



⊖ PERSPECTIVE

NOT TO SCALE

LINE AND GRADE

LINE USE AND ZONING

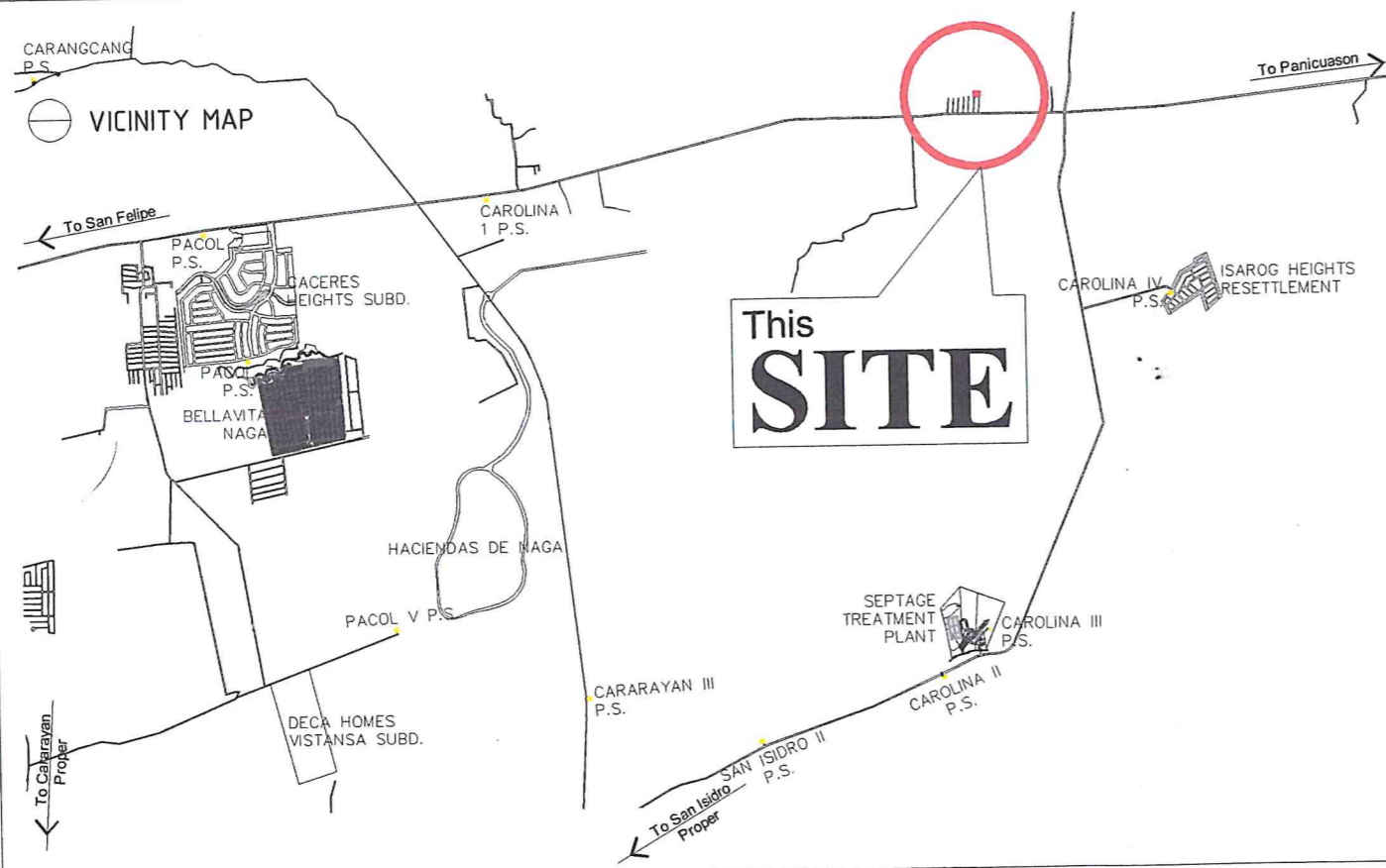
ARCHITECTURAL

STRUCTURAL

SANITARY

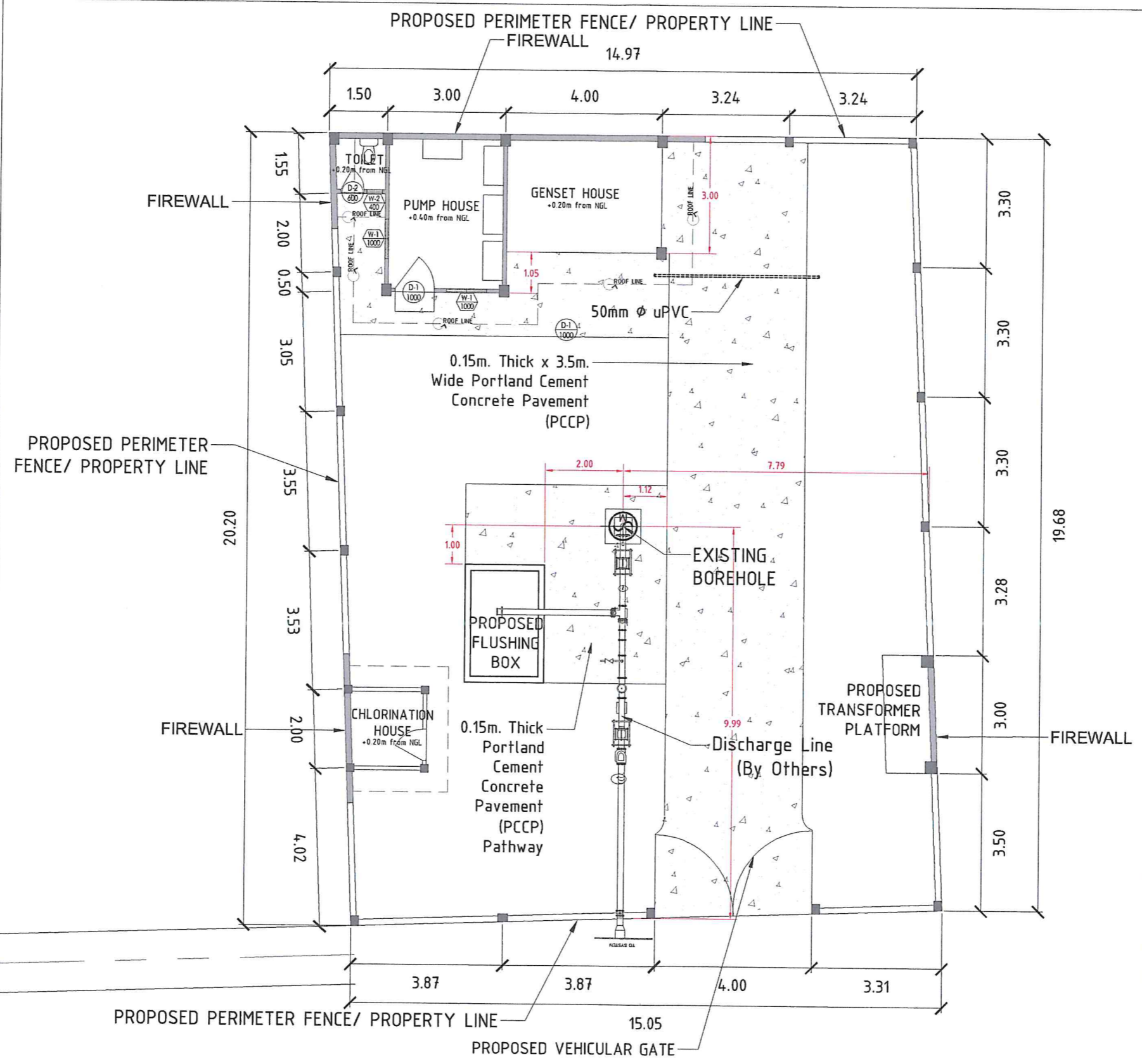
ELECTRICAL

MECHANICAL




⊖ VICINITY MAP

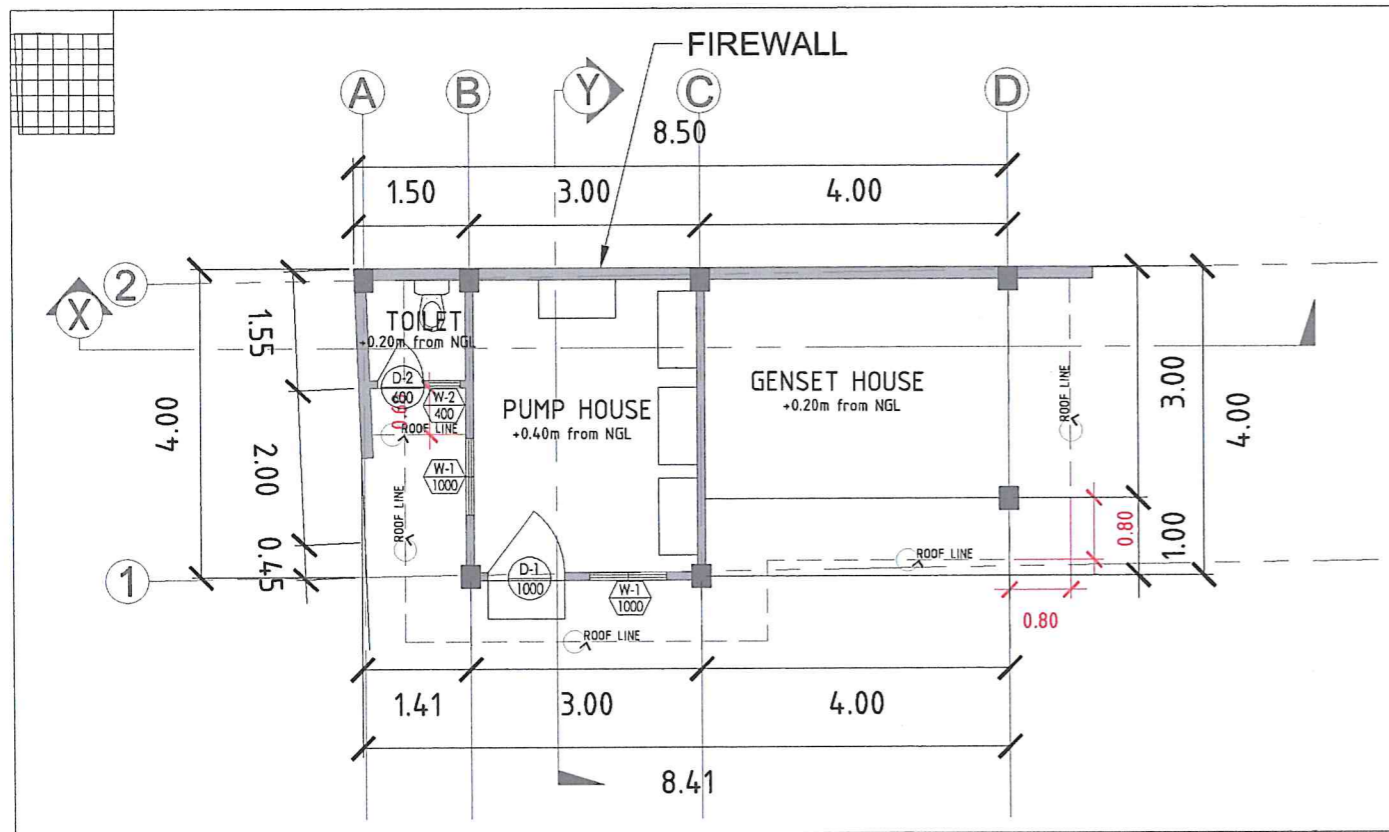
NOT TO SCALE



⊕ SITE DEVELOPMENT PLAN

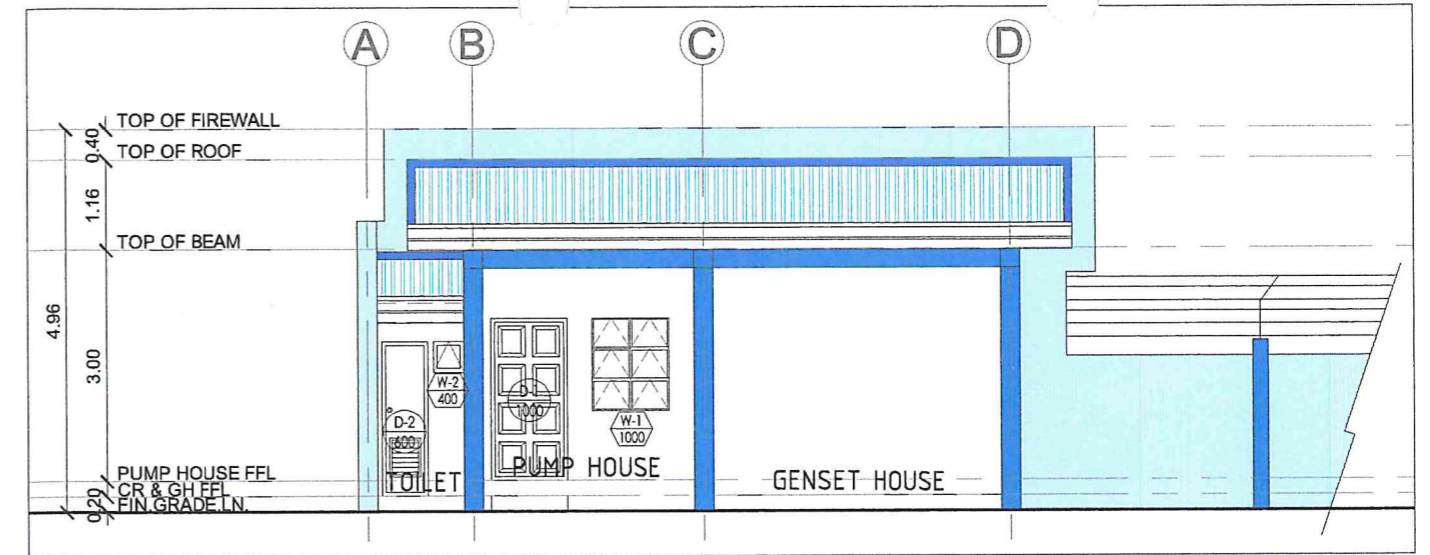
SCALE 1:125mts.

 <p>Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b> 40 J. Miranda Avenue, Naga City</p>	<p>PREPARED BY: <i>[Signature]</i> <b>SHARMAINE E. BRACIA</b> DIC - Division Manager, PDCD</p>	<p>CHECKED BY: <i>[Signature]</i> <b>SONJUN O. MILLARES</b> DIC - Department Manager, EED</p>	<p>CHECKED BY: <i>[Signature]</i> <b>ARTURO M. MARCO</b> DIC - Department Manager, PD</p>	<p>RECOMMENDING APPROVAL: <i>[Signature]</i> <b>ROQUE S. FRANCISCO</b> AGM, O&amp;TS</p>	<p>APPROVED: <i>[Signature]</i> <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A</p>	<p>PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City</p>	<p>SHEET CONTENTS: Site Development Plan</p>	<p>SHEET NO.: 2 / 17</p>
	<p>CADD by: J.B. Cerillo</p>							<p>Date: 07 - 2024</p>



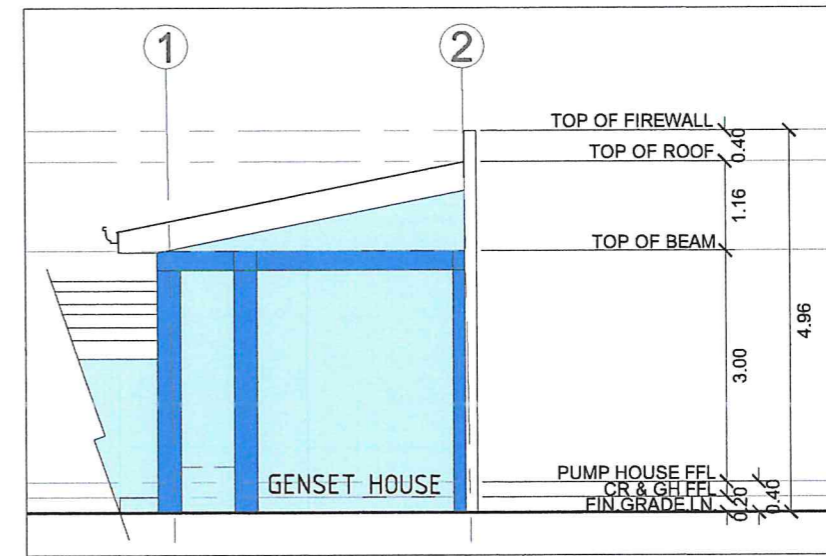
FLOOR PLAN

SCALE 1:100mts.



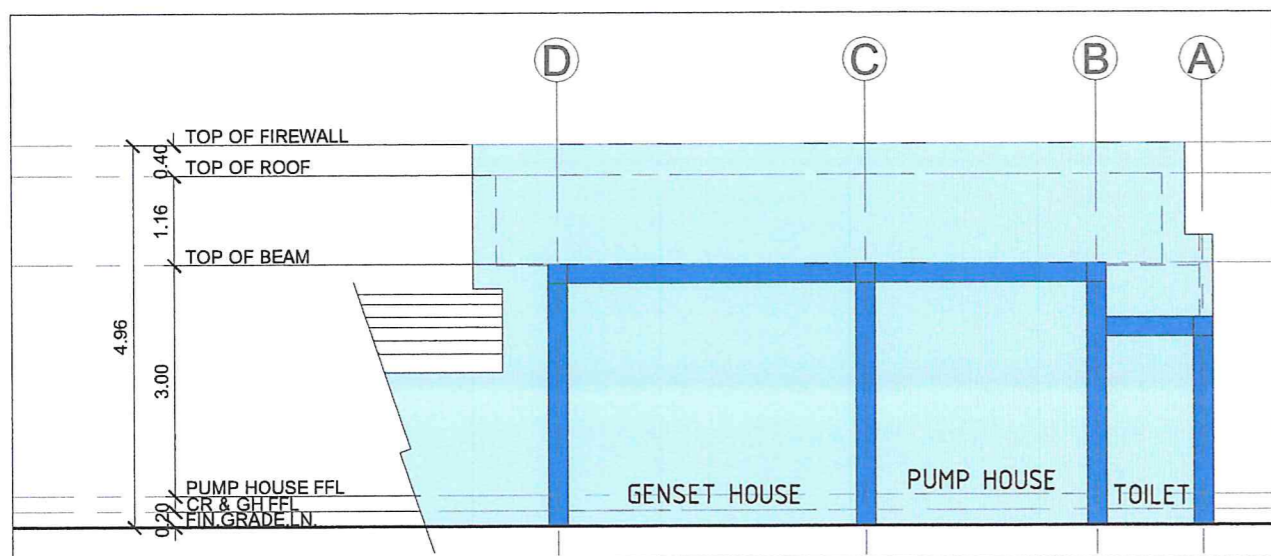
FRONT ELEVATION

SCALE 1:100mts.



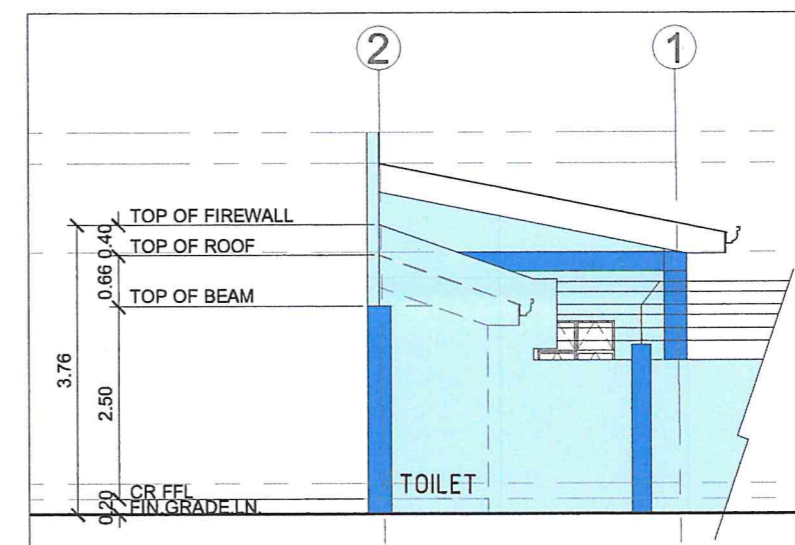
RIGHTSIDE ELEVATION

SCALE 1:100mts.



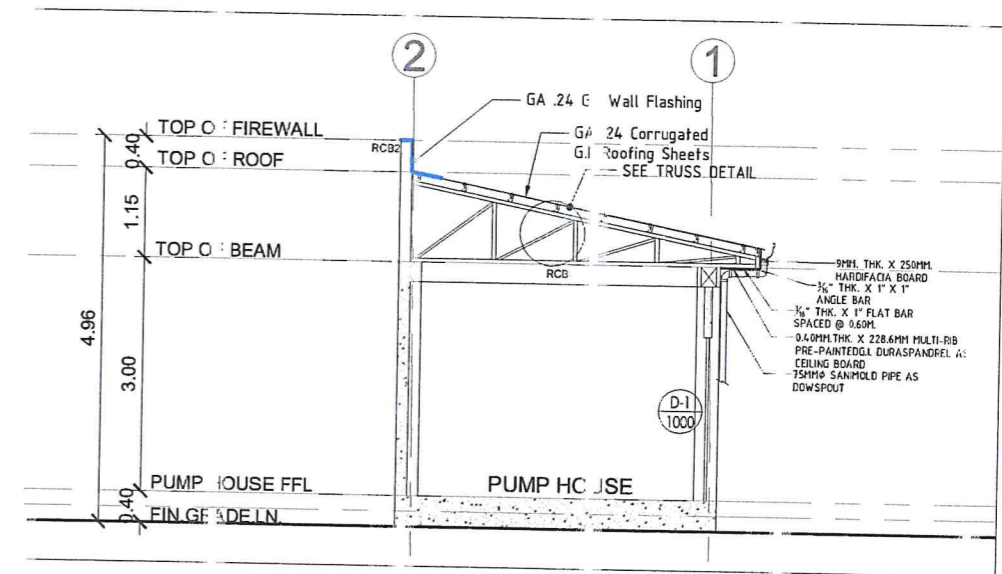
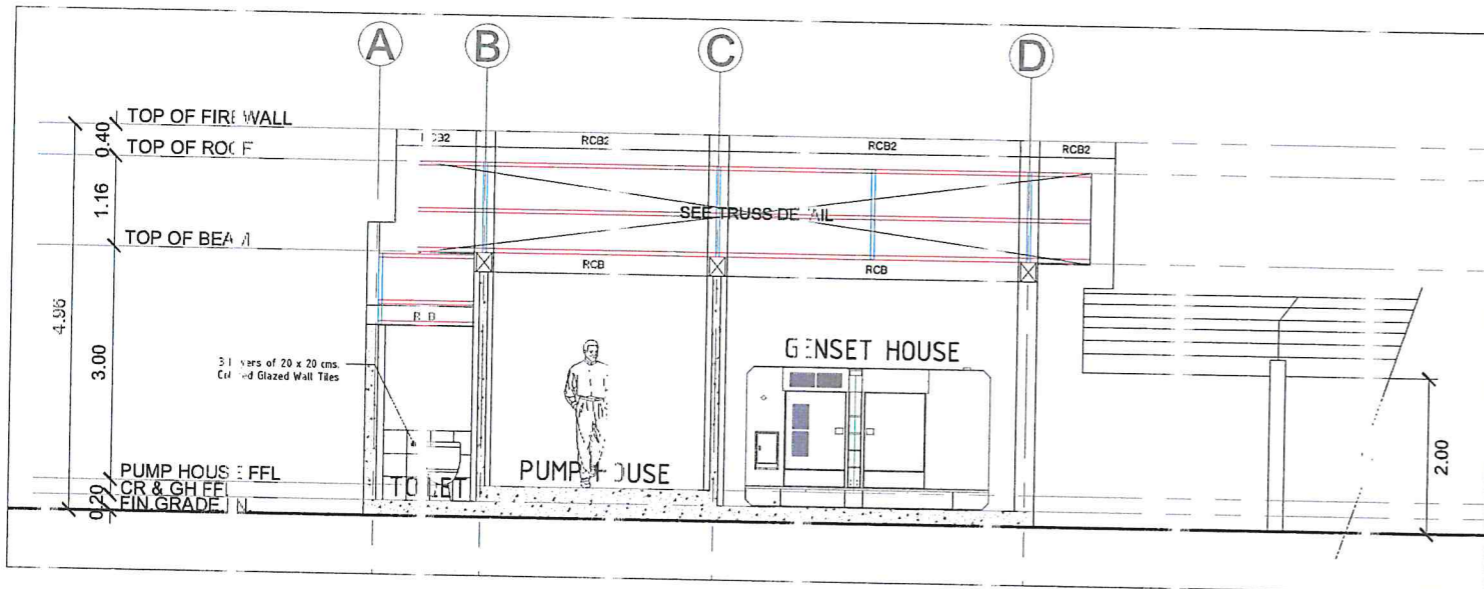
REAR ELEVATION

SCALE 1:100mts.



LEFTSIDE ELEVATION

SCALE 1:100mts.

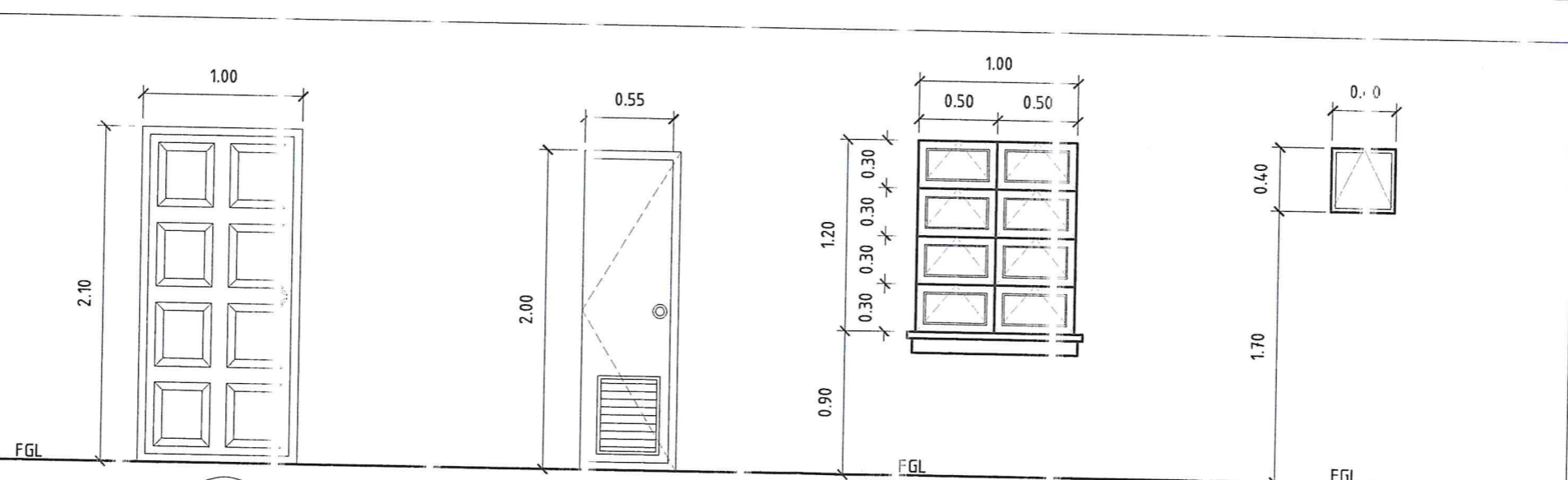


SECTION THRU X' - X"

SCALE 1:100mts.

SECTION THRU X' - X"

SCALE 1:100mts.



D-1 1000	D-2 600	W-1 1000	W-2 400
TYPE: PANEL DOOR	TYPE: FLUSH DOOR	TYPE: AWNING TYPE WINDOW	TYPE: AWNING TYPE WINDOW
QTY: 1 SET	QTY: 1 SET	QTY: 1 SET	QTY: 1 SET
LOCATION: PUMP ROOM	LOCATION: TOILET	LOCATION: PUMP ROOM	LOCATION: COMFORT ROOM

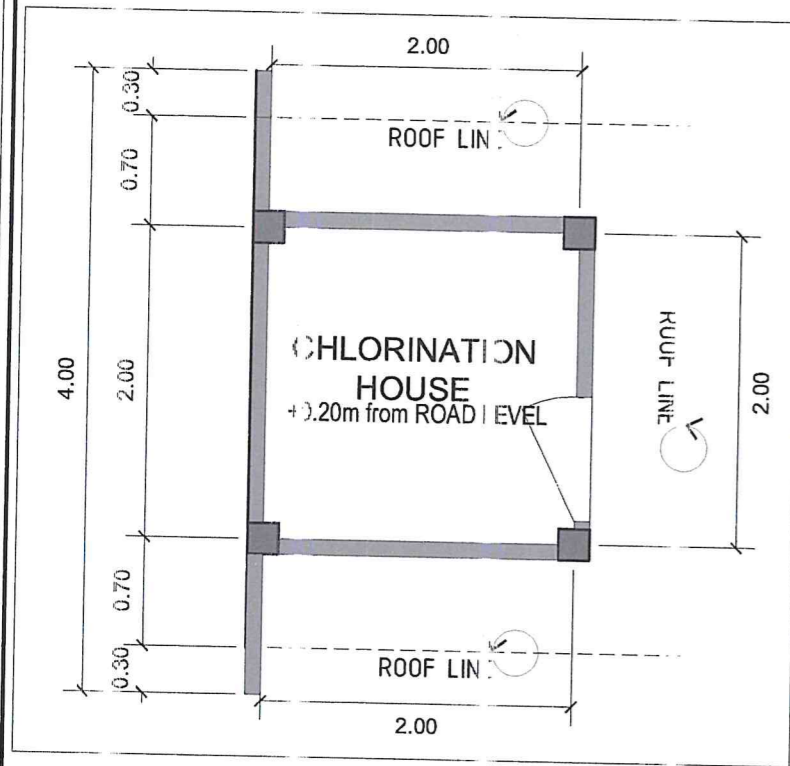
SCHEDULE OF DOORS & WINDOWS

SCALE 1:40mts.

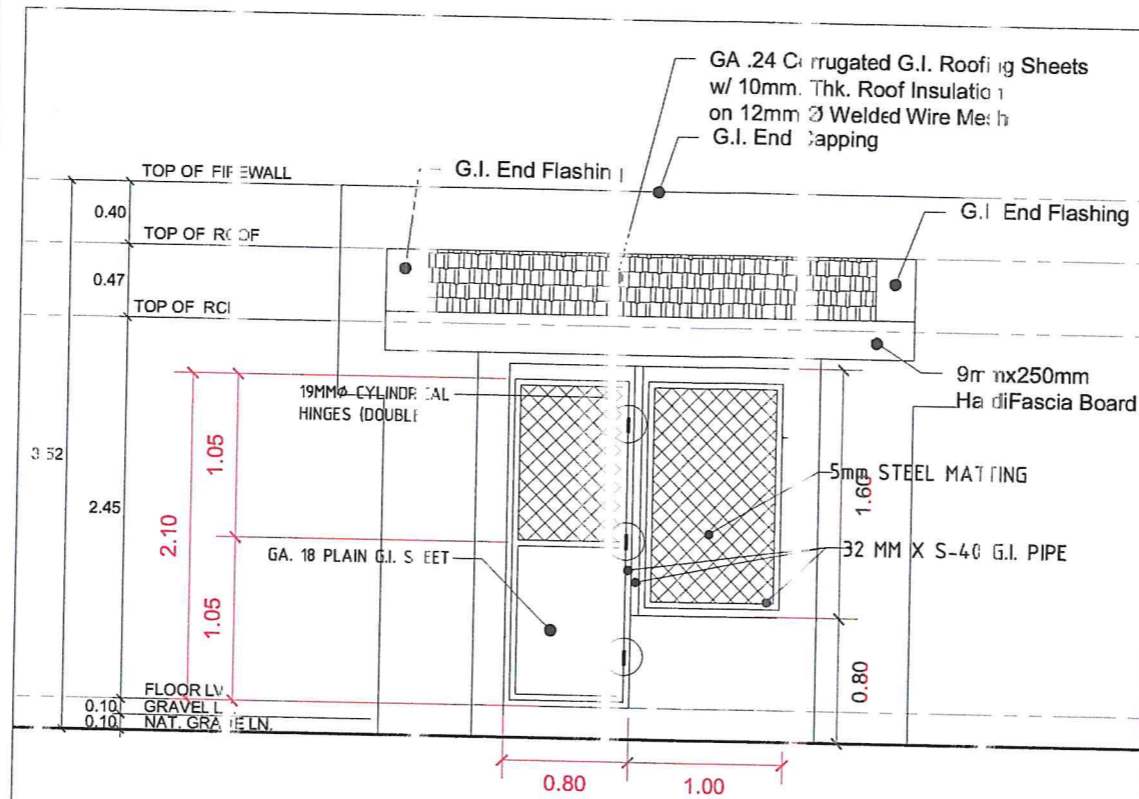
PREPARED BY:  SHARMAINE E. FRACIA OIC - Division Manager, PDCD	CHECKED BY:  SONJUN O. MILLARES OIC - Department Manager, EED	CHECKED BY:  ARTURO M. MARCO OIC - Department Manager, PD	RECOMMENDING APPROVAL:  ROQUE S. FRANCISCO GM, O&TS	APPROVED:  FLORENCIO T. MOJOSO, JR. General Manager A
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PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City
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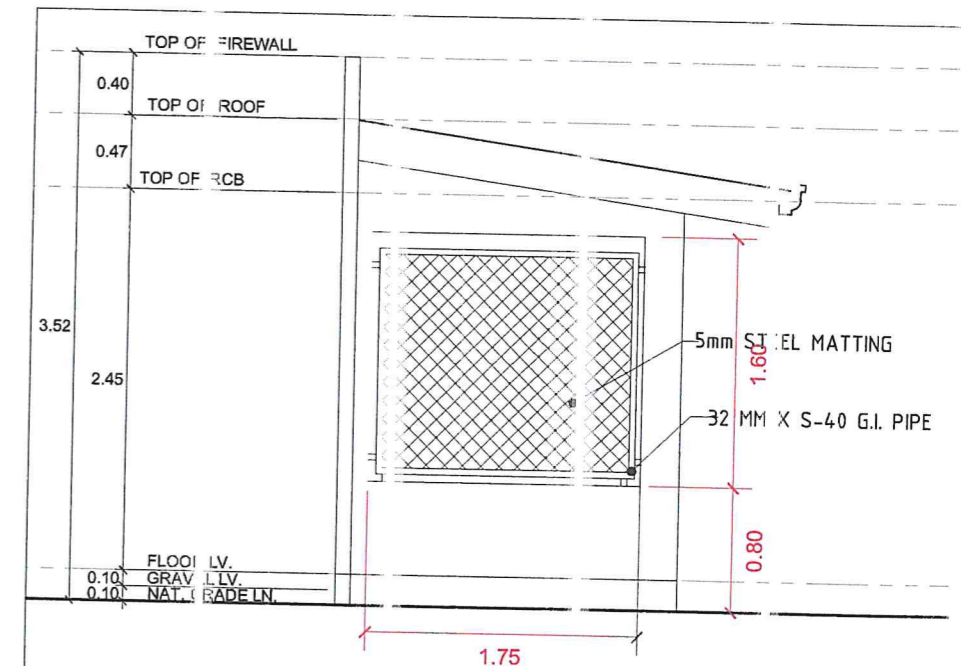
SHEET CONTENTS:	SHEET NO.:
Sections	4
Schedule of Doors & Windows	17
CADD by: J. Cerillo	Date: 07 - 20



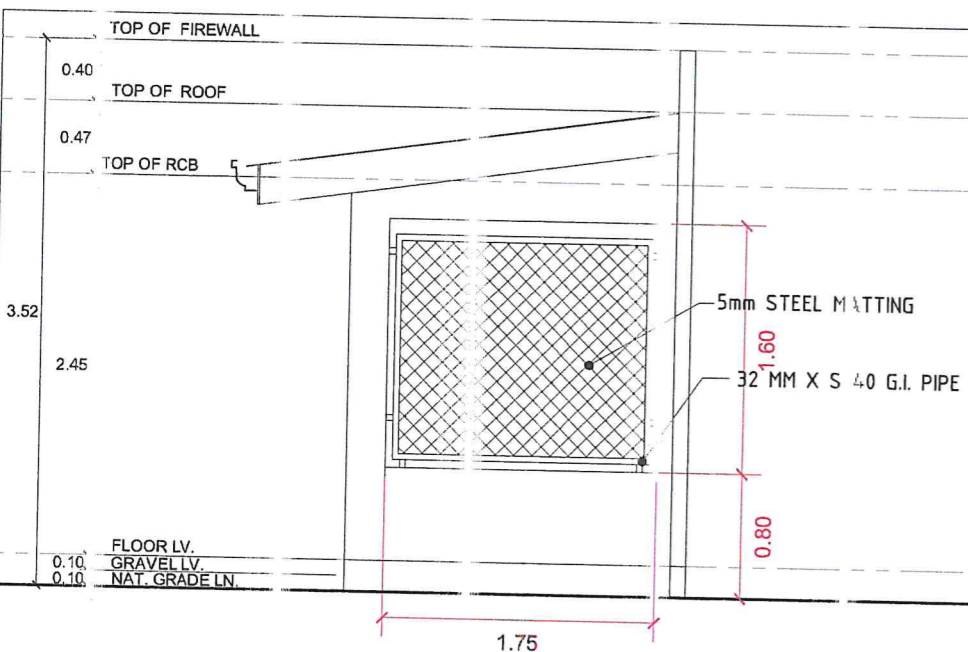
FLOOR PLAN (CHLORINATION HOUSE)



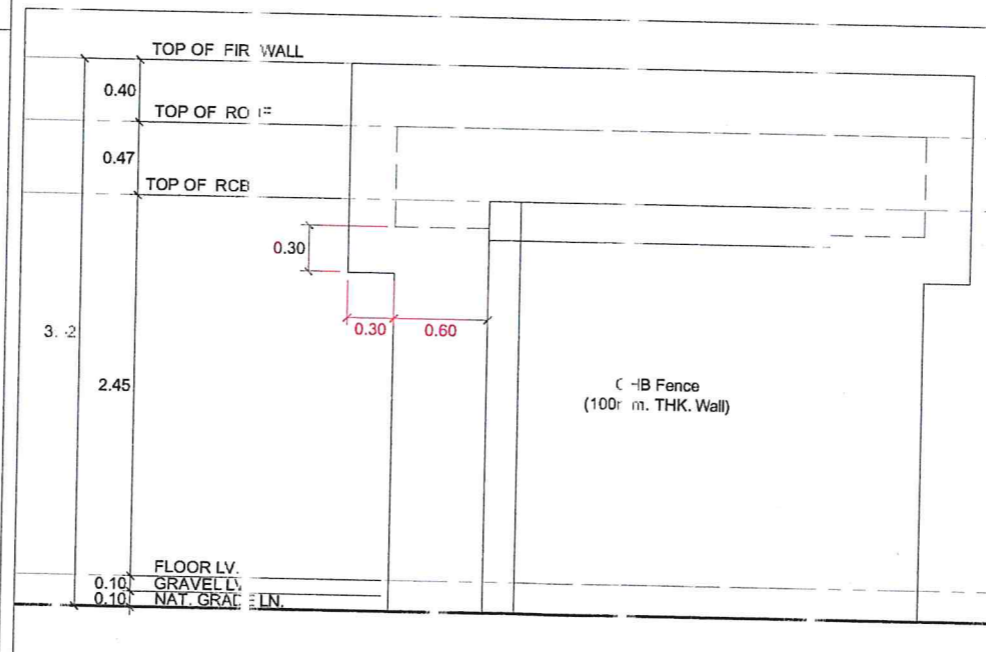
FRONT ELEVATION



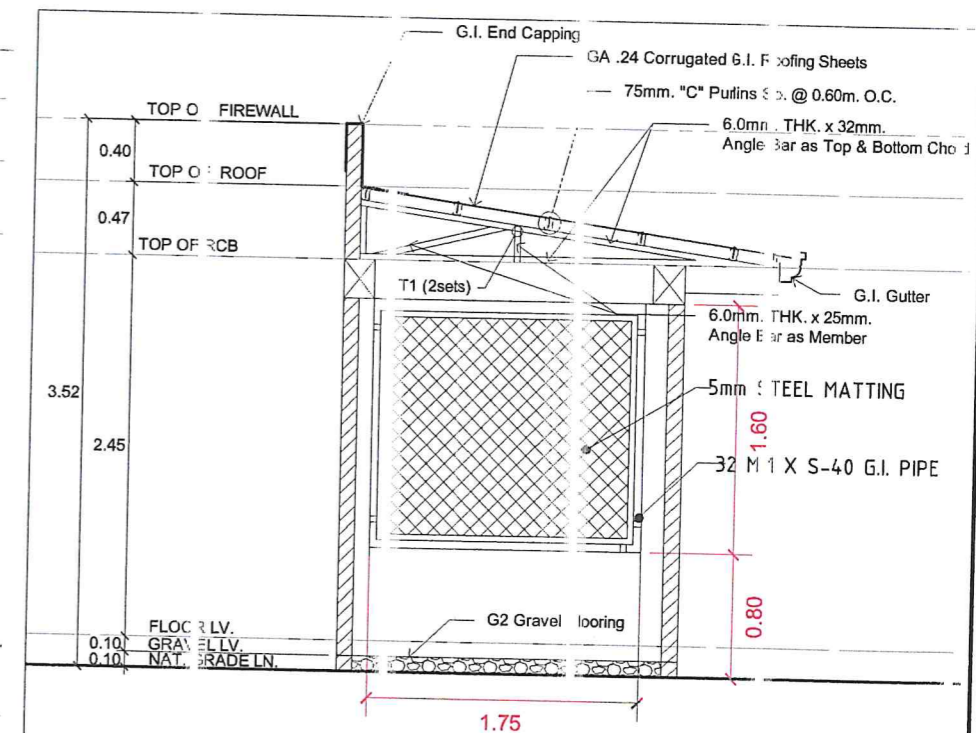
LEFT SIDE ELEVATION



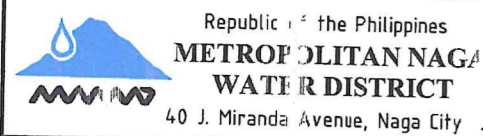
RIGHTSIDE ELEVATION



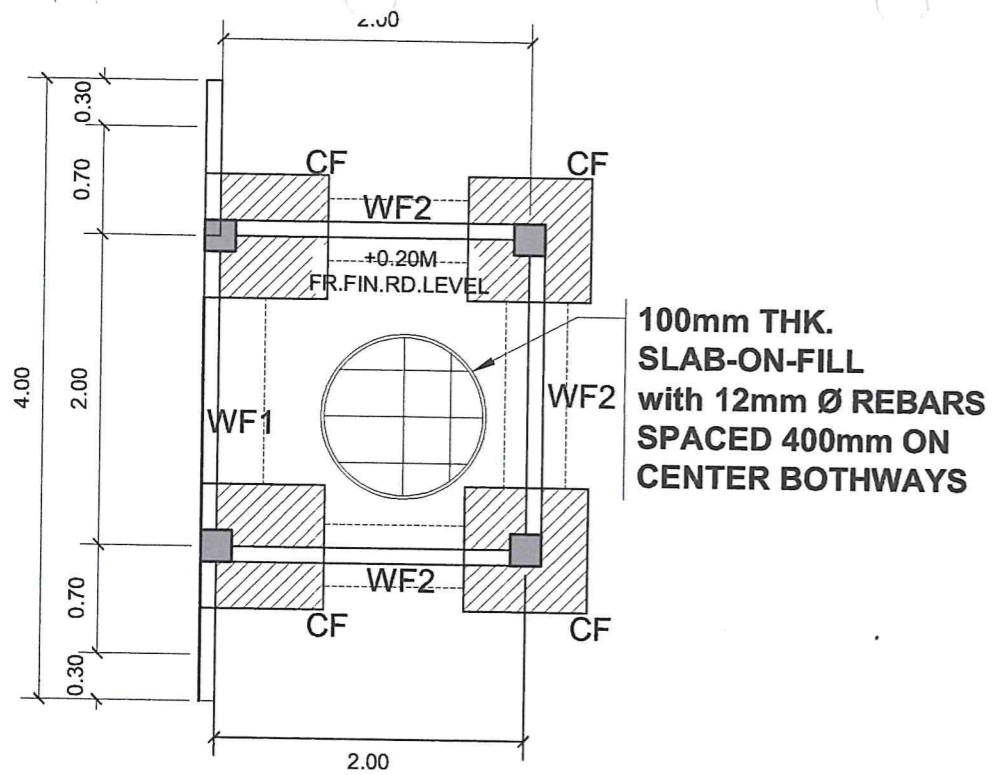
REAR ELEVATION



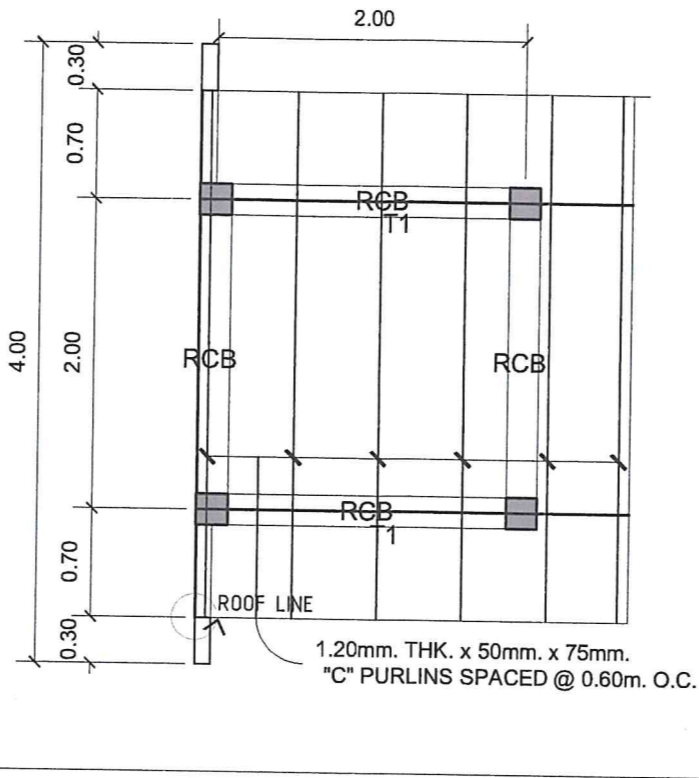
SECTION THRU X' - X'



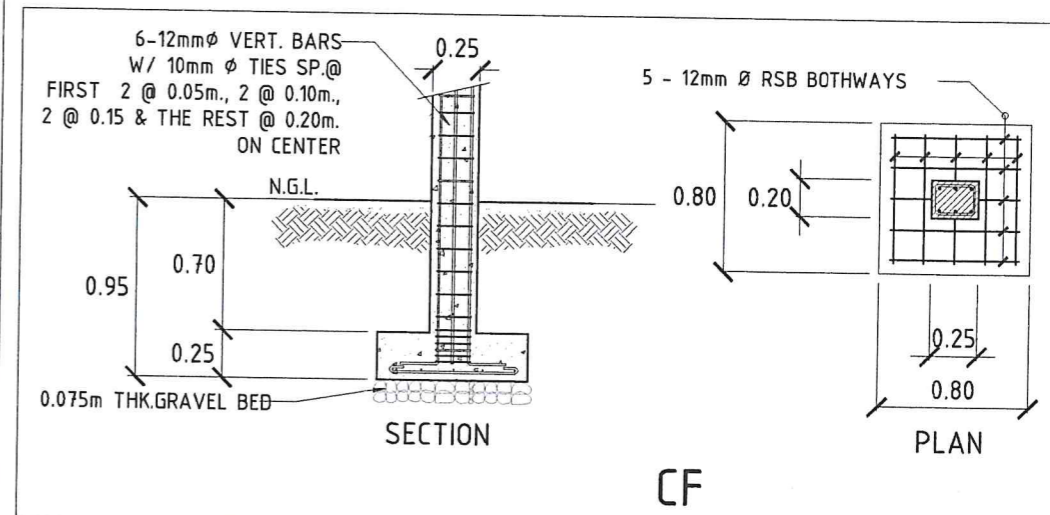
Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b> 40 J. Miranda Avenue, Naga City	PREPARED BY:  <b>SHARMAINE E. ERACIA</b> OIC - Division Manager, PDCD	CHECKED BY:  <b>SONJIN O. MILLARES</b> OIC - Department Manager, EED	CHECKED BY:  <b>ARTURO M. MARCO</b> OIC - Department Manager, PD	RECOMMENDING APPROVAL:  <b>ROMEO S. FRANCISCO</b> OIC - GM, O&TS	APPROVED:  <b>FLORENCIO T. MOIGOSO, JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS: Floor Plan (Chlorination House) Elevations (Chlorination House)	SHEET NO.: <b>5</b> <b>17</b> CADD by: J. Cerillo Date: 07 - 2024
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**100mm THK. SLAB-ON-FILL with 12mm Ø REBARS SPACED 400mm ON CENTER BOTHWAYS**



1.20mm THK. x 50mm. x 75mm. "C" PURLINS SPACED @ 0.60m. O.C.



FOUNDATION PLAN (CHLORINATION HOUSE)

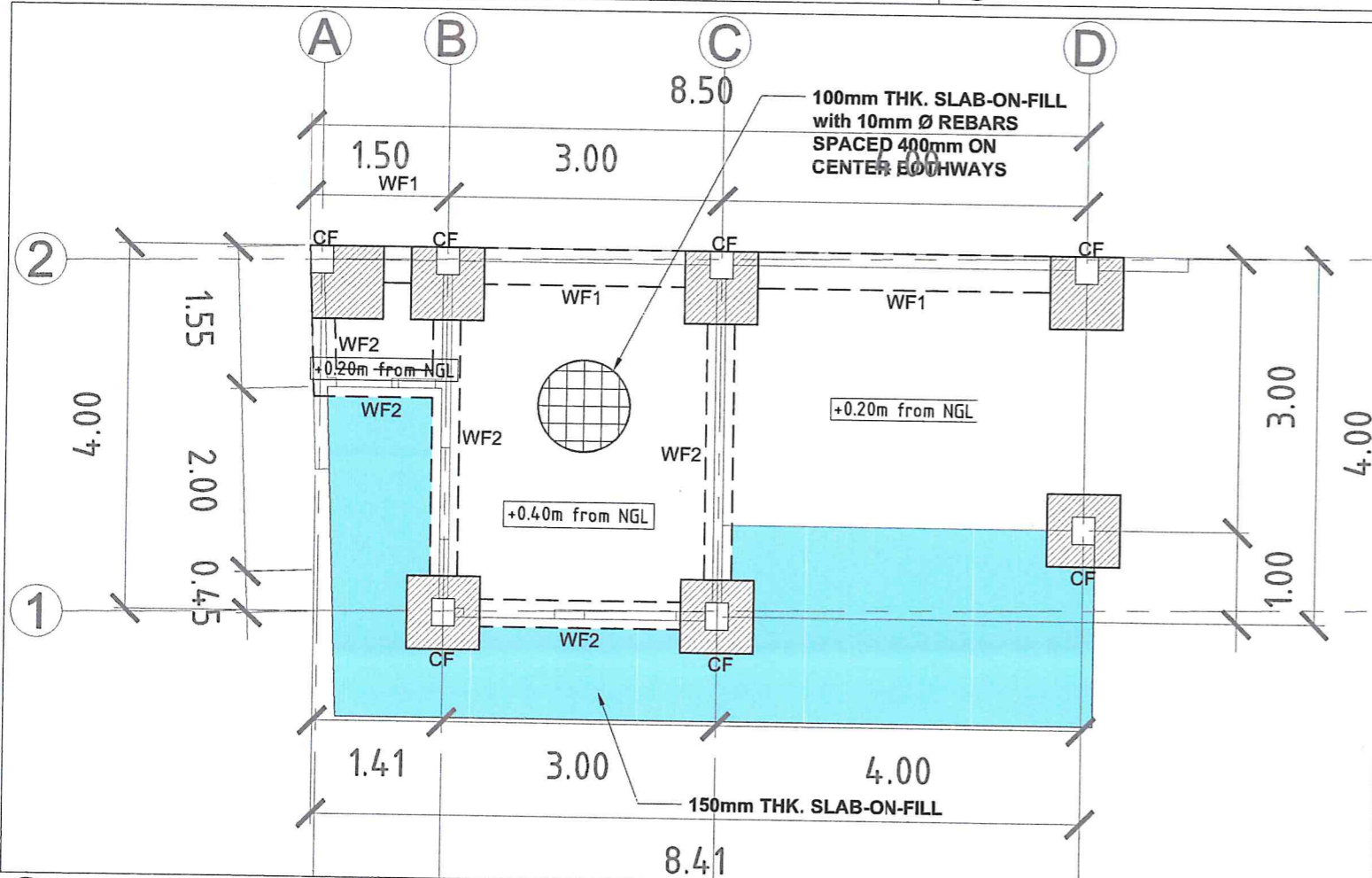
SCALE 1:50mts.

ROOF FRAMING PLAN

SCALE 1:50mts.

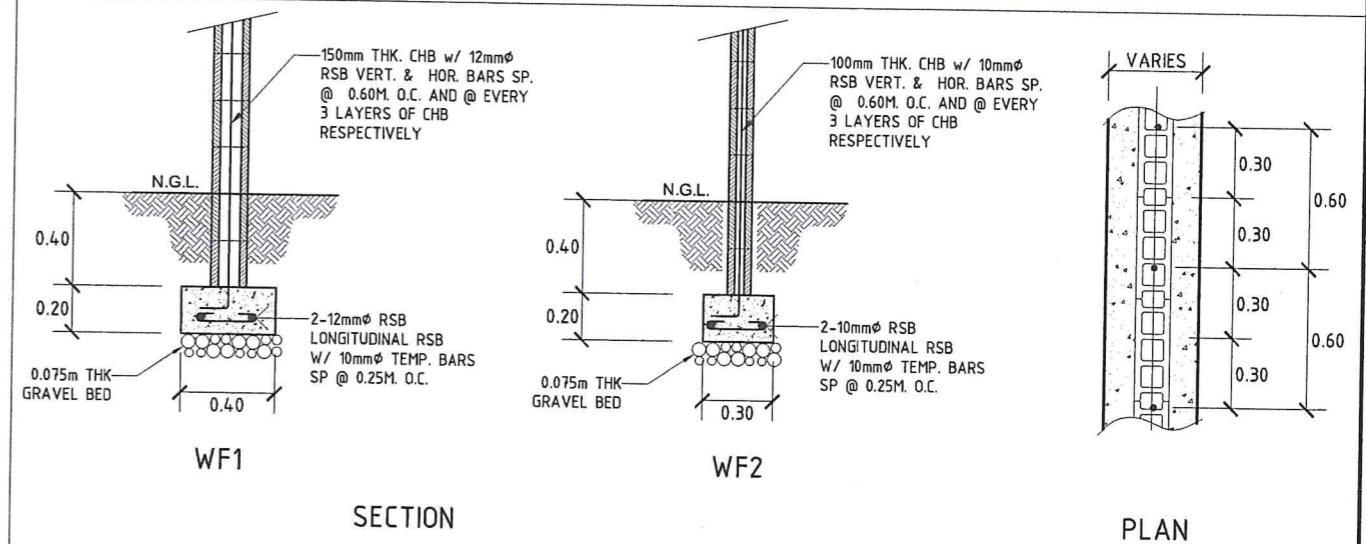
COLUMN/FOOTING DETAIL

Not To Scale



**100mm THK. SLAB-ON-FILL with 10mm Ø REBARS SPACED 400mm ON CENTER BOTHWAYS**

150mm THK. SLAB-ON-FILL

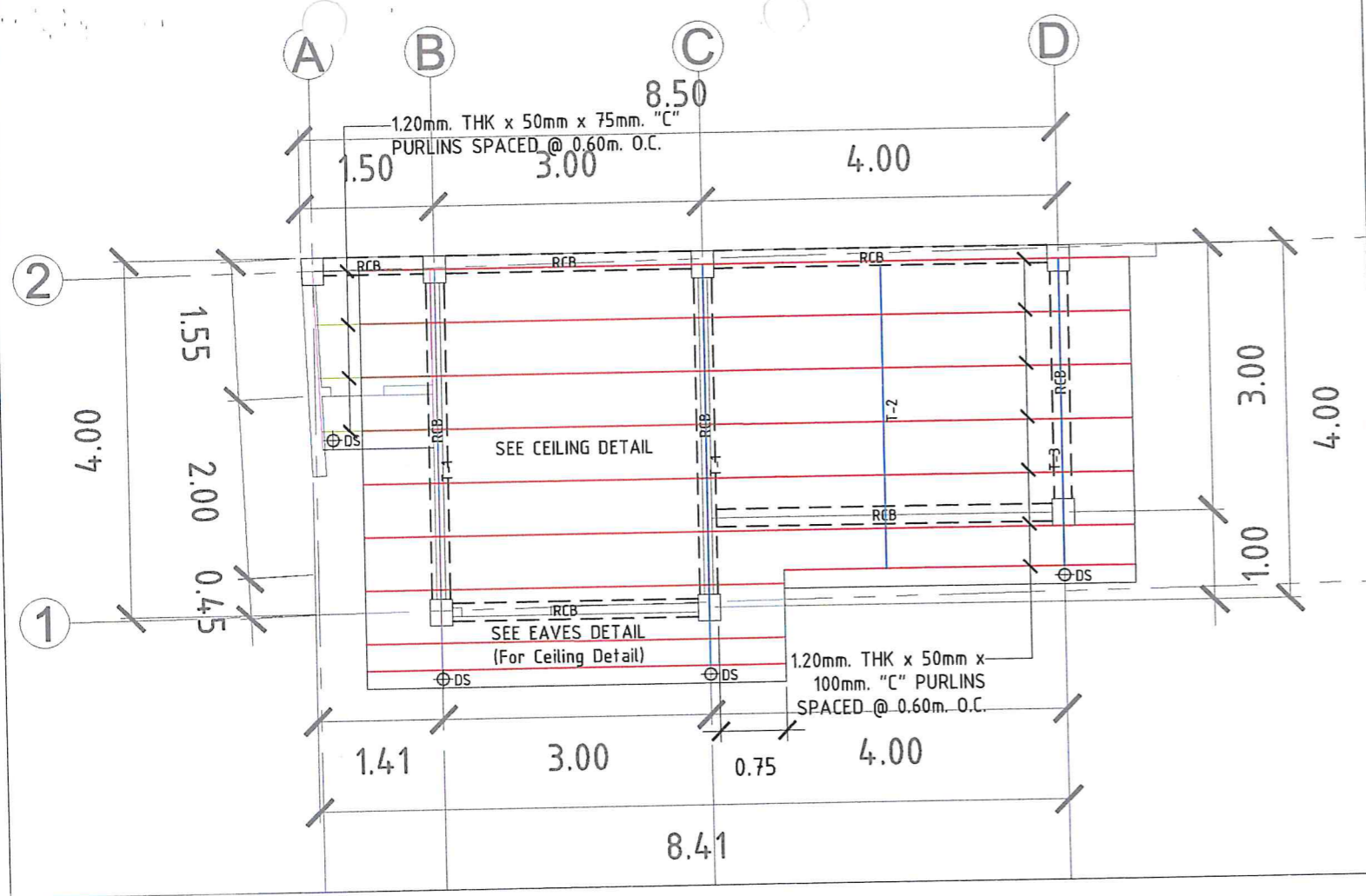


FOUNDATION PLAN (PUMP HOUSE)

SCALE 1:75mts.

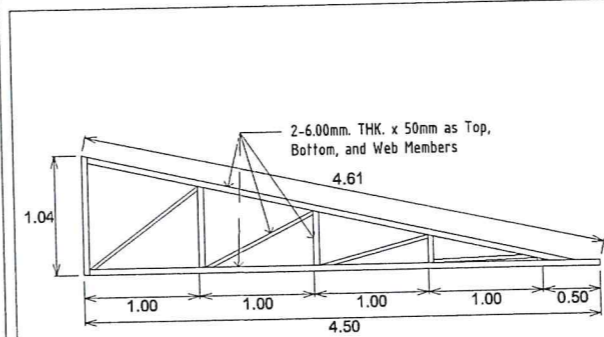
WALL FOOTING DETAIL

Not To Scale

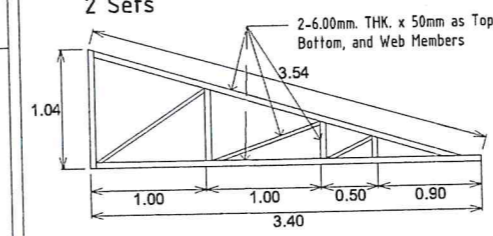


MARK	SIZE (mm)	@ SUPPORTS		@ -SPAN	
		10mm $\phi$ STIRRUPS SPACED AS FOLLOWS: 2 @ 0.05M, 2 @ 0.10M, 2 @ 0.15M & THE REST @ 0.20M.O.C.			
RCB	200 x 250		4-12mm $\phi$ RSB 2-12mm $\phi$ RSB		2-12mm $\phi$ RSB 4-12mm $\phi$ RSB
RCB2	150 x 200		1-12mm $\phi$ RSB 1-12mm $\phi$ RSB		1-12mm $\phi$ RSB 1-12mm $\phi$ RSB

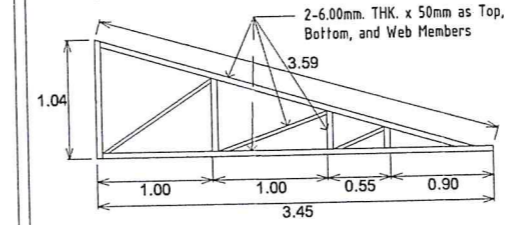
⊖ Schedule of Beam



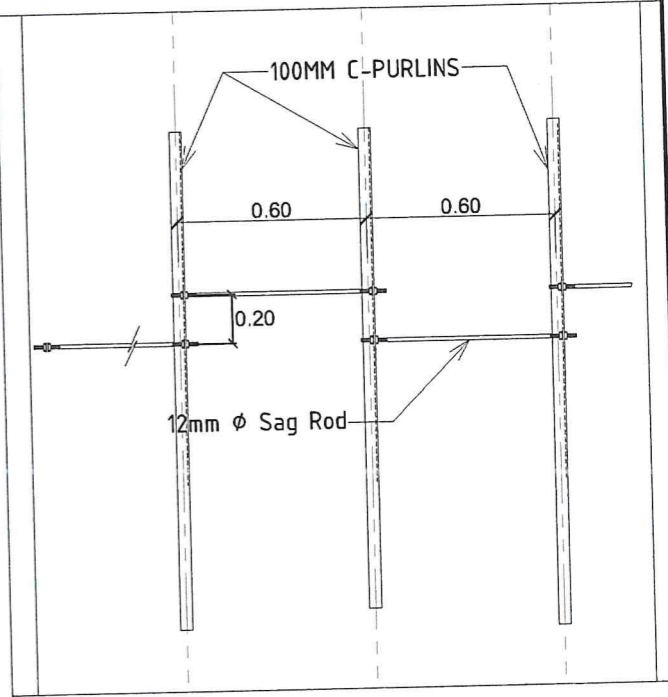
TRUSS 1 (T-1)  
2 Sets



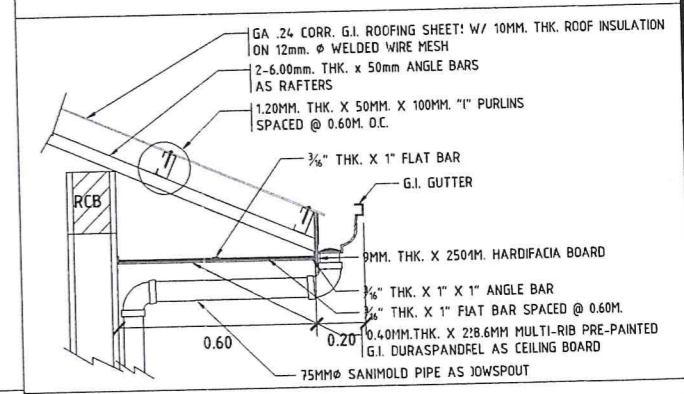
TRUSS 2 (T-2)  
1 Set



TRUSS 3 (T-3)  
1 Set



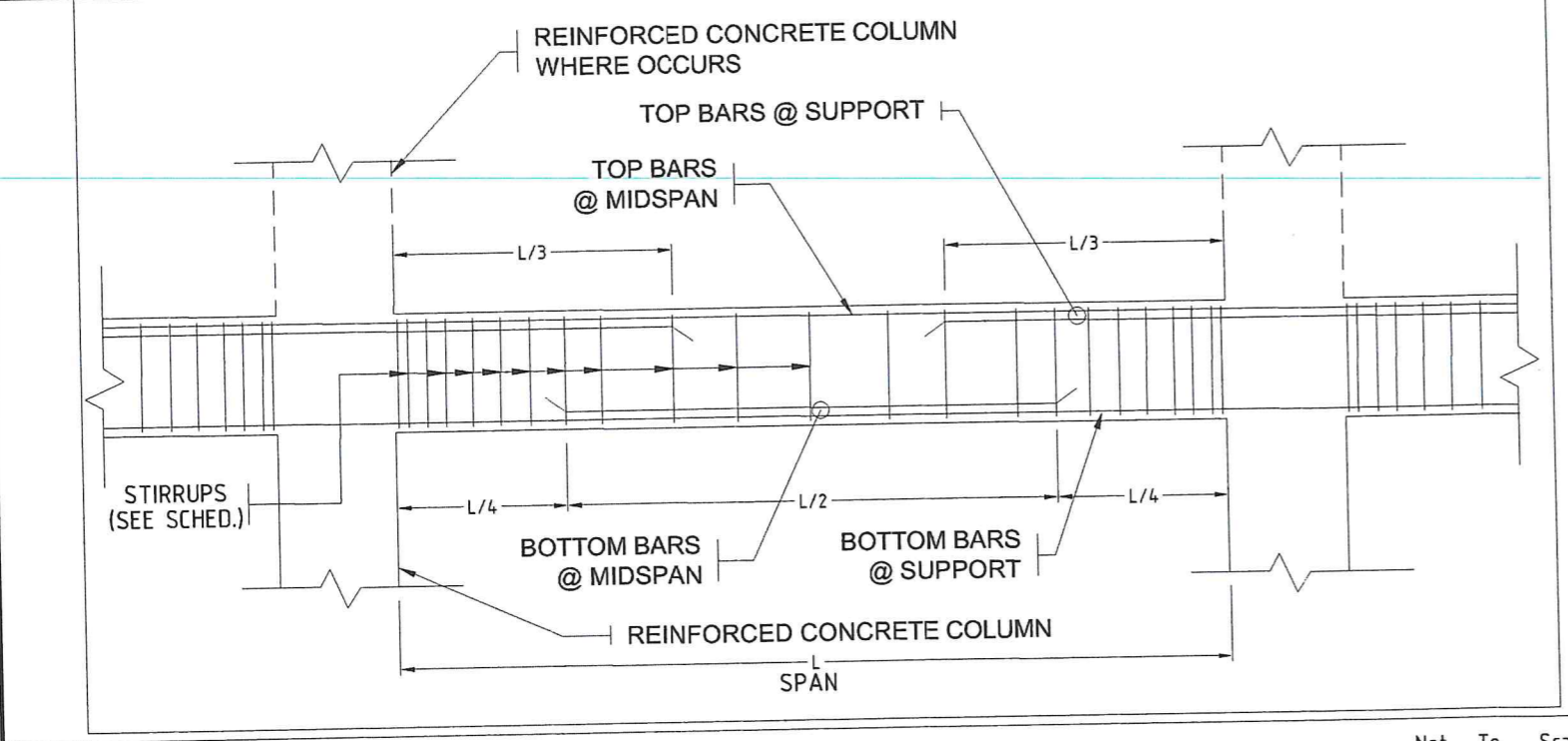
⊖ SAGROD DETAIL Not To Scale



⊖ EAVES DETAIL Not To Scale

⊖ ROOF FRAMING PLAN

SCALE 1:75mts.

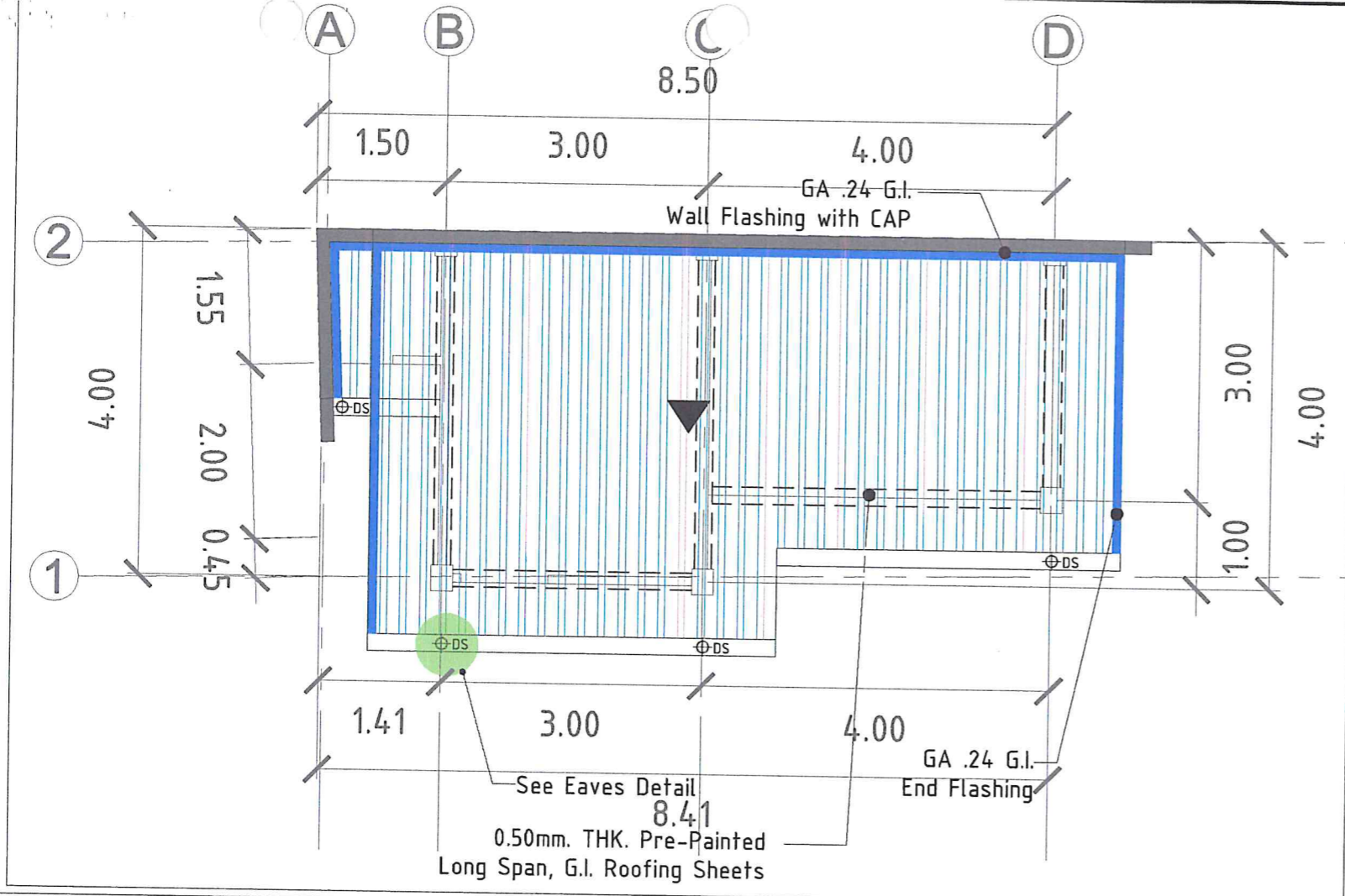


⊖ TYPICAL BEAM DETAIL

Not To Scale

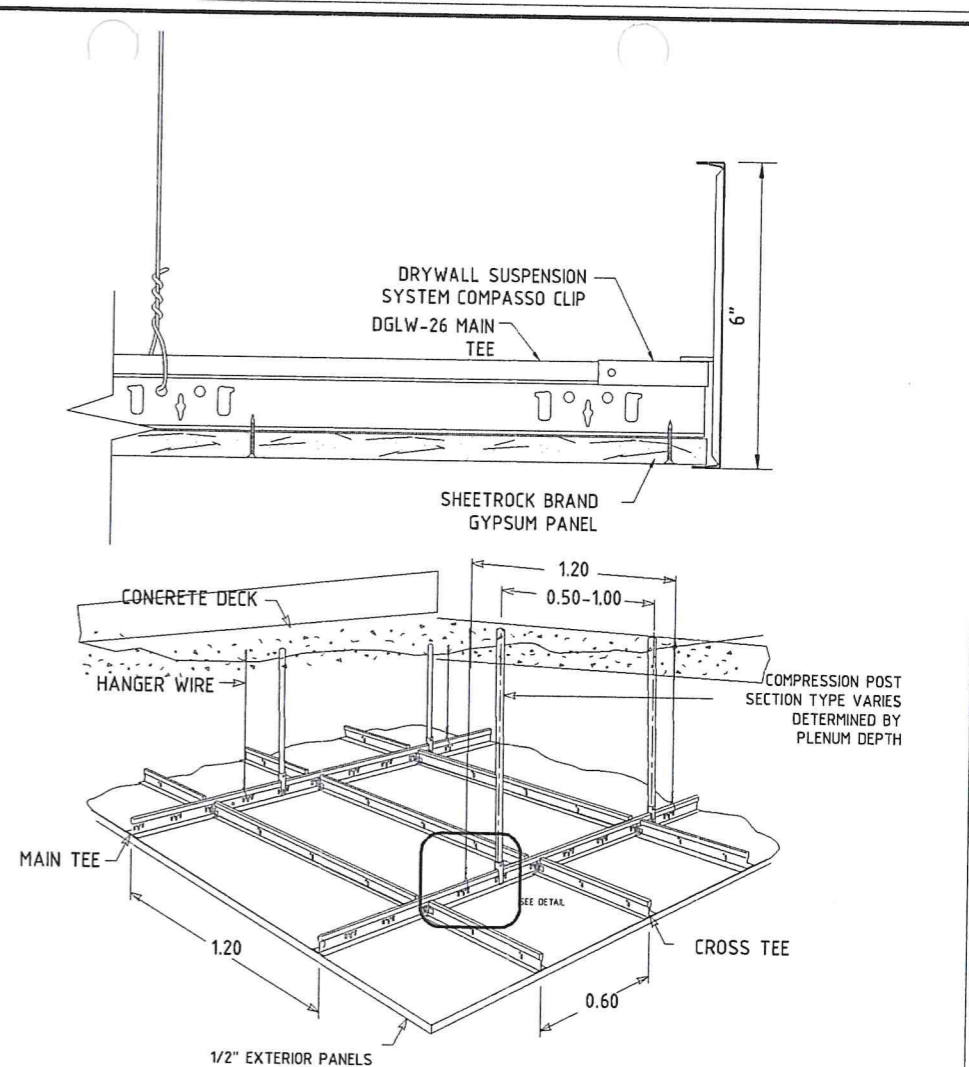
⊖ TRUSSES DETAIL

Not To Scale



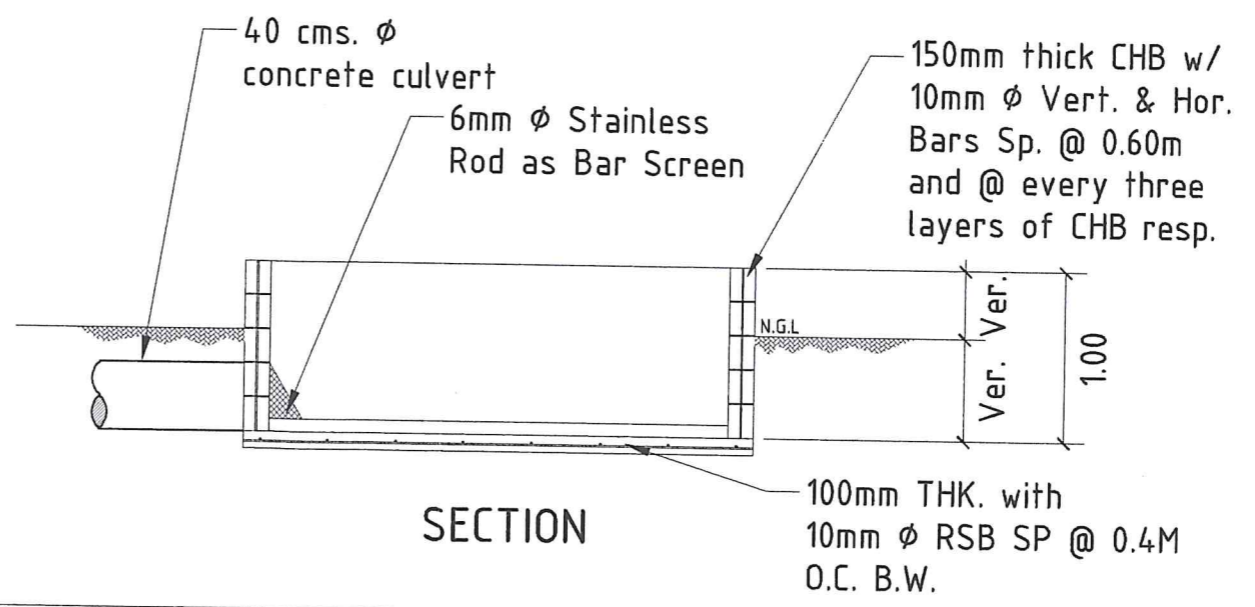
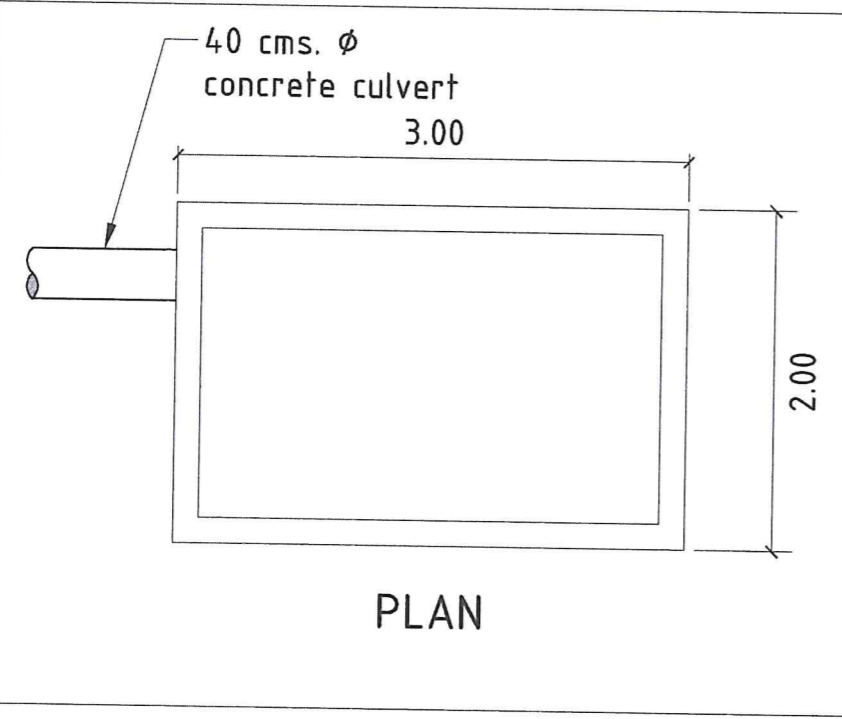
ROOF PLAN

SCALE 1:75mts.



CEILING DETAIL

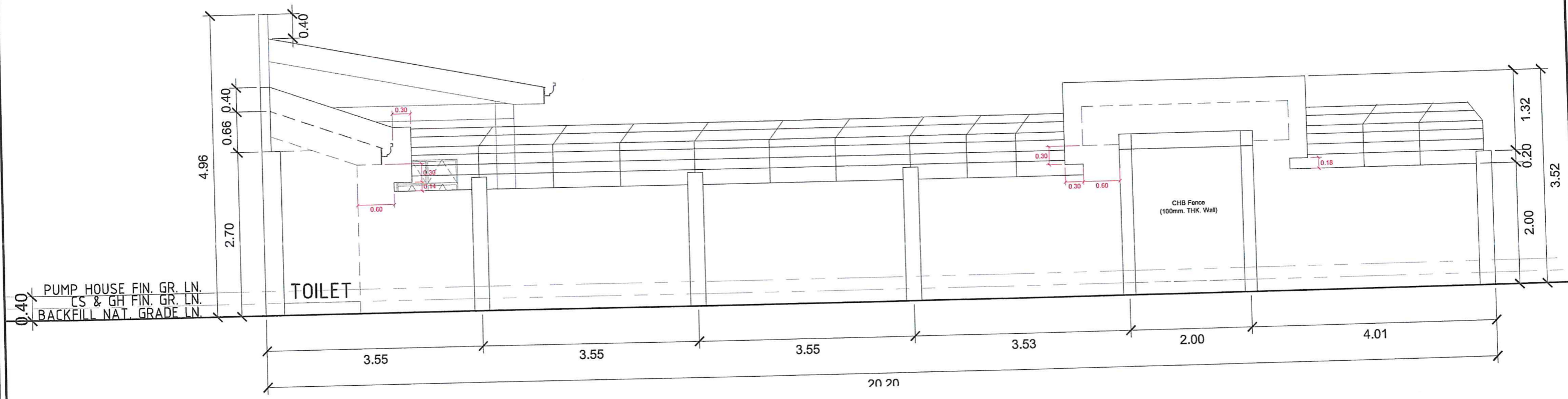
Not To Scale



FLUSHING BOX DETAIL



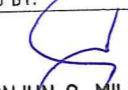
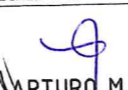


Not To Scale



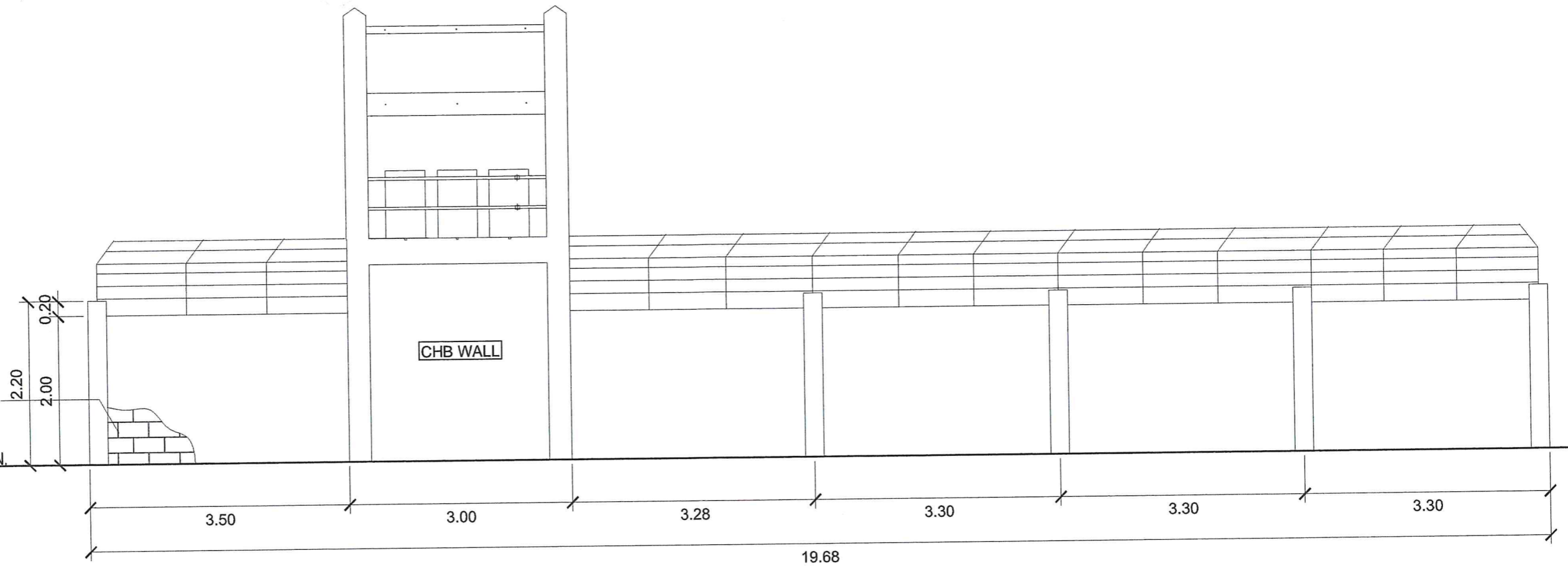


NOT TO SCALE

⊖ LEFTSIDE ELEVATION (PERIMETER FENCE)

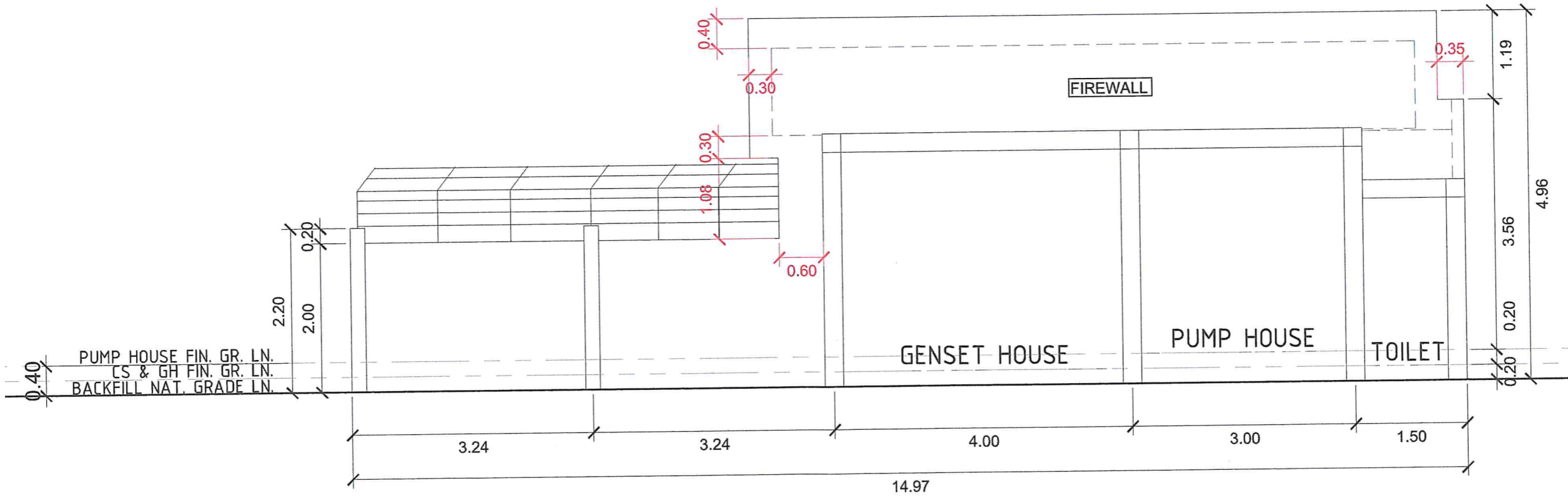
 <p>Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b></p>	PREPARED BY:  <b>SHARMAINE E. BRACIA</b>	CHECKED BY:  <b>SONJUN O. MILLARES</b>	CHECKED BY:  <b>ARTURO M. MARCO</b>	RECOMMENDING APPROVAL:  <b>ROQUE S. FRANCISCO</b> AGM, O&TS	APPROVED:  <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS : Leftside Elevation	SHEET NO.: 12 / 17 Date: 07 - 2024
	CADD by: J.B. Cerillo							

100 MM THICK CHB WALL  
W/ 12 MM  $\phi$  HOR. & VERT.  
BARS SP. AT .60 RESPECTIVELY  
BACKFILL NAT. GRADE LN.



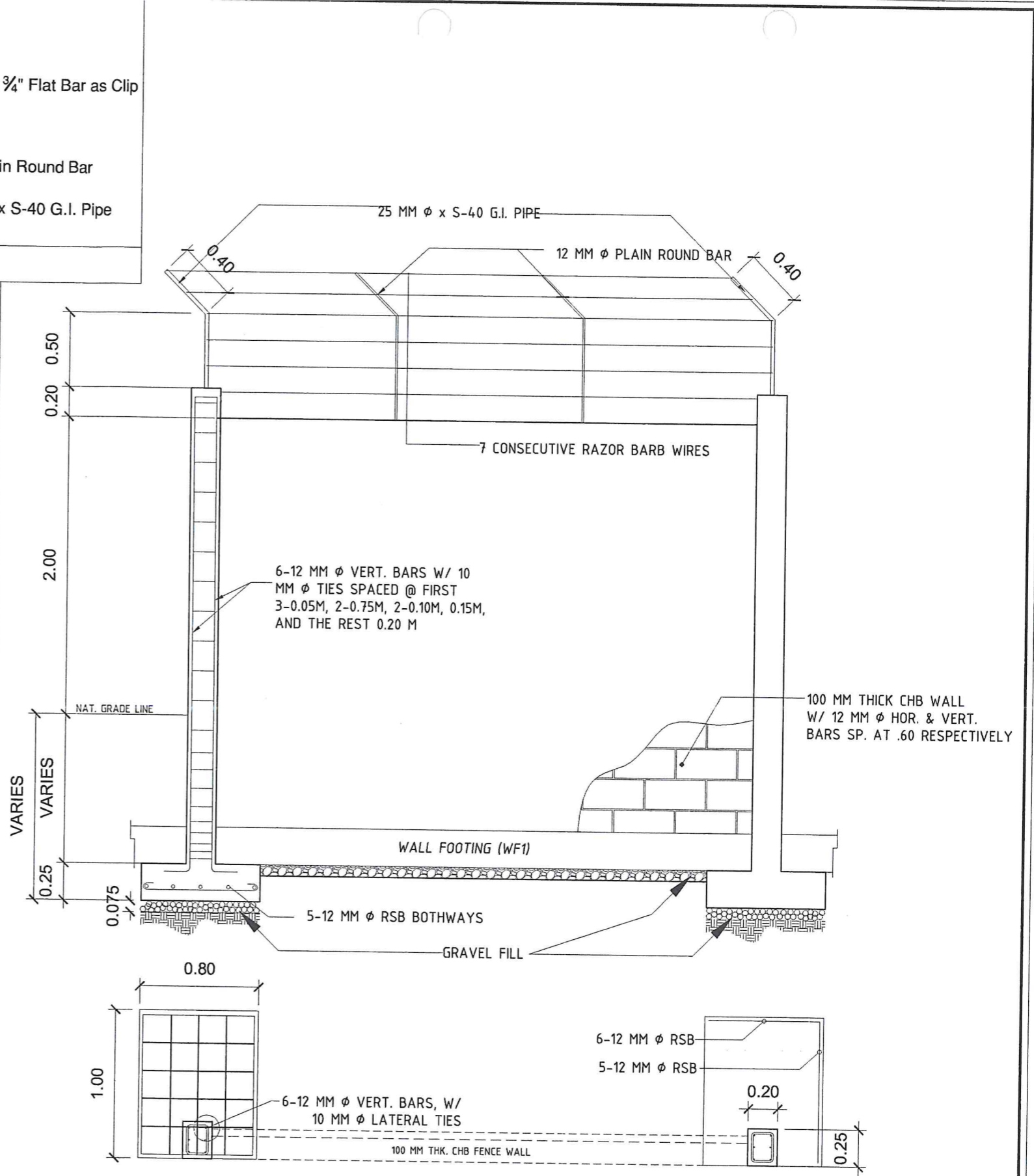
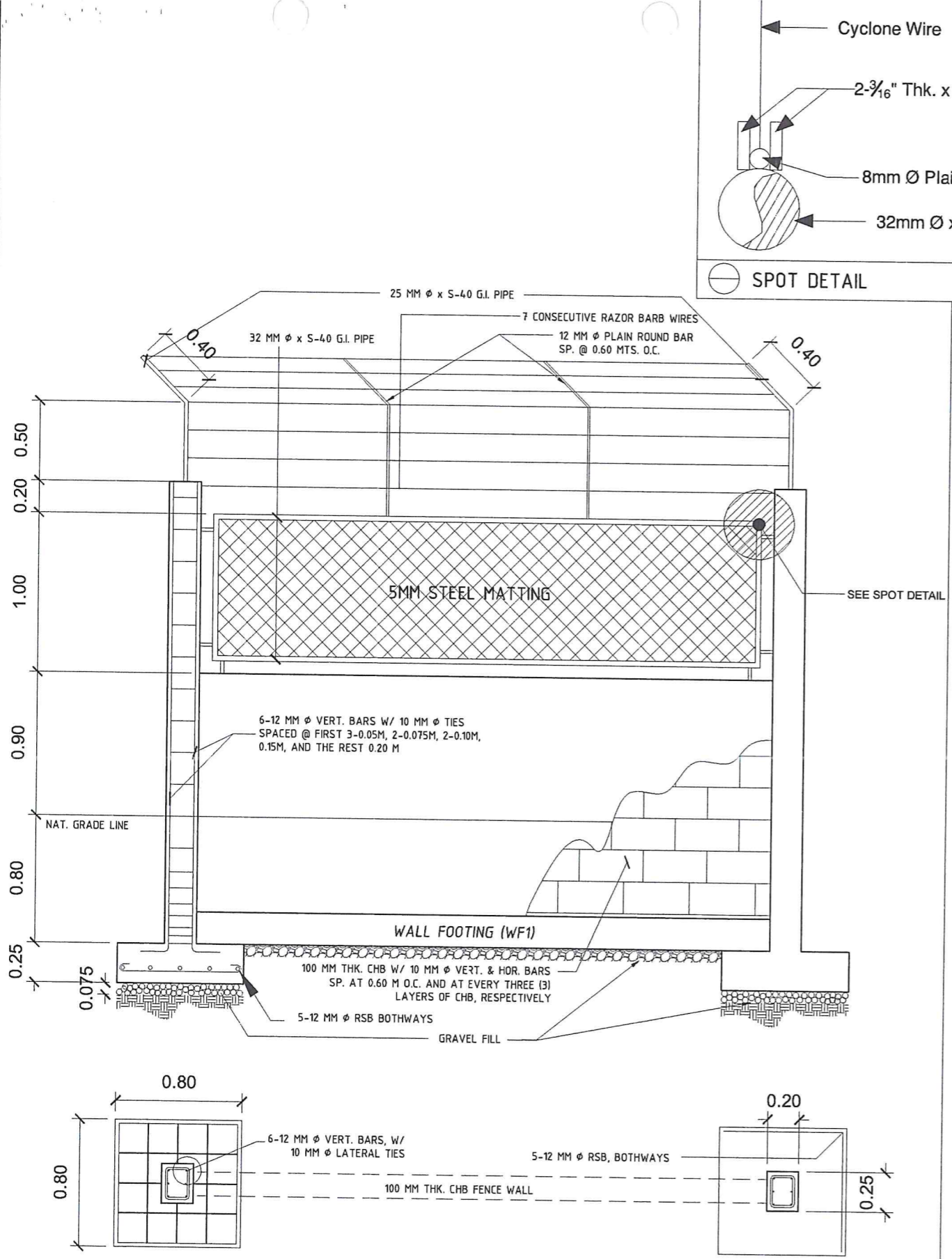
RIGHTSIDE ELEVATION (PERIMETER FENCE)

NOT TO SCALE



REAR ELEVATION (PERIMETER FENCE)

NOT TO SCALE



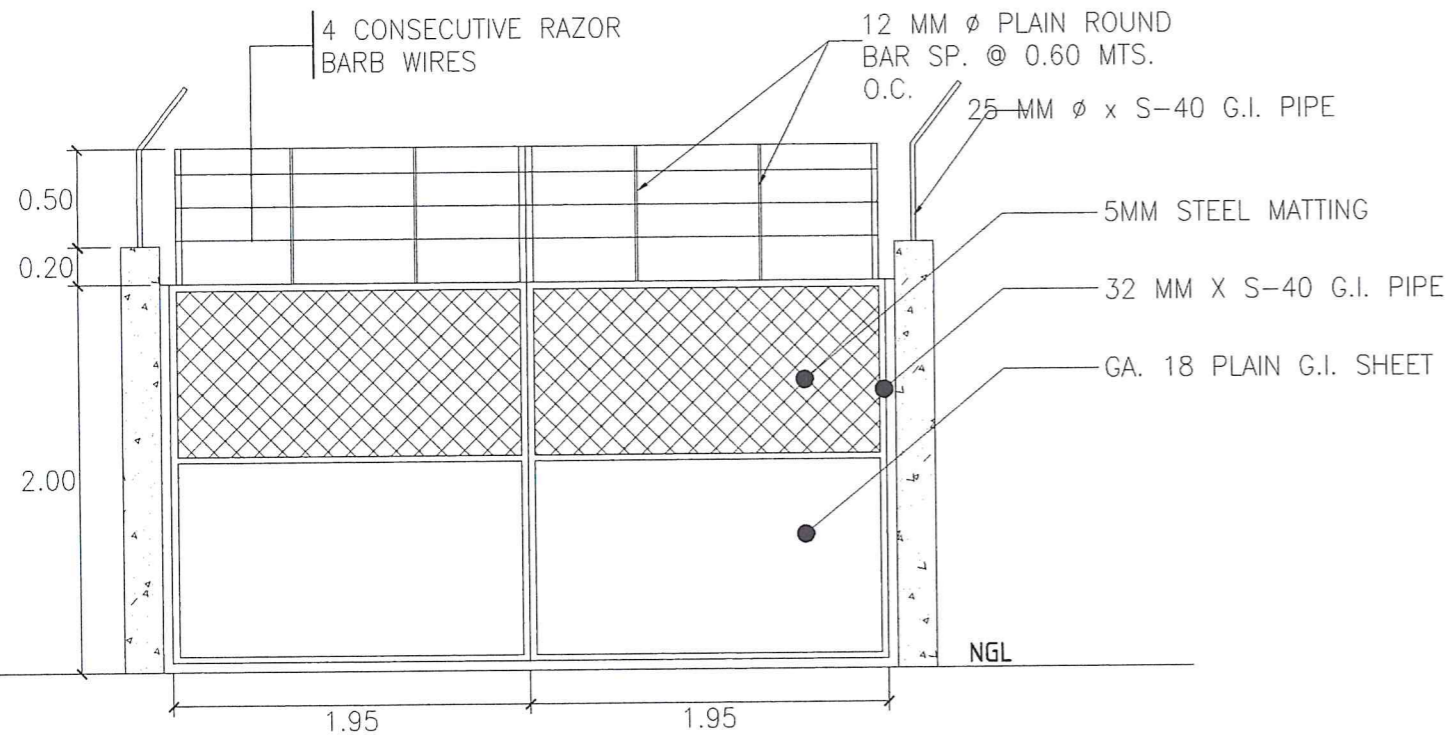
FRONT FENCE DETAILED SECTION

NOT TO SCALE

RIGHTSIDE, LEFTSIDE AND REAR DETAILED SECTION

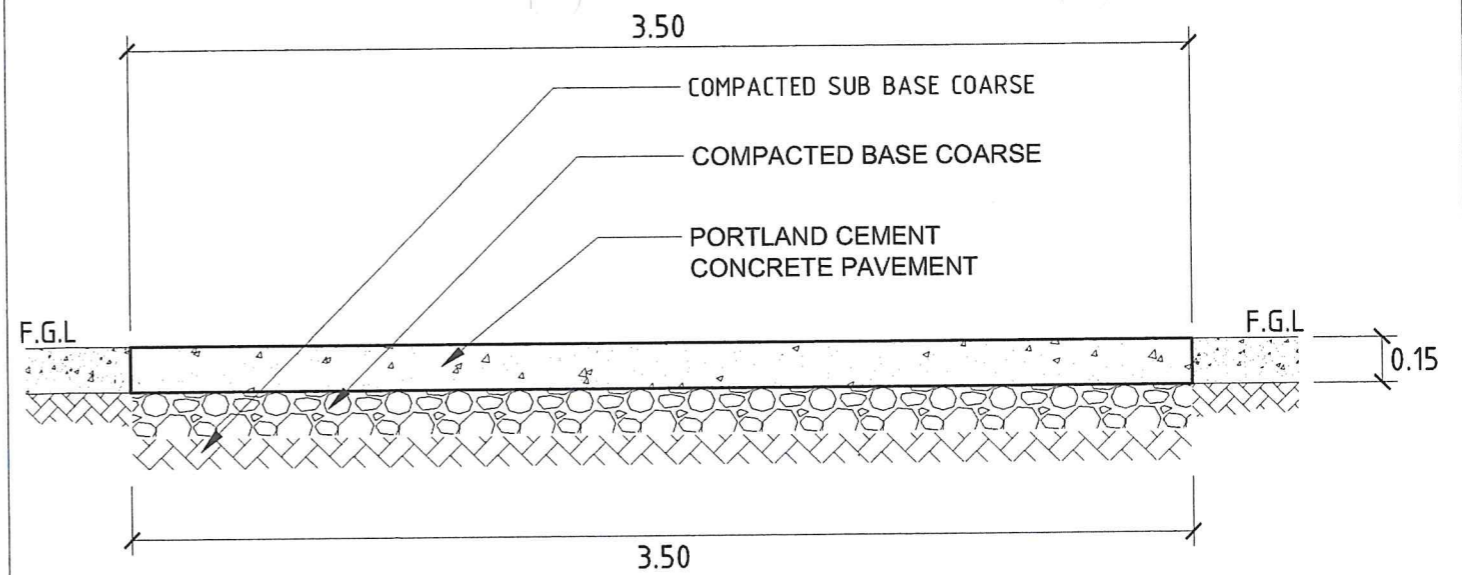
NOT TO SCALE

<p>Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b> 40 J. Miranda Avenue, Naga City</p>	<p>PREPARED BY:</p> <p><i>[Signature]</i> <b>SHARMAINE E. BRACIA</b> ZOIC - Division Manager, PDCD</p>	<p>CHECKED BY:</p> <p><i>[Signature]</i> <b>SONJUN O. MILLARES</b> OIC - Department Manager, EED</p>	<p>CHECKED BY:</p> <p><i>[Signature]</i> <b>ARTURO M. MARCO</b> OIC - Department Manager, PD</p>	<p>RECOMMENDING APPROVAL:</p> <p><i>[Signature]</i> <b>ROQUE S. FRANCISCO</b> AGM, O&amp;TS</p>	<p>APPROVED:</p> <p><i>[Signature]</i> <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A</p>	<p>PROJECT TITLE/LOCATION:</p> <p><b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City</p>	<p>SHEET CONTENTS:</p> <p>Front Fence Detailed Section Rear, Right &amp; Leftside Detailed Section</p>	<p>SHEET NO.:</p> <p>9 / 17</p>
							<p>CADD by: J.B. Cerillo</p>	<p>Date: 07 - 2024</p>



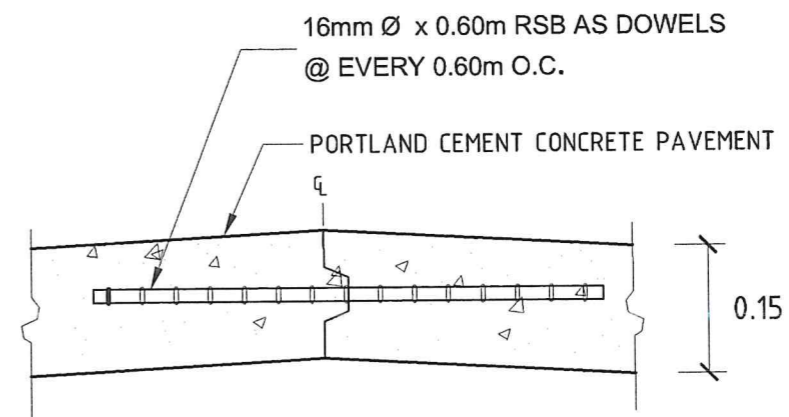
VEHICULAR GATE DETAIL

SCALE 1 : 40 MTS.



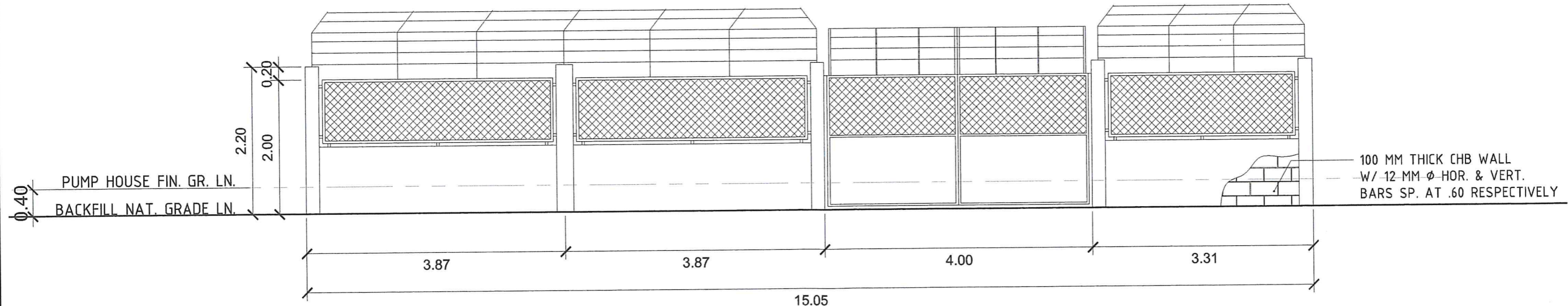
DETAIL OF PCCP

NOT TO SCALE







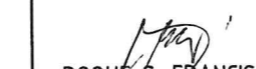

PCCP SPOT DETAIL

NOT TO SCALE



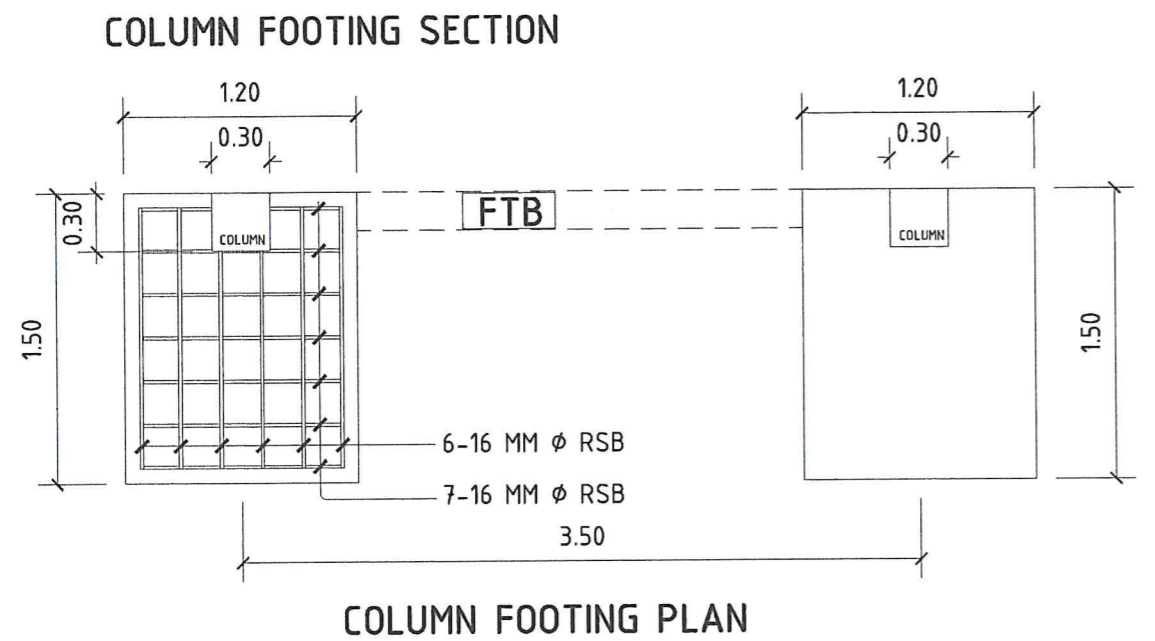
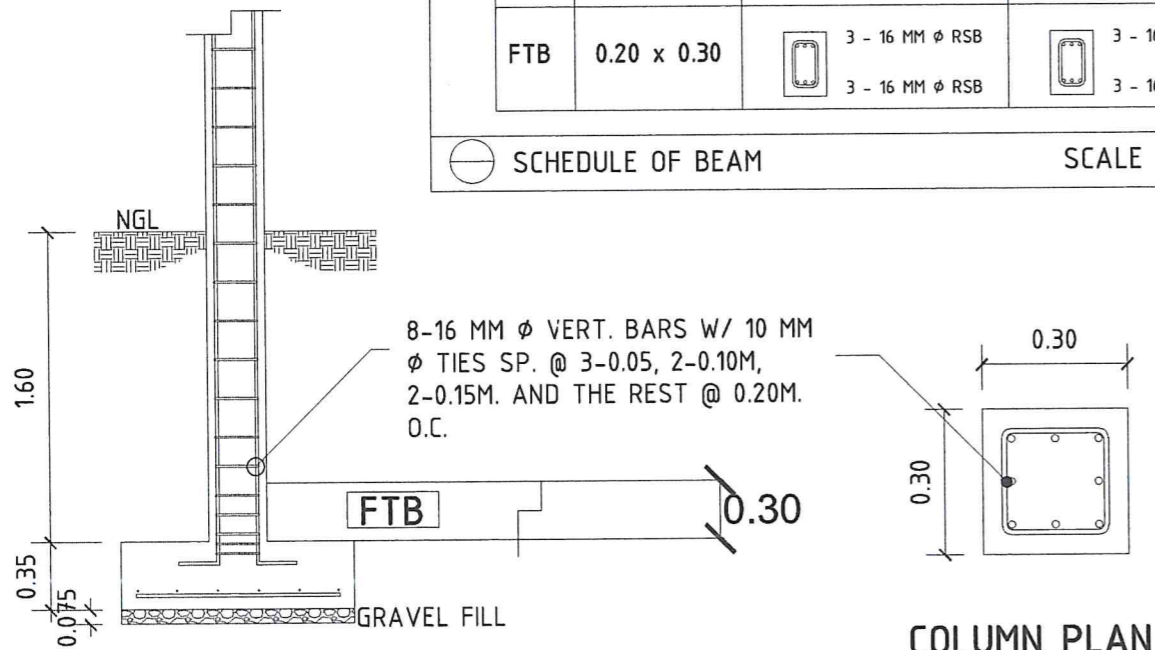
FRONT ELEVATION (PERIMETER FENCE GATE)

NOT TO SCALE

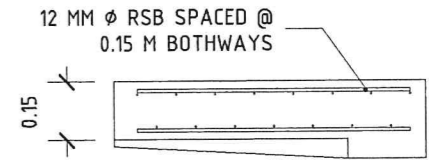
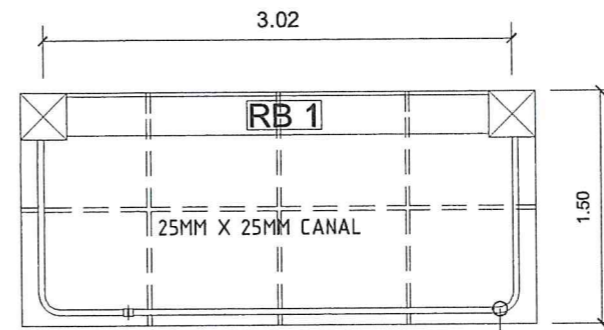
 <p>Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b> 40 J. Miranda Avenue, Naga City</p>	PREPARED BY:  <b>SHARMAINE E. BRACIA</b> OIC / Division Manager, POCB	CHECKED BY:  <b>SONJUN O. MILLARES</b> OIC - Department Manager, EED	CHECKED BY:  <b>ARTURO M. MARCO</b> OIC - Department Manager, PD	RECOMMENDING APPROVAL:  <b>ROQUE S. FRANCISCO</b> AGM, O&TS	APPROVED:  <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS : Vehicular Gate Detail PCCP Detailed Front Elevation (Perimeter Fence Gate) CADD by: J.B. Cerillo	SHEET NO.: 10 / 17 Date: 07 - 2024
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	SIZE	REINFORCEMENTS	
		AT SUPPORT	AT MIDSPAN
CB 1	0.25 x 0.30	6 - 16 MM $\phi$ RSB 2 - 16 MM $\phi$ RSB	6 - 16 MM $\phi$ RSB 2 - 16 MM $\phi$ RSB
RB 1	0.25 x 0.30	4 - 16 MM $\phi$ RSB 2 - 12 MM $\phi$ RSB 2 - 16 MM $\phi$ RSB	2 - 16 MM $\phi$ RSB 2 - 12 MM $\phi$ RSB 5 - 16 MM $\phi$ RSB
RB 2	0.25 x 0.30	4 - 16 MM $\phi$ RSB 2 - 16 MM $\phi$ RSB	2 - 16 MM $\phi$ RSB 6 - 16 MM $\phi$ RSB
FTB	0.20 x 0.30	3 - 16 MM $\phi$ RSB 3 - 16 MM $\phi$ RSB	3 - 16 MM $\phi$ RSB 3 - 16 MM $\phi$ RSB

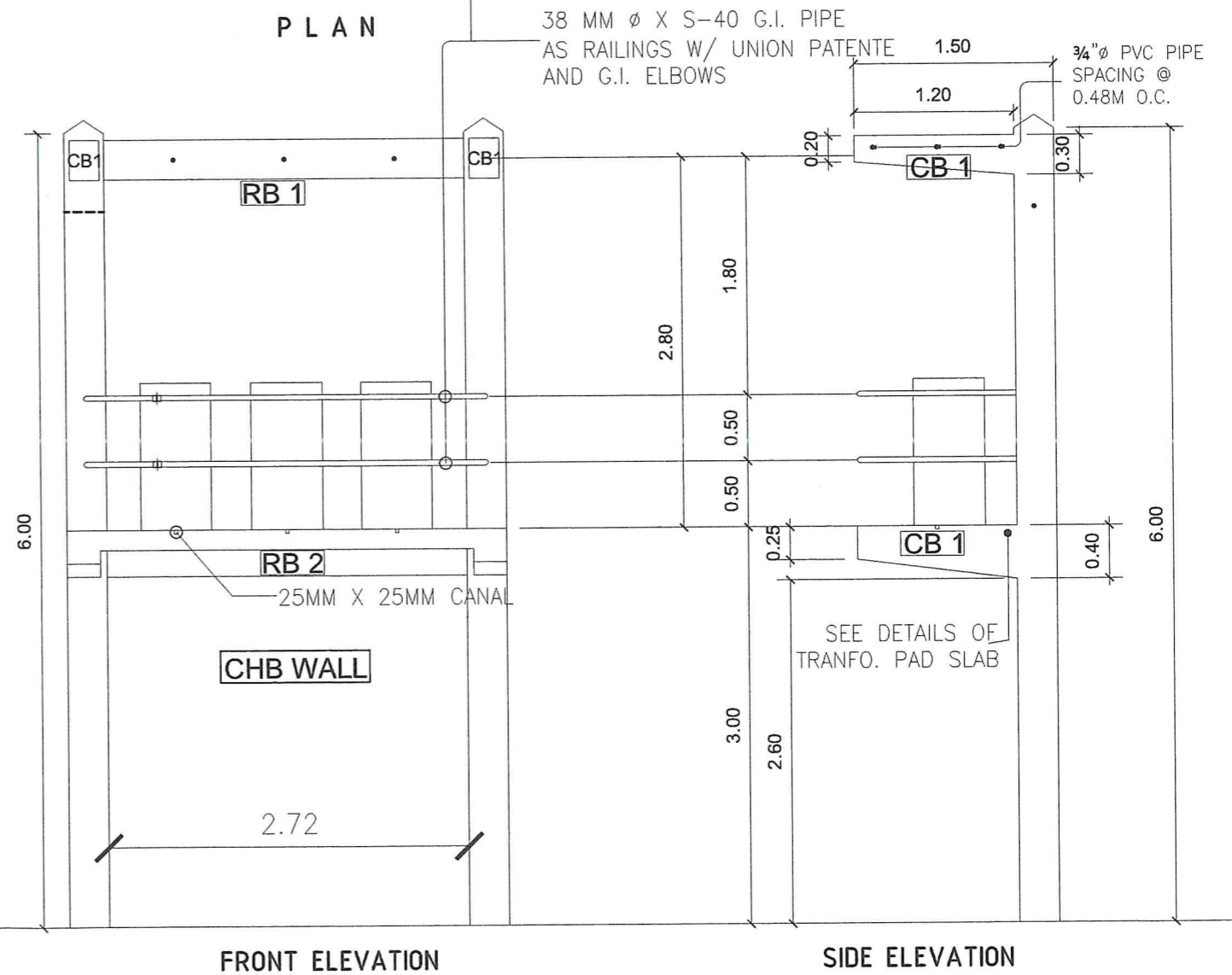
⊖ SCHEDULE OF BEAM SCALE 1 : 20 MTS.



⊖ TRANSFORMER FOUNDATION DETAILS SCALE 1 : 40 MTS.



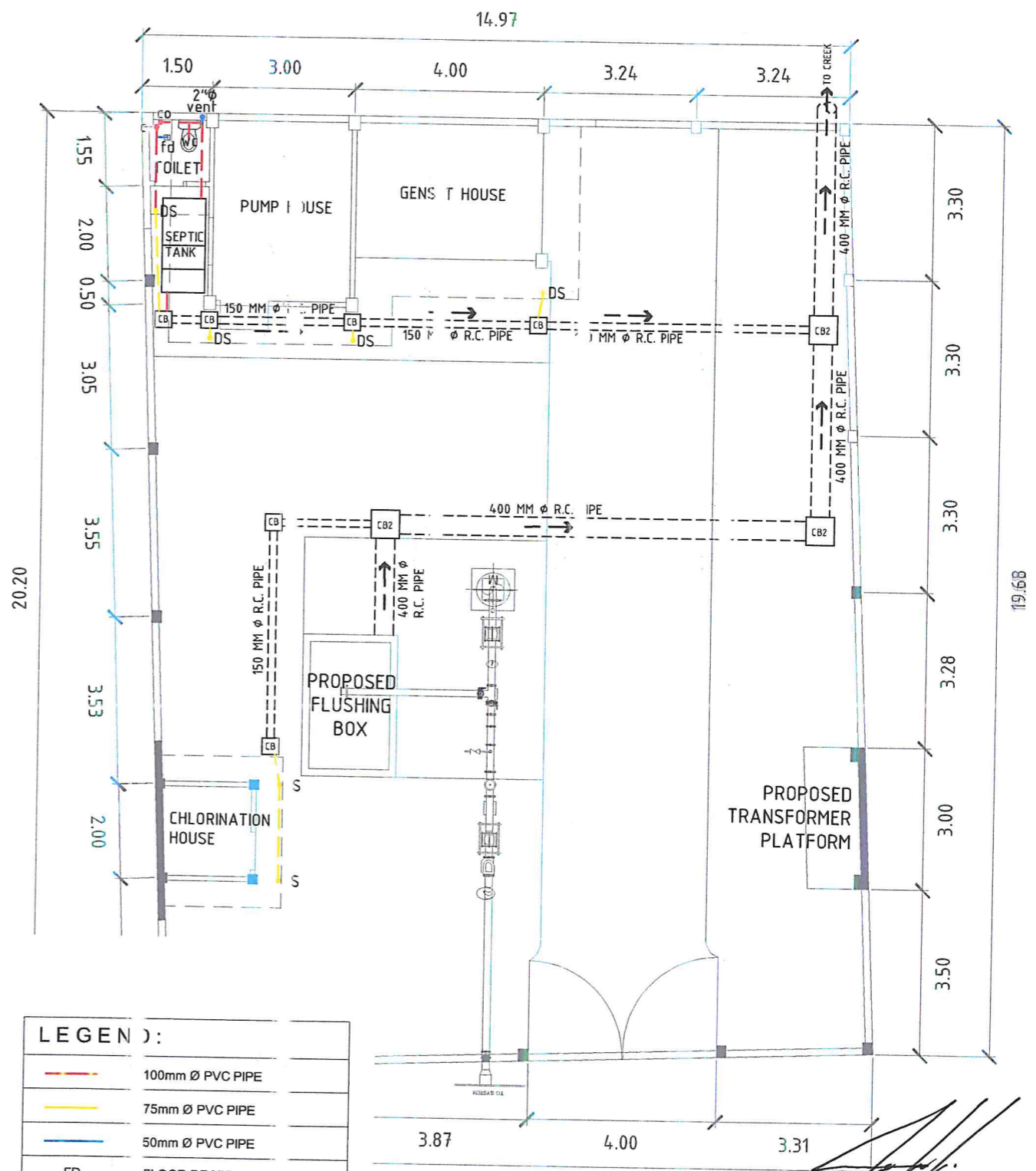
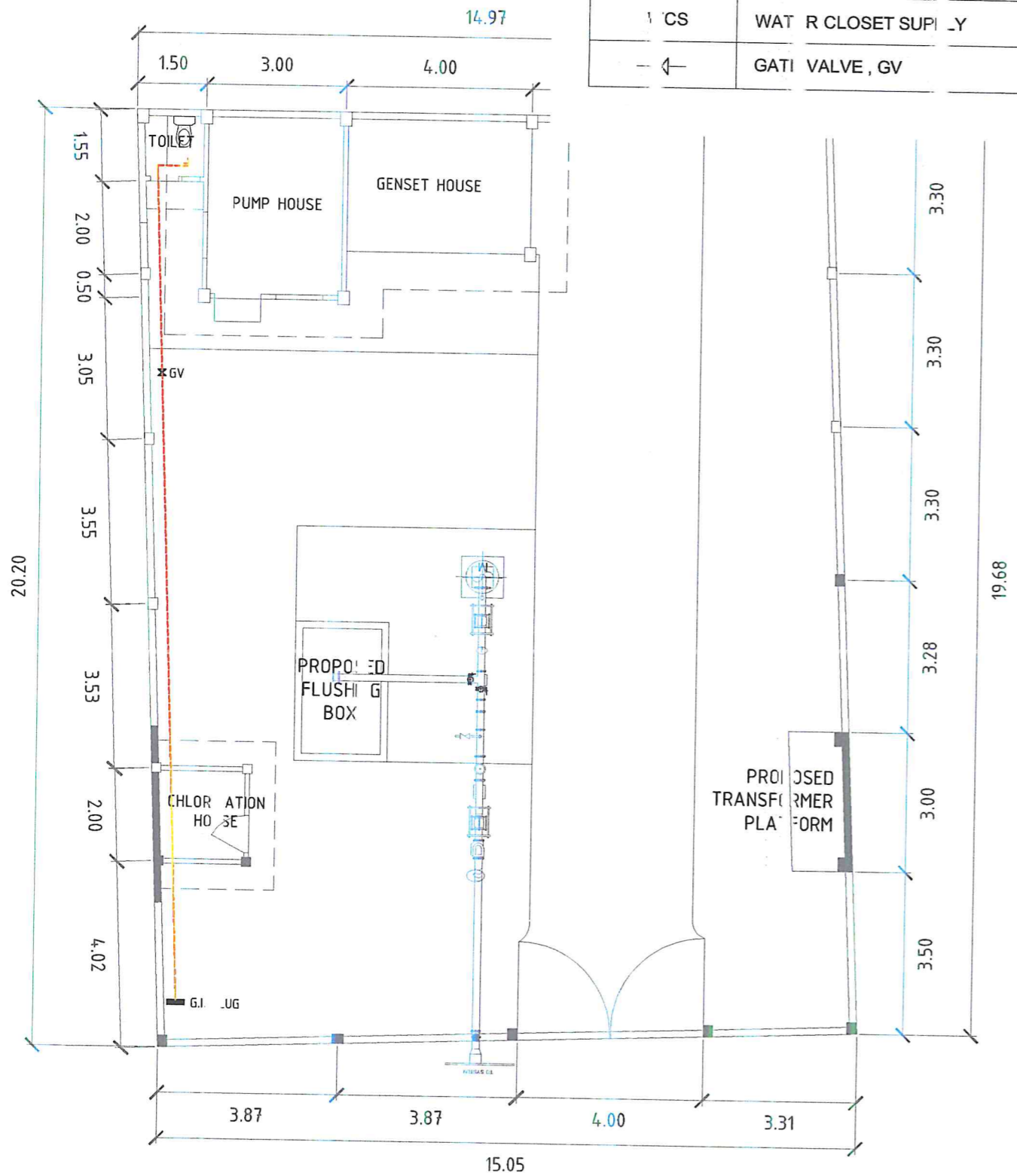
⊖ SLAB DETAILS SCALE 1 : 20 MTS.



⊖ TRANSFORMER PAD ELEVATION SCALE 1 : 40 MTS.

**LEGEND:**

	12mr Ø,S-40 G.I. PIPE
	FAUCET
	WATER CLOSET SUPPLY
	GATE VALVE, GV



**LEGEND:**

	100mm Ø PVC PIPE
	75mm Ø PVC PIPE
	50mm Ø PVC PIPE
	FLOOR DRAIN
	WATER CLOSET
	DOWNSPOUT
	CLEAN OUT

**JOHN LUMENICK A. PEÑAS**  
 REGISTERED MASTER PLUMBER  
 PRC License No. : 008535  
 Validity : 11/14/2024  
 PTR No. : 4922317  
 Date Issued : 03/04/2024  
 Piece Issued : Naga City  
 TIN No. : 800151056-025 M<sup>3</sup>

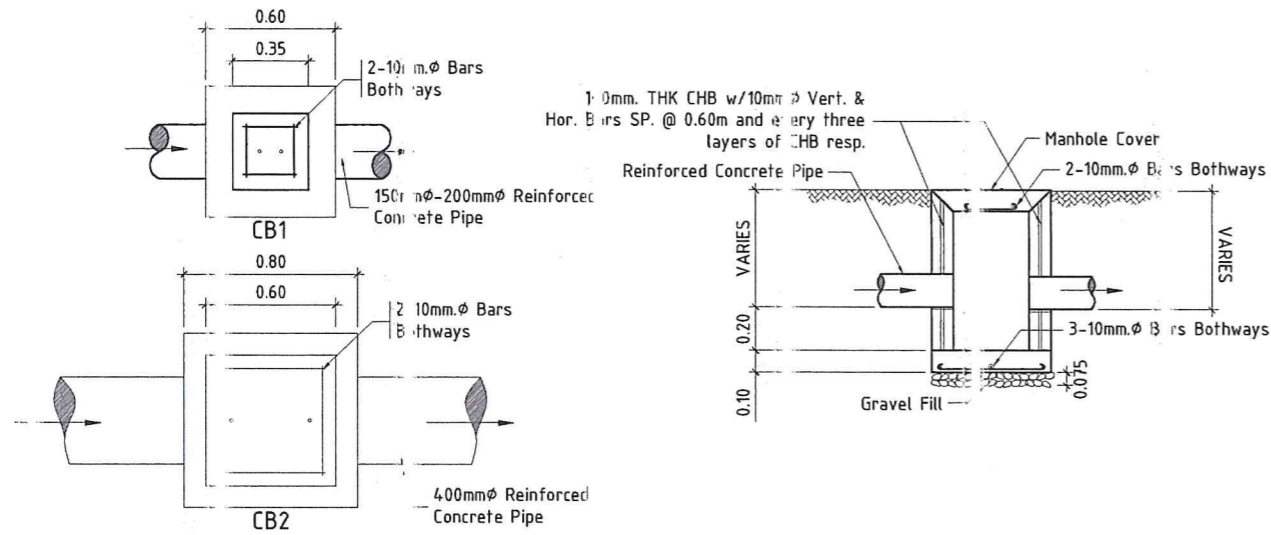
CLEAN WATER LAYOUT

SCALE 1 : 125 MTS.

SANITARY LAYOUT

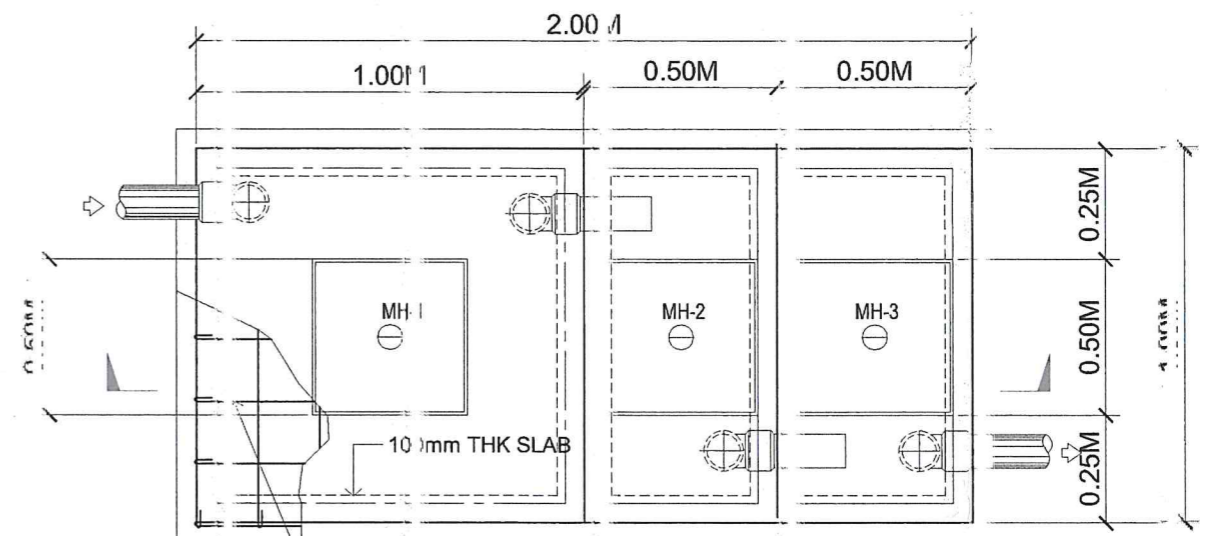
<p>Republic of the Philippines  <b>METROPOLITAN WATER DISTRICT OF NAGA CITY</b>        40 J. Miranda Avenue, Naga City</p>	PREPARED BY:  <b>SHARLENE E. BRACIA</b> OIC - Division Manager, PDCO	CHECKED BY:  <b>SONJUN O. MILARES</b> OIC - Department Manager, EED	CHECKED BY:  <b>ARTURO M. MARCO</b> OIC - Department Manager, PDCO	RECOMMENDING APPROVAL:  <b>ROQUE S. FRAJISCO</b> AGM, O&S	APPROVED BY:  <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS: San Water & Sanitary layout	SHEET NO.: <b>17</b>
	DD by: J.B. Cerillo						DATE: 07 - 2024	

1717, REV.00, AUG. 5, 2019



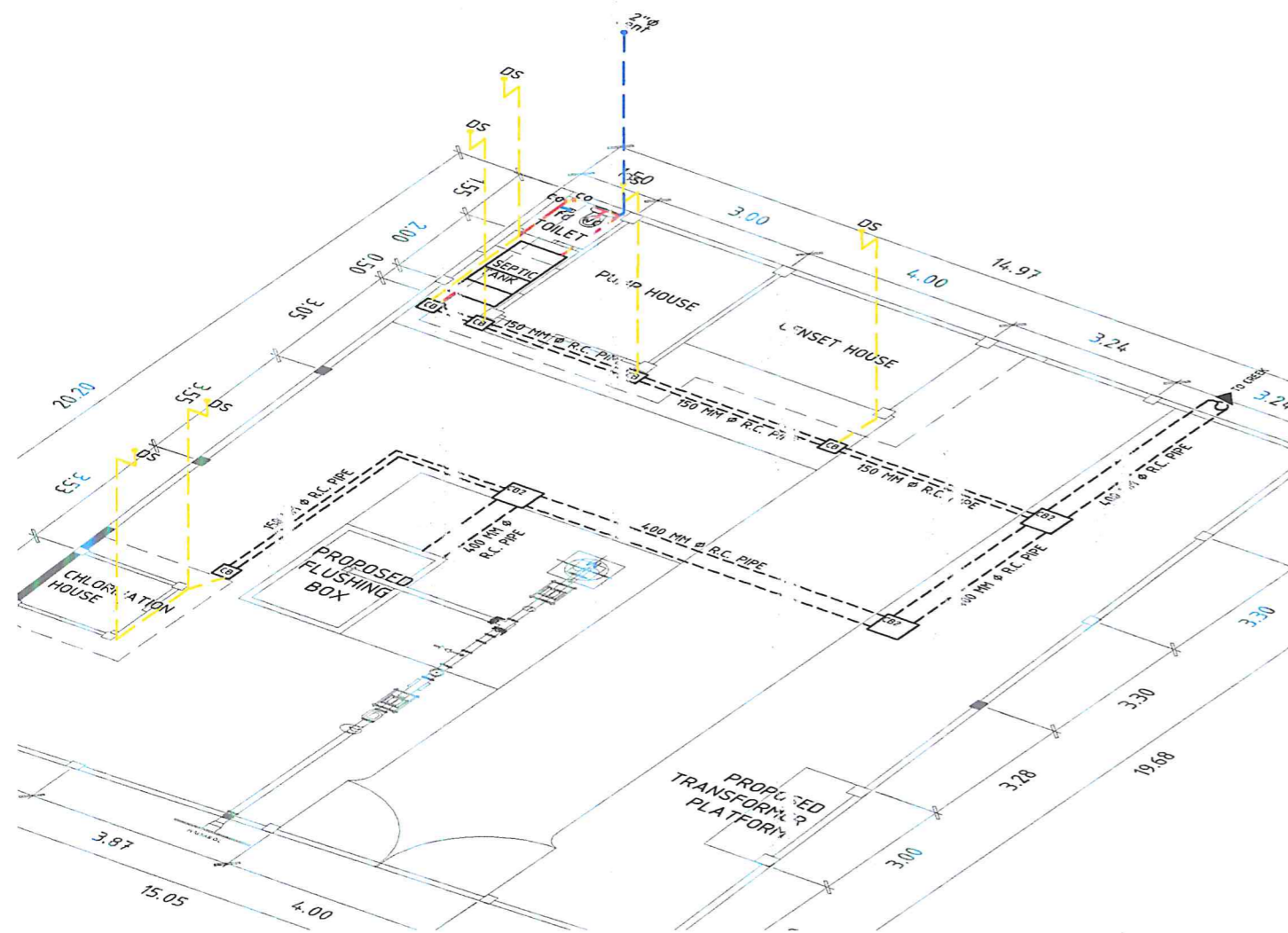
⊖ CATCH BASIN DETAIL

NOT TO SCALE



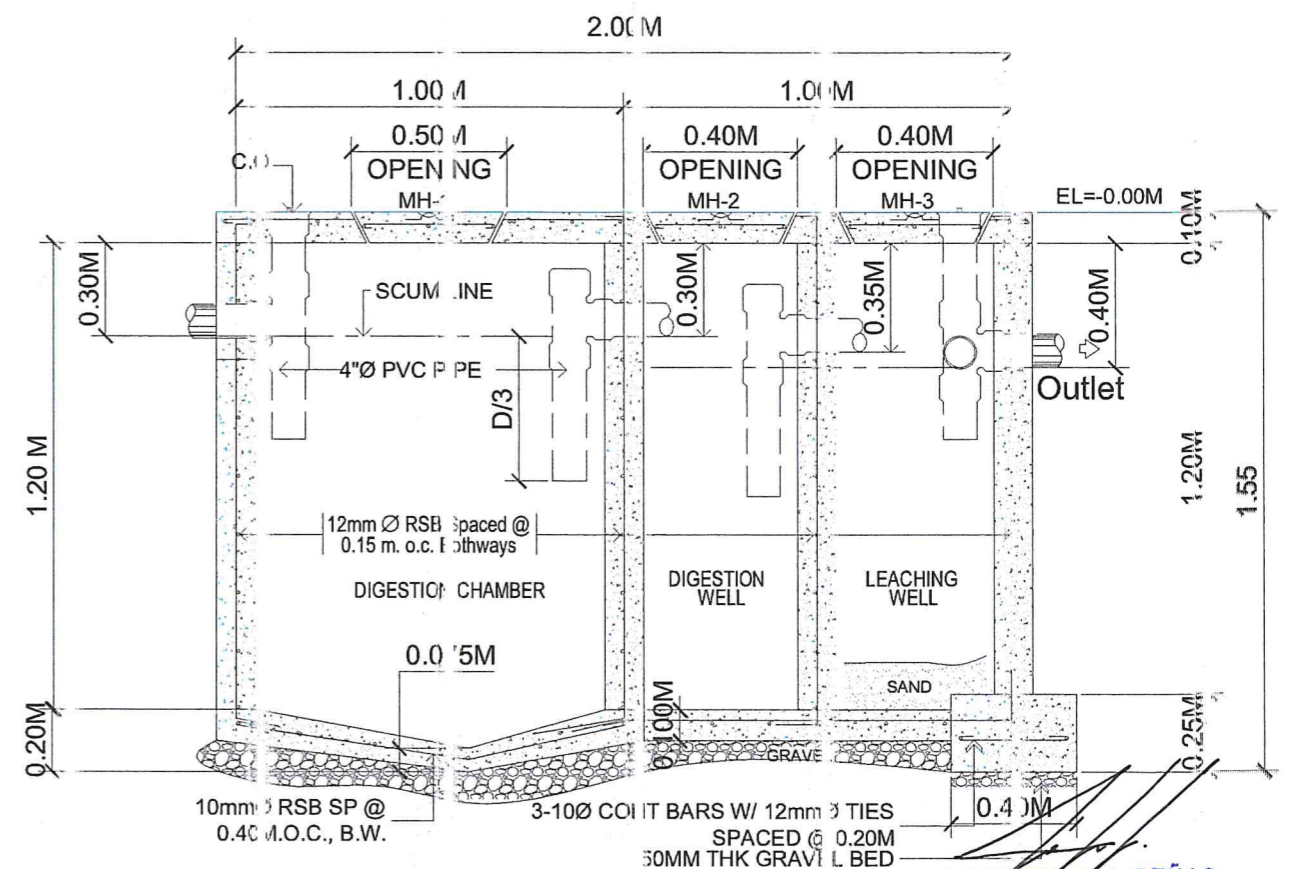
10mm THK TOP & BOTTOM BARS  
SP. @ 0.20M.O.C. BOTHWAYS (ALTERNATE)

PLAN



⊖ ISOMETRIC VIEW

NOT TO SCALE



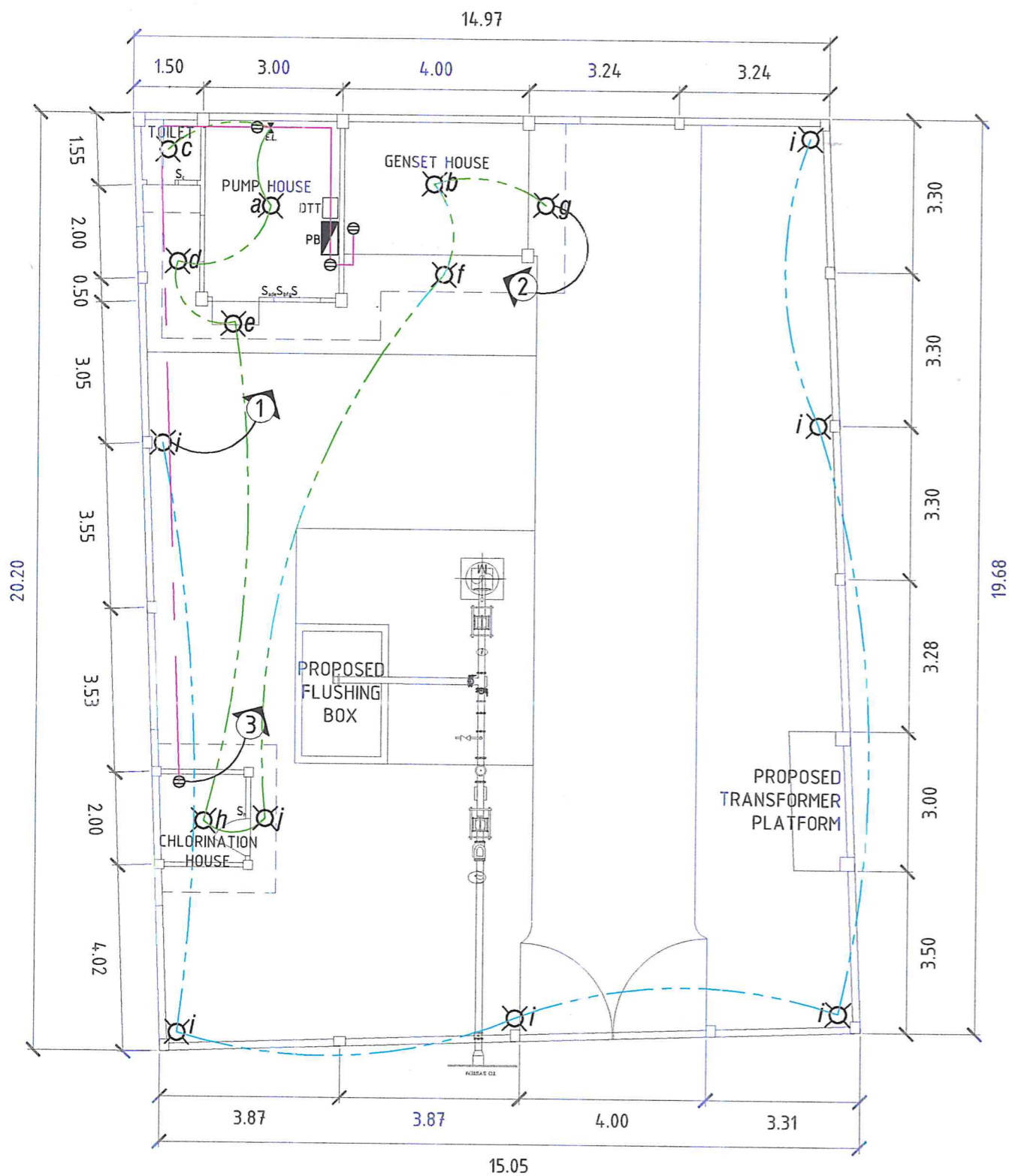
SECTION

**JOHN LUMENICK A. PEÑAS**  
REGISTERED MASTER PLUMBER

PRC License No.: 008535  
Validity: 11/19/2024  
PTR No.: 4922577  
Date Issued: 03/09/2024  
Place Issued: Naga City  
TIN No.: 480-663-956-100

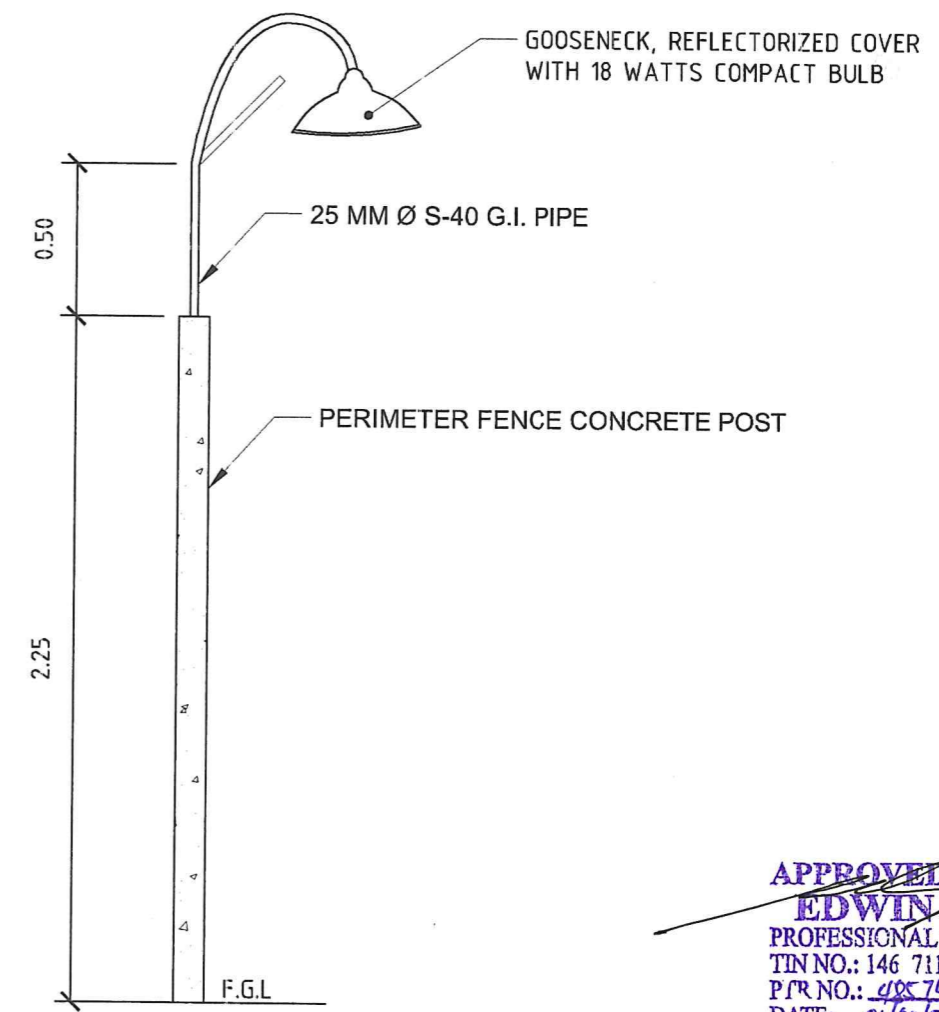
⊖ SEPTIC TANK DETAIL

<p>Republic of the Philippines <b>METROPOLITAN NAGA WATER DISTRICT</b> 40 J. Miranda Avenue, Naga City</p>	PREPARED BY:  <b>SHARAINA B. BRACIA</b> OIC - Division Manager, PDCO	CHECKED BY:  <b>SONJUN O. M. LARES</b> OIC - Department Manager, EED	CHECKED BY:  <b>ARTURO M. MARCO</b> OIC - Department Manager, P	RECOMMENDING APPROVAL:  <b>ROQUE S. FRANCISCO</b> AGM, O&T	APPROVED:  <b>FLORENCIO T. MONGOSO, JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS: Isometric View Septic Tank & Catch Basin Detail CADD by: J.B. Cerillo	SHEET NO.: <b>15</b> <b>17</b> Date: 07 - 2024
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LEGEND

- LIGHTING OUTLET
- CONVENIENCE OUTLET
- CIRCUIT HOMERUN
- PANEL BOARD
- SERVICE ENTRANCE
- ONE GANG SWITCH
- TWO GANG SWITCH
- THREE GANG SWITCH
- DRY TYPE TRANSFORMER
- EMERGENCY LIGHT
- KILOWATTHOUR METER
- CIRCUIT BREAKER
- GROUND



APPROVED BY:  
**EDWIN G. PARANAL**  
 PROFESSIONAL ELECTRICAL ENGINEER  
 TIN NO.: 146 711116  
 P/R NO.: 485 7481 PRC NO.: 1809  
 DATE: 01/02/24 PLACE: NAGA CITY

⊖ ELECTRICAL LIGHTING AND POWER LAYOUT

SCALE 1 : 100 MTS.

⊖ DETAIL OF PERIMETER LIGHT

NOT TO SCALE

<p>Republic of the Philippines  <b>METROPOLITAN NAGA WATER DISTRICT</b>          40 J. Miranda Avenue, Naga City</p>	PREPARED BY:  <b>SHARMAINE E. BRACIA</b> Division Manager, PDCD	CHECKED BY:  <b>SONJUN O. MILLARES</b> OIC - Department Manager, EED	CHECKED BY:  <b>ARTURO M. MARCO</b> OIC - Department Manager, PJC	RECOMMENDING APPROVAL:  <b>ROQUE S. FRANCISCO</b> BGM, O&TS	APPROVED:  <b>FLORENCIO T. MONGOSO JR.</b> General Manager A	PROJECT TITLE/LOCATION: <b>PROPOSED CAROLINA V PUMPING STATION</b> Zone 5, Barangay Carolina, Naga City	SHEET CONTENTS: Electrical Lighting & Power Layout Detail of Perimeter Light Legend	SHEET NO.: 16 / 17 Date: 06 - 2024
	METROPOLITAN NAGA WATER DISTRICT							



# SCHEDULE OF LOADS

CIRCUIT NO.	LOAD DESCRIPTION	NO. OF			SWITCHES			VOLT	VA	AMP	CIRCUIT BREAKER RATINGS	SIZE OF WIRE	SIZE OF CONDUIT
		L.O.	C.O.	SPO	S1	S2	S3						
1	LIGHTING LOADS (PERIMETER LIGHTS)	6						230	600	2.61	15AT, 2P, 50AF (AFCI)	2C - 2.0 mm <sup>2</sup> THHN COPPER WIRE 1C - 2.0 mm <sup>2</sup> THHN COPPER WIRE	20 mm Ø uPVC PIPE
2	LIGHTING LOADS + E. LIGHT	10			2	1	2	230	1000	4.35	15AT, 2P, 50AF (AFCI)	2C - 2.0 mm <sup>2</sup> THHN COPPER WIRE 1C - 2.0 mm <sup>2</sup> THHN COPPER WIRE	20 mm Ø uPVC PIPE
3	CONVENIENCE OUTLET		4					230	720	3.13	20AT, 2P, 50AF (GFCI)	2C - 2.0 mm <sup>2</sup> THHN COPPER WIRE 1C - 2.0 mm <sup>2</sup> THHN COPPER WIRE	20 mm Ø uPVC PIPE
4	SPARE			1				230	1,000	4.35	20AT, 2P, 50AF (GFCI)	2C - 3.5 mm <sup>2</sup> THHN COPPER WIRE 1C - 3.5 mm <sup>2</sup> THHN COPPER WIRE	20 mm Ø uPVC PIPE
TOTAL		16	4	1	2	1	2	230	3,320	14.44	50AT, 2P, 50AF	2C - 8.0 mm <sup>2</sup> THHN COPPER WIRE 1C - 5.5 mm <sup>2</sup> THHN COPPER WIRE	25 mm Ø uPVC PIPE

## COMPUTATIONS:

$$I_T = \frac{3,320 \text{ V.A.} \times 100\% \text{ D.F.}}{230 \text{ V}}$$

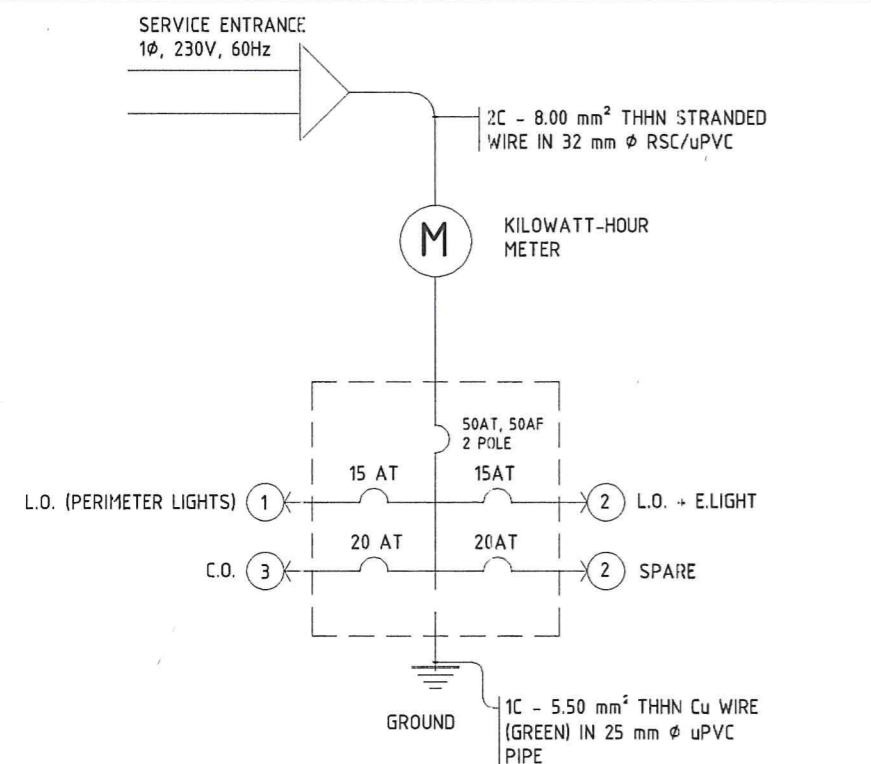
$$I_T = 14.44 \text{ AMPS.}$$

## RECOMMENDATIONS:

USE 50AT/50AF, 2P, 230V, 60Hz CIRCUIT BREAKER FOR MAIN PROTECTION AND 2C - 8.00mm<sup>2</sup> THHN Cu WIRE + 1C - 5.50mm<sup>2</sup> THHN Cu WIRE IN 25mm Ø uPVC PIPE.

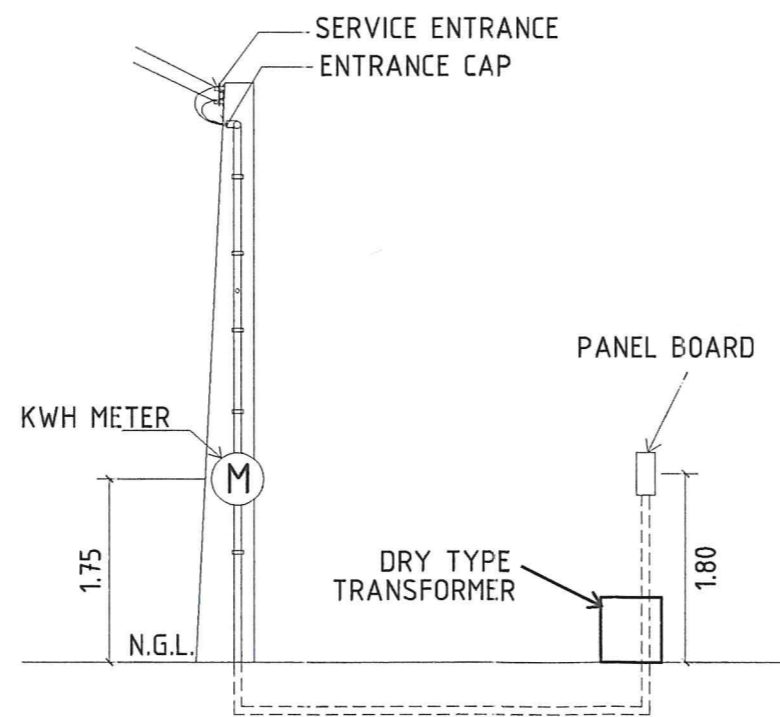
⊖ SCHEDULE OF LOADS

NOT TO SCALE



⊖ RISER DIAGRAM

NOT TO SCALE



⊖ SERVICE ENTRANCE DETAIL

NOT TO SCALE

## GENERAL NOTES AND SPECIFICATIONS:

- ALL WORKS HEREIN SHALL CONFORM WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LABOR AND SAFETY CODE AND ALL THE REQUIREMENTS OF LOCAL UTILITY COMPANY.
- POWER SUPPLY TO BE INSTALLED SHALL BE SINGLE PHASE, TWO-WIRES, 230 VOLTS, 60 Hz.
- MINIMUM SIZE OF WIRE TO BE USED WHEN NOT INDICATED SHALL BE 2.0 MM THHN FOR SWITCH LEGS AND 3.5 MM THHN FOR ALL CIRCUIT RUNS.
- ALL SWITCHES SHALL BE INSTALLED 1.50M AND ALL OUTLETS AT 0.30M FROM FINISHED FLOOR LEVEL AND POWER PANEL SAFETY SWITCH SHALL BE 1.80M, KILOWATT HOUR METER SHALL BE 1.75 FROM FLOOR LEVEL.
- ALL ELECTRICAL WORKS HEREIN SHALL BE SUPERVISED BY LICENSED ELECTRICAL ENGINEER AND MASTER ELECTRICIAN.

APPROVED BY:  
**EDWIN G. PARANAL**  
 PROFESSIONAL ELECTRICAL ENGINEER  
 TIN NO.: 146 711116  
 P/R NO.: 487481 PRC NO.: 2809  
 DATE: 06/07/24 PLACE: NAGACITY