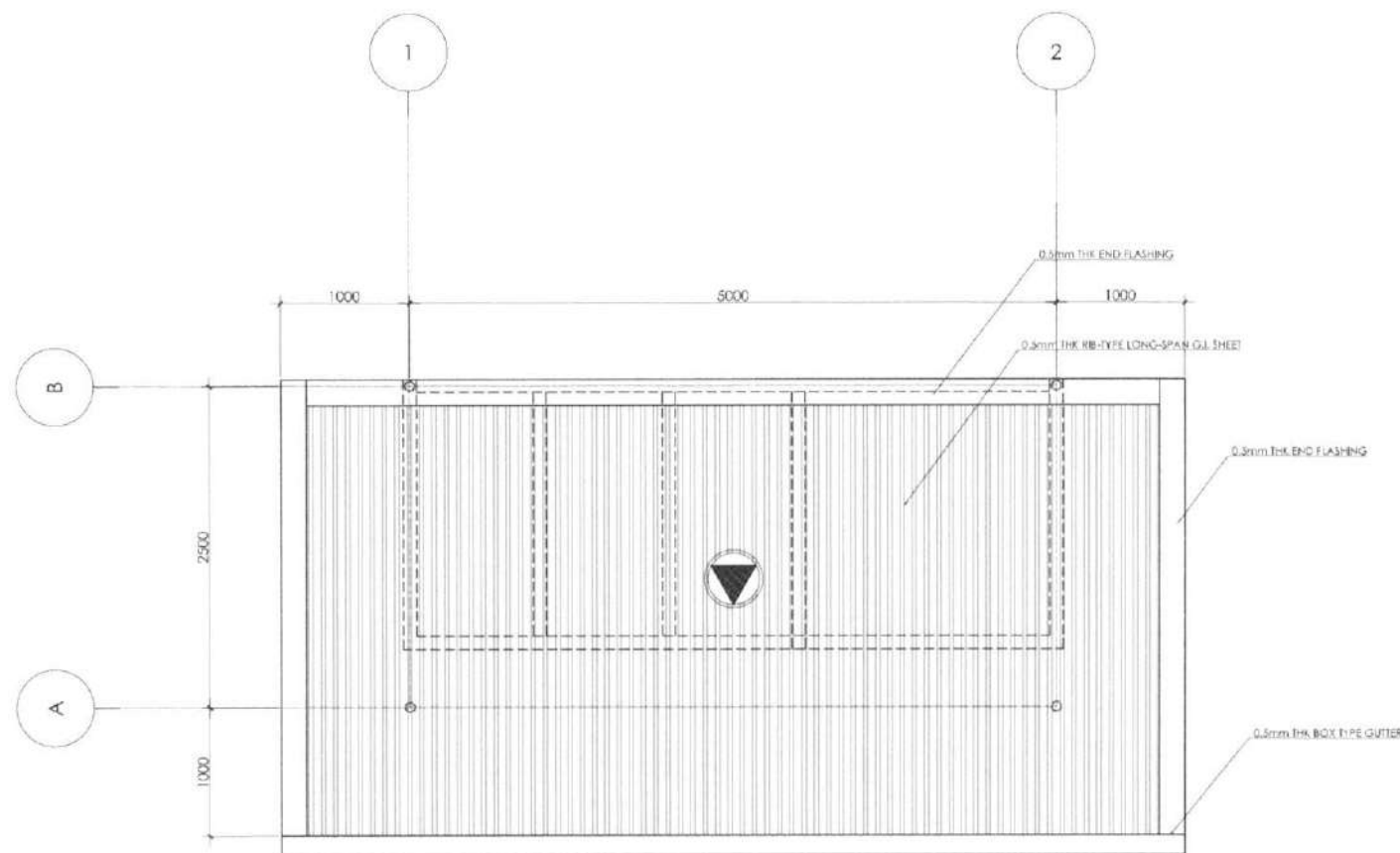
**PROJECT TITLE:**  
PROPOSED MATERIAL  
RECOVERY FACILITY (MRF) FOR  
CEZA MULTI-PURPOSE  
BUILDING

**RECOMMENDING APPROVAL:**  
*Leonardo C. Cruz*  
LEONARDO C. CRUZ  
ADMINISTRATOR & C.E.O.


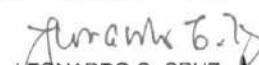


**APPROVED:**  
*Michael L. Lambino*  
MICHAEL L. LAMBINO  
ADMINISTRATOR & C.E.O.

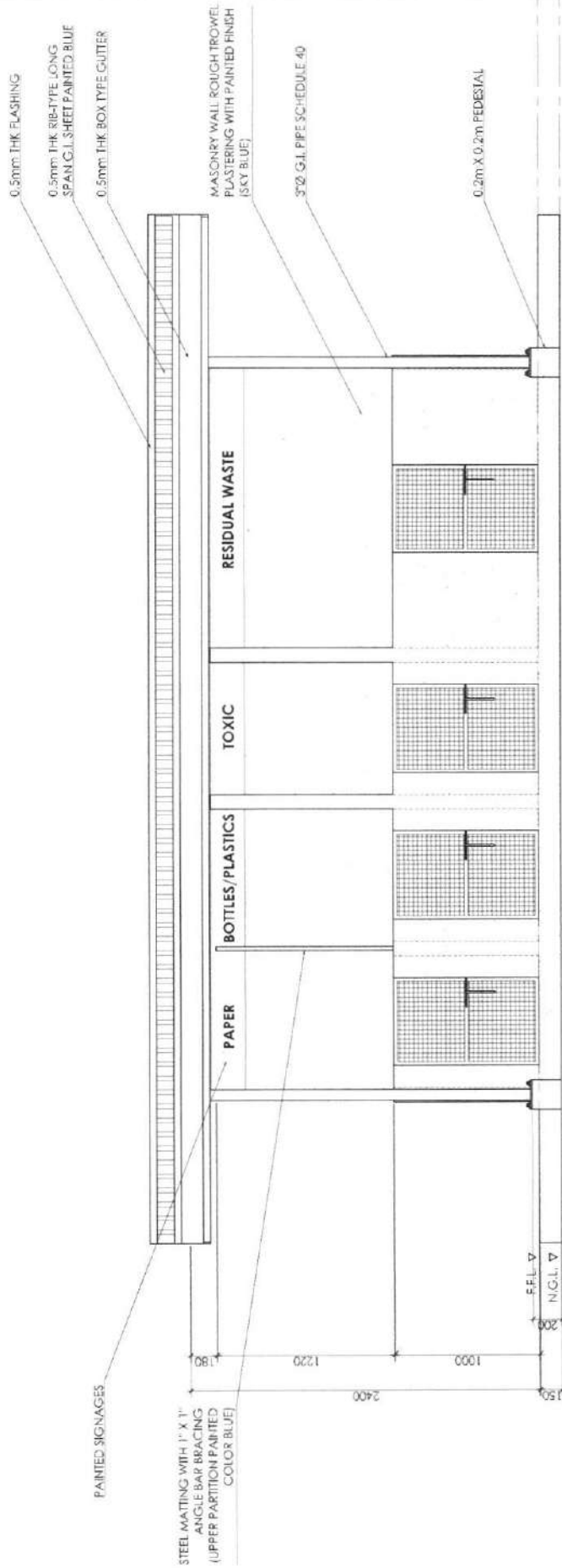
**REVISION:**

**PROJECT DESIGN NO.:** 2022-  
**CONTROL NO.:** CEZA-PDP-  
**SHEET NO.:** 1



**1 ROOF PLAN**  
 SCALE 1:40mts

	OWNER:	PROJECT TITLE:	RECOMMENDING APPROVAL:	APPROVED:	REVISION:	PROJECT DESIGN NO.:	SHEET NO.:
	CAGAYAN ECONOMIC ZONE AUTHORITY	PROPOSED MATERIAL RECOVERY FACILITY (MRF) FOR CEZA MULTI-PURPOSE BUILDING	 LEONARDO C. CRUZ M/ADIC CAGAYAN OFFICES	 ATTY. PAUL L. LAMBINO ADMINISTRATOR & C.E.O.		2022-____	
							CONTROL NO.: CEZA-PDP-____



**FRONT ELEVATION**

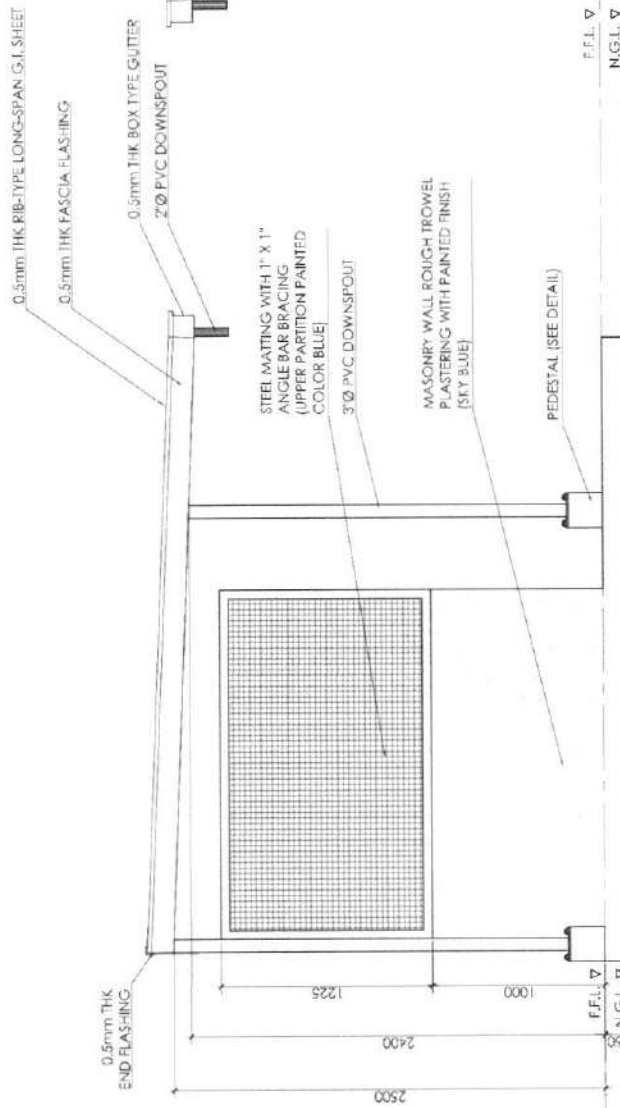
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OWNER: <b>CAGAYAN ECONOMIC ZONE AUTHORITY</b>	PROJECT TITLE: PROPOSED MATERIAL RECOVERY FACILITY (MRF) FOR CEZA MULTI-PURPOSE BUILDING	RECOMMENDING APPROVAL: <i>Leonardo C. Cruz</i> LEONARDO C. CRUZ ADMINISTRATOR & C.E.O.	APPROVED: <i>[Signature]</i> ATTY. RODRIL L. LAMBINO ADMINISTRATOR & C.E.O.	REVISION:	PROJECT DESIGN NO.:	SHEET NO.:
				2022-	CONTROL NO.:	3
				CEZA-PDP-	A 3	


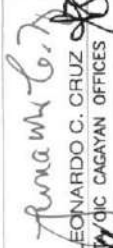



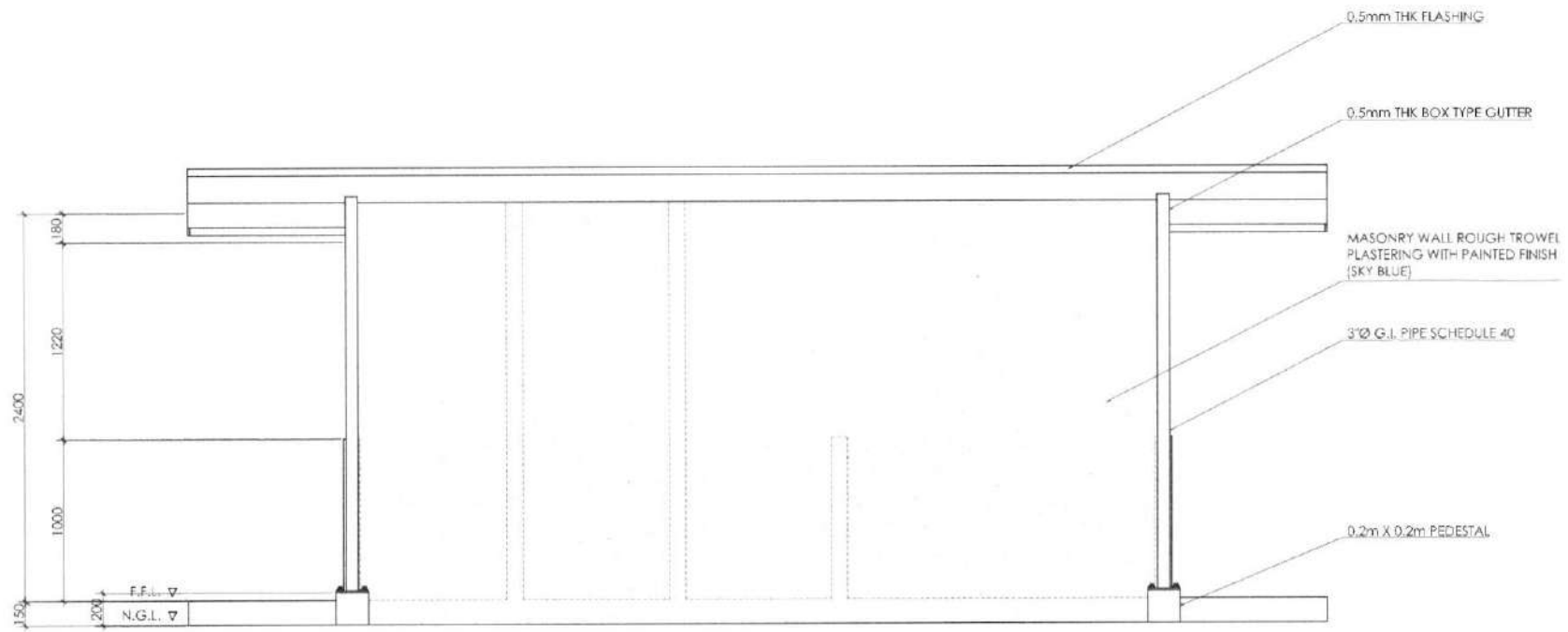





**LEFT SIDE ELEVATION**  
 SCALE 1:30mts  
 1/4

**RIGHT SIDE ELEVATION**  
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 2/4

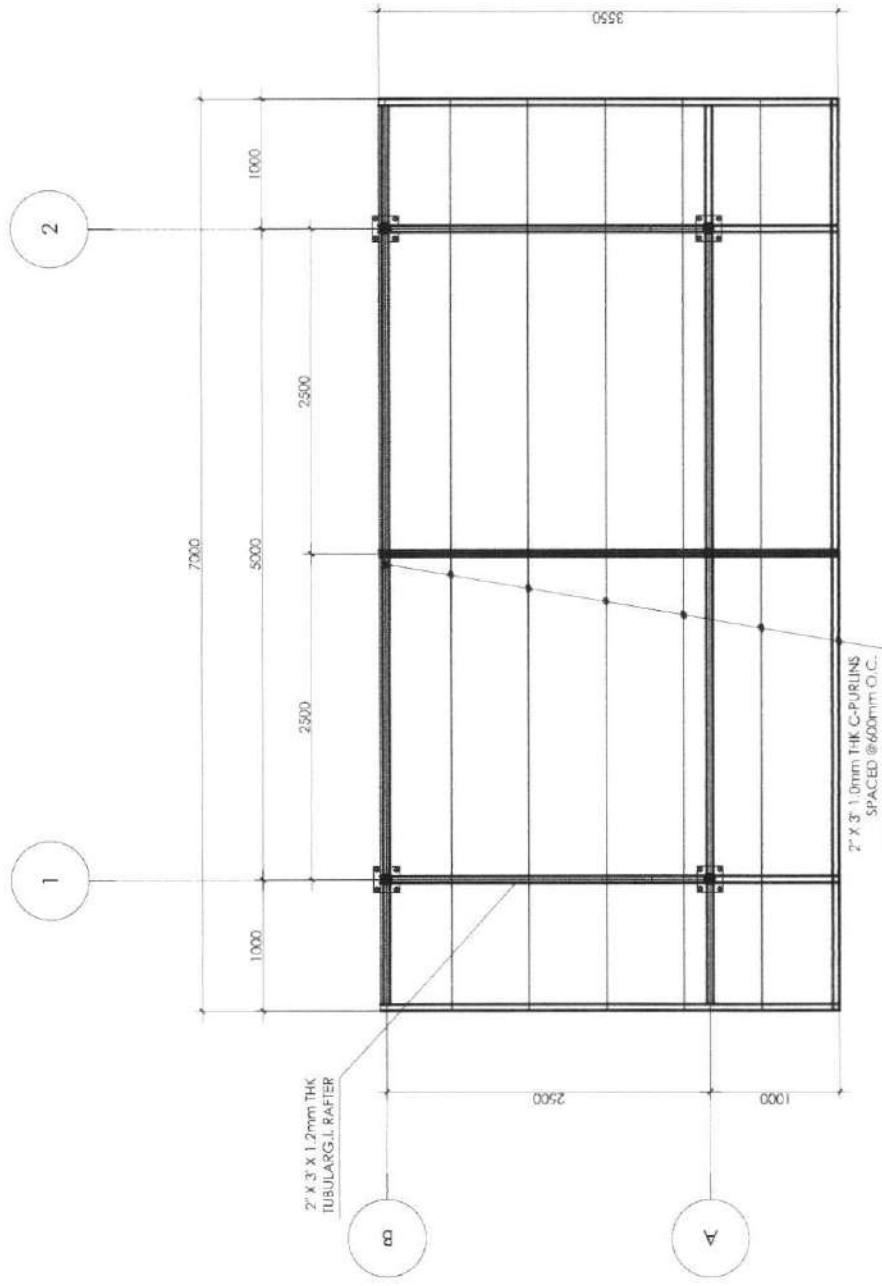
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**REAR ELEVATION**  
 SCALE 1:30mts

	OWNER:	PROJECT TITLE:	RECOMMENDING APPROVAL:	APPROVED:	REVISION:	PROJECT DESIGN NO.:	SHEET NO.:
	<b>CAGAYAN ECONOMIC ZONE AUTHORITY</b>	PROPOSED MATERIAL RECOVERY FACILITY (MRF) FOR CEZA MULTI-PURPOSE BUILDING	LEONARDO C. CRUZ HEAD OF CAGAYAN OFFICES	ATTY. PAUL L. LAMBINO ADMINISTRATOR & C.S.O.		2022-_____	5 A 5
						CONTROL NO.:	




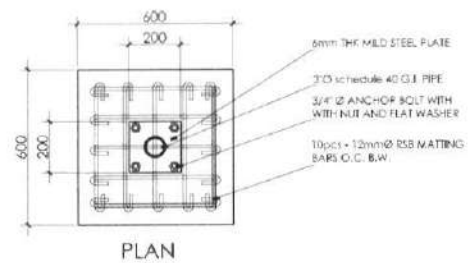


**ROOF FRAMING PLAN**

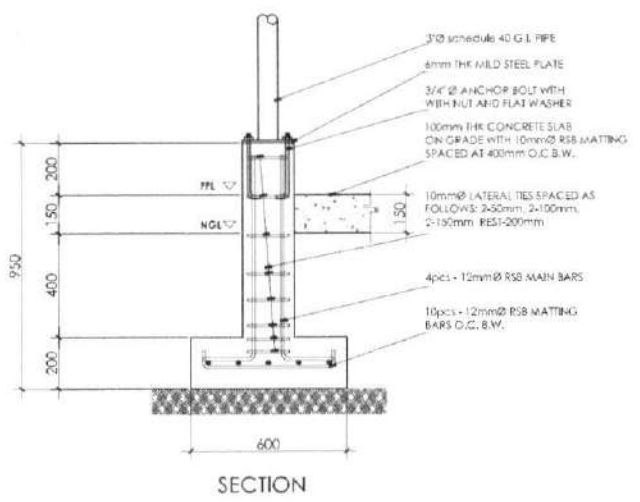


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	<p>OWNER: <b>CAGAYAN ECONOMIC ZONE AUTHORITY</b></p>	<p>PROJECT TITLE: PROPOSED MATERIAL RECOVERY FACILITY (MRF) FOR CEZA MULTI-PURPOSE BUILDING</p>	<p>RECOMMENDING APPROVAL: <i>Leonardo C. Cruz</i> LEONARDO C. CRUZ HEAD/CHIEF CAGAYAN OFFICES</p>	<p>APPROVED: <i>Atty. Paul L. Lambino</i> ATTY. PAUL L. LAMBINO ADMINISTRATOR &amp; C.E.O.</p>	<p>REVISION:</p>	<p>PROJECT DESIGN NO.: 2022-_____ CONTROL NO.: CEZA-PDP-_____ SHEET NO.: 7 S 1</p>
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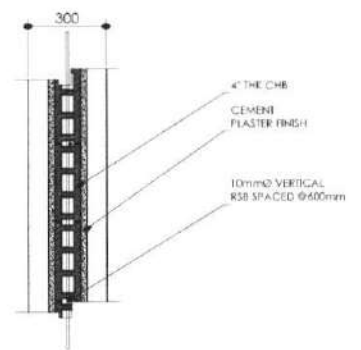


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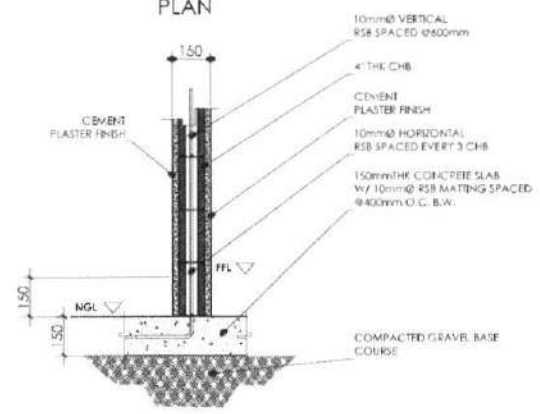


SECTION

1  
S 2  
**LALLY COLUMN DETAIL**  
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PLAN



SECTION

2  
S 2  
**MASONRY WALL TO SLAB CONNECTION DETAIL**  
SCALE  
1:20mts



OWNER:	PROJECT TITLE:	RECOMMENDING APPROVAL:	APPROVED:	REVISION:	PROJECT DESIGN NO.:	SHEET NO.:
CAGAYAN ECONOMIC ZONE AUTHORITY	PROPOSED MATERIAL RECOVERY FACILITY (MRF) FOR CEZA MULTI-PURPOSE BUILDING	LEONARDO C. CRUZ HTA/VOIC CAGAYAN OFFICES	ATTY. PAUL L. LAMBINO ADMINISTRATOR & C.E.O.		2022-____	8
					CONTROL NO.:	S 2
					CEZA-PDP-____	