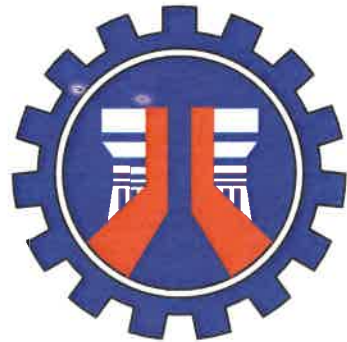




REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
CABUNGAN ELEMENTARY SCHOOL
CABUNGAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3546, E 123.2756

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE

TOTAL AREA = 37.5253 SQ.M

THE SITE



SITE DEVELOPMENT PLAN
SCALE: 1:1000m

INDEX OF DRAWING

SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAI OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMART OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
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**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
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CABUNGAN ELEMENTARY SCHOOL
CABUNGAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3546, E 123.2756

SHEET CONTENT:

PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

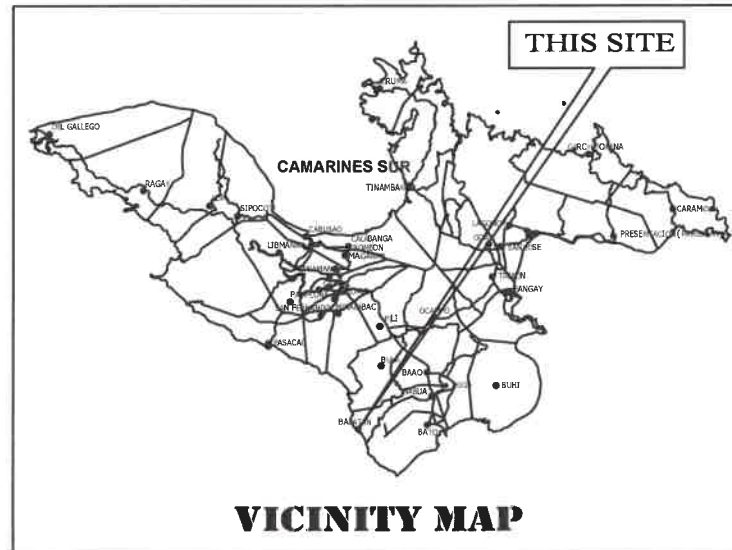
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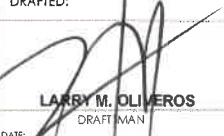
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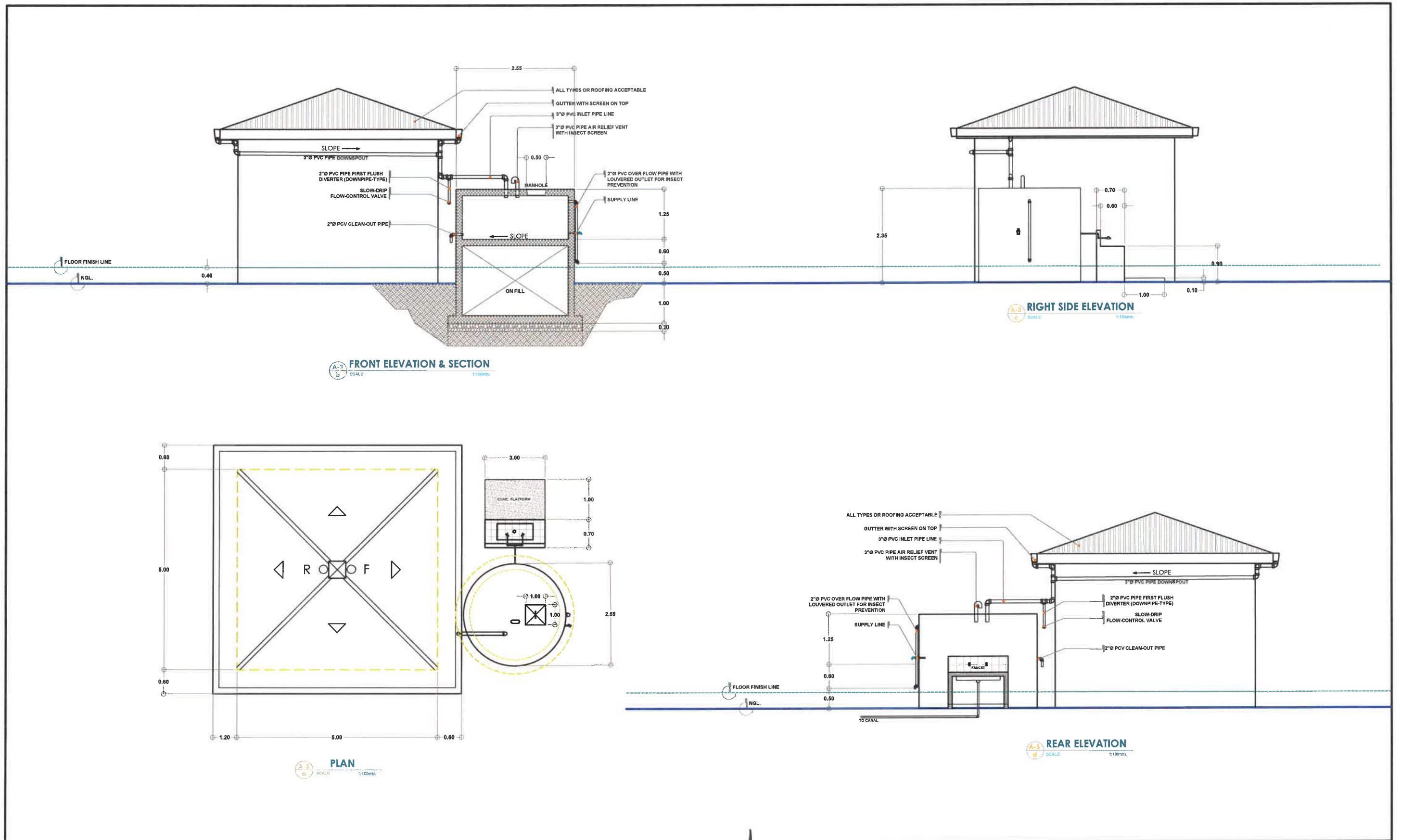
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SUMMARY OF QUANTITIES

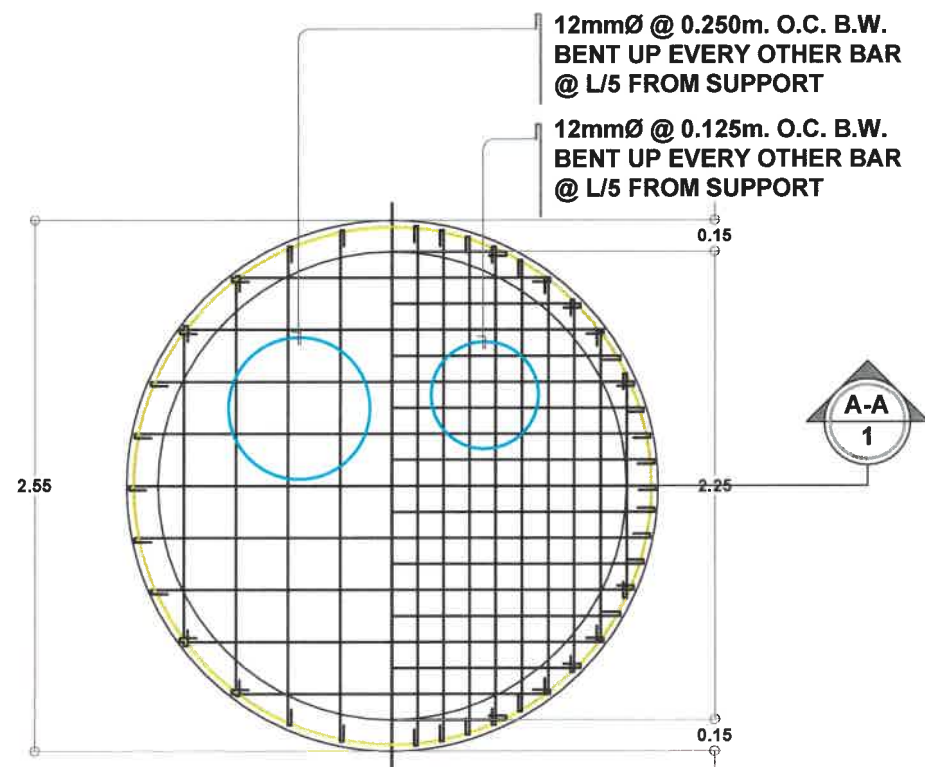
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A FACILITIES FOR THE ENGINEER			
1.1.1 Offices and Laboratory for the Engineer			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B OTHER GENERAL REQUIREMENTS			
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	I.s.
B.9 (1)	Mobilization / Demobilization	1.00	I.s.
PART III CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS			
DIVISION I GENERAL			
PART C EARTHWORKS			
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
804(7)	Gravel Fill	4.60	cu.m.
PART D REINFORCED CONCRETE			
900(1)d	Structural Concrete, 4000psi, Class A, 28 days	7.00	cu.m.
902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
DIVISION II BUILDINGS			
PART E FINISHING AND OTHER CIVIL WORKS			
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
1013(2)c	Fabricated Metal Roofing Accessory, Gauge 24(0.701mm), Gutters	40.00	I.m.
1001(9)	Storm Drainage and Downspout	1.00	I.s.
1002(24)	Cold Water Line	1.00	I.s.



 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5 th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS CABUNGAN ELEMENTARY SCHOOL CABUNGAN, BALATAN, CAMARINES SUR COORDINATES: N 13.3546, E 123.2766	SHEET CONTENT: SUMMARY OF QUANTITY VICINITY MAP KEY MAP	DRAFTED:  LARRY M. OLIVEROS DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. A-2 3	SHEET NO. 2 5
			DATE:	DATE:	DATE:	DATE:	DATE:		

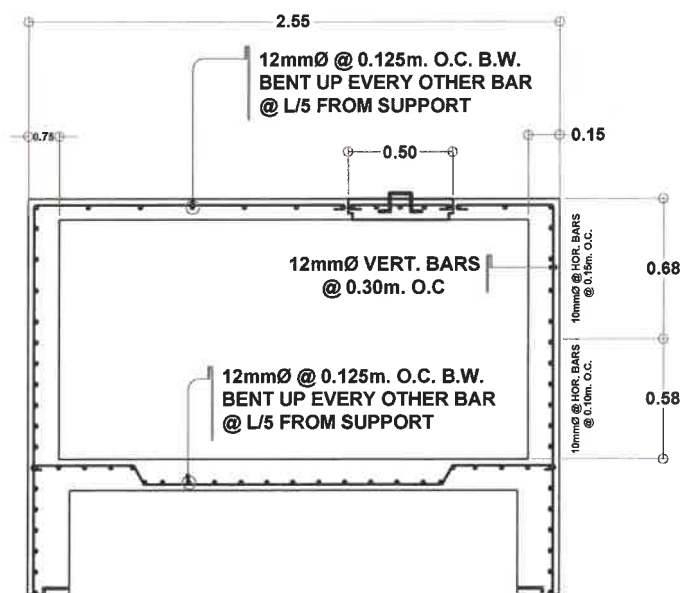


REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS CABUNGAN ELEMENTARY SCHOOL CABUNGAN, BALATAN, CAMARINES SUR COORDINATES: N 13.3546, E 123.2766	SHEET CONTENT: PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	DRAFTED: LARRY M. OLIVEROS DATE: _____ DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO DATE: _____ ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA DATE: _____ OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS DATE: _____ ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DATE: _____ DISTRICT ENGINEER	SET NO. A-3 3	SHEET NO. 3 5
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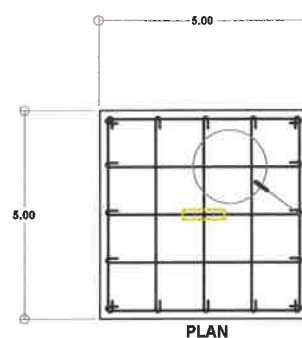
DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB

S-1
a SCALE 1:200



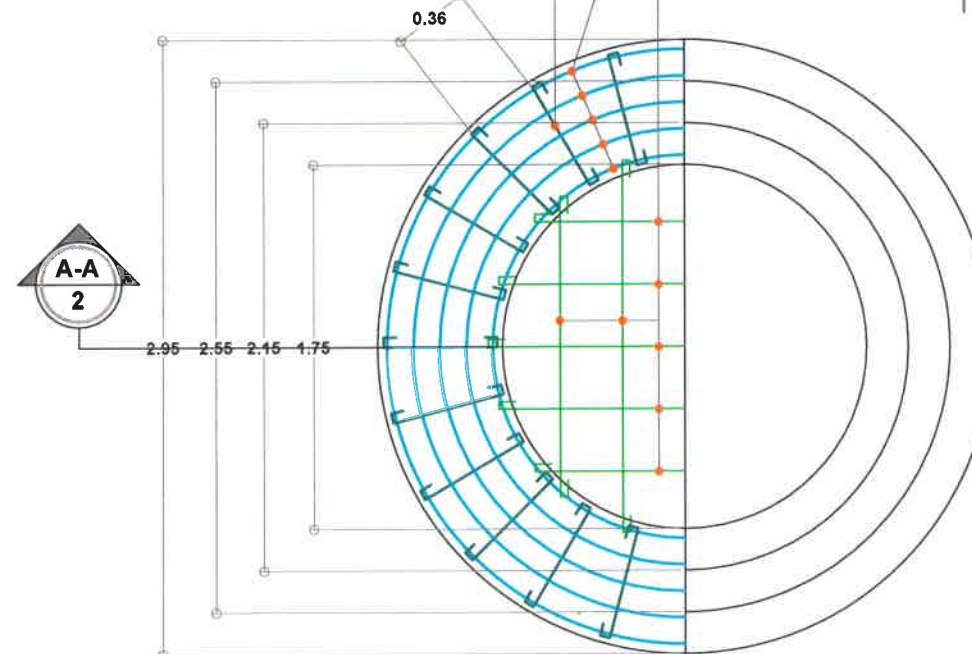
SECTION A-A 1

S-1
c SCALE 1:200



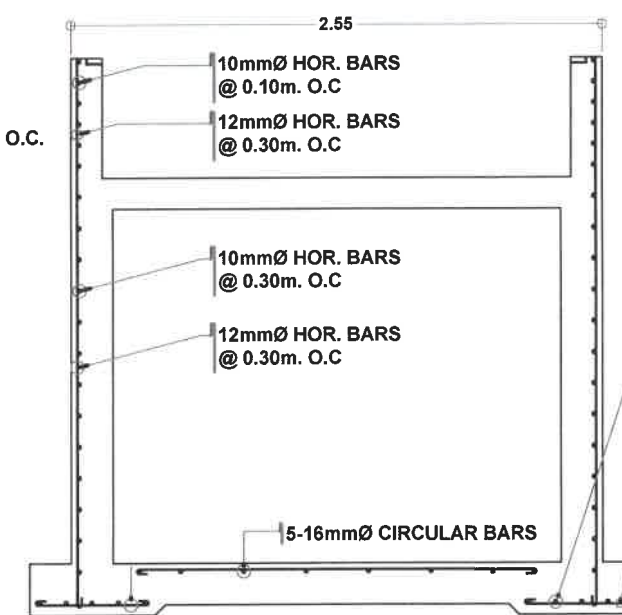
DETAIL OF MANHOLE COVER

S-1
d SCALE 1:100



FOUNDATION FRAMING PLAN

S-1
b SCALE 1:200



SECTION A-A 2

S-1
e SCALE 1:200

12mmØ RADIAL BARS @ 0.35m. O.C
MEASURED FROM OUT SIDE

5-16mmØ CIRCULAR BARS

16mmØ RADIAL BARS @ 0.30m.
BOTHWAYS ON CENTER

5-16mmØ CIRCULAR BARS

12mmØ RADIAL BARS @ 0.35m. O.C
MEASURED FROM OUT SIDE



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAYO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
CABUNGAN ELEMENTARY SCHOOL
CABUNGAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3546, E 123.2766

SHEET CONTENT:

DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

DATE:

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

DATE:

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

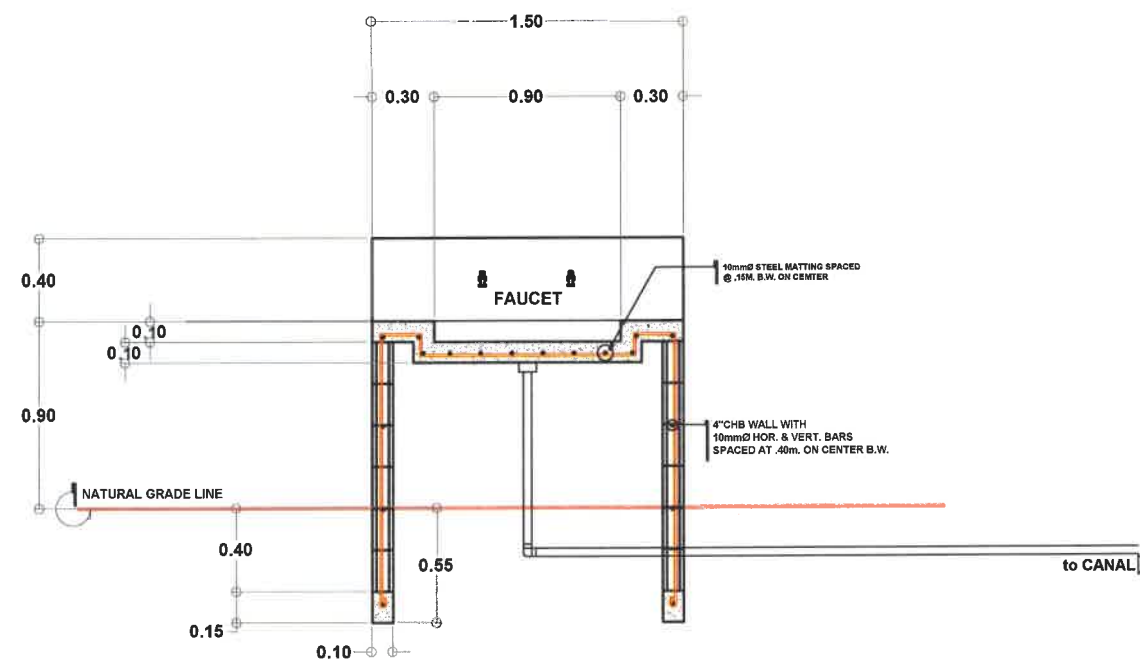
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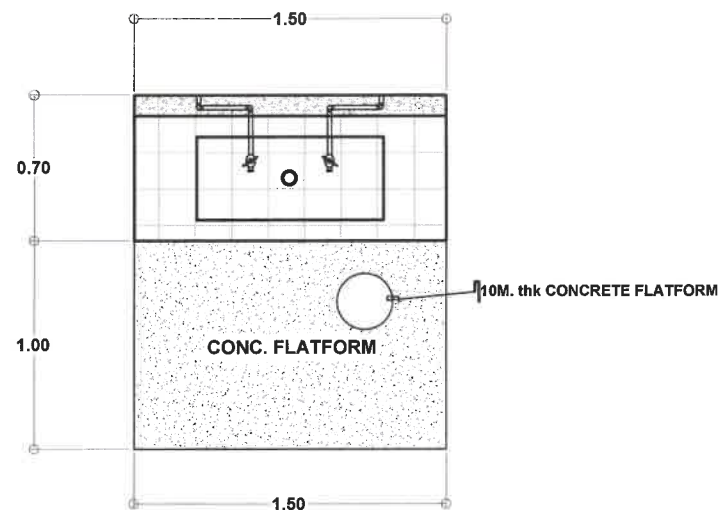
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SHEET NO.

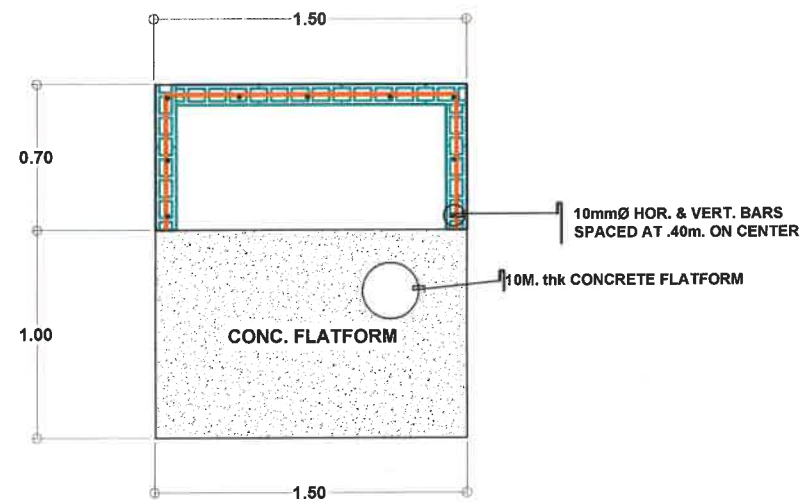
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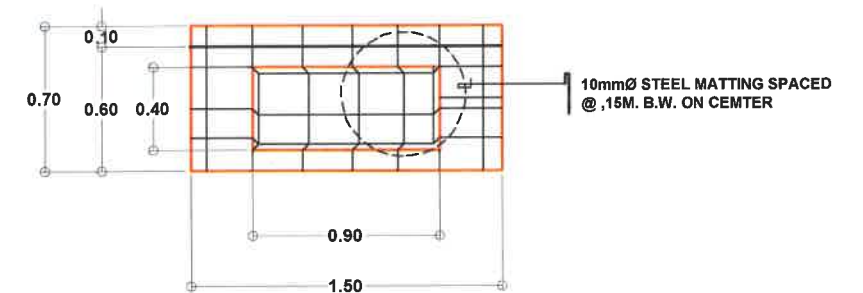
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



FOUNDATION PLAN



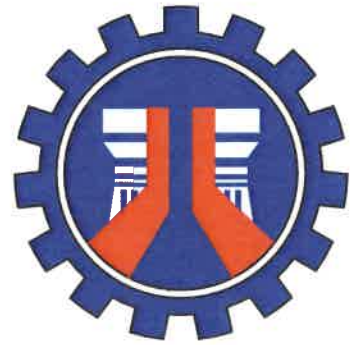
CONC. SLAB DETAIL



DETAIL OF LABATORY

SCALE 1:10mts.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS CABUNGAN ELEMENTARY SCHOOL CABUNGAN, BALATAN, CAMARINES SUR COORDINATES: N 13.3546, E 123.2766	SHEET CONTENT: DETAIL OF LABATORY	DRAFTED: LARRY M. OLIVEROS DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA JOIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. 2 SHEET NO. 5
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REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
DURAN ELEMENTARY SCHOOL
DURAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3101, E 123.2371

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE

TOTAL AREA = 37.5253 SQ.M



SITE DEVELOPMENT PLAN
SCALE 1:1000

INDEX OF DRAWING			
SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAIL OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMARY OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

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ELECTRICAL

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REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
DURAN ELEMENTARY SCHOOL
DURAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3101, E 123.2371

SHEET CONTENT:
PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:
LARRY M. OLIVEROS
DRAFTSMAN
DATE:

REVIEWED:
FRANCIA M. PLOPINIO
ARCHITECT II
DATE:

SUBMITTED:
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OIC-CHIEF, PLANNING AND DESIGN SECTION
DATE:

RECOMMENDED:
BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER
DATE:

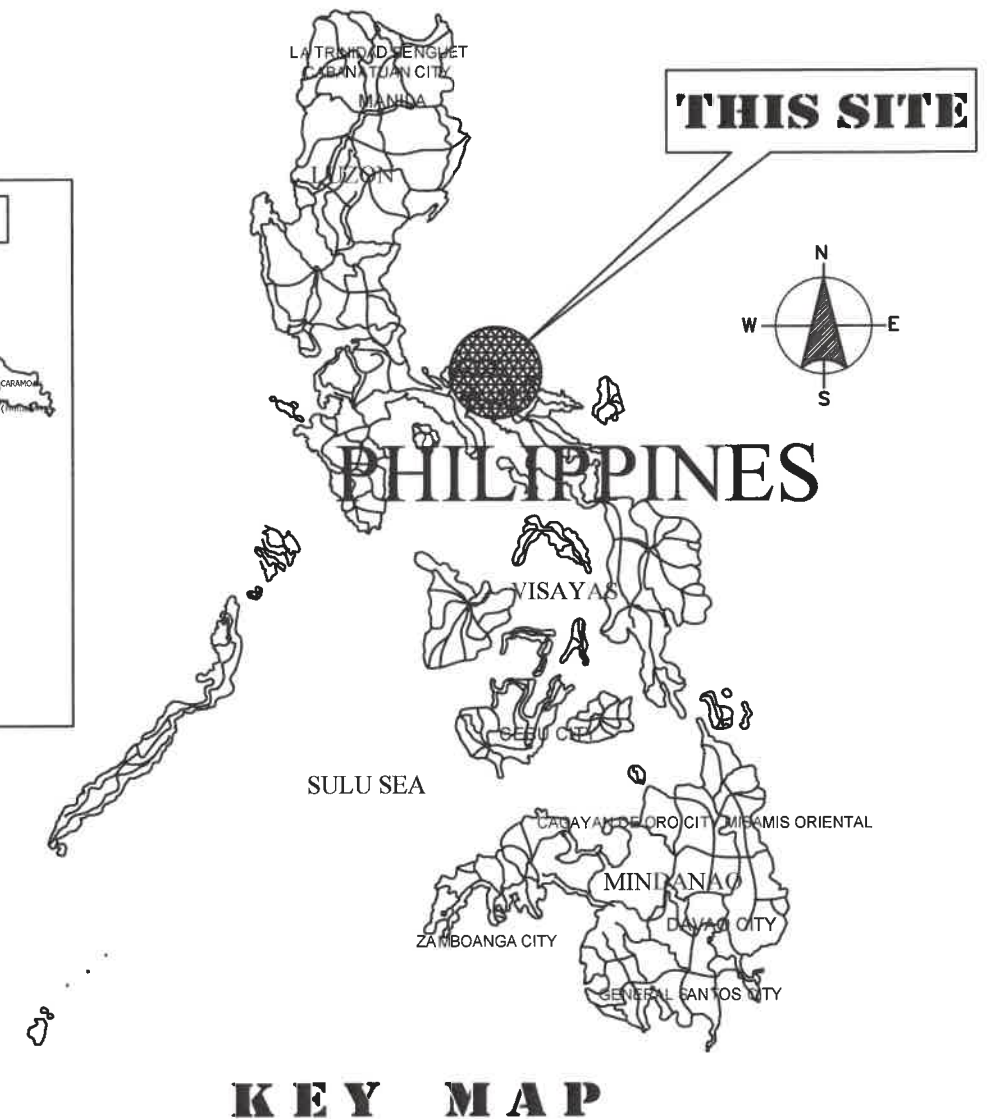
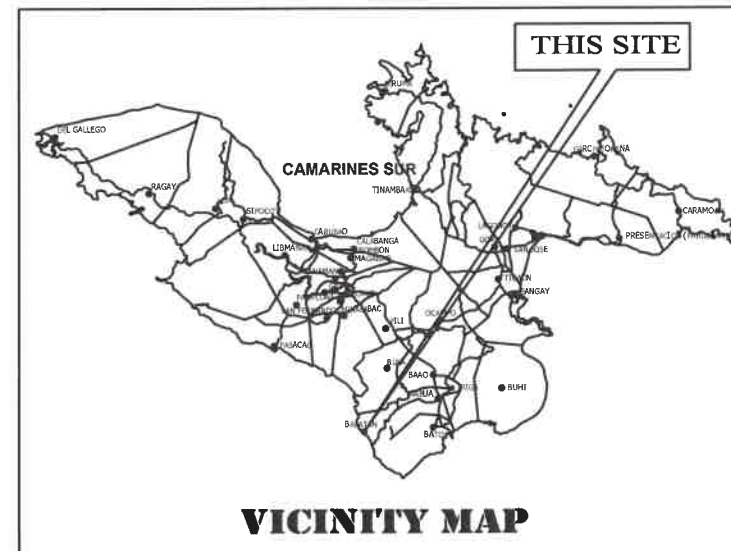
APPROVED:
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER
DATE:

SET NO.
A-1
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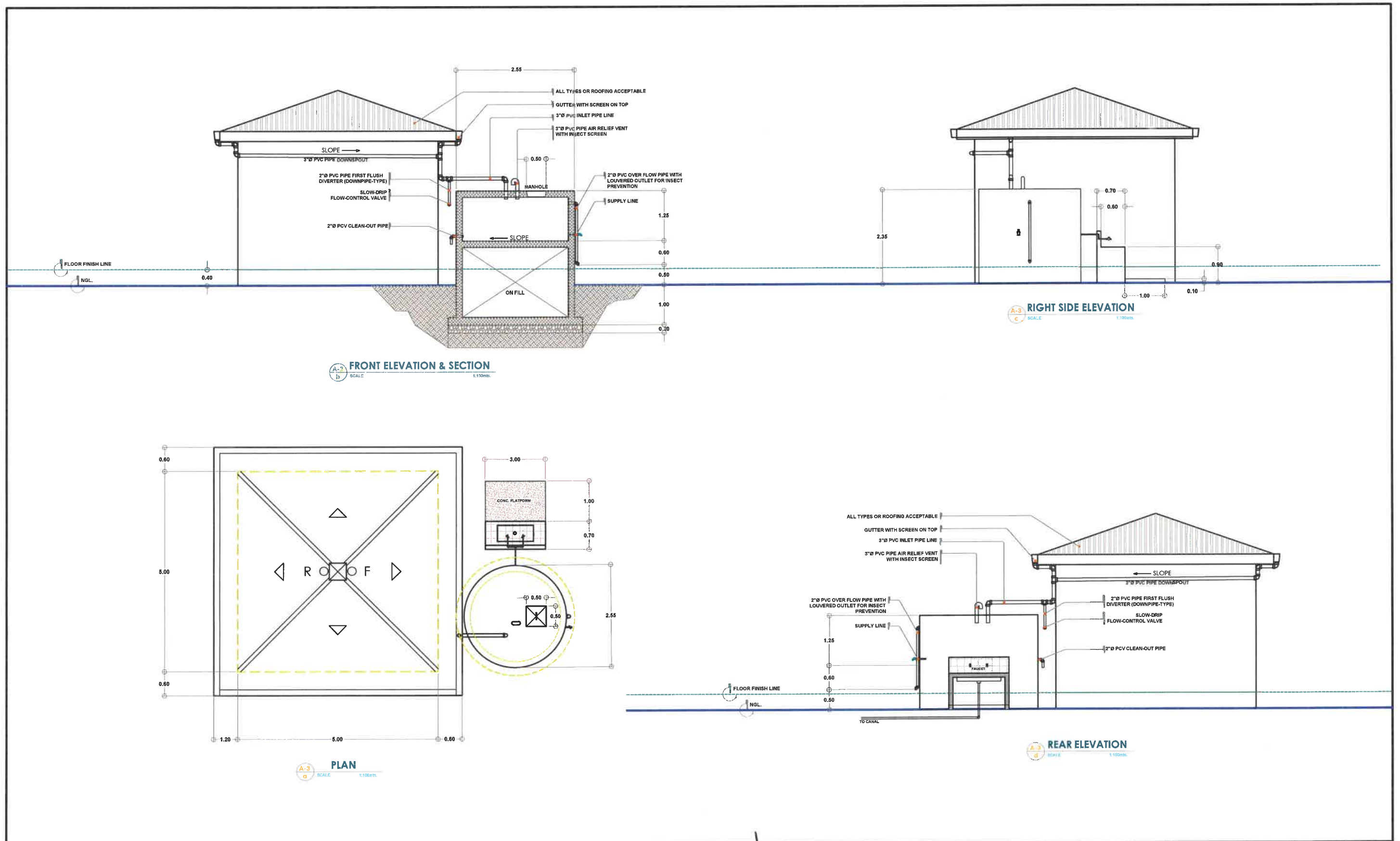
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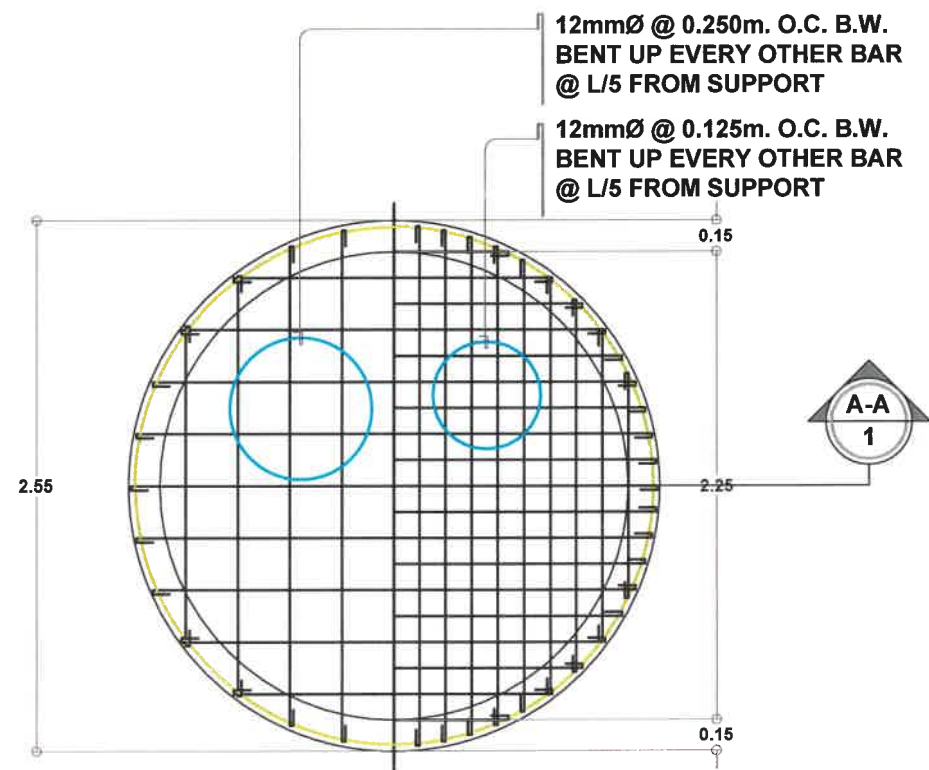
SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A	FACILITIES FOR THE ENGINEER		
1.1.1 Offices and Laboratory for the Engineer			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B	OTHER GENERAL REQUIREMENTS		
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	l.s.
B.9 (1)	Mobilization / Demobilization	1.00	l.s.
PART III	CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS		
DIVISION I	GENERAL		
PART C	EARTHWORKS		
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
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902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
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PART E	FINISHING AND OTHER CIVIL WORKS		
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
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1001(9)	Storm Drainage and Downspout	1.00	l.s.
1002(24)	Cold Water Line	1.00	l.s.

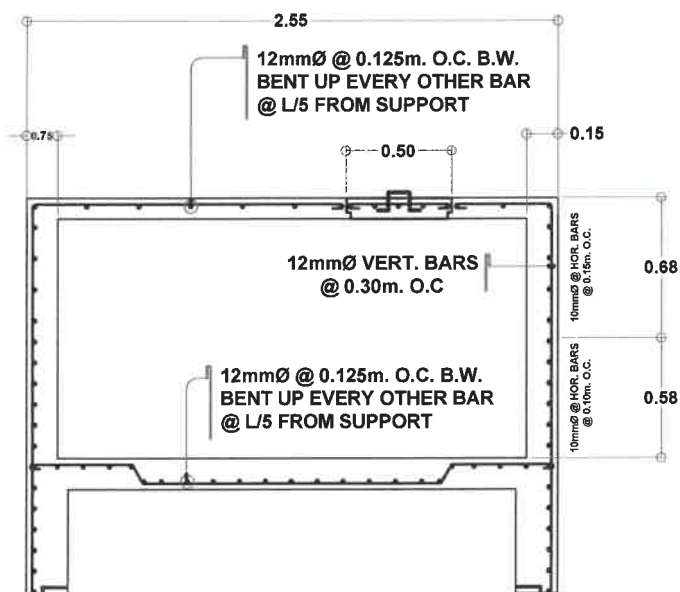


 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS DURAN ELEMENTARY SCHOOL DURAN, BALATAN, CAMARINES SUR	SHEET CONTENT: SUMMARY OF QUANTITY VICINITY MAP KEY MAP	DRAFTED:  LARRY M. OLIVEROS DATE: _____ DRAFTSMAN	REVIEWED:  FRANCIA M. PLOPINIO DATE: _____ ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION DATE: _____	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER DATE: _____	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER DATE: _____	SET NO. A-2 3	SHEET NO. 2 5
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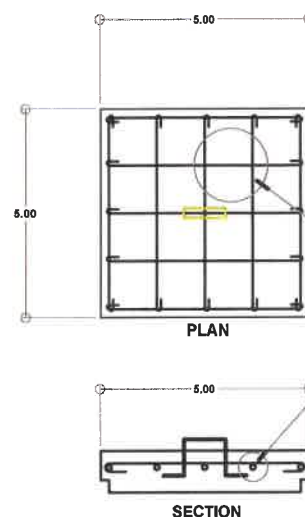




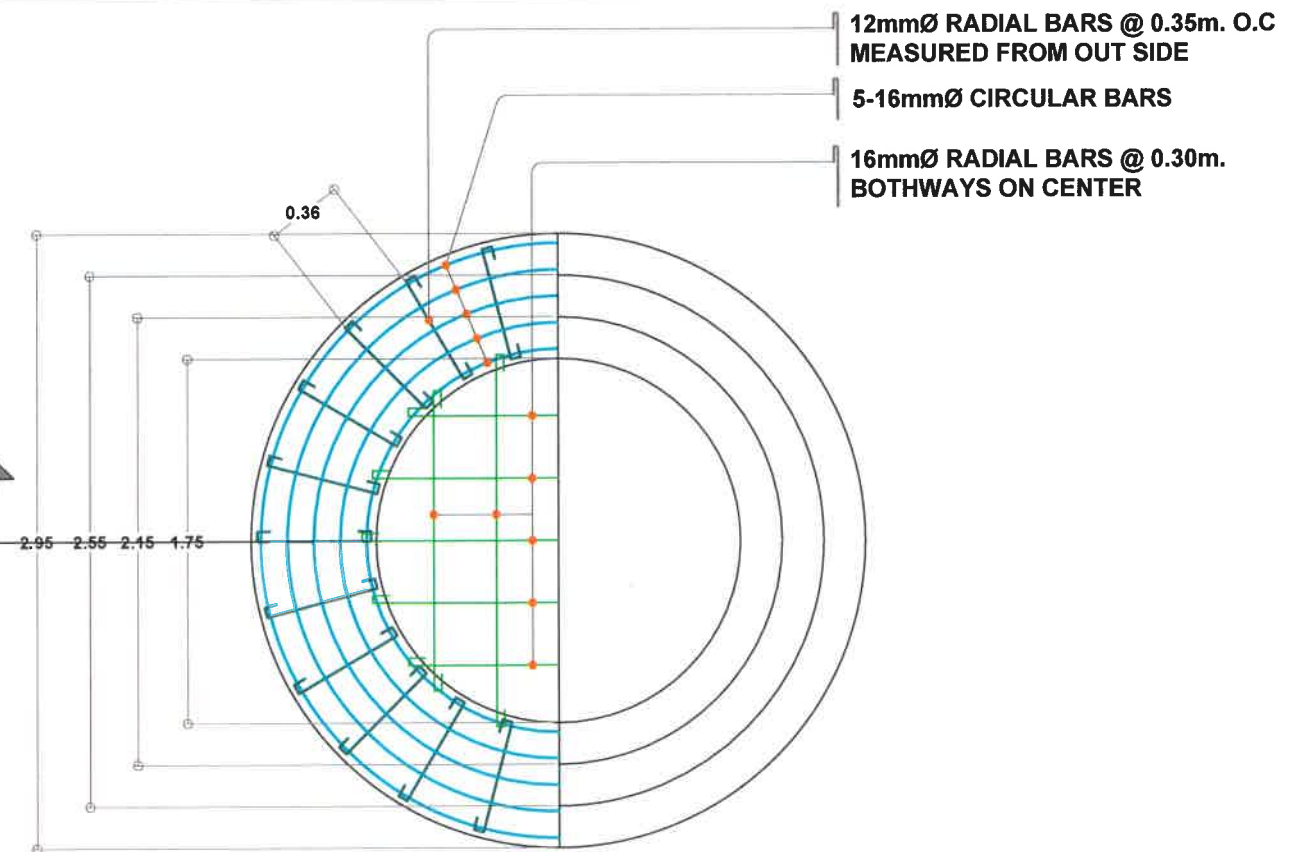
**DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB**
SCALE: 1:20m



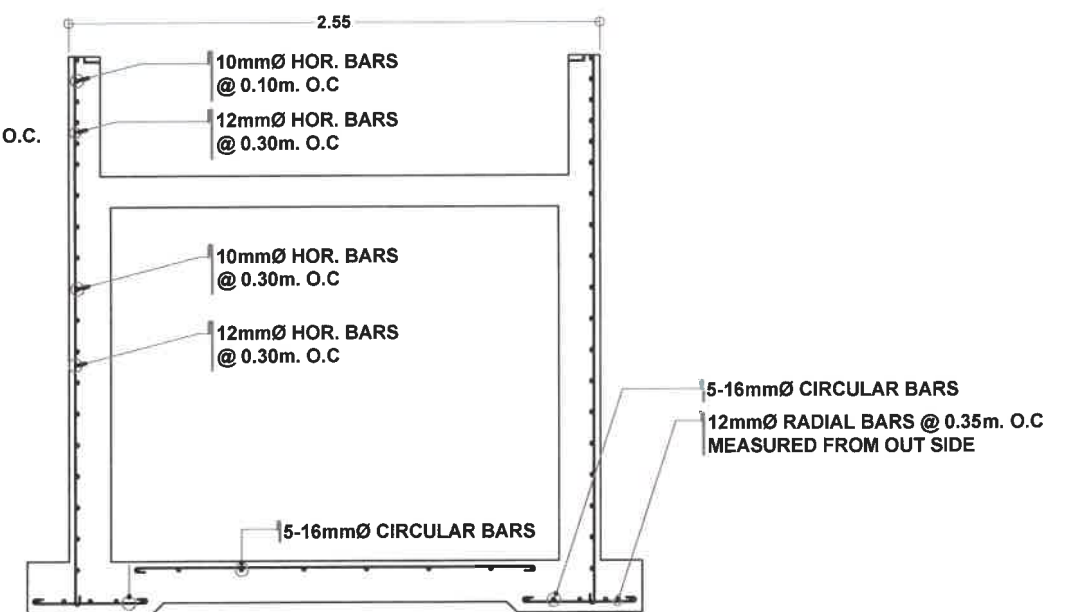
SECTION A-A 1
SCALE: 1:20m



DETAIL OF MANHOLE COVER
SCALE: 1:15m



FOUNDATION FRAMING PLAN
SCALE: 1:20m



SECTION A-A 2
SCALE: 1:20m



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
DURAN ELEMENTARY SCHOOL
DURAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3101, E 123.2371

SHEET CONTENT:

DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

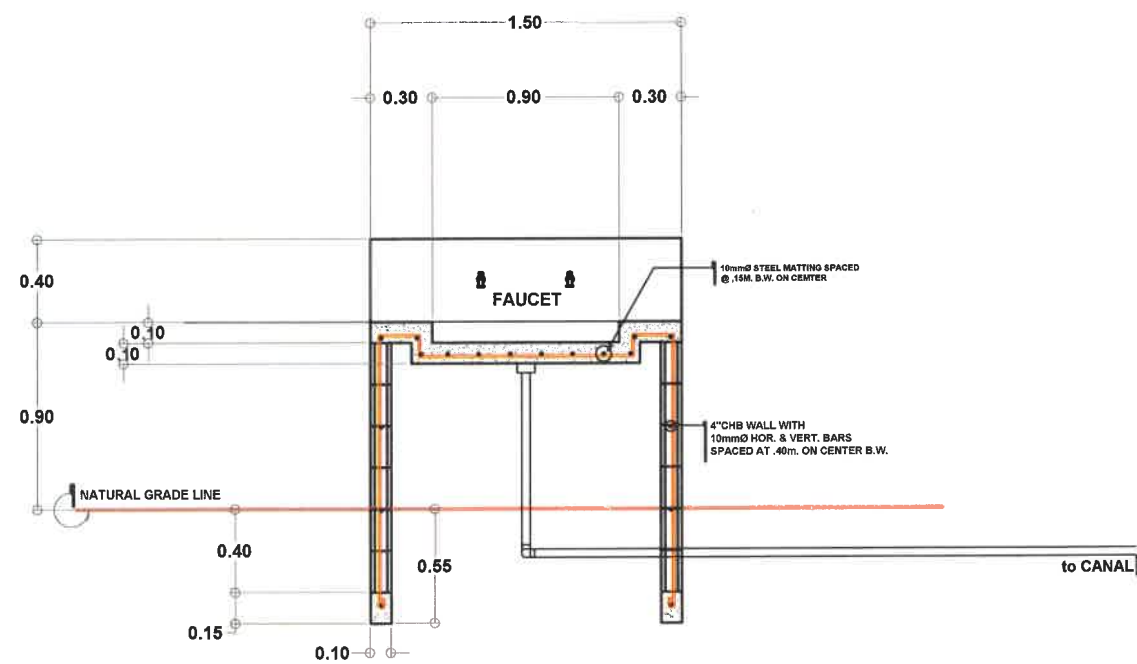
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

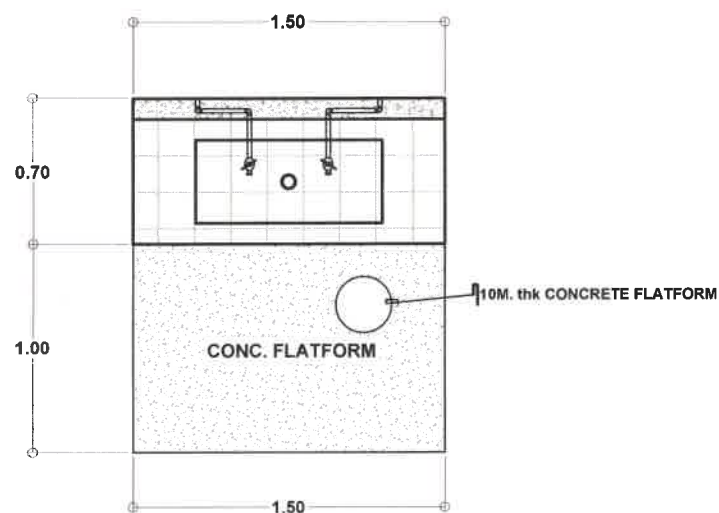
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SHEET NO.

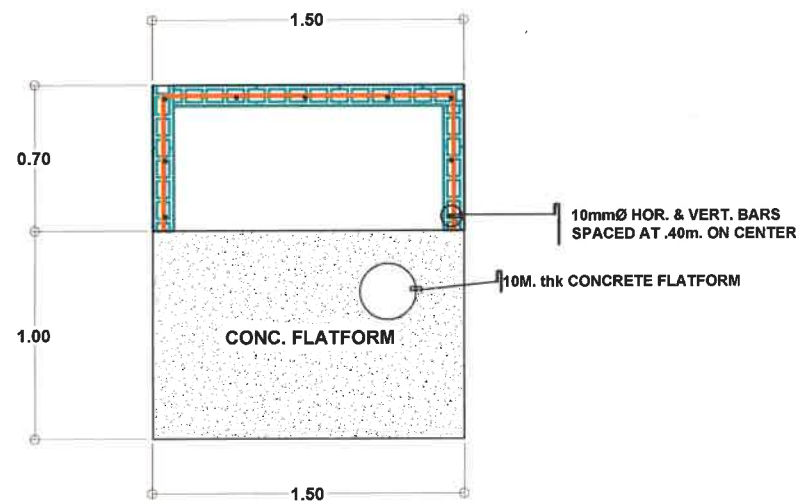
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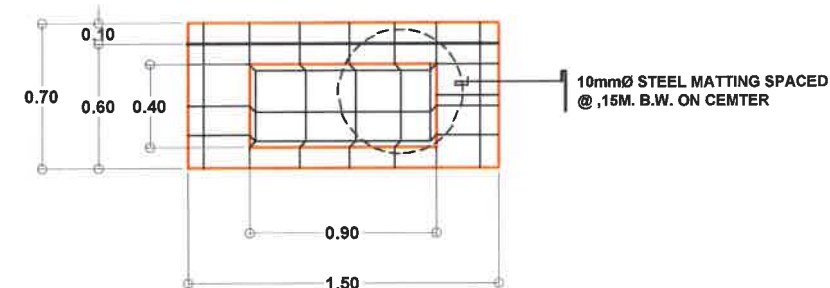
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



FOUNDATION PLAN



CONC. SLAB DETAIL



DETAIL OF LABATORY

SCALE 1:10mts.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
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DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
DURAN ELEMENTARY SCHOOL
DURAN, BALATAN, CAMARINES SUR
COORDINATES: N 13.3101, E 123.2371

SHEET CONTENT:

DETAIL OF LABATORY

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

DATE:

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

DATE:

SUBMITTED:

ARMAN C. IBARRETA
JOIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

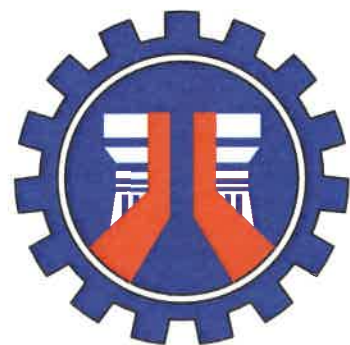
DATE:

SET NO.

S-2
2

SHEET NO.

5
5



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
LAGANAC ELEMENTARY SCHOOL
LAGANAC, BALATAN, CAMARINES SUR
COORDINATES: N 13.3299, E 123.2519

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE



THE SITE

SITE DEVELOPMENT PLAN
SCALE: 1:1000

INDEX OF DRAWING

SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAIL OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMART OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
LAGANAC ELEMENTARY SCHOOL
LAGANAC, BALATAN, CAMARINES SUR
COORDINATES: N 13.3259, E 123.2519

SHEET CONTENT:

PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

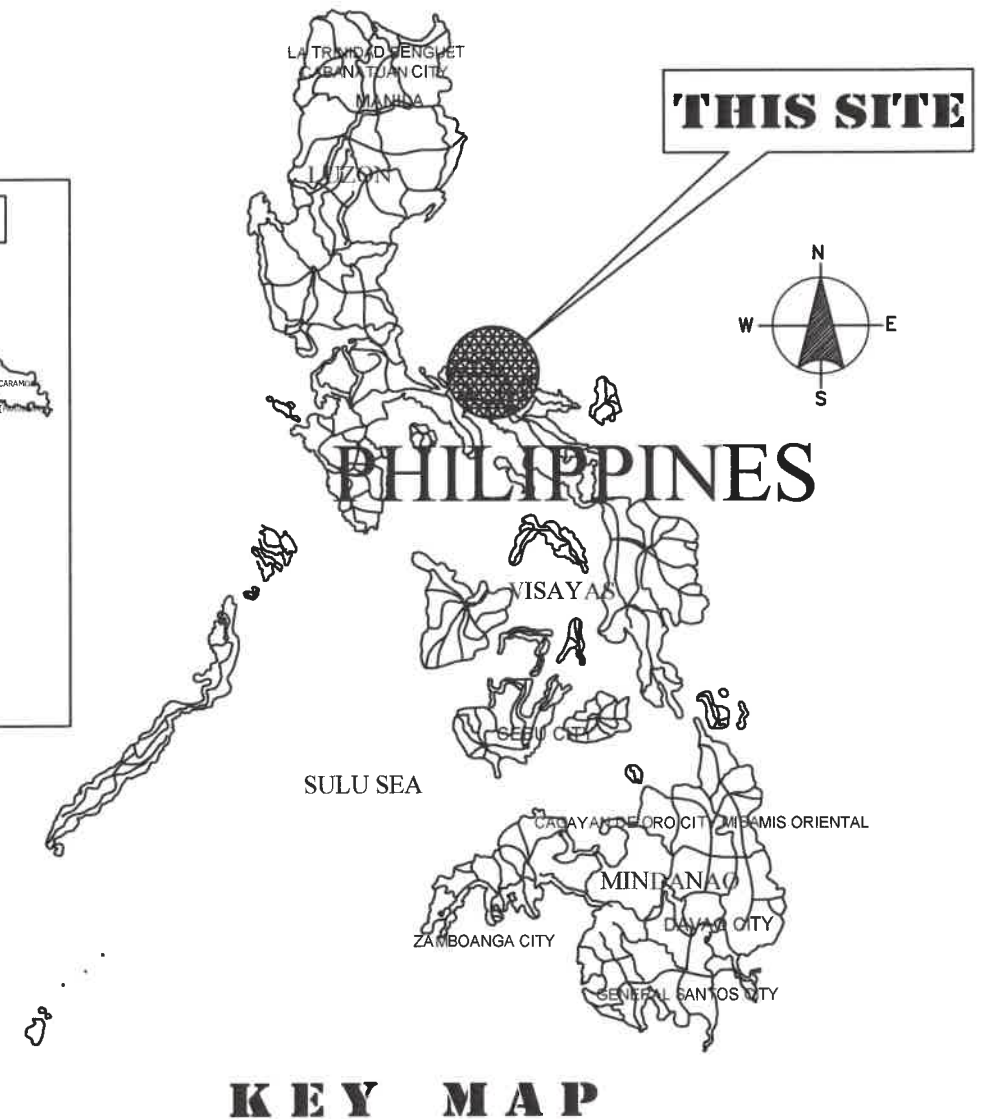
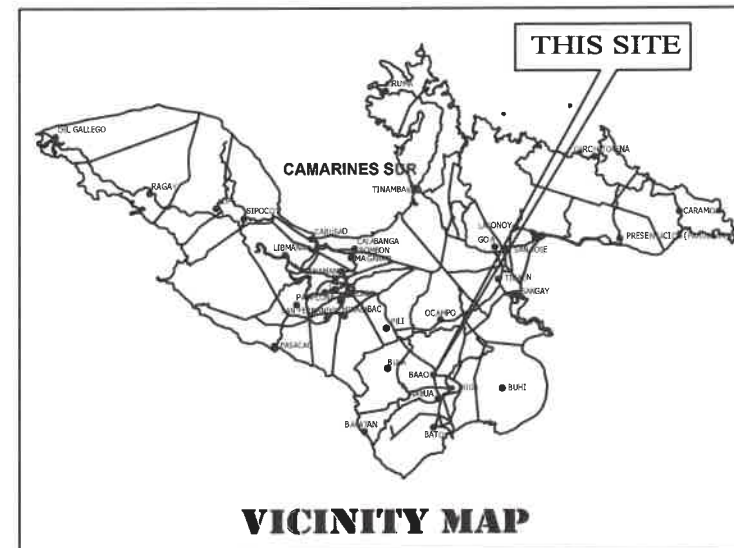
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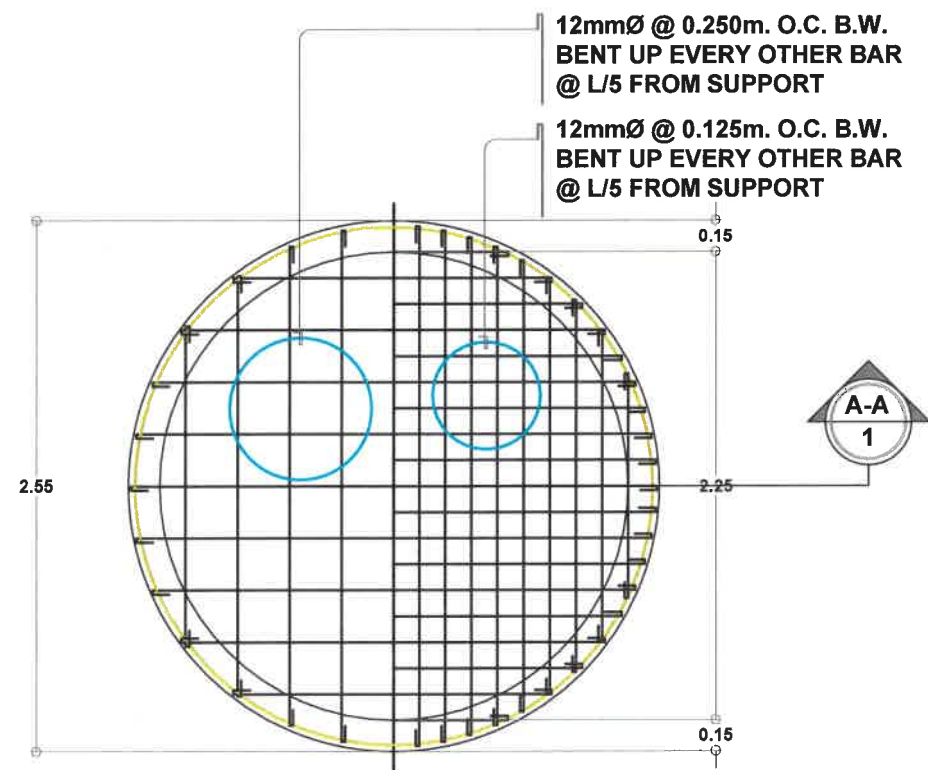
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SUMMARY OF QUANTITIES

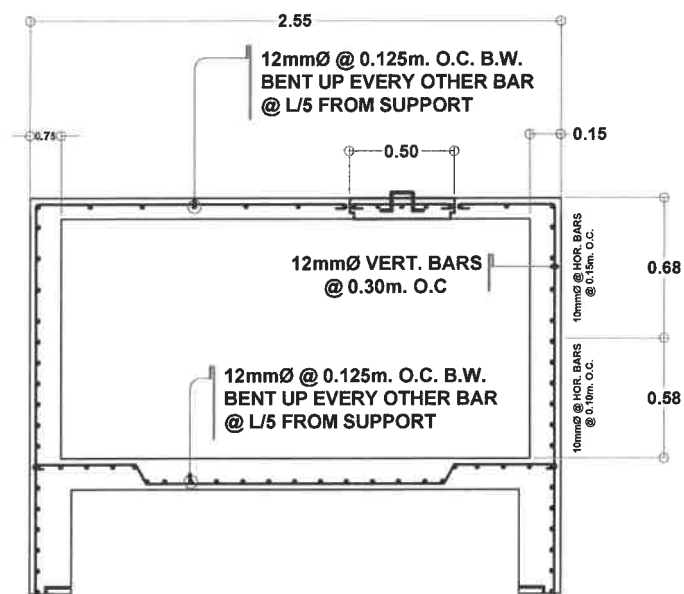
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A	FACILITIES FOR THE ENGINEER		
<i>1.1.1 Offices and Laboratory for the Engineer</i>			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B	OTHER GENERAL REQUIREMENTS		
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	l.s.
B.9 (1)	Mobilization / Demobilization	1.00	l.s.
PART III	CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS		
DIVISION I	GENERAL		
PART C	EARTHWORKS		
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
804(7)	Gravel Fill	4.60	cu.m.
PART D	REINFORCED CONCRETE		
900(1)d	Structural Concrete, 4000psi, Class A, 28 days	7.00	cu.m.
902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
DIVISION II	BUILDINGS		
PART E	FINISHING AND OTHER CIVIL WORKS		
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
1013(2)c	Fabricated Metal Roofing Accessory, Gauge 24(0.701mm), Gutters	40.00	l.m.
1001(9)	Storm Drainage and Downspout	1.00	l.s.
1002(24)	Cold Water Line	1.00	l.s.



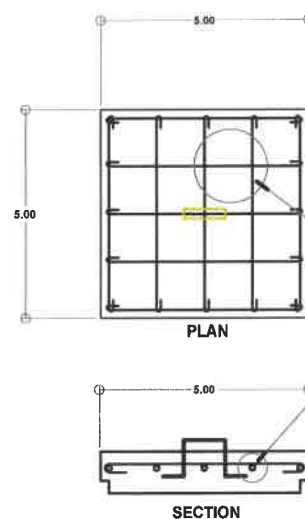
 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS LAGANAC ELEMENTARY SCHOOL LAGANAC, BALATAN, CAMARINES SUR	SHEET CONTENT: SUMMARY OF QUANTITY VICINITY MAP KEY MAP	DRAFTED:  LARRY M. OLIVEROS DATE: _____ DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO DATE: _____ ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA DATE: _____ OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRIILLANCE M. SALAS DATE: _____ ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DATE: _____ DISTRICT ENGINEER	SET NO. A-2 3	SHEET NO. 2 5
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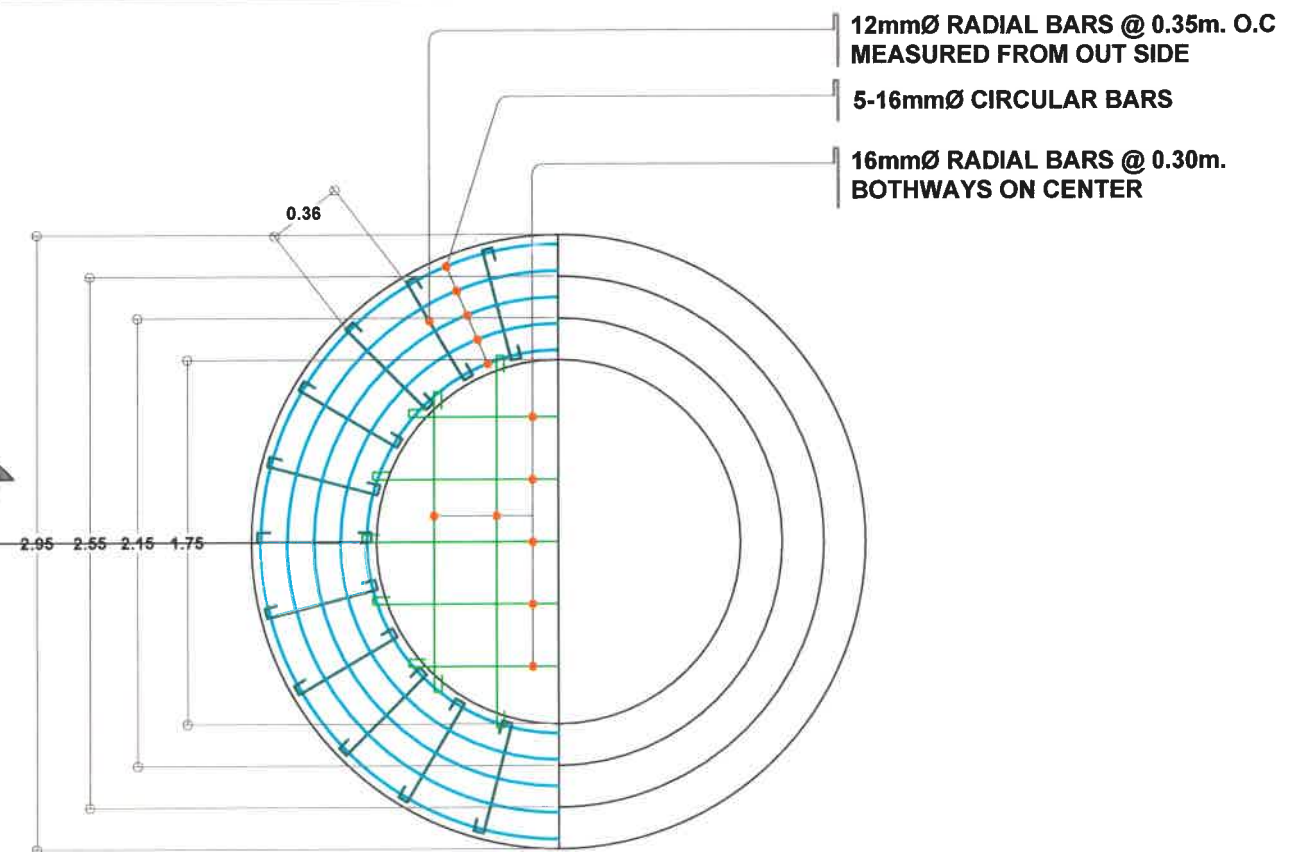
**DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB**
SCALE 1:200m



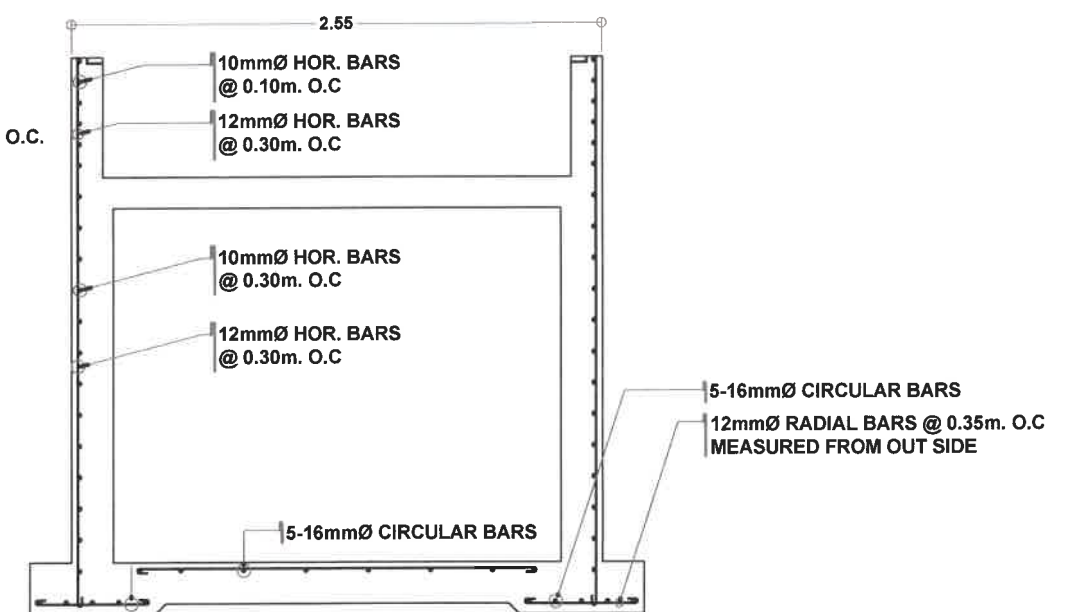
SECTION A-A 1
SCALE 1:20m



DETAIL OF MANHOLE COVER
SCALE 1:100m



FOUNDATION FRAMING PLAN
SCALE 1:200m



SECTION A-A 2
SCALE 1:20m



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
LAGANAC ELEMENTARY SCHOOL
LAGANAC, BALATAN, CAMARINES SUR
COORDINATES: N 13.3299, E 123.2519

SHEET CONTENT:
DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:
LARRY M. OLIVEROS
DATE: _____
DRAFTSMAN

REVIEWED:
FRANCIA M. PLOPINIO
DATE: _____
ARCHITECT II

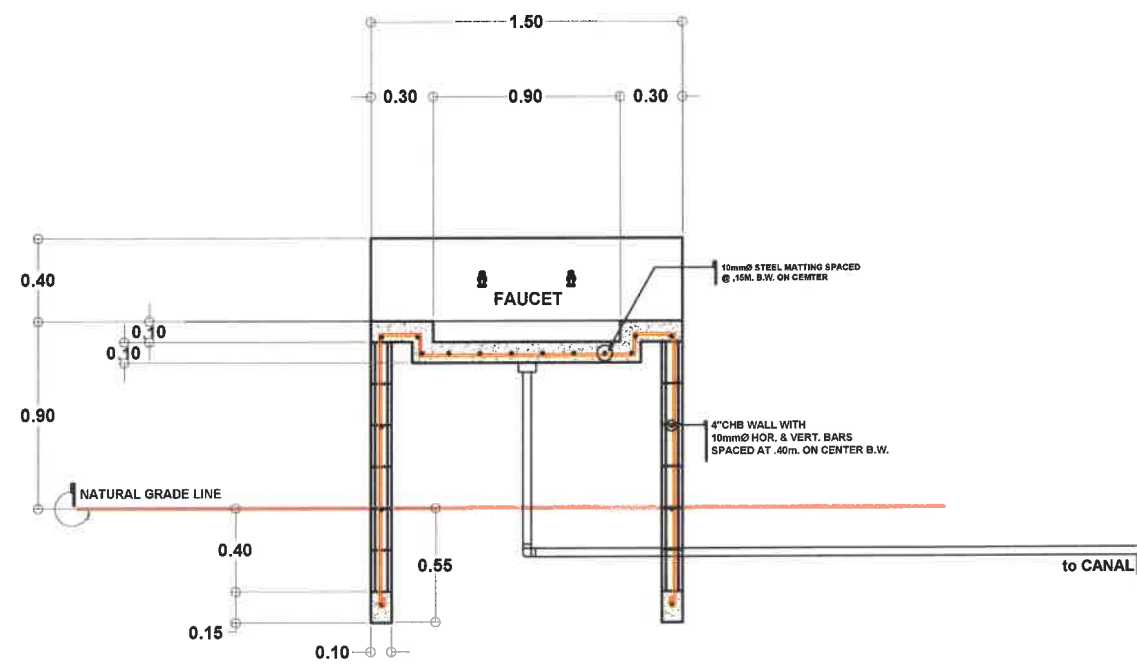
SUBMITTED:
ARMAN C. IBARRETA
DATE: _____
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:
BRILLIANCE M. SALAS
DATE: _____
ASSISTANT DISTRICT ENGINEER

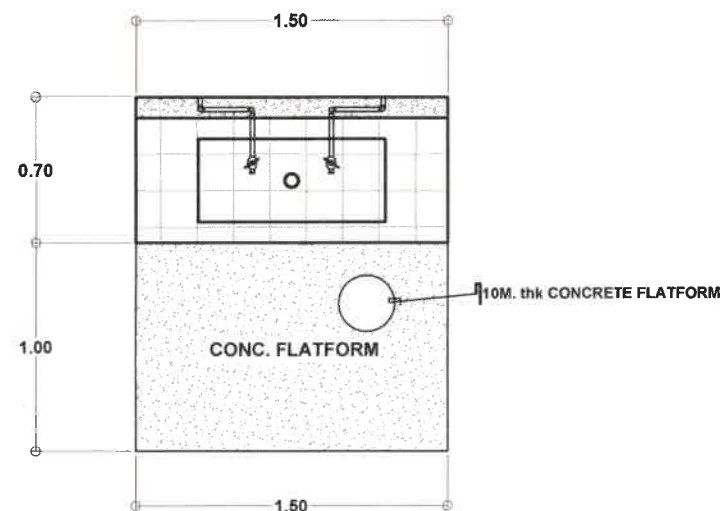
APPROVED:
LEOPOLDO A. BARELA, JR.
DATE: _____
DISTRICT ENGINEER

SET NO.
S-1
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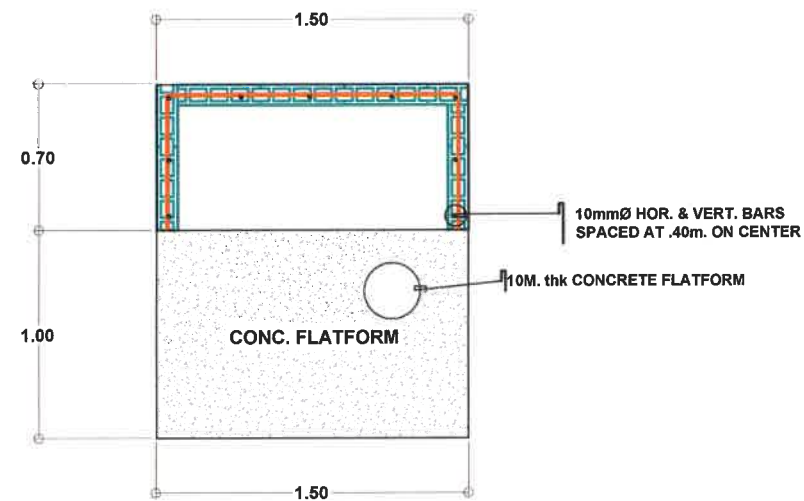
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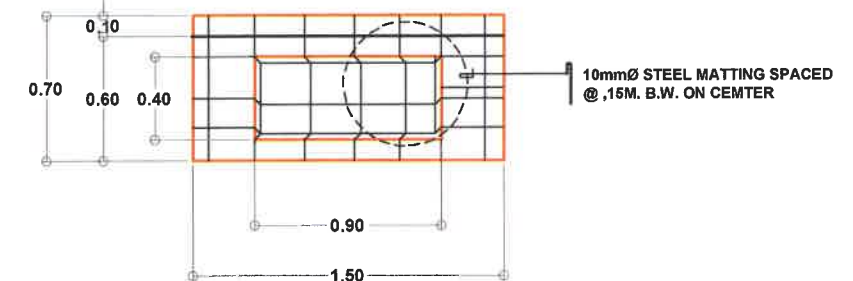
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



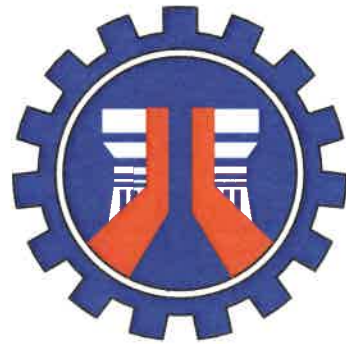
FOUNDATION PLAN



CONC. SLAB DETAIL

S-2
a
DETAIL OF LABATORY
SCALE 1:10mts.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS LAGANAC ELEMENTARY SCHOOL LAGANAC, BALATAN, CAMARINES SUR COORDINATES: N 13.3299, E 123.2819	SHEET CONTENT: DETAIL OF LABATORY	DRAFTED: LARRY M. OLIVEROS DRA / S.M.A.H.	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. S-2 2	SHEET NO. 5 5
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REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
MAGUIRON ELEMENTARY SCHOOL
MONTENEGRO, BALATAN, CAMARINES SUR
COORDINATES: N 13.3473, E 123.2856

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE

THE SITE



SITE DEVELOPMENT PLAN
SCALE 1:100m

INDEX OF DRAWING

SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAIL OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMARY OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
MAGUIRON ELEMENTARY SCHOOL
MONTENEGRO, BALATAN, CAMARINES SUR
COORDINATES: N 13.3473, E 123.2856

SHEET CONTENT:

PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

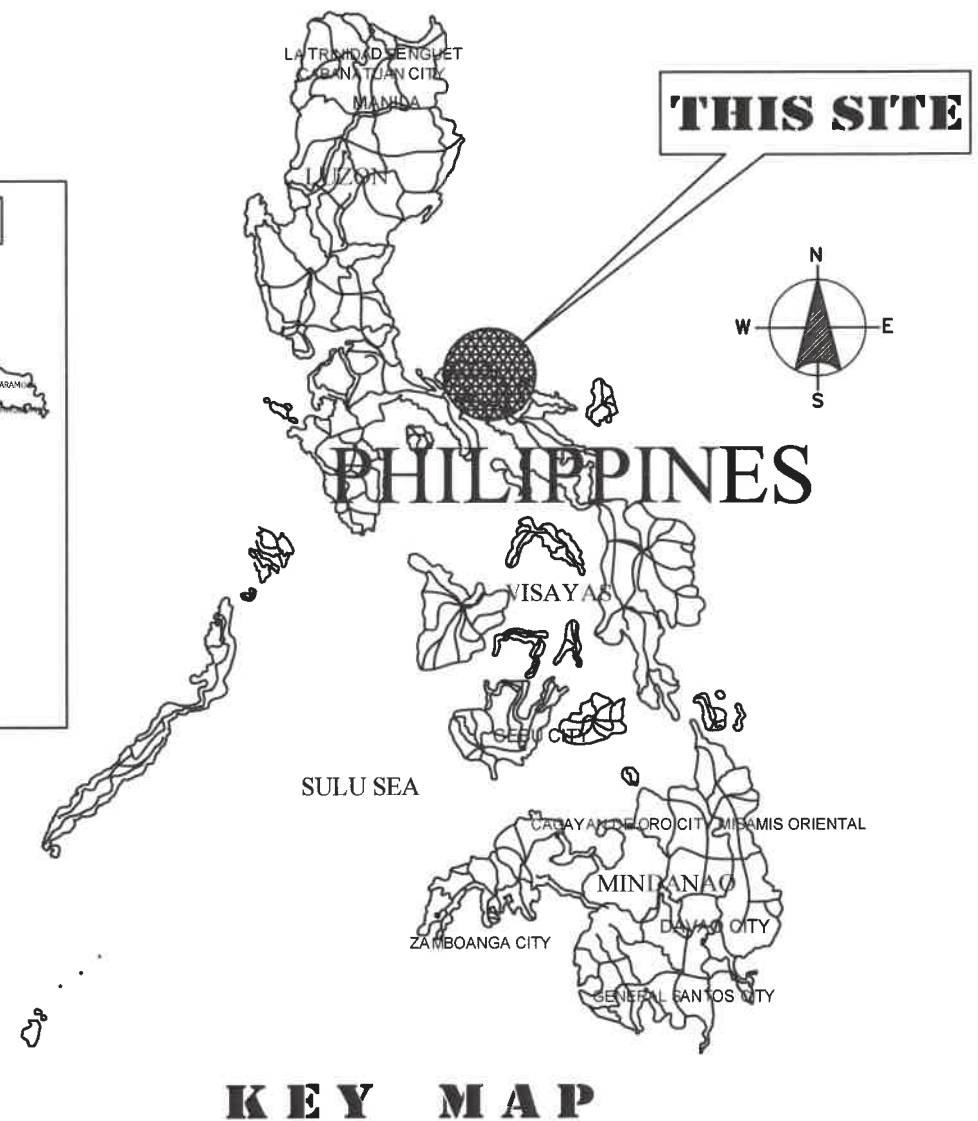
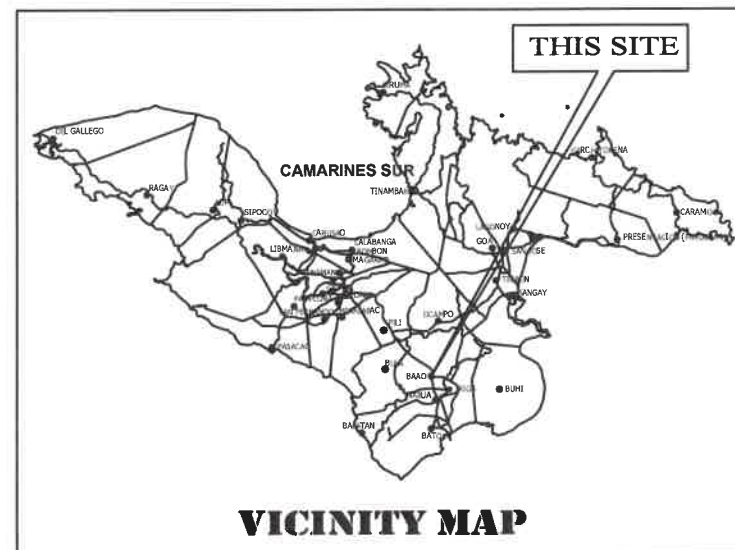
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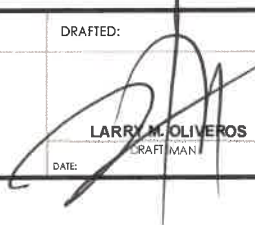
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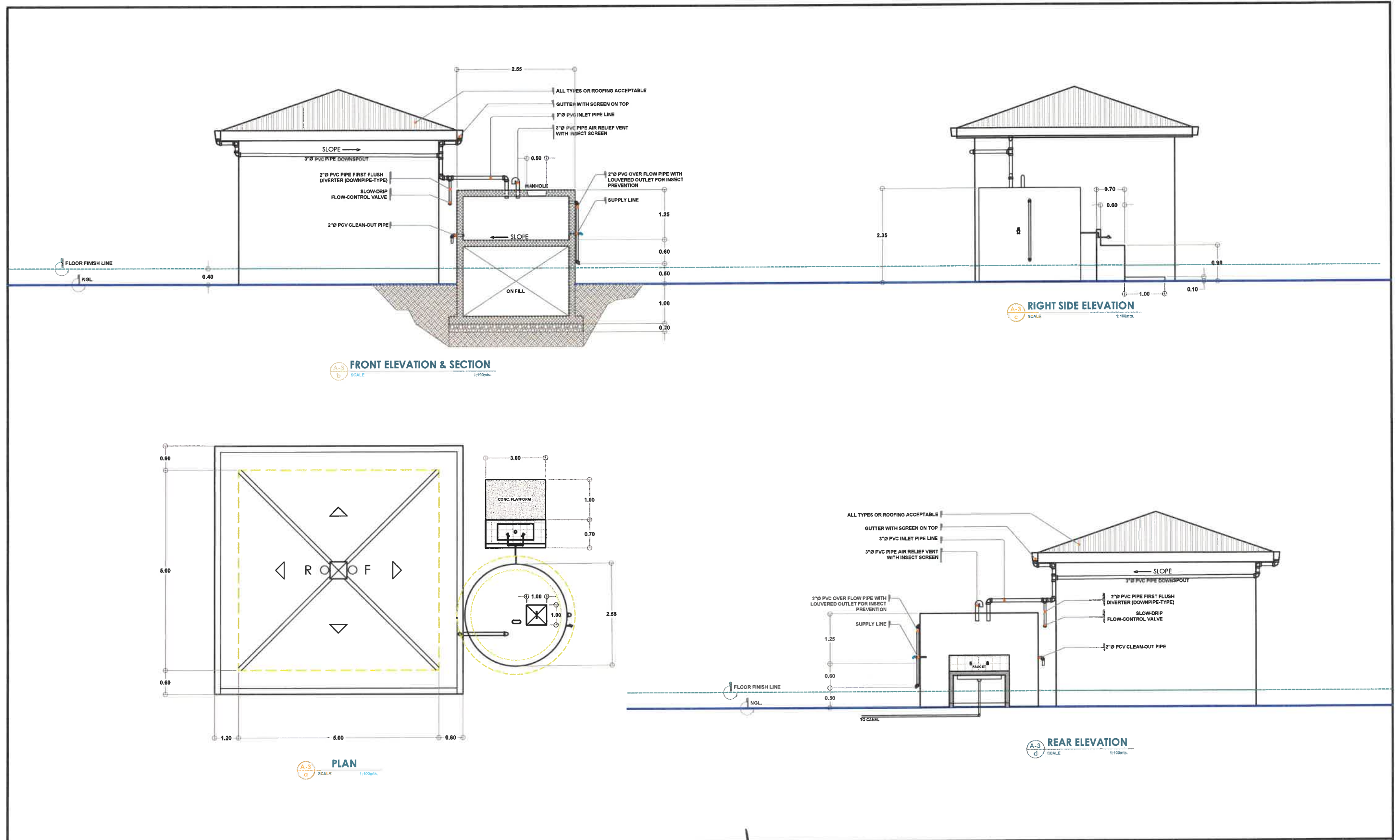
SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A FACILITIES FOR THE ENGINEER			
1.1.1 Offices and Laboratory for the Engineer			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B OTHER GENERAL REQUIREMENTS			
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	l.s.
B.9 (1)	Mobilization / Demobilization	1.00	l.s.
PART III CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS			
DIVISION I GENERAL			
PART C EARTHWORKS			
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
804(7)	Gravel Fill	4.60	cu.m.
PART D REINFORCED CONCRETE			
900(1)d	Structural Concrete, 4000psi, Class A, 28 days	7.00	cu.m.
902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
DIVISION II BUILDINGS			
PART E FINISHING AND OTHER CIVIL WORKS			
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
1013(2)c	Fabricated Metal Roofing Accessory, Gauge 24(0.701mm), Gutters	40.00	l.m.
1001(9)	Storm Drainage and Downspout	1.00	l.s.
1002(24)	Cold Water Line	1.00	l.s.

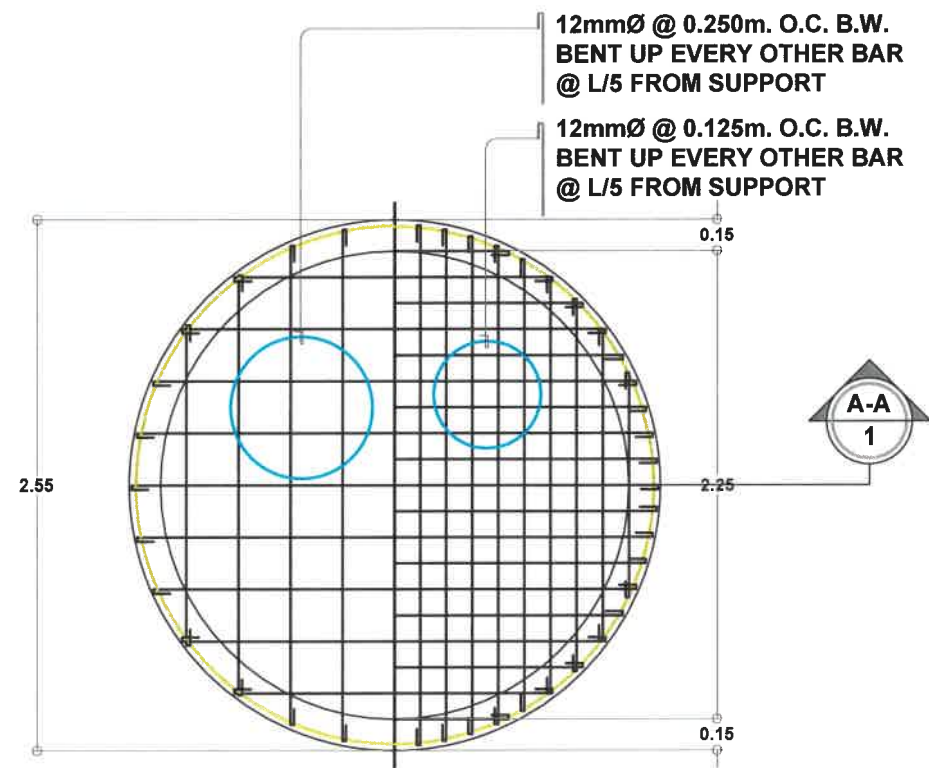


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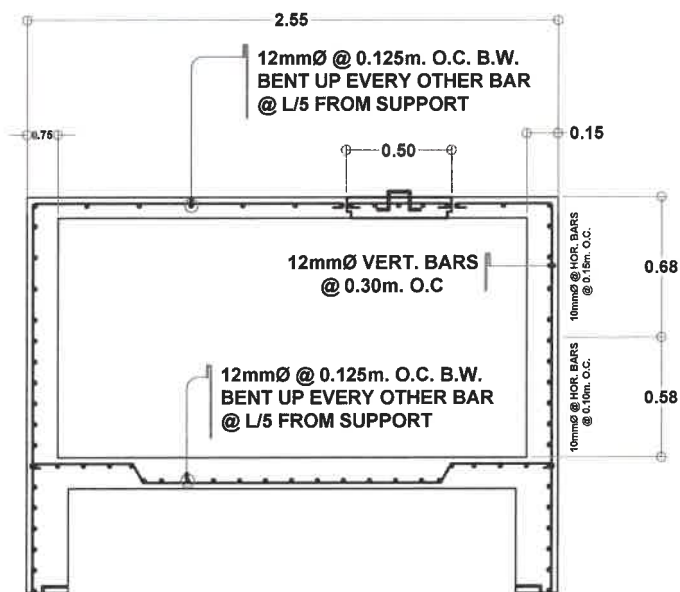
 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5 th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS MAGUIRON ELEMENTARY SCHOOL MONTENEGRO, BALATAN, CAMARINES SUR COORDINATES: N 13.3473, E 123.2856	SHEET CONTENT: SUMMARY OF QUANTITY VICINITY MAP KEY MAP	DRAFTED:  LARRY M. OLIVEROS DRAFTSMAN DATE: _____	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II DATE: _____	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION DATE: _____	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER DATE: _____	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER DATE: _____	SET NO. A-2 3	SHEET NO. 2 5
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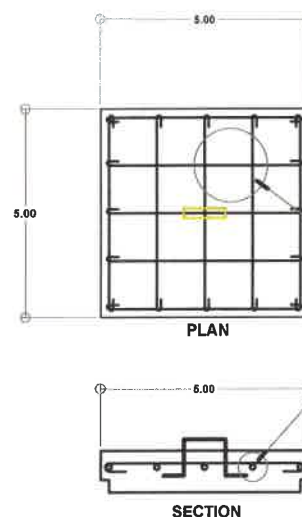
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS MAGUIRON ELEMENTARY SCHOOL MONTENEGRO, BALATAN, CAMARINES SUR COORDINATES: N 13.3473, E 123.2866	SHEET CONTENT: PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	DRAFTED: LARRY M. OLIVEROS DRAFTER	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. A-3 3 SHEET NO. 3 5
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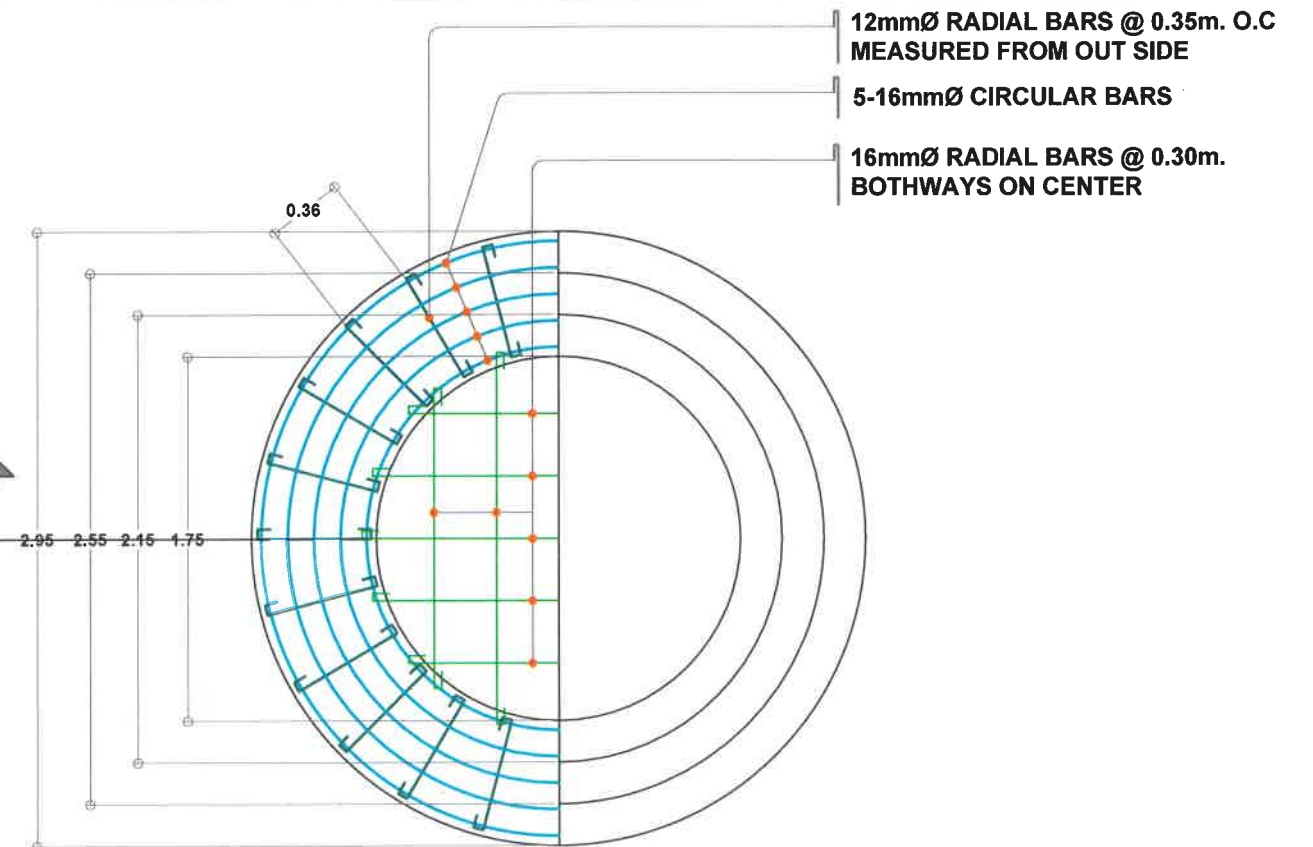
DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB
SCALE 1:20



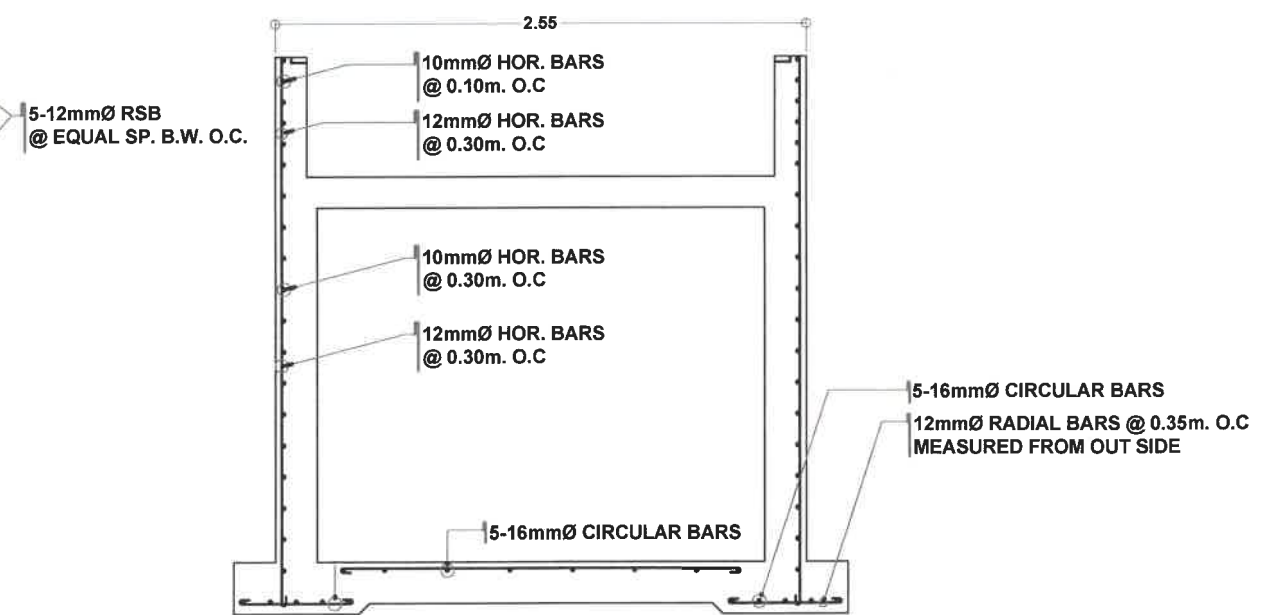
SECTION A-A 1
SCALE 1:20



DETAIL OF MANHOLE COVER
SCALE 1:10



FOUNDATION FRAMING PLAN
SCALE 1:20



SECTION A-A 2
SCALE 1:20



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS
MAGUIRON ELEMENTARY SCHOOL
MONTENEGRO, BALATAN, CAMARINES SUR
COORDINATES: N 13.3473, E 123.2866

SHEET CONTENT:
DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:
LARRY M. OLIVEROS
DATE: _____
DRAFTSMAN

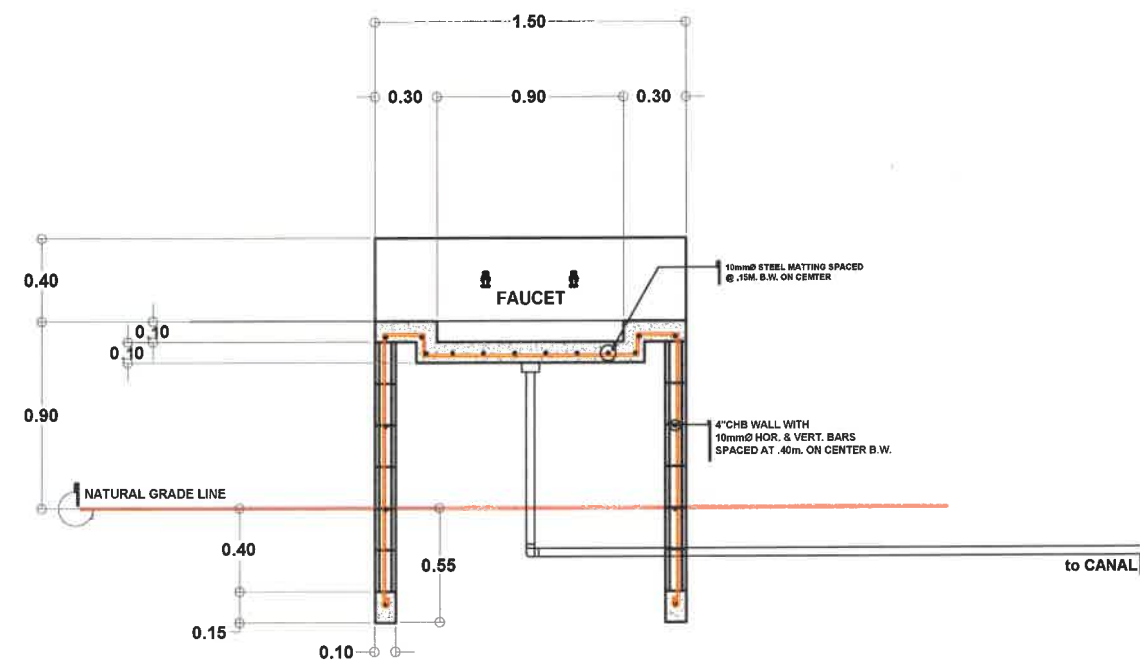
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ARCHITECT II

SUBMITTED:
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DATE: _____
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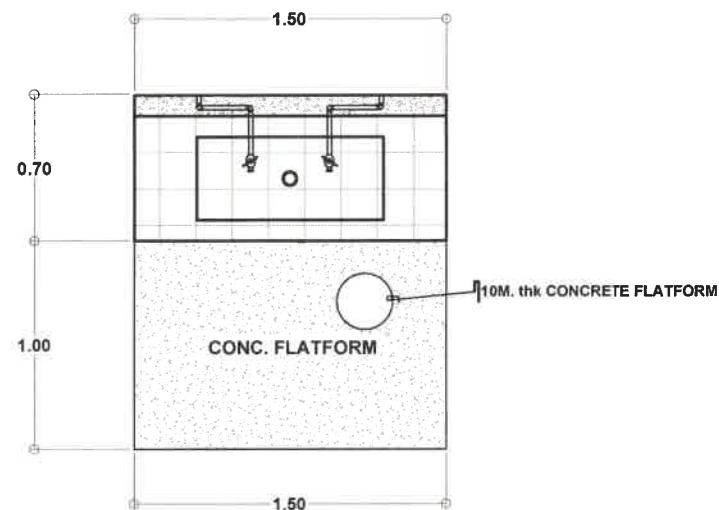
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DATE: _____
ASSISTANT DISTRICT ENGINEER

APPROVED:
LEOPOLDO A. BARELA, JR.
DATE: _____
DISTRICT ENGINEER

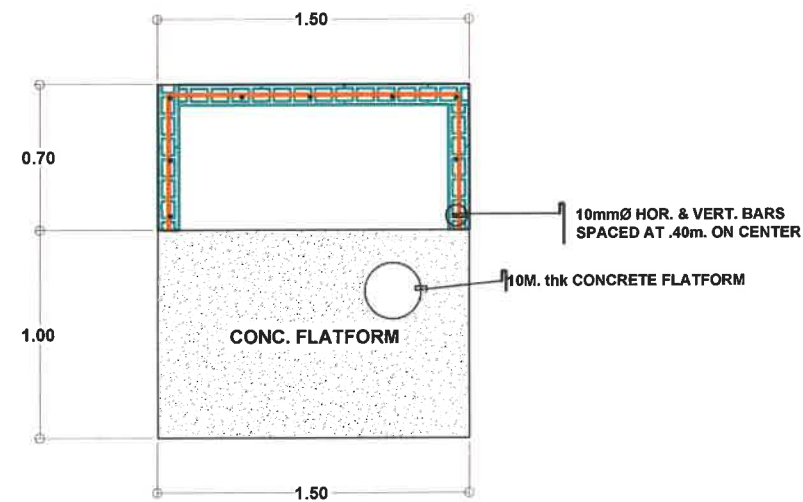
SET NO. SHEET NO.
S-1 4
2 5



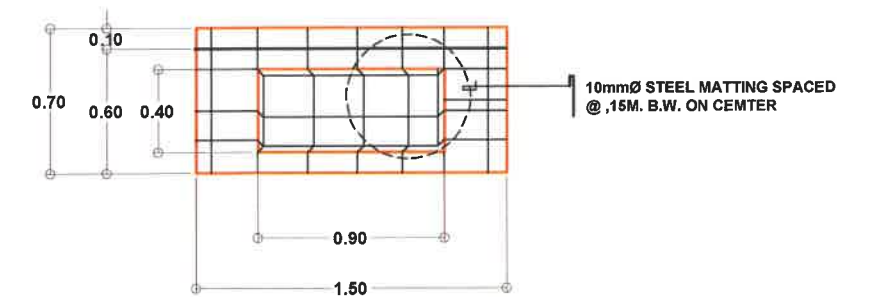
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



FOUNDATION PLAN



CONC. SLAB DETAIL



DETAIL OF LABATORY

SCALE

1:10mts.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
MAGUIRON ELEMENTARY SCHOOL
MONTENEGRO, BALATAN, CAMARINES SUR
COORDINATES: N 13.3473, E 123.2856

SHEET CONTENT:

DETAIL OF LABATORY

DRAFTED:

LARRY M. OLIVEROS

DATE: DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO

DATE: ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA

DATE: OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS

DATE: ASSISTANT DISTRICT ENGINEER

APPROVED:

LEOPOLDO A. BARELA, JR.

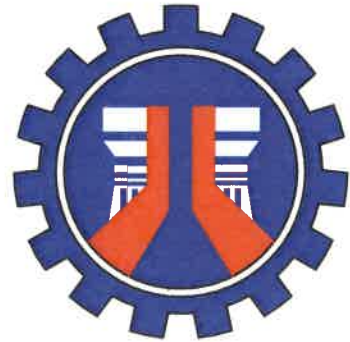
DATE: DISTRICT ENGINEER

SET NO.

S-2
2

SHEET NO.

5
5



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS ELEMENTARY SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3754, E 123.2757

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE



SITE DEVELOPMENT PLAN
SCALE: 1:100m

INDEX OF DRAWING			
SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAIL OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMARY OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS ELEMENTARY SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3754, E 123.2767

SHEET CONTENT:

PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:

LARRY M. OLIVEROS
DATE: 10/10/2024

REVIEWED:

FRANCIA M. PLOPINIO
DATE: 10/10/2024

SUBMITTED:

ARMAN C. IBARRETA
DATE: 10/10/2024

RECOMMENDED:

BRILLIANCE M. SALAS
DATE: 10/10/2024

APPROVED:

LEOPOLDO A. BARELA, JR.
DATE: 10/10/2024

SET NO.

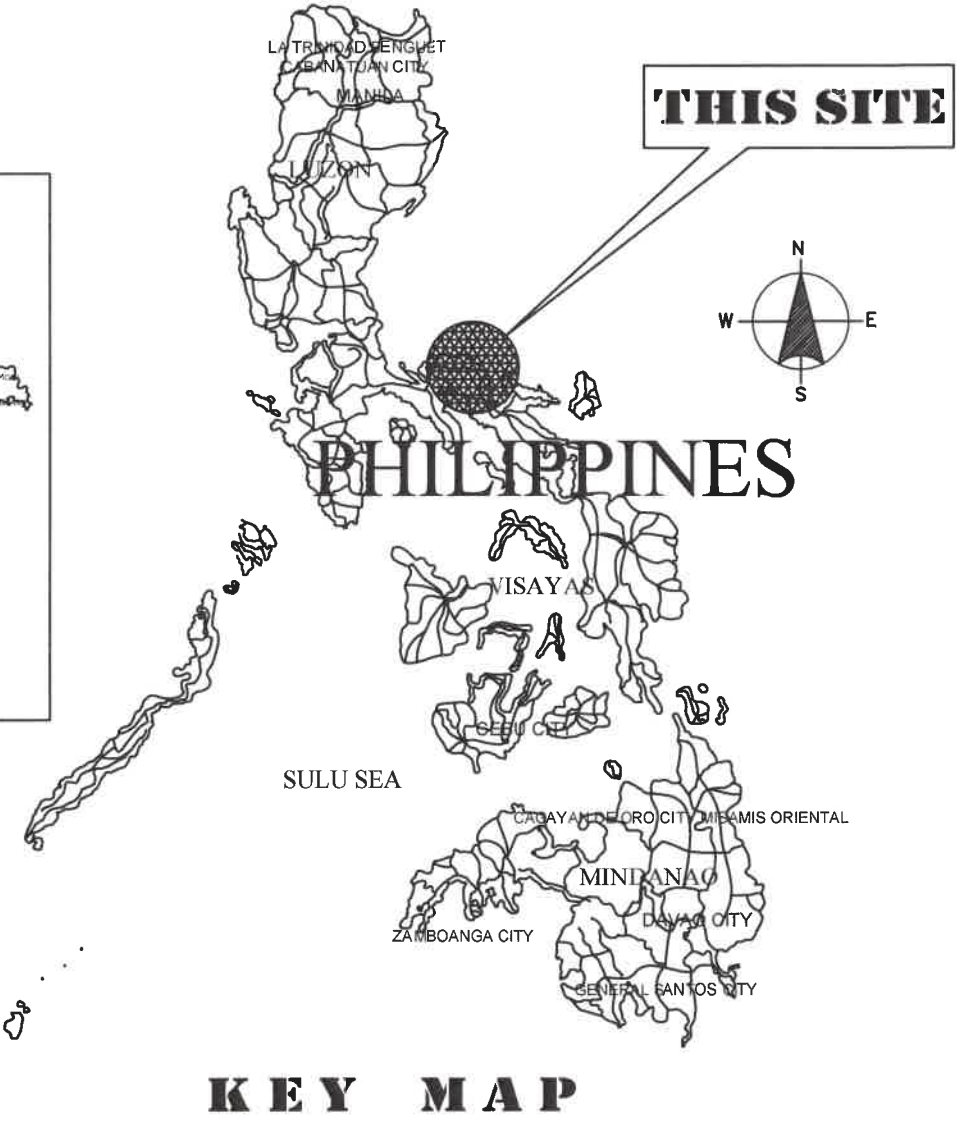
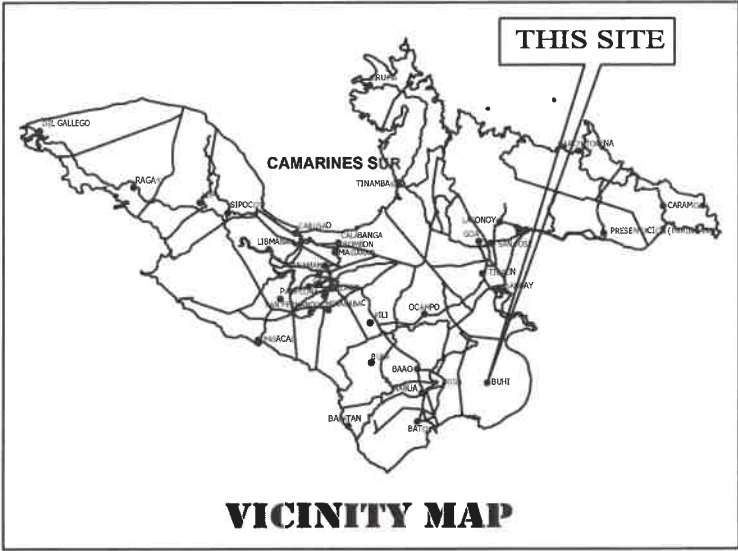
A-1
3

SHEET NO.

1
5

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A FACILITIES FOR THE ENGINEER			
I.1.1 Offices and Laboratory for the Engineer			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B OTHER GENERAL REQUIREMENTS			
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	I.s.
B.9 (1)	Mobilization / Demobilization	1.00	I.s.
PART III CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS			
DIVISION I GENERAL			
PART C EARTHWORKS			
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
804(7)	Gravel Fill	4.60	cu.m.
PART D REINFORCED CONCRETE			
900(1)d	Structural Concrete, 4000psi, Class A, 28 days	7.00	cu.m.
902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
DIVISION II BUILDINGS			
PART E FINISHING AND OTHER CIVIL WORKS			
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
1013(2)c	Fabricated Metal Roofing Accessory, Gauge 24(0.701mm), Gutters	40.00	I.m.
1001(9)	Storm Drainage and Downspout	1.00	I.s.
1002(24)	Cold Water Line	1.00	I.s.



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS ELEMENTARY SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3754, E 123.2767

SHEET CONTENT:

SUMMARY OF QUANTITY
VICINITY MAP
KEY MAP

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

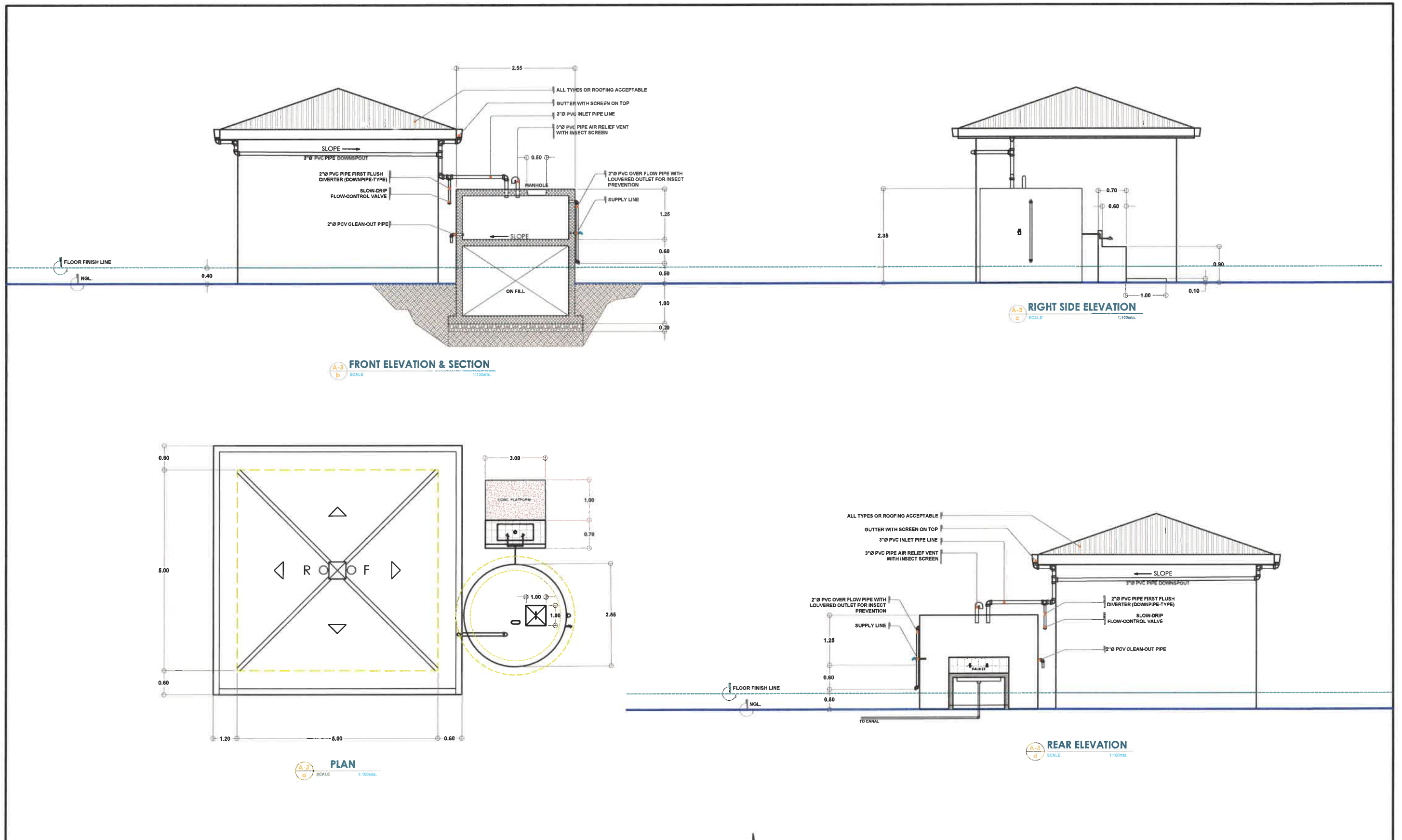
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

A-2
3

SHEET NO.

2
5



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:

C.Y. 2025 PROJECT
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CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS ELEMENTARY SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3754, E 123.2757

SHEET CONTENT:

PLAN
FRONT ELEVATION
RIGHT SIDE ELEVATION
REAR ELEVATION

DRAFTED:

LARRY M. OLIVEROS
DRAFTSMAN

REVIEWED:

FRANCIA M. PLOPINIO
ARCHITECT II

SUBMITTED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

RECOMMENDED:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

APPROVED:

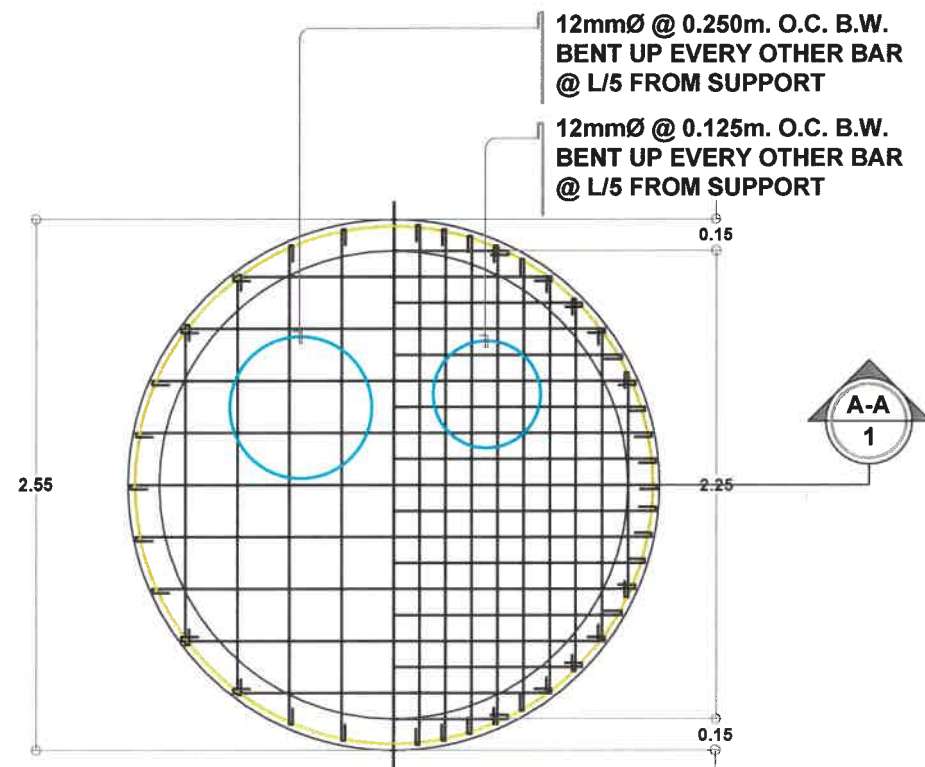
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

SET NO.

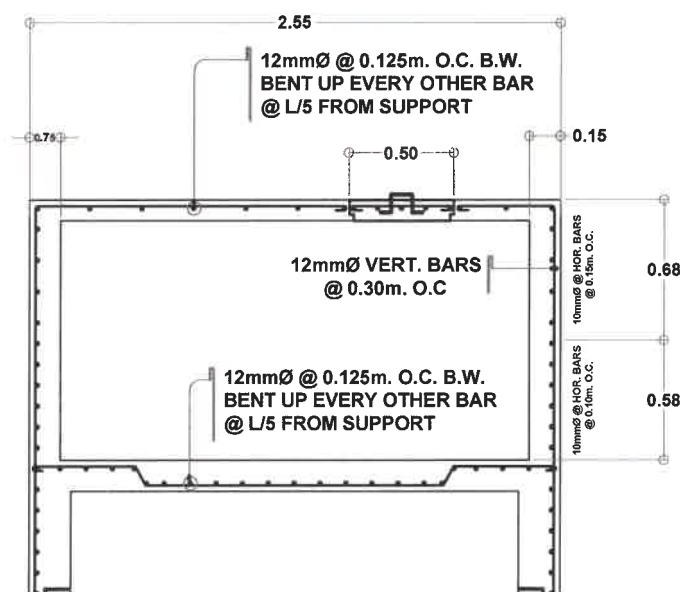
A-3
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SHEET NO.

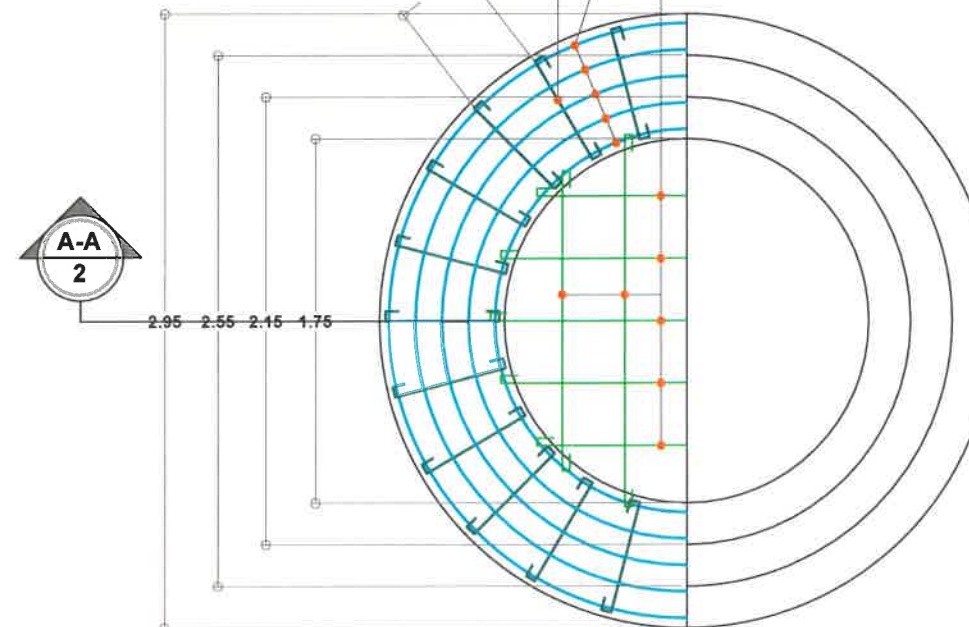
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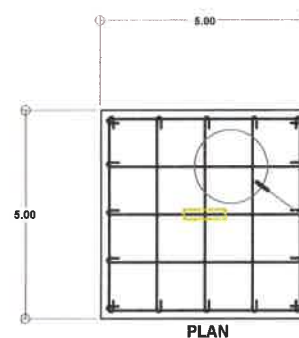
DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB
SCALE 1:20



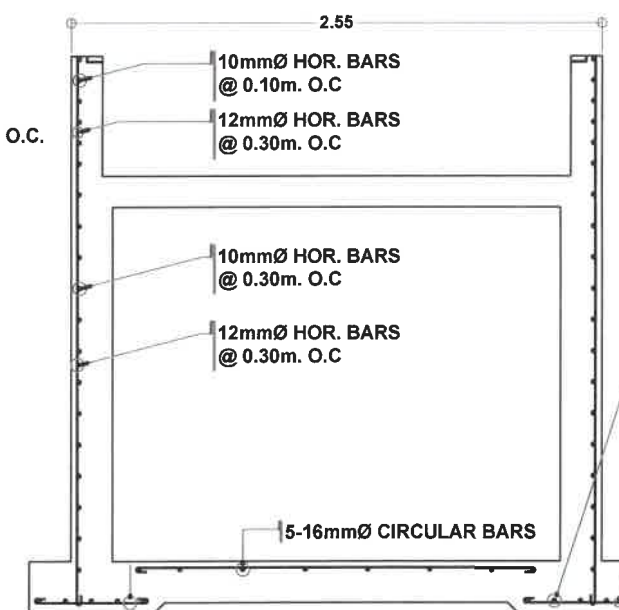
SECTION A-A 1
SCALE 1:20



FOUNDATION FRAMING PLAN
SCALE 1:20



DETAIL OF MANHOLE COVER
SCALE 1:10



SECTION A-A 2
SCALE 1:20



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS ELEMENTARY SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3754, E 123.2757

SHEET CONTENT:
DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:
LARRY M. OLIVEROS
DRAFTSMAN
DATE:

REVIEWED:
FRANCIA M. PLOPINIO
ARCHITECT II
DATE:

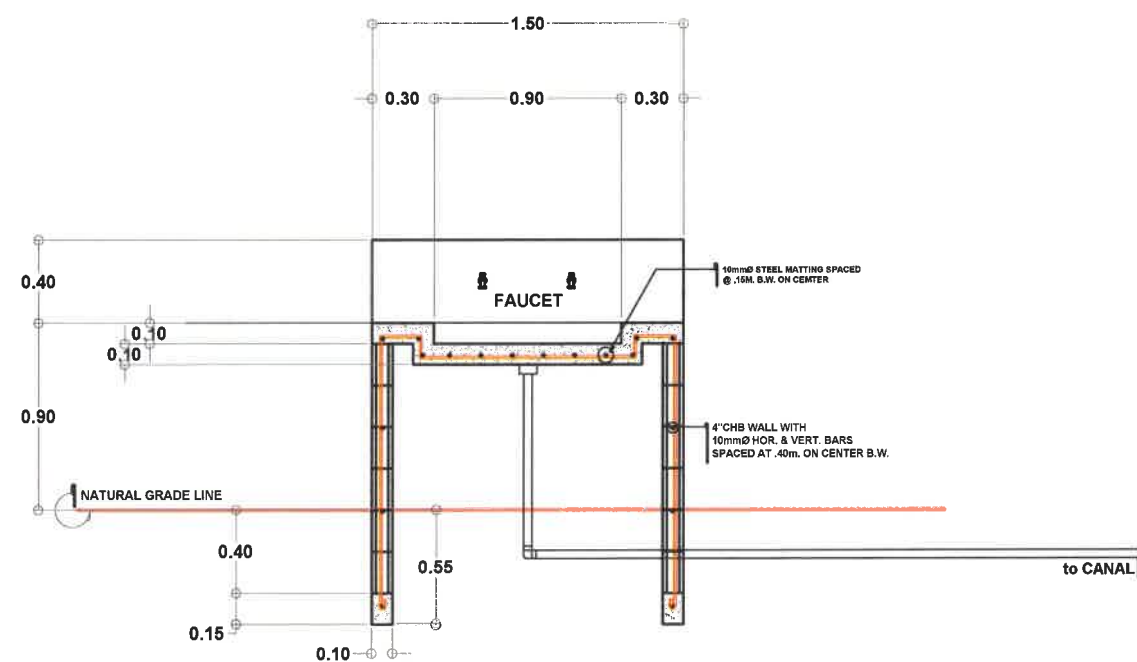
SUBMITTED:
ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION
DATE:

RECOMMENDED:
BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER
DATE:

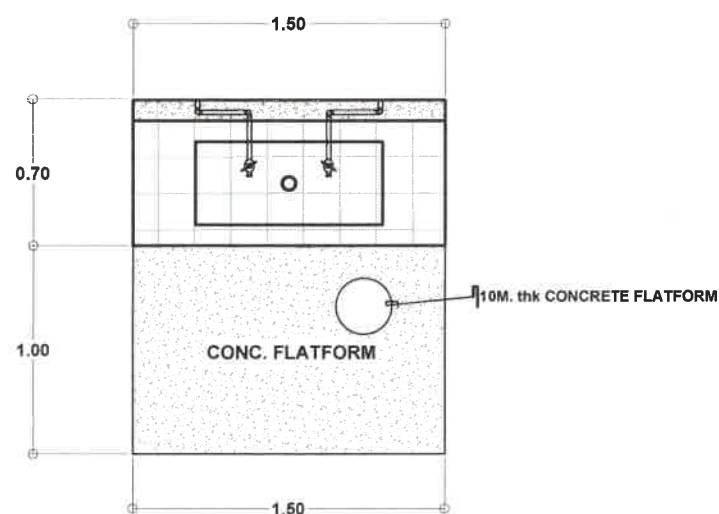
APPROVED:
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER
DATE:

SET NO.
S-1
2

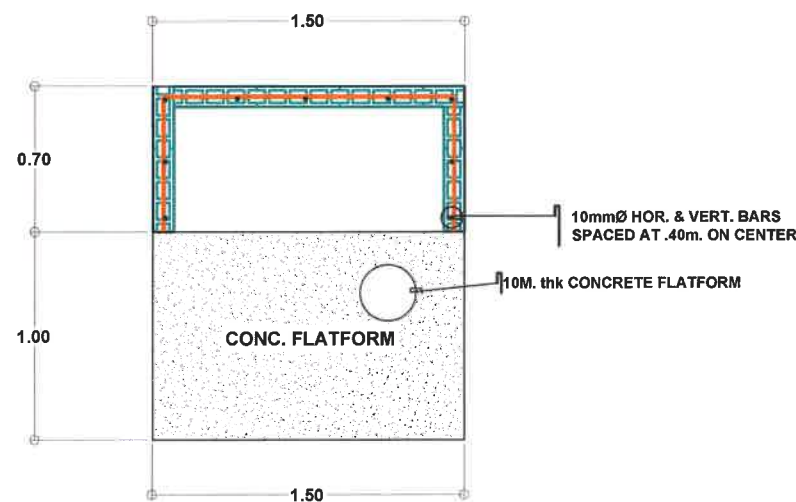
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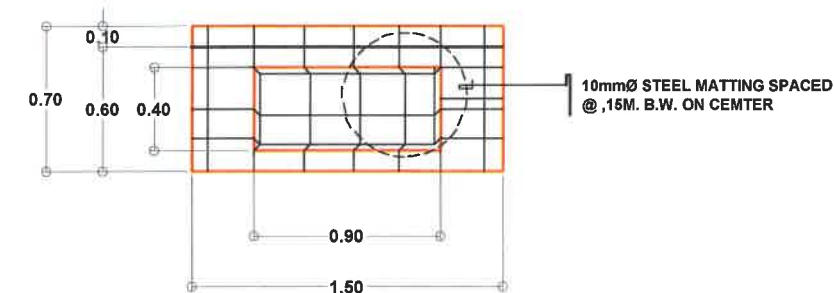
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



FOUNDATION PLAN



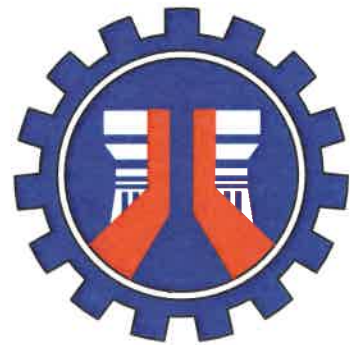
CONC. SLAB DETAIL



DETAIL OF LABATORY

SCALE 1:10mts.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS TAPAYAS ELEMENTARY SCHOOL TAPAYAS, BALATAN, CAMARINES SUR COORDINATES: N 13.3764, E 123.2767	SHEET CONTENT: DETAIL OF LABATORY	DRAFTED: LARRY M. OLIVEROS DATE: _____	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II DATE: _____	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION DATE: _____	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER DATE: _____	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER DATE: _____	SET NO. S-2 2	SHEET NO. 5 5
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REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5TH DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS NATIONAL HIGH SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3703, E 123.2710

SUBMITTED BY:

RECOMMENDING APPROVAL:

APPROVED:

ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION

DATE:

BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER

DATE:

LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER

DATE:



PERSPECTIVE



SITE DEVELOPMENT PLAN
SCALE 1:100m

INDEX OF DRAWING			
SHEET NO.	SHEET CONTENT:	SHEET NO.	SHEET CONTENT:
1 / 5	PERSPECTIVE SITE DEVELOPMENT PLAN INDEX OF DRAWING	4 / 5	DETAIL SLAB REINFORCEMENT HALF ROOF SLAB HALF FLOOR SLAB DETAIL OF MANHOLE COVER FOUNDATION FRAMING PLAN SECTION A-A 1 SECTION A-A 2
2 / 5	SUMMARY OF QUANTITY VICINITY MAP KEY MAP		
3 / 5	PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	5 / 5	DETAIL OF LABATORY

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

DISTRICT / CITY / MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
**CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS**
TAPAYAS NATIONAL HIGH SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3703, E 123.2710

SHEET CONTENT:
PERSPECTIVE
SITE DEVELOPMENT PLAN
INDEX OF DRAWING

DRAFTED:
LARRY M. OLIVEROS
DRAFTSMAN
DATE:

REVIEWED:
FRANCIA M. PLOPINIO
ARCHITECT II
DATE:

SUBMITTED:
ARMAN C. IBARRETA
OIC-CHIEF, PLANNING AND DESIGN SECTION
DATE:

RECOMMENDED:
BRILLIANCE M. SALAS
ASSISTANT DISTRICT ENGINEER
DATE:

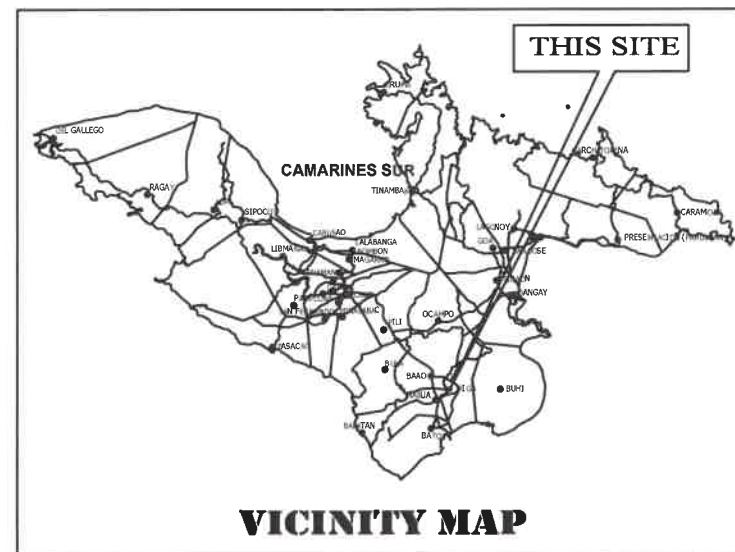
APPROVED:
LEOPOLDO A. BARELA, JR.
DISTRICT ENGINEER
DATE:

SET NO.
A-1
3

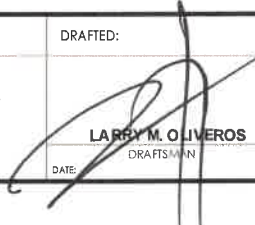
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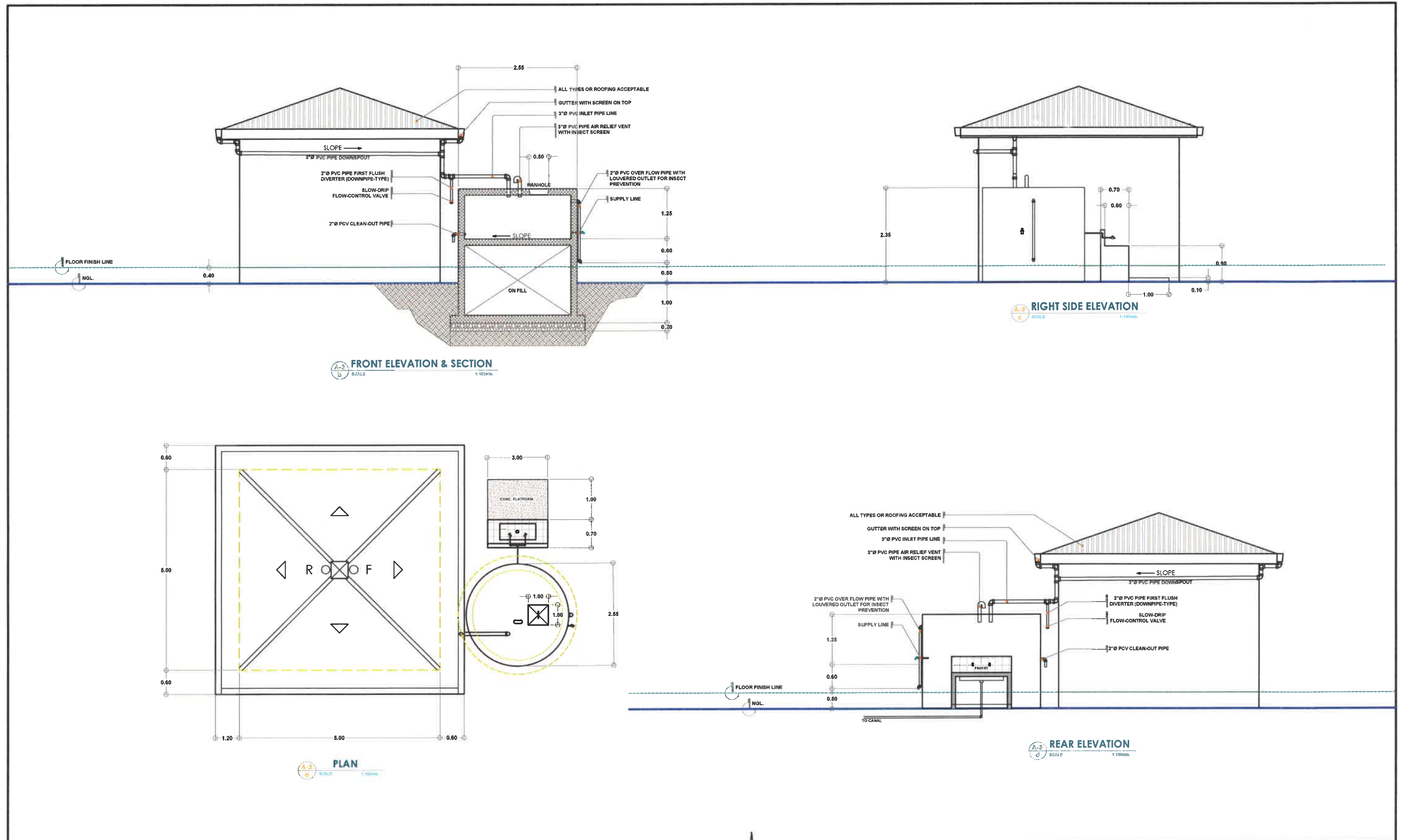
SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
PART A FACILITIES FOR THE ENGINEER			
1.1.1 Offices and Laboratory for the Engineer			
A.1.1.(8)	Provision of Field Office for the Engineer (Rental Basis)	2.43	mo.
PART B OTHER GENERAL REQUIREMENTS			
B.5 (1)	Project Billboard / Signboard	2.00	ea.
B.7 (1)	Occupational Safety and Health	1.00	l.s.
B.9 (1)	Mobilization / Demobilization	1.00	l.s.
PART III CIVIL, MECHANICAL, ELECTRICAL AND SANITARY/ PLUMBING WORKS			
DIVISION I GENERAL			
PART C EARTHWORKS			
803(1)a	Structure Excavation, Common Soil	8.70	cu.m.
804(1)a	Embankment from Roadway/ Structure Excavation, Common Soil	7.00	cu.m.
804(2)a	Embankment from Borrow, Common Soil	3.80	cu.m.
804(7)	Gravel Fill	4.60	cu.m.
PART D REINFORCED CONCRETE			
900(1)d	Structural Concrete, 4000psi, Class A, 28 days	7.00	cu.m.
902(1)a1	Reinforcing Steel (Deformed), Grade 40 (for one-storey building)	737.00	kgs.
903(2)	Formworks and Falseworks (for one-storey building)	54.00	sq.m.
DIVISION II BUILDINGS			
PART E FINISHING AND OTHER CIVIL WORKS			
1016(1)b	Waterproofing, Liquid	44.00	sq.m.
1018(1)	Glazed Tiles and Trims	3.00	sq.m.
1027(1)	Cement Plaster Finish	33.00	sq.m.
1046(2)a1	CHB Non Load Bearing (including Reinforcing Steel) 100mm	4.10	sq.m.
1013(2)c	Fabricated Metal Roofing Accessory, Gauge 24(0.701mm), Gutters	40.00	l.m.
1001(9)	Storm Drainage and Downspout	1.00	l.s.
1002(24)	Cold Water Line	1.00	l.s.

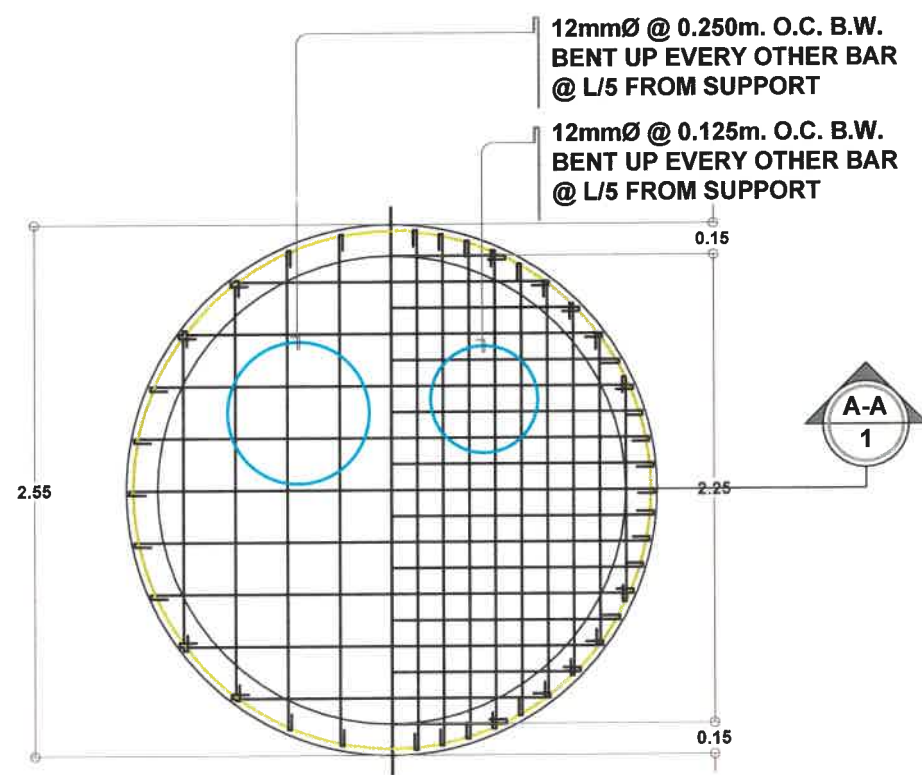


KEY MAP

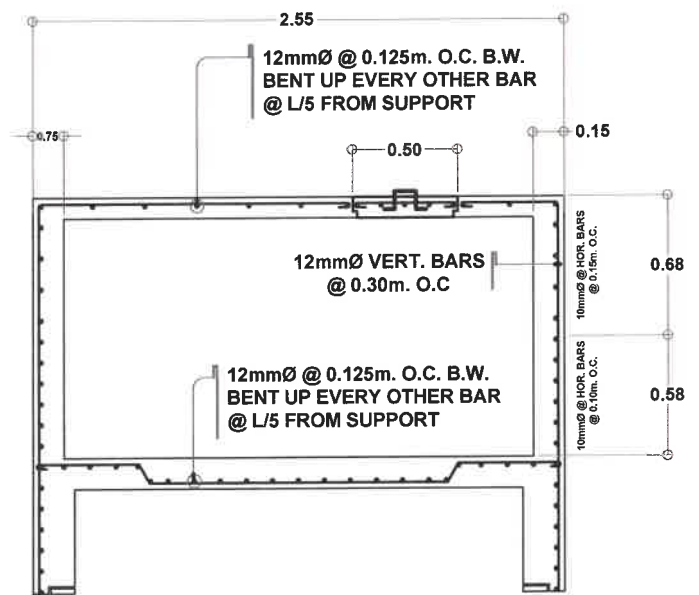
 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5 th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS TAPAYAS NATIONAL HIGH SCHOOL TAPAYAS, BALATAN, CAMARINES SUR COORDINATES: N 13.3703, E 123.2710	SHEET CONTENT: SUMMARY OF QUANTITY VICINITY MAP KEY MAP	DRAFTED:  LARRY M. OLIVEROS DRAFTSMAN DATE: _____	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II DATE: _____	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION DATE: _____	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER DATE: _____	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER DATE: _____	SET NO. A-2 3	SHEET NO. 2 5
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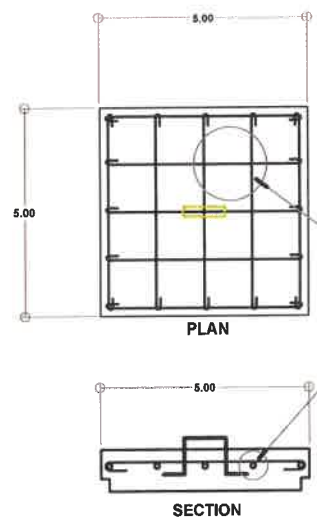
 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS TAPAYAS NATIONAL HIGH SCHOOL TAPAYAS, BALATAN, CAMARINES SUR COORDINATES: N 13.3703, E 123.2710	SHEET CONTENT: PLAN FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	DRAFTED:  LARRY M. OLIVEROS DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA OIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. A-3 3 SHEET NO. 3 5
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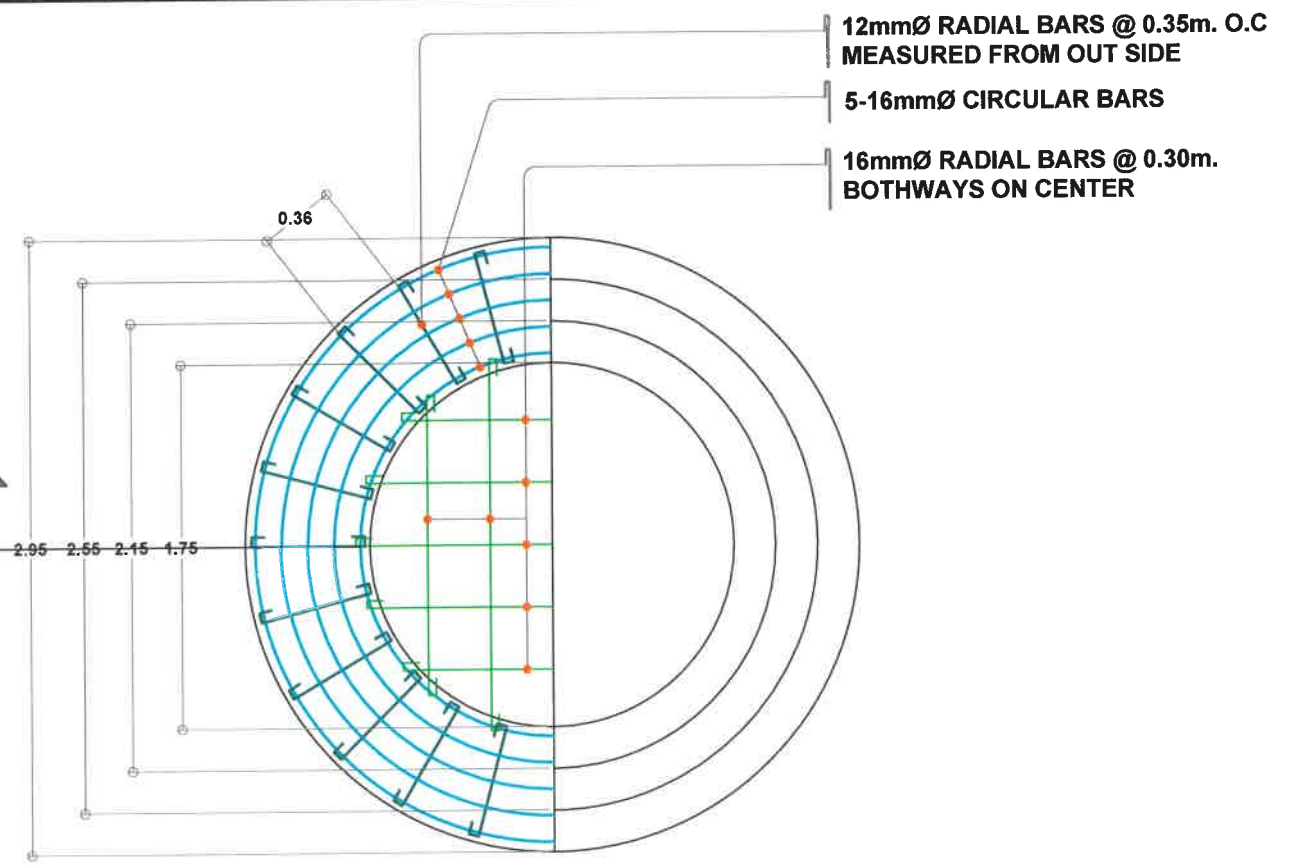
DETAILS SLAB REINFORCEMENT
HALF ROOF SLAB, HALF FLOOR SLAB
SCALE: 1:200



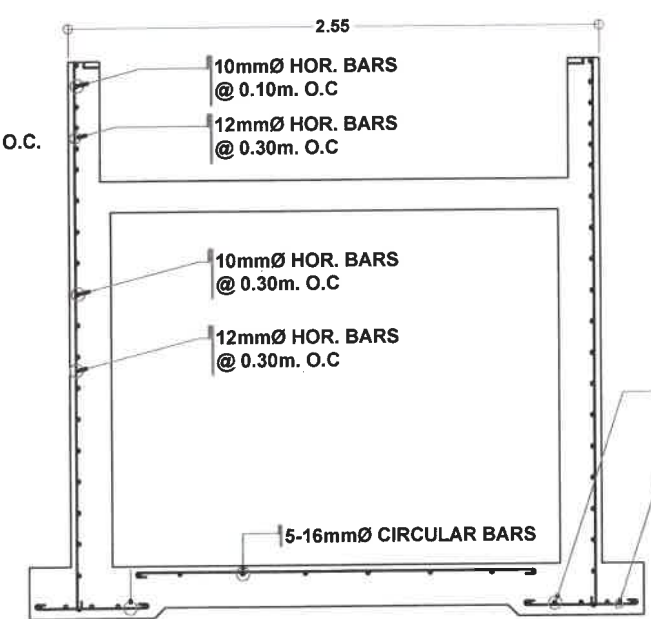
SECTION A-A 1
SCALE: 1:20



DETAIL OF MANHOLE COVER
SCALE: 1:10



FOUNDATION FRAMING PLAN
SCALE: 1:20



SECTION A-A 2
SCALE: 1:20

5-16mmØ CIRCULAR BARS
12mmØ RADIAL BARS @ 0.35m. O.C. MEASURED FROM OUT SIDE



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS
REGION V
CAMARINES SUR 5th
DISTRICT ENGINEERING OFFICE
STA. TERESITA, BAAO, CAMARINES SUR

PROJECT NAME AND LOCATION:
C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN FOR
CONVERGENCE AND SPECIAL SUPPORT PROGRAM
CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND
SEWERAGE / RAIN WATER COLLECTOR SYSTEMS
TAPAYAS NATIONAL HIGH SCHOOL
TAPAYAS, BALATAN, CAMARINES SUR
COORDINATES: N 13.3705, E 123.2710

SHEET CONTENT:
DETAIL SLAB REINFORCEMENT
HALF ROOF SLAB HALF FLOOR SLAB
DETAIL OF MANHOLE COVER
FOUNDATION FRAMING PLAN
SECTION A-A 1
SECTION A-A 2

DRAFTED:
LARRY M. OLIVEROS
DATE: _____

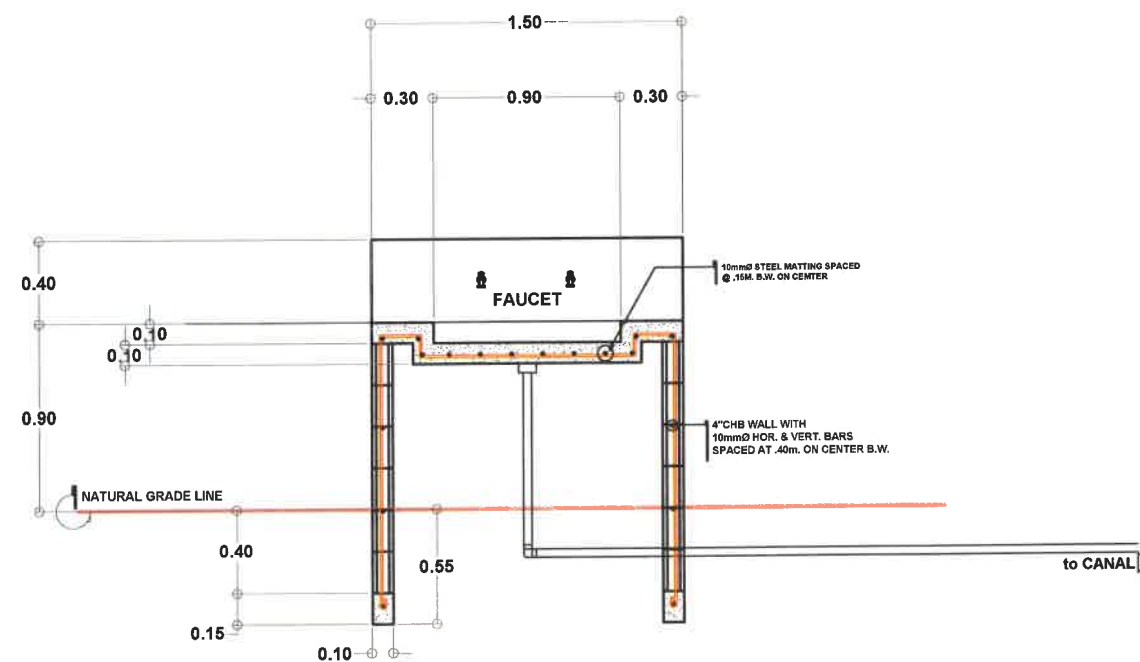
REVIEWED:
FRANCIA M. PLOPINIO
DATE: _____

SUBMITTED:
ARMAN C. IBARRETA
DATE: _____

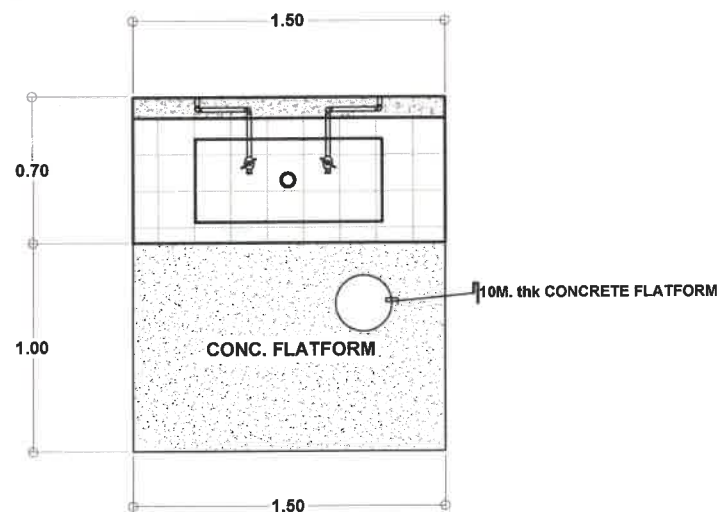
RECOMMENDED:
BRILLIANCE M. SALAS
DATE: _____

APPROVED:
LEOPOLDO A. BARELA, JR.
DATE: _____

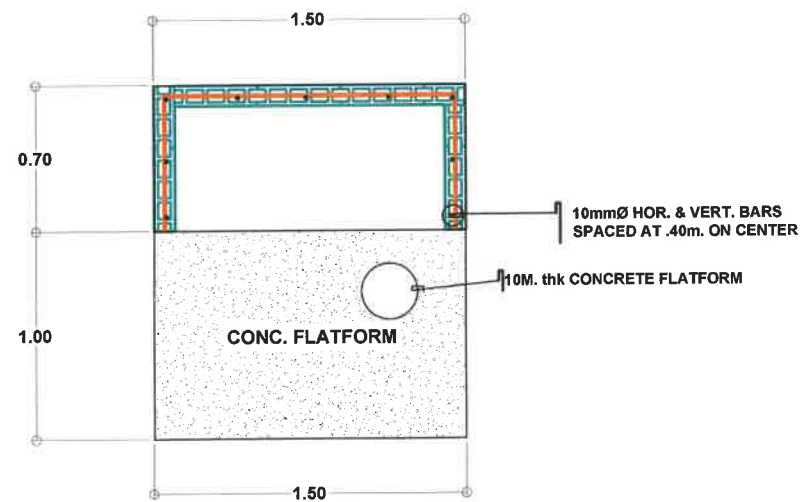
SET NO. 2
SHEET NO. 45



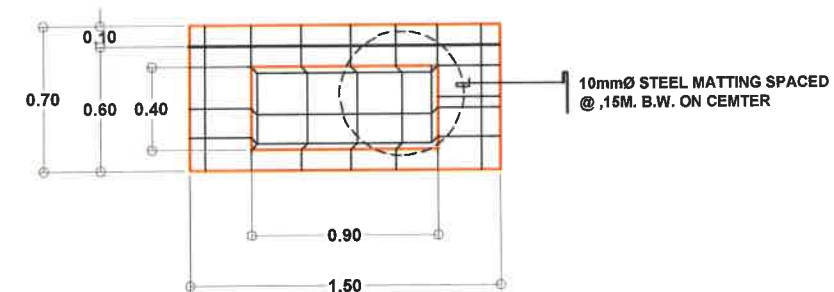
SECTION DETAIL OF CONC. SINK



FLOOR PLAN



FOUNDATION PLAN



CONC. SLAB DETAIL



DETAIL OF LABATORY

SCALE 1:10mts.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS REGION V CAMARINES SUR 5th DISTRICT ENGINEERING OFFICE STA. TERESITA, BAAO, CAMARINES SUR	PROJECT NAME AND LOCATION: C.Y. 2025 PROJECT DETAILED ENGINEERING DESIGN FOR CONVERGENCE AND SPECIAL SUPPORT PROGRAM CONSTRUCTION / REHABILITATION OF WATER SUPPLY / SEPTAGE AND SEWERAGE / RAIN WATER COLLECTOR SYSTEMS TAPAYAS NATIONAL HIGH SCHOOL TAPAYAS, BALATAN, CAMARINES SUR COORDINATES: N 13.3703, E 123.2710	SHEET CONTENT: DETAIL OF LABATORY	DRAFTED: LARRY M. OLIVEROS DRAFTSMAN	REVIEWED: FRANCIA M. PLOPINIO ARCHITECT II	SUBMITTED: ARMAN C. IBARRETA JOIC-CHIEF, PLANNING AND DESIGN SECTION	RECOMMENDED: BRILLIANCE M. SALAS ASSISTANT DISTRICT ENGINEER	APPROVED: LEOPOLDO A. BARELA, JR. DISTRICT ENGINEER	SET NO. S-2 2 SHEET NO. 5 5
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