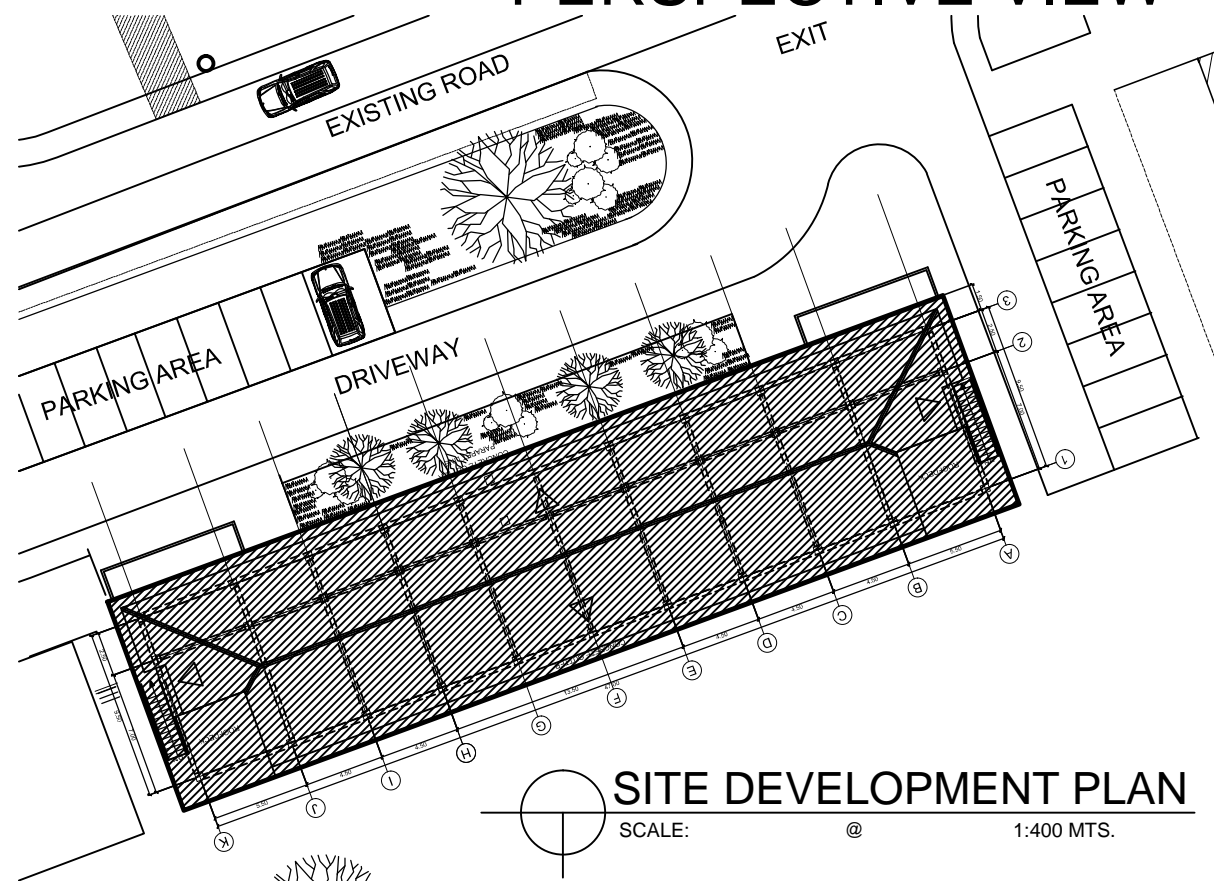


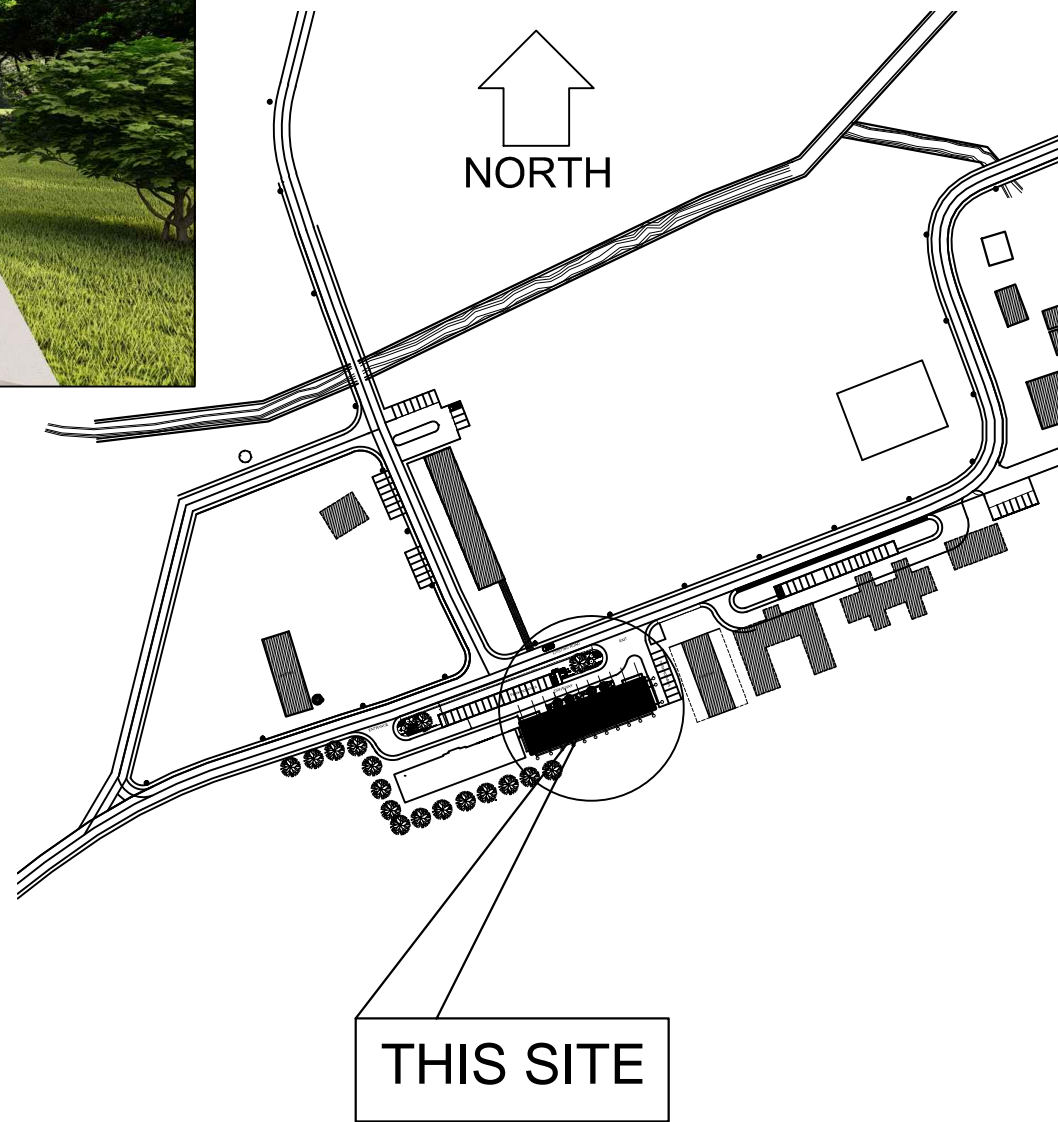


PERSPECTIVE VIEW



SITE DEVELOPMENT PLAN

SCALE: @ 1:400 MTS.



VICINITY MAP

SCALE: NTS

REPUBLIC OF THE PHILIPPINES
OFFICE OF THE MUNICIPAL/CITY
ENGINEER/
BUILDING OFFICIAL

DISTRICT/CITY/MUNICIPALITY

LAND USE & ZONING:

LINE & GRADE:

ARCHITECTURAL:

STRUCTURAL:

ELECTRICAL:

PLUMBING:

FIRE AND SAFETY:

MECHANICAL:

NOTED:

MAYOR

APPROVED:

BUILDING OFFICIAL



PROJECT TITLE :
**CONSTRUCTION OF TWO (2) STOREY
8 CL ACADEMIC BUILDING WITH
COMPLETE FURNITURES & FIXTURES
AT DUMINGAG CAMPUS**
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR

PREPARED BY:
Abapol
AIVY B. GAPOL, CE
ENGINEERING ASSISTANT

CHECKED AND SUBMITTED BY:
Pangasian
PANGASIAN B. MAMINTAS, CE
COLLEGE ENGINEER

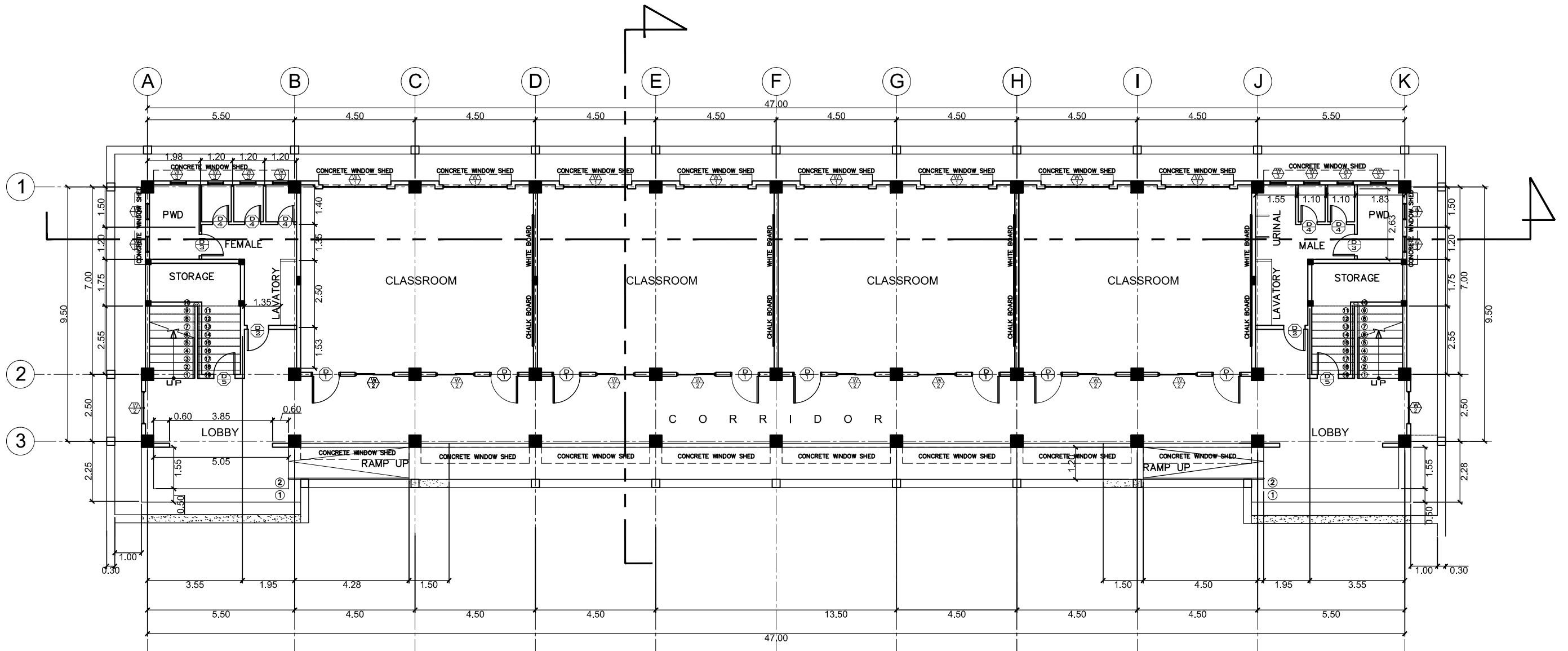
NOTED BY:
Nanette
NANETTE D. BILBAO, Ed.D
DUMINGAG CAMPUS ADMINISTRATOR

RECOMMENDING APPROVAL:
Rodrigo
RODRIGO P. MILLARES, JR., REE, EnP.
PLANNING AND DEVELOPMENT DIRECTOR

APPROVED:
Freddie
DR. FREDDIE T. BERNAL, CESO III
OIC-PRESIDENT

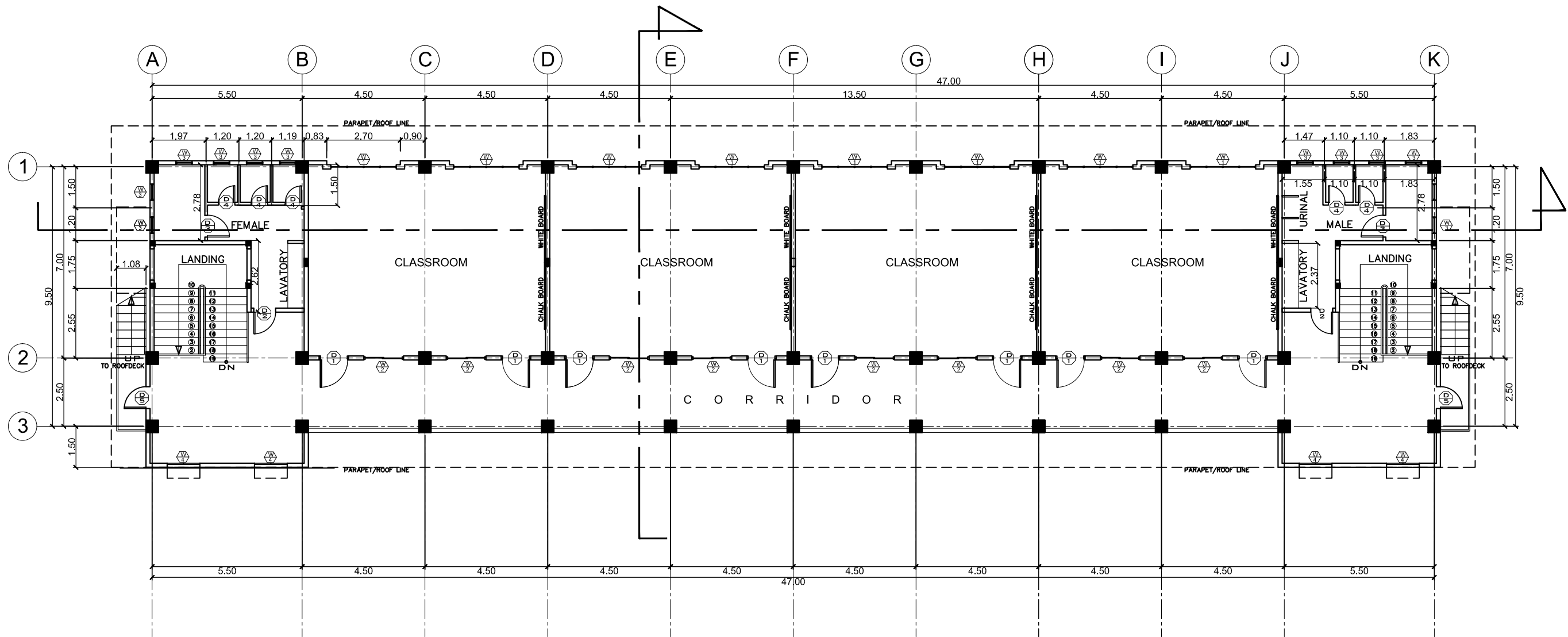
SHEET CONTENT:
AS SHOWN

SHEET NO:
A-1
1 | 13



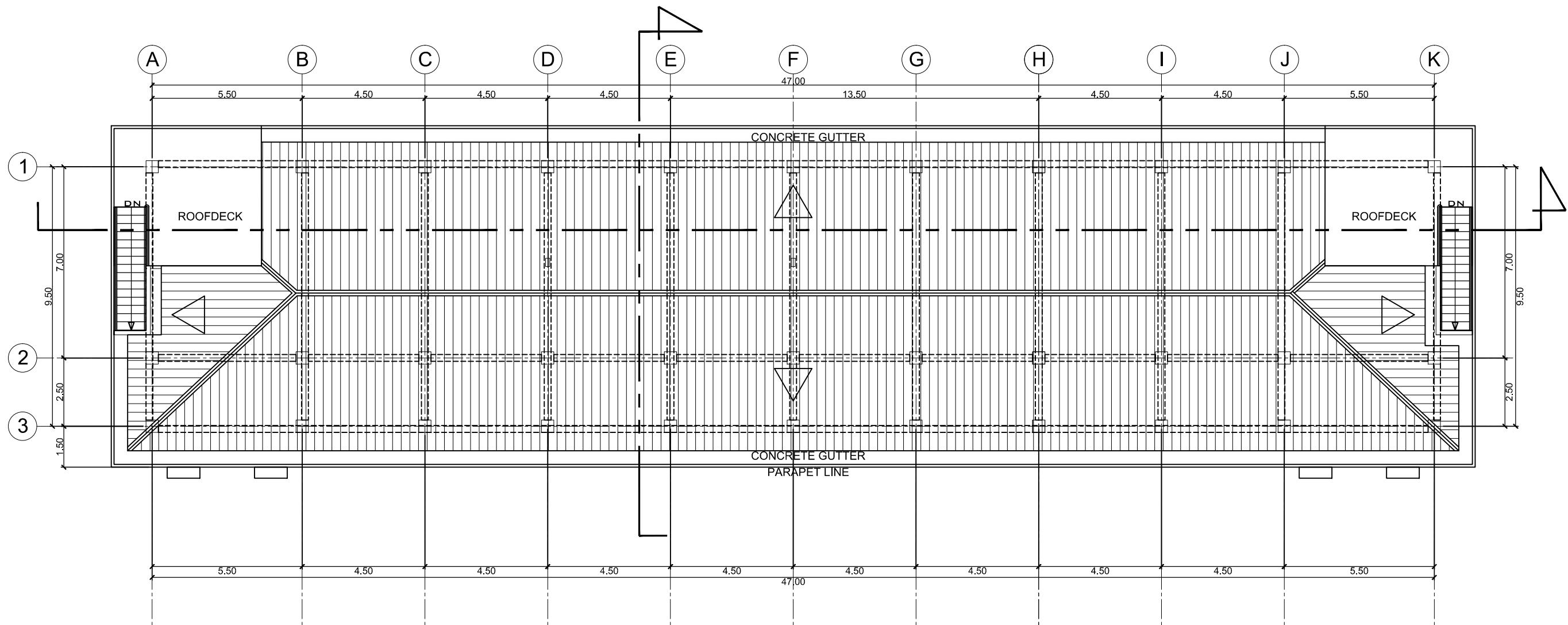
GROUND FLOOR PLAN
 SCALE: @ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-2 2 13 </div>
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR		DATE :	DATE :	DATE :	DATE :	DATE :		



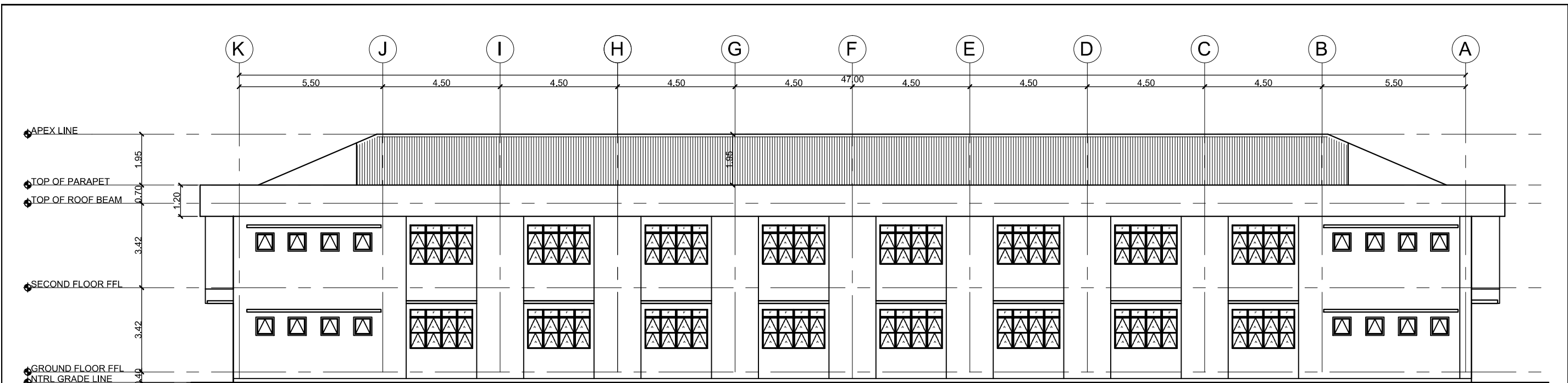
SECOND FLOOR PLAN
 SCALE: @ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS <small>LOCATION : DUMINGAG, ZAMBOANGA DEL SUR</small>	PREPARED BY: <u>AIVY B. GAPOL, CE</u> ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <u>PANGASIAN B. MAMINTAS, CE</u> COLLEGE ENGINEER	NOTED BY: <u>NANETTE D. BILBAO, Ed.D</u> DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <u>RODRIGO P. MILLARES, JR., REE, EnP.</u> PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <u>DR. FREDDIE T. BERNAL, CESO III</u> OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-3 3 13 </div>
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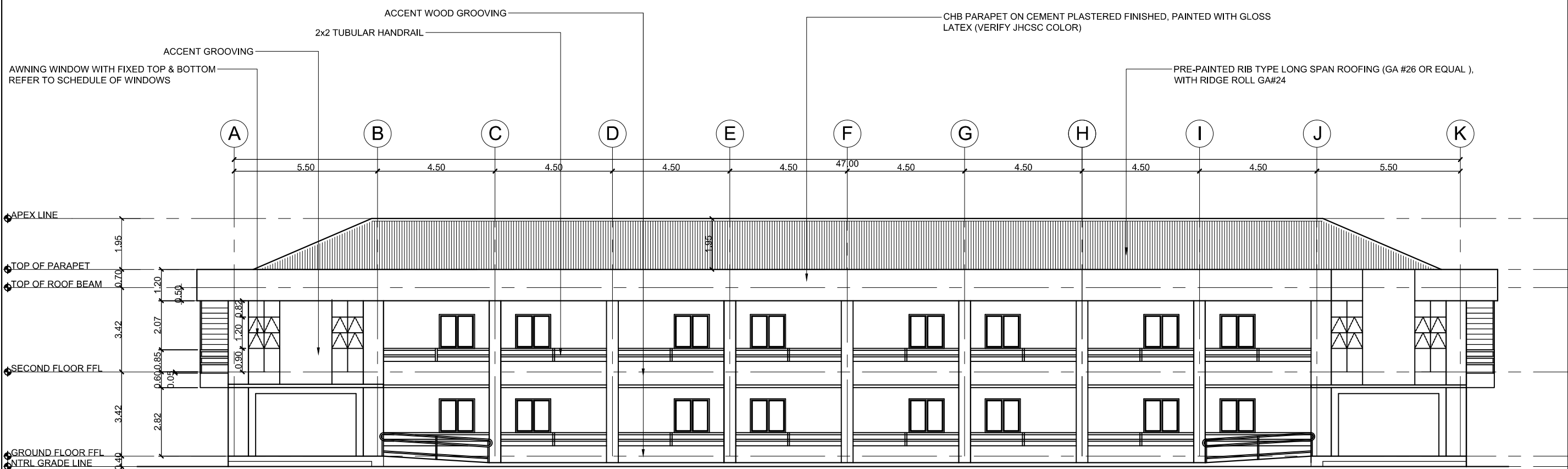


ROOF PLAN
 SCALE: _____ @ _____ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-4 4 13 </div>
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR		DATE :	DATE :	DATE :	DATE :	DATE :		

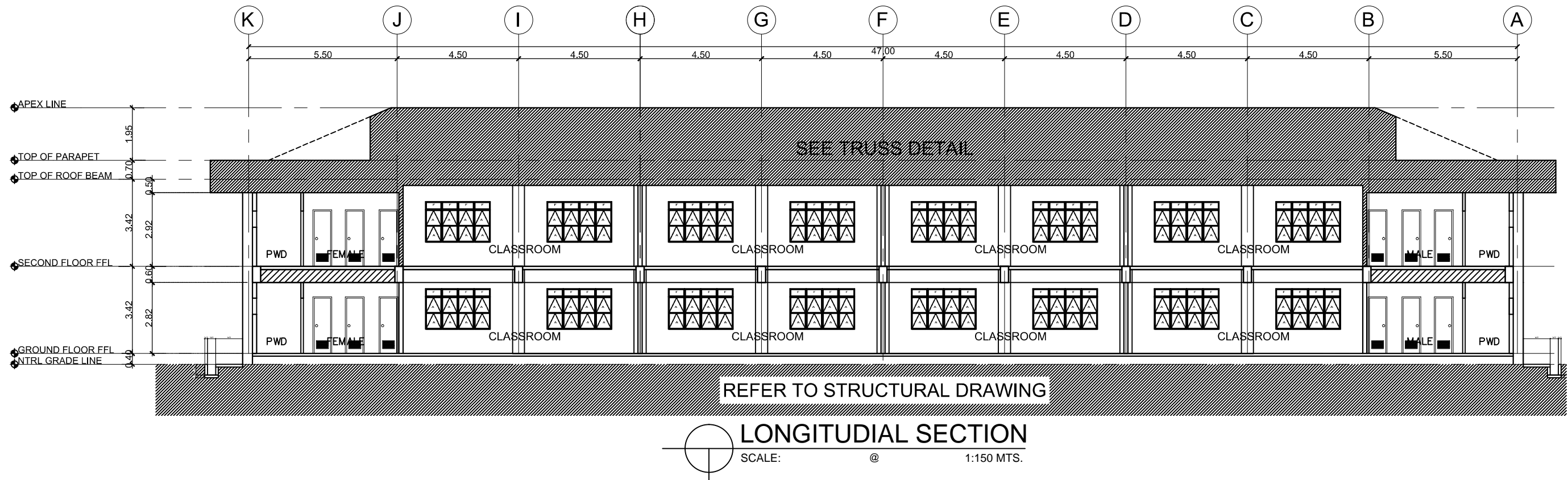
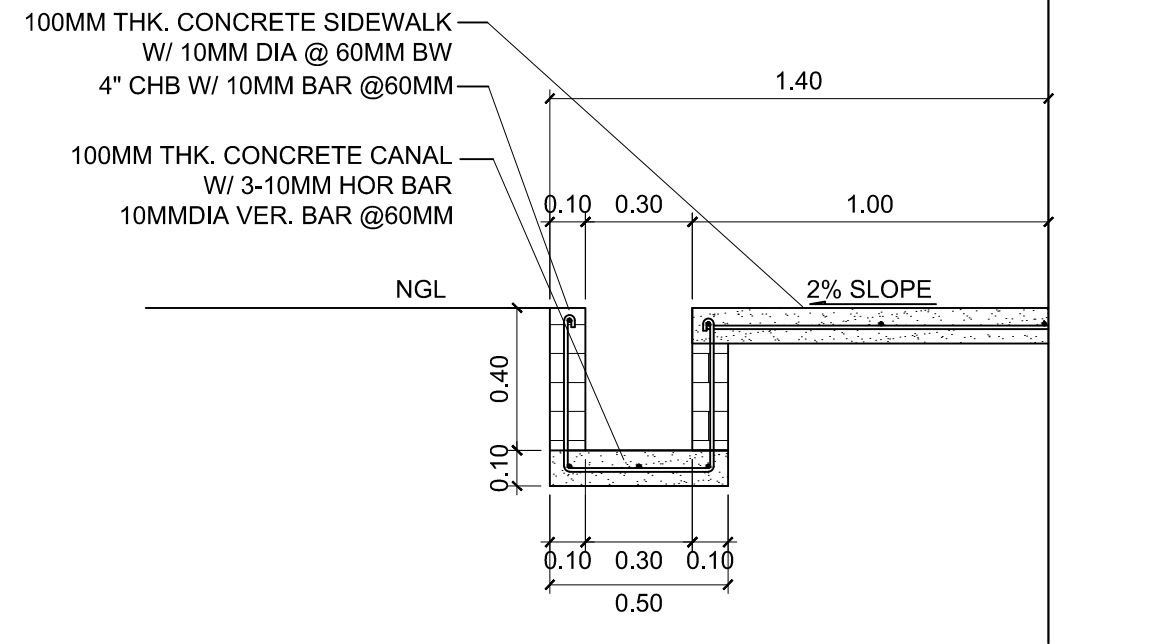
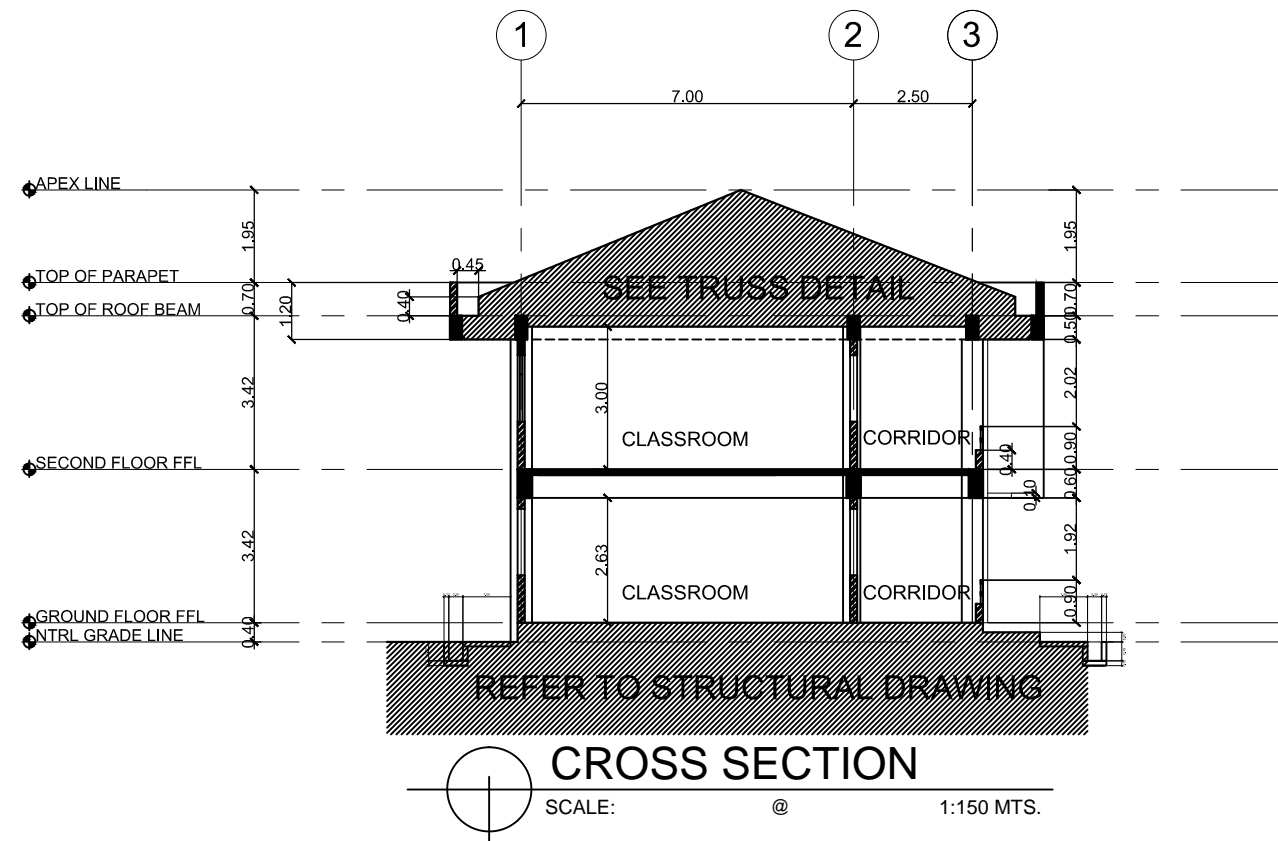



REAR ELEVATION
 SCALE: @ 1:150 MTS.

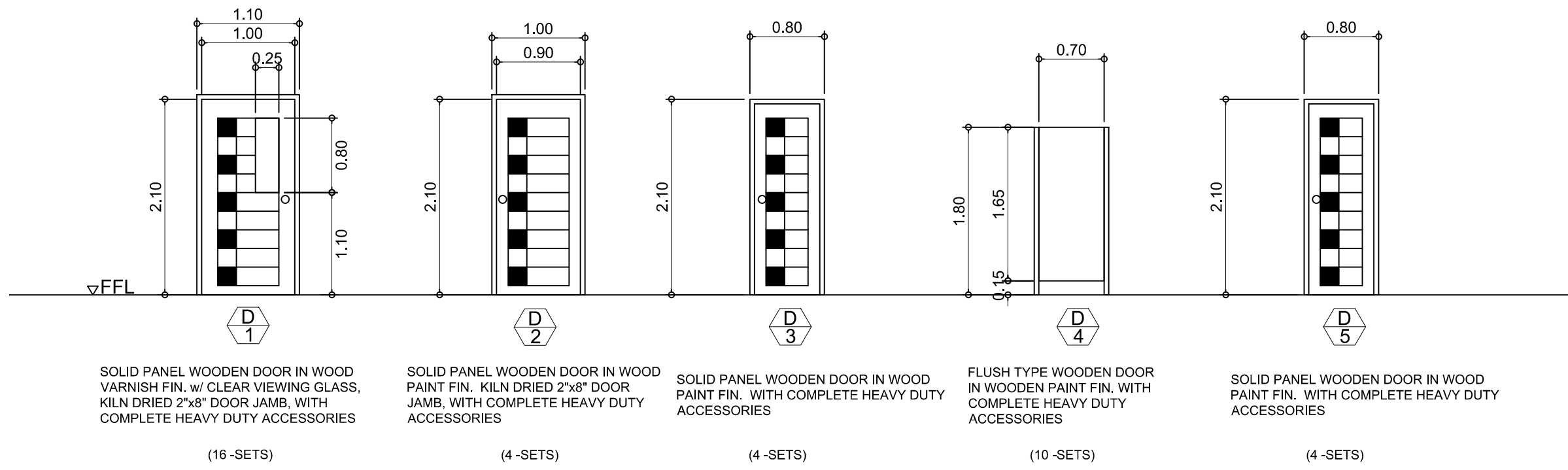
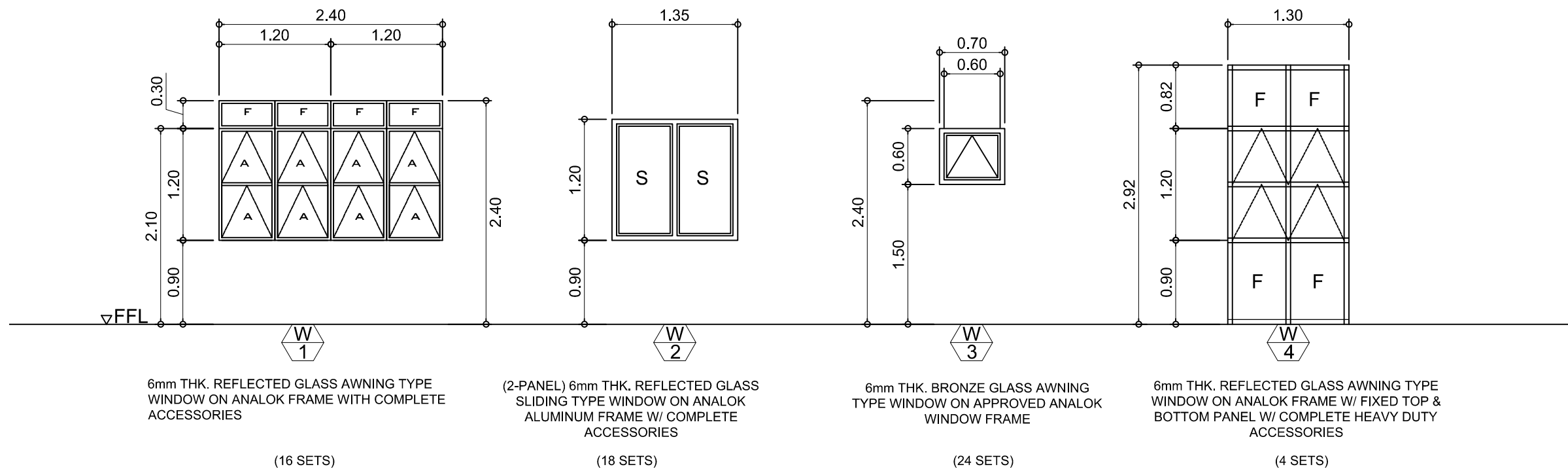


FRONT ELEVATION
 SCALE: @ 1:150 MTS.







	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CE^{SO} III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-5 5 13 </div>
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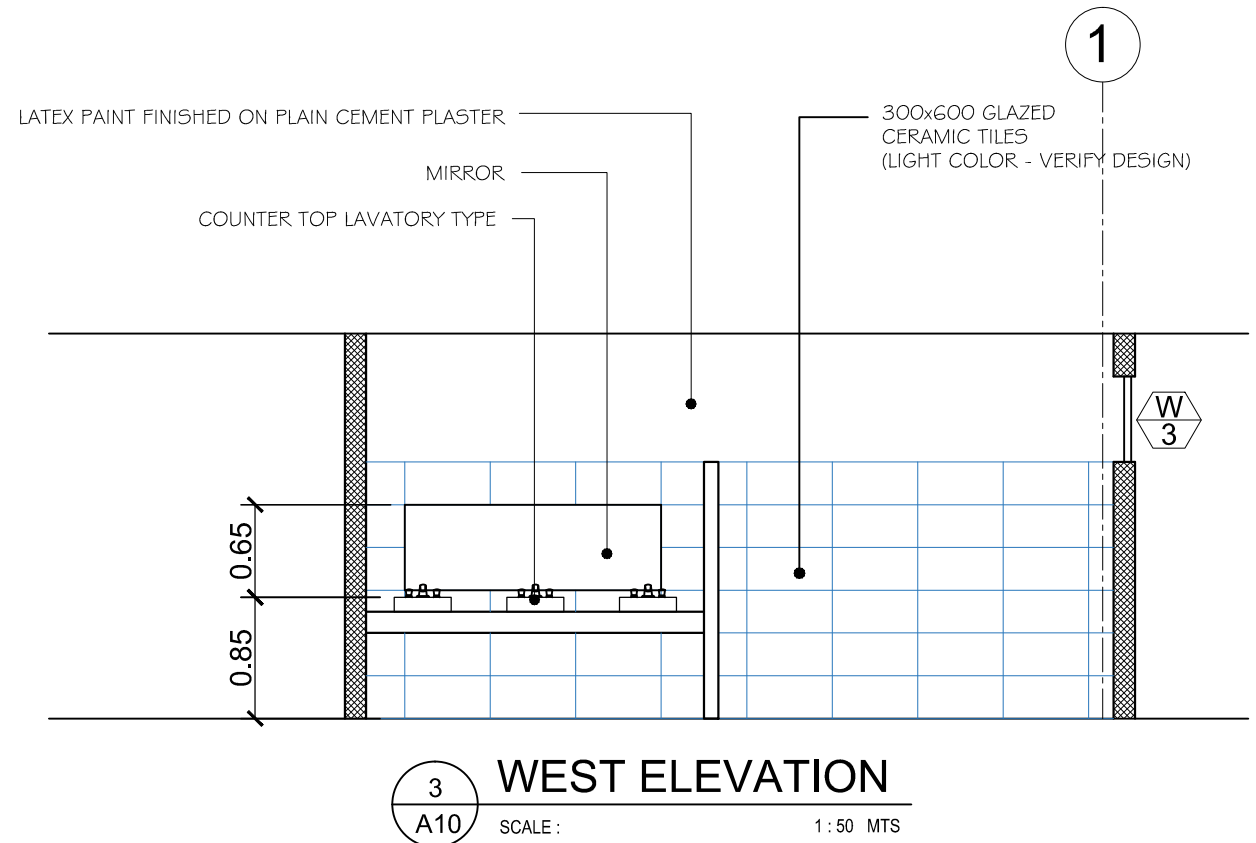
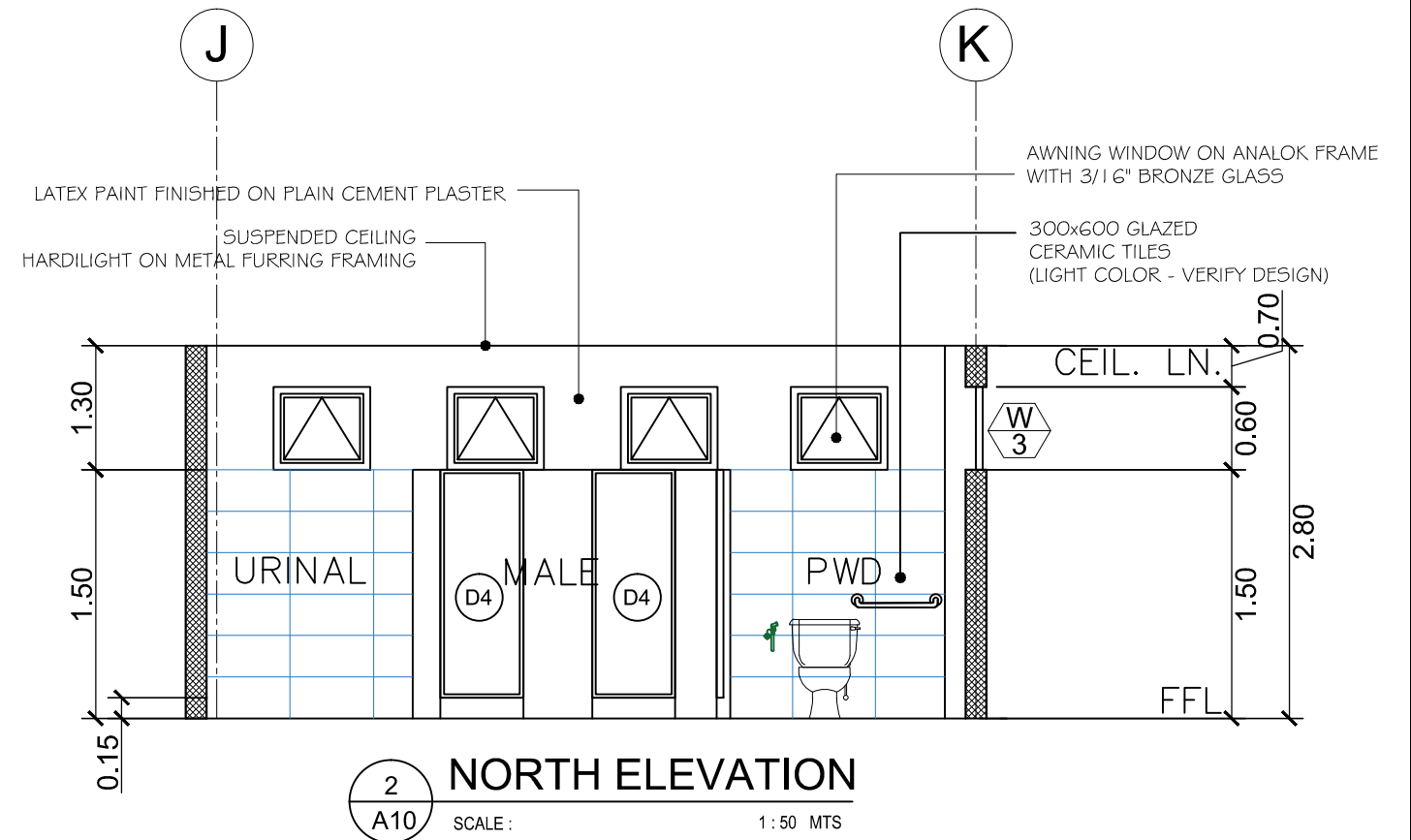
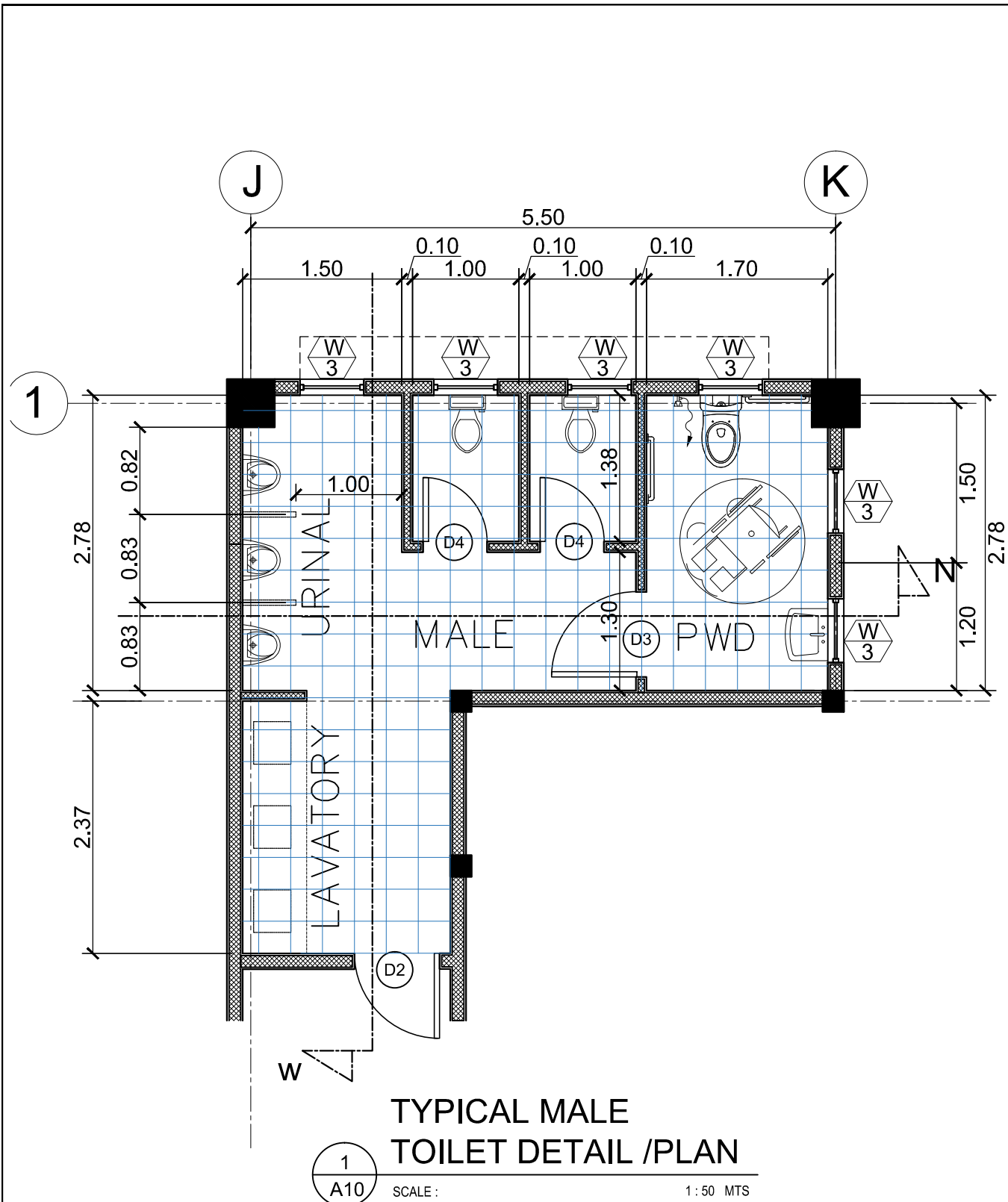


	PROJECT TITLE :	PREPARED BY:	CHECKED AND SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET NO:
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	<i>A. B. Gapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	<i>P. B. Mamintas</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	<i>N. Bilbao</i> NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	<i>R. P. Millares, Jr.</i> RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	<i>Dr. Freddie T. Bernal</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN	A-7 7 13

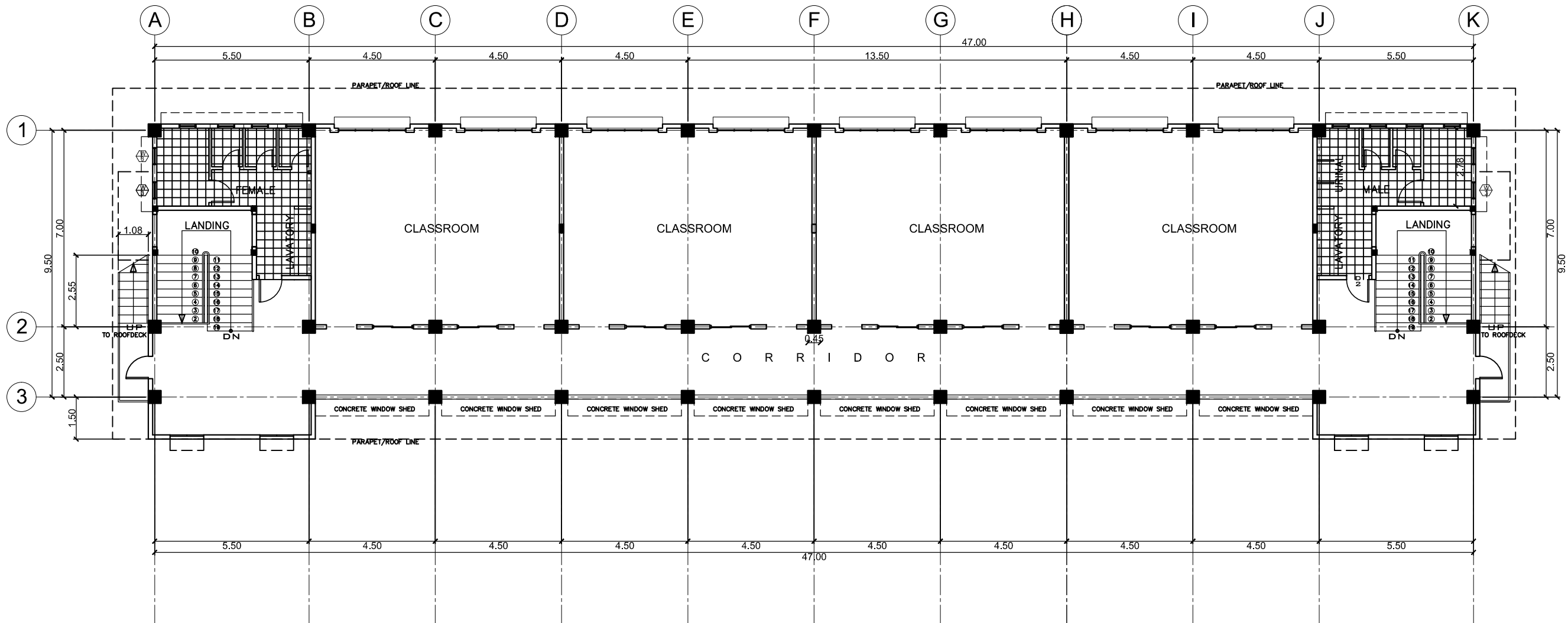


SCHEDULE OF DOORS & WINDOWS
 SCALE: _____ @ _____ 1:50 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY:  AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY:  PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY:  NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL:  RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED:  DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-8 8 13 </div>
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR		DATE :	DATE :	DATE :	DATE :	DATE :		



	PROJECT TITLE :	PREPARED BY:	CHECKED AND SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET NO.:
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	<i>A. Gapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	<i>Pangasian B. Mamintas</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	<i>Nanette J. Bilbao</i> NANETTE J. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	<i>Rodrigo P. Millares, Jr.</i> RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	<i>Dr. Freddie T. Bernal</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN	A-10 10/13



SECOND FLR TILES LAYOUT PLAN
 SCALE: _____ @ _____ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS <small>LOCATION : DUMINGAG, ZAMBOANGA DEL SUR</small>	PREPARED BY: <u>AIVY B. GAPOL, CE</u> ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <u>PANGASIAN B. MAMINTAS, CE</u> COLLEGE ENGINEER	NOTED BY: <u>NANETTE D. BILBAO, Ed.D</u> DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <u>RODRIGO P. MILLARES, JR., REE, EnP.</u> PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <u>DR. FREDDIE T. BERNAL, CESO III</u> OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-12 12 13 </div>
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GENERAL CONSTRUCTION NOTES

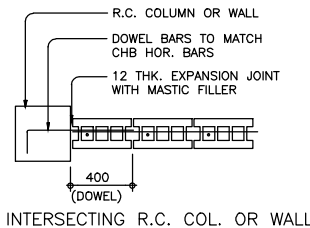
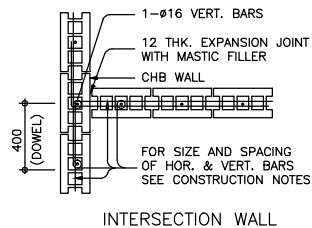
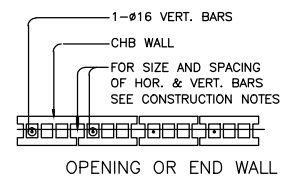
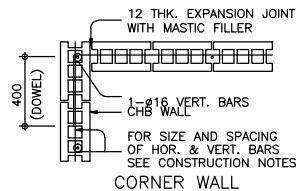
NOTES ON CONCRETE HOLLOW BLOCK WALLS

- UNLESS OTHERWISE SHOWN IN PLANS ALL CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCKS SHALL BE REINFORCED AS SHOWN IN THE SCHEDULE OF CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCK REINFORCEMENT.
- PROVIDE 150mm x 300mm STIFFENER COLUMN REINFORCED WITH 4-12mm WITH 6mm ϕ TIES AT 150mm ON CENTER WHERE CONCRETE HOLLOW BLOCK TERMINATES AND AT EVERY 3.0M LENGTH OF CONCRETE HOLLOW BLOCK WALLS UNLESS NOTED IN STRUCTURAL PLANS.

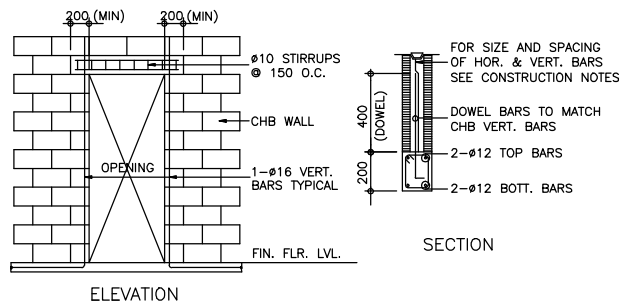
BLOCK THICKNESS	REINFORCEMENT		NOTES
	HORIZONTAL	VERTICAL	
75 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	A. MINIMUM LAPS AT SPLICE = 0.25M B. PROVIDE RIGHT ANGLED REINFORCEMENT AT CORNERS 0.92M LONG C. WHERE CHB OR CER. BLK. WALL DOWELS JOIN COL. R.C. BEAMS AND WALL DOWELS WITH THE SAME SIZE AS VERT. OR HOR. REINFORCEMENTS SHALL BE PROVIDED
125 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	
150 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	
200 mm	12mm ϕ @ 600mm O.C.	12mm ϕ @ 600mm O.C.	

REINFORCING CONCRETE LINTEL BEAM IN CONCRETE BLOCK WALLS

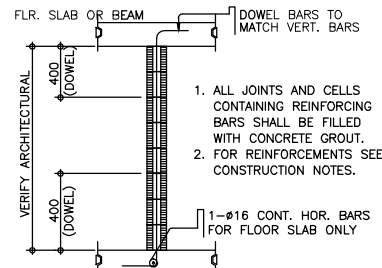
CLEAR SPAN (L)	TOTAL LENGTH (L+0.40M)	MIN. HEIGHT OF LINTEL (MPa)	REINFORCEMENT		
			BOTTOM	TOP	STIRRUPS
1.20M	1.80M	200	1-#10	1-#10	#6mm @ 200mm
1.50M	1.90M	200	1-#10	1-#10	#6mm @ 200mm
1.80M	2.20M	200	1-#12	1-#10	#6mm @ 200mm
2.10M	2.50M	250	1-#12	1-#10	#6mm @ 200mm
2.40M	2.90M	250	1-#12	1-#10	#6mm @ 200mm
2.70M	3.10M	250	1-#16	1-#12	#10mm @ 200mm
3.00M	3.40M	300	1-#16	1-#12	#10mm @ 200mm
3.30M	3.70M	300	1-#16	1-#12	#10mm @ 200mm
3.60M	4.00M	300	1-#20	1-#12	#10mm @ 200mm



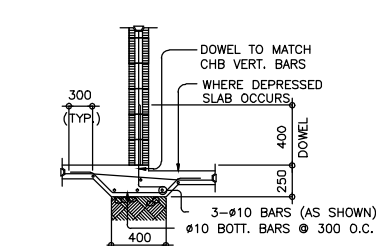
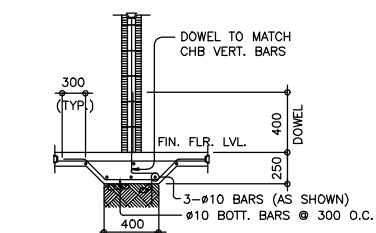
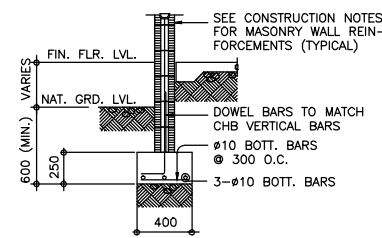
TYPICAL CONNECTION DETAIL OF MASONRY WALL



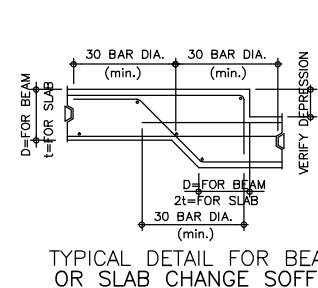
TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING



TYP. SECTION OF MASONRY PARTITION REINFORCEMENTS



TYPICAL CHB FOOTING DETAILS (WHERE APPLICABLE)



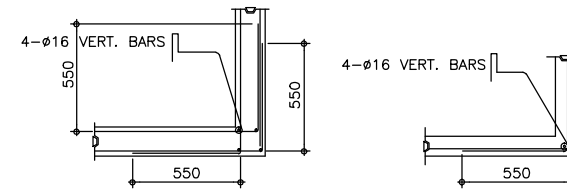
NOTES ON CONCRETE WALLS

- ALL WALLS SHALL BE REINFORCED ACCORDING TO THE FOLLOWING SCHEDULE OF WALL REINFORCEMENT UNLESS OTHERWISE INDICATED IN THE PLANS.

WALL THICKNESS	REINFORCEMENT		REMARKS	VERTICAL SECTION
	HORIZONTAL	VERTICAL		
100mm	#10mm @ 250mm O.C.	#10mm @ 300mm O.C.	HORIZONTAL BARS AT CENTERS VERTICAL BARS STAGGERED OUT	
125mm	#10mm @ 200mm O.C.	#10mm @ 250mm O.C.		
150mm	#12mm @ 250mm O.C.	#12mm @ 300mm O.C.		

REINFORCING BARS SHALL HAVE 25mm CLEAR CONCRETE COVER FROM FACE OF WALL EXCEPT FOR WALLS IN CONTACT WITH THE GROUND WHERE A MINIMUM OF 60mm SHALL BE PROVIDED, AND FOR EXPOSED FACES OF FORMED WALLS WHERE THE MINIMUM SHALL BE 50mm CLEAR.

- CARRY VERTICAL BARS AT LEAST 60mm ABOVE FLOOR LEVEL TO PROVIDE FOR SPLICES WHEN NECESSARY STOP AT 50mm BELOW TOP SLAB OR SOLID BAND WHERE THE WALL ENDS VERTICAL AND HORIZONTAL BARS SHALL BE SPLICED BY LAPPING A DISTANCE EQUAL TO 30 DIAMETERS AND WIRE SECURELY WITH 16 G.I. WIRE PROVIDED THAT SPLICES IN ADJACENT BARS ARE STAGGERED AT LEAST 1.50M O.C.
- UNLESS OTHERWISE NOTED IN THE PLANS, ALL OPENINGS IN WALLS 250mm OR THICKER SHALL BE REINFORCED AROUND WITH 2-20mm ϕ BARS FOR 225mm, 200mm, 175mm, 150mm, USE 2-16mm ϕ FOR 125mm AND 100mm WALLS, USE 2-12mm ϕ BARS. ALL WALLS SPANNING SHALL HAVE VERTICAL REINFORCEMENT BENT TO A U-FORM LIKE STIRRUPS AND SPACED ACCORDING TO THE SCHEDULE UNLESS OTHERWISE NOTED (SEE FIG.1)



TYPICAL CONNECTION DETAIL OF R.C. WALL AT CORNERS

NOTES ON WELDS

- USE E70xx ELECTRODES FOR ALL MEMBERS WELDED.
- WELDS SHALL DEVELOP THE FULL STRENGTH OF MEMBERS JOINED UNLESS OTHERWISE SHOWN OR DETAILED IN THE DRAWINGS.

NOTES ON STRUCTURAL STEEL

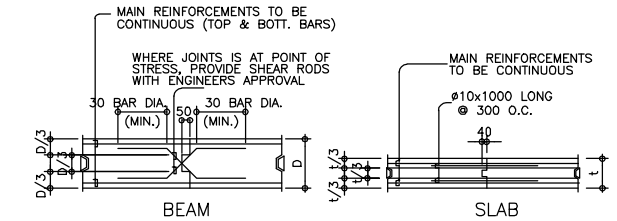
- STRUCTURAL STEEL TO BE USED FOR FABRICATION AND ERECTION OF THIS STRUCTURE SHALL COMPLY WITH ALL THE PERTINENT PROVISION OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING LATEST EDITION.
- ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
- ALL WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF THE MEMBERS CONNECTED.
- UNLESS OTHERWISE SPECIFIED ALL WELDING RODS SHALL CONFORM AWS E60 ELECTRODES.
- ALL BOLTS USED UNLESS OTHERWISE SPECIFIED SHALL BE ASTM A 307 BOLTS.

NOTES ON EMBEDDED PIPES

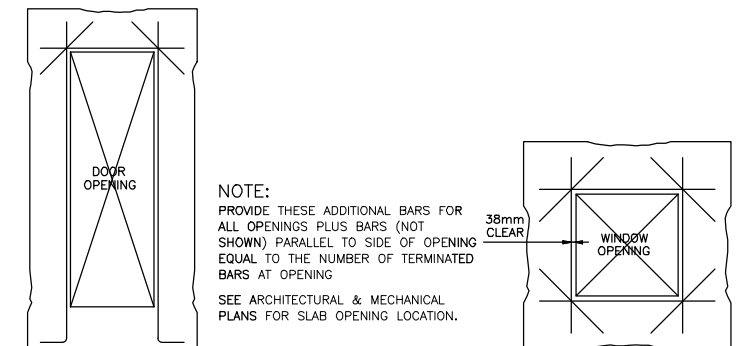
- ALL EMBEDDED PIPES FOR UTILITIES, ETC. THAT PASS THRU BEAMS SHALL NOT EXCEED 100mm IN DIAMETER OR 1/3 BEAM DEPTH WHICHEVER IS LESS, UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
- NO PIPES SHALL BE ALLOWED TO PASS THRU BEAMS VERTICALLY.
- NO PIPES SHALL BE EMBEDDED IN COLUMNS.

NOTES ON CONSTRUCTION JOINTS IN CONCRETE

- WHERE A CONSTRUCTION JOINT IS TO BE MADE, THE SURFACE OF CONCRETE SHALL BE CLEANED AND ALL LAITANCE AND STANDING WATER REMOVED. SHEAR KEY SHALL BE PROVIDED AT THE JOINT.



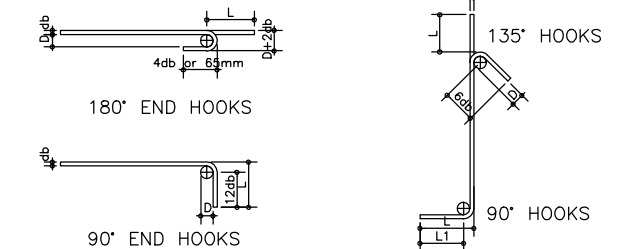
TYPICAL SLAB & BEAM CONSTRUCTION JOINT DET.



TYP. EXTERIOR WINDOW & DOOR OPENING

NOTES OF STIRRUPS

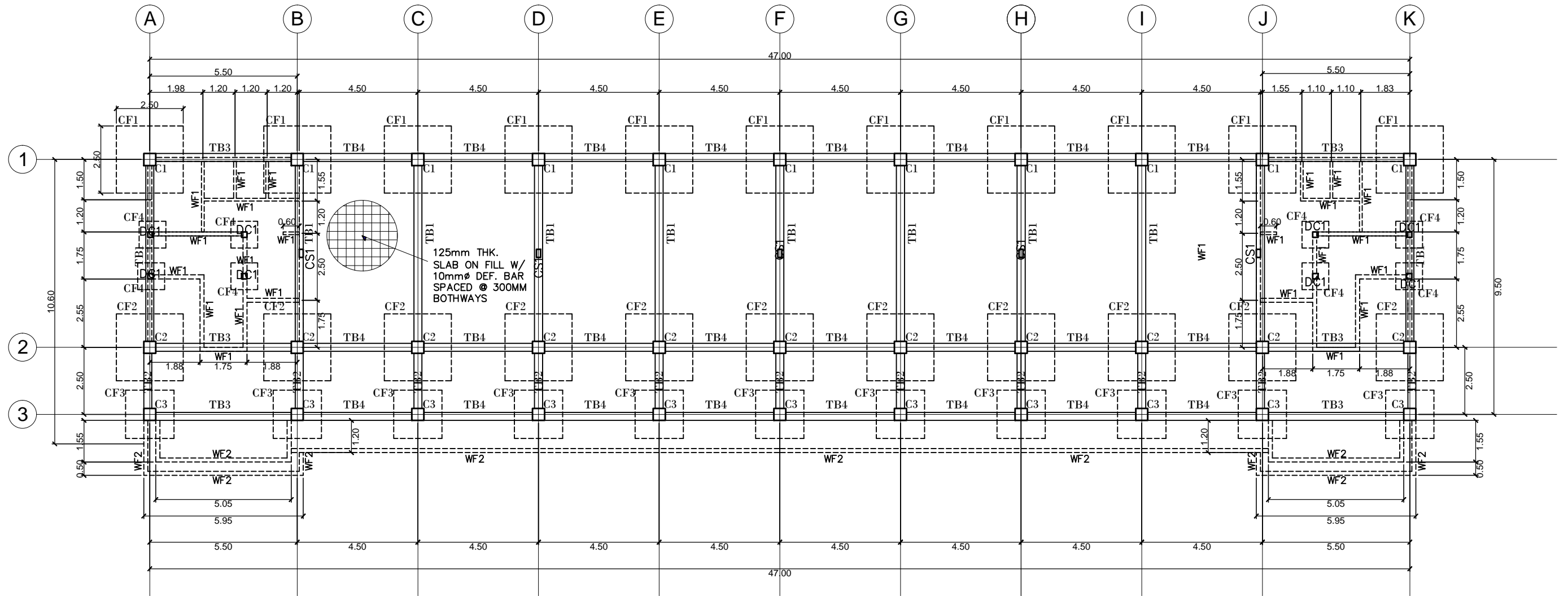
- ALL REINFORCEMENT SHALL BE BENT COLD UNLESS OTHERWISE PERMITTED BY THE STRUCTURAL ENGINEER.
- REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FILLED BENT, EXCEPT AS SHOWN IN THE DESIGN DRAWINGS OR PERMITTED BY THE STRUCTURAL ENGINEER.
- TIES & CLOSE STIRRUPS MUST BE BENT AT 135°.



BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm ϕ	60	75	125	150
12mm ϕ	75	100	150	200
16mm ϕ	95	125	175	250
20mm ϕ	115	150	200	300
25mm ϕ	150	200	230	450
28mm ϕ	240	300	350	550
32mm ϕ	300	335	450	600

BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm ϕ	40	125	85	100
12mm ϕ	50	165	115	115
16mm ϕ	65	200	140	150
20mm ϕ	115	250	165	300
25mm ϕ	150	365	230	405

	PROJECT TITLE :	PREPARED BY:	CHECKED AND SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET NO.:
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	AIVY B. GAPOL, CE ENGINEERING ASSISTANT	PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NANETTE D. EILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RODRIGO P. MILLARES, JR., REE, EnP PLANNING AND DEVELOPMENT DIRECTOR	DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN	S-2 2 12
	LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		



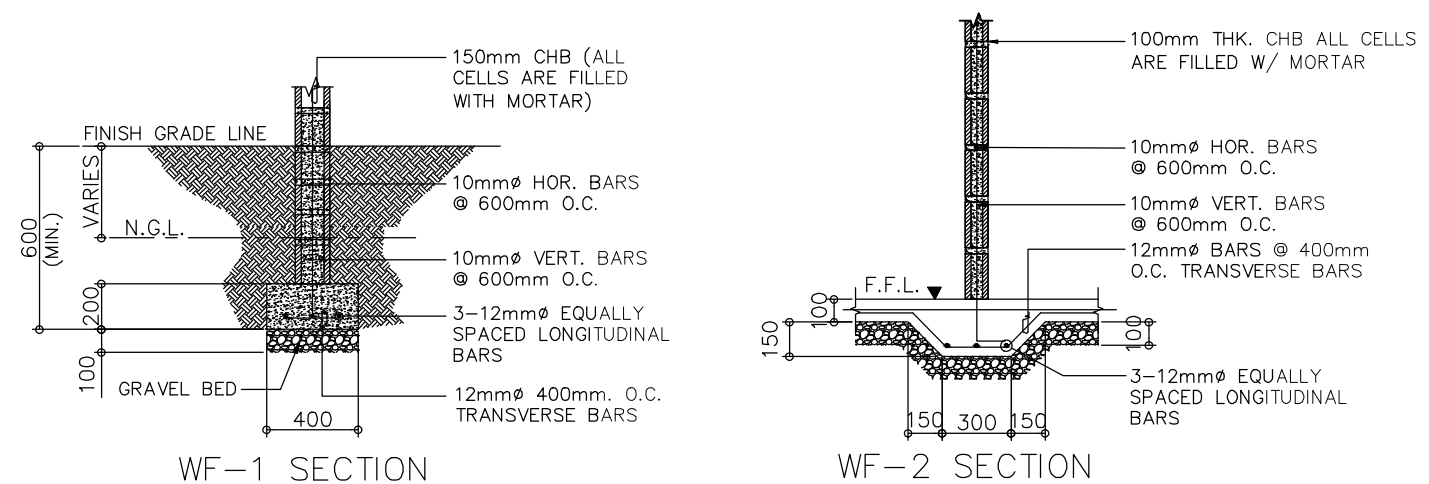
FOUNDATION PLAN
 SCALE 1:150M

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center; width: 15px; height: 15px; border: 1px solid black; border-radius: 50%; display: flex; align-items: center; justify-content: center;">S-3</div> <div style="text-align: center; width: 15px; height: 15px; border: 1px solid black; border-radius: 50%; display: flex; align-items: center; justify-content: center;">3 12</div> </div>
	LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		

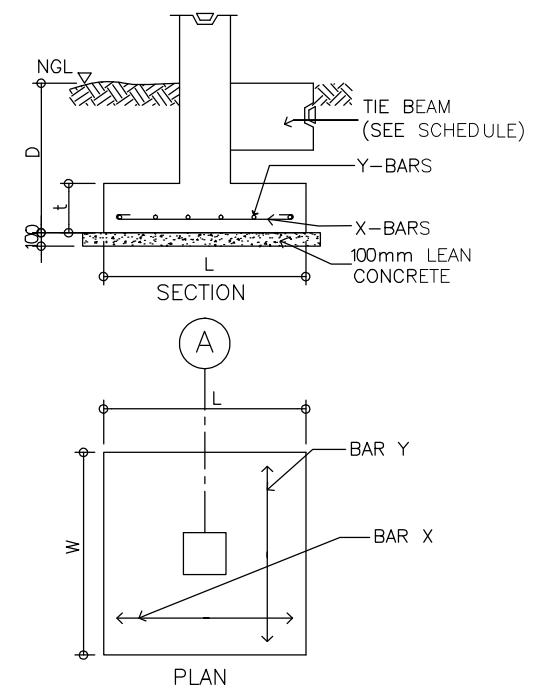
		COLUMN SCHEDULE						
LEVEL		C-1	C-2	C-3	SC-1	DC-1		
2F TO RF								
	SIZE MAIN BAR TIES (Lv) CONFINEMENT TIES (Lo & Lj)	450 X 450 12 - 20mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	450 X 450 12 - 20mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	450 X 450 12 - 16mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	150 X 300 4 - 16mm 10mm @ 150 - 1 SET 10mm @ 100 - 1 SET			
GF TO 2F								
	SIZE MAIN BAR TIES (Lv) CONFINEMENT TIES (Lo & Lj)	450 X 450 12 - 20mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	450 X 450 12 - 20mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	450 X 450 12 - 16mm 10mm @ 150 - 3 SETS 10mm @ 100 - 3 SETS	150 X 300 4 - 16mm 10mm @ 150 - 1 SET 10mm @ 100 - 1 SET	200 X 200 6 - 16mm 10mm @ 150 - 1 SET 10mm @ 100 - 1 SET		
FDN TO GF								
	SIZE MAIN BAR TIES (Lv) CONFINEMENT TIES (Lo & Lj)	450 X 450 12 - 20mm 10mm @ 100 - 3 SETS	450 X 450 12 - 20mm 10mm @ 100 - 3 SETS	450 X 450 12 - 16mm 10mm @ 100 - 3 SETS		200 X 200 6 - 16mm 10mm @ 150 - 1 SET 10mm @ 100 - 1 SET		

SCHEDULE OF FOOTING												
FOOTING REMARKS	FOOTING DIMENSIONS (m)							REINFORCEMENT				REMARKS
	LENGTH (m)	WIDTH (m)	X (m)	Y (m)	Z (m)	Thickness (m)	FOUNDING DEPTH (m)	BAR X		BAR Y		
								TOP	BOTTOM	TOP	BOTTOM	
CF-1	2.50	2.50	-	-	-	0.40	1.50	-	20 @ 150mm	-	20 @ 150mm	SQUARE FOOTING ALONG GRID 1
CF-2	2.50	2.50	-	-	-	0.40	1.50	-	20 @ 150mm	-	20 @ 150mm	SQUARE FOOTING ALONG GRID 2
CF-3	1.80	1.80	-	-	-	0.40	1.50	-	20 @ 150mm	-	20 @ 150mm	SQUARE FOOTING ALONG GRID 3
CF-4	1.00	1.00	-	-	-	0.25	1.00	-	16 @ 150mm	-	16 @ 150mm	SQUARE FOOTING

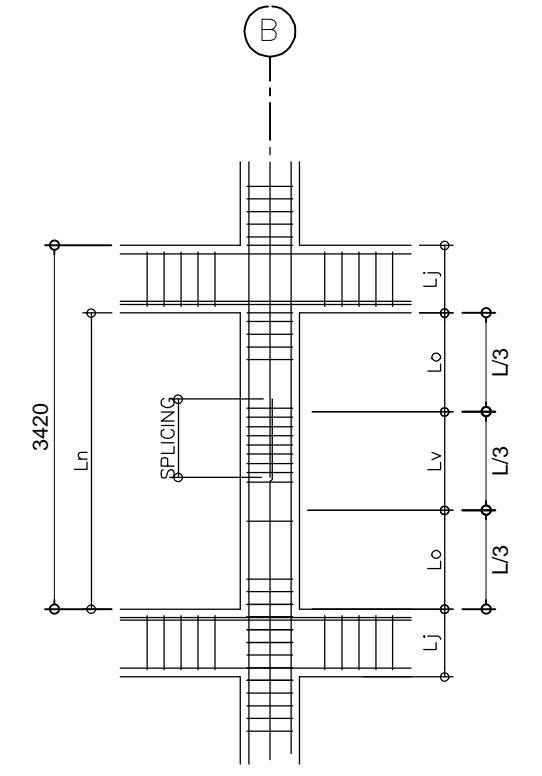
SCHEDULE OF FOOTING TIE BEAMS																
FLOOR LEVEL	BEAM MARK	BEAM DIMENSIONS (in / mm)		STEEL REINFORCEMENTS						STIRRUPS (UNLESS NOTED OTHERWISE)						
		B	D	REBAR (mm Ø)	LEFT		MID SPAN		RIGHT		SUPPORT 2D			MIDSPAN		
					TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	BAR	SPACING	TYPE	BAR	SPACING	TYPE
FOUNDATION	TB-1	300	500	Ø25mm	5	3	5	3	5	3	12	90	B	12	100	B
	TB-2	300	500	Ø25mm	5	3	5	3	5	3	12	90	B	12	100	B
	TB-3	300	500	Ø25mm	5	3	5	3	5	3	12	90	B	12	100	B
	TB-4	300	500	Ø25mm	5	3	5	3	5	3	12	90	B	12	100	B



3
S-4 SCALE 1:20 M.
DETAIL OF WALL FOOTINGS



1
S-4 NOT TO SCALE
TYPICAL FOOTING DETAIL



2
S-4 SCALE 1:100 M.
ELEVATION OF COLUMN

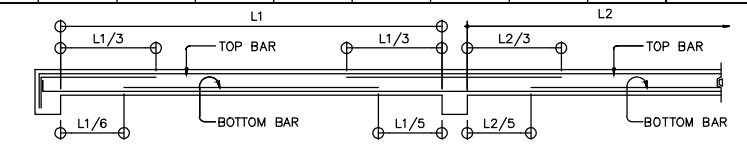
	PROJECT TITLE :	PREPARED BY:	CHECKED AND SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET NO.:
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	 AIVY B. GAPOL, CE ENGINEERING ASSISTANT	 PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	 NANETTE D. MILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR			 DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN

SCHEDULE OF SLABS

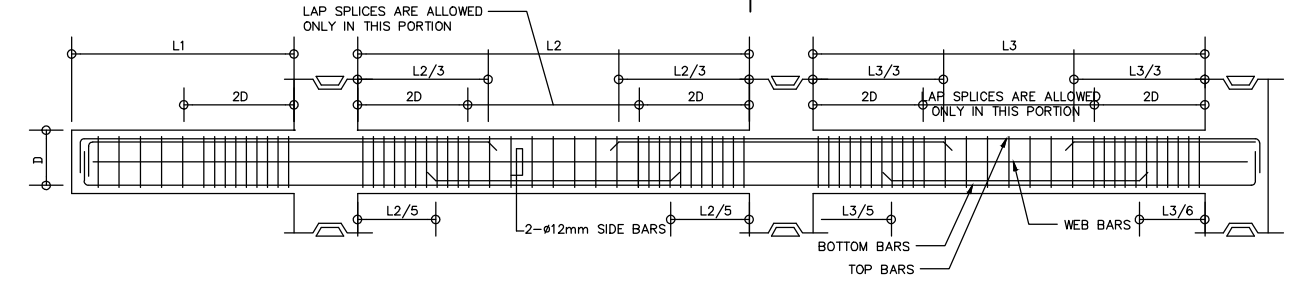
FLOOR LEVEL	SLAB MARK	THICKNESS (mm)	REBAR (mm ø)	ALONG SHORT DIRECTION						ALONG LONG DIRECTION						REMARKS	
				CONTINUOUS		MID SPAN		DISCONTINUOUS		CONTINUOUS		MID SPAN		DISCONTINUOUS			
				TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM		
2F	S-1	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	2-WAY SLAB
	S-2	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	2-WAY SLAB
	S-3	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-4	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-5	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-6	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-7	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
RD	S-1	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	2-WAY SLAB
	S-2	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-3	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB
	S-4	150	Ø 12mm	125	125	-	125	125	125	Ø 12mm	125	125	-	125	125	125	1-WAY SLAB

STIRRUP CONFIGURATIONS:

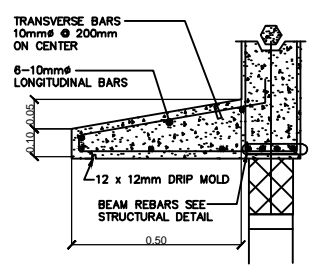
- I - 2 @ 50mm, 8 @ 100mm, 5 @ 150mm, REST @ 200mm TO MIDSPAN
- II - 2 @ 50mm, 8 @ 100mm, 5 @ 150mm, REST @ 175mm TO MIDSPAN
- III - 2 @ 50mm, 6 @ 100mm, REST @ 200mm TO MIDSPAN
- IV - 2 @ 50mm, 8 @ 100mm, REST @ 175mm TO MIDSPAN
- V - 2 @ 50mm, 8 @ 100mm, REST @ 200mm TO MIDSPAN
- VI - 2 @ 50mm, 6 @ 100mm, REST @ 150mm TO MIDSPAN
- VII - 2 @ 50mm, 6 @ 100mm, REST @ 150mm TO END SUPPORT



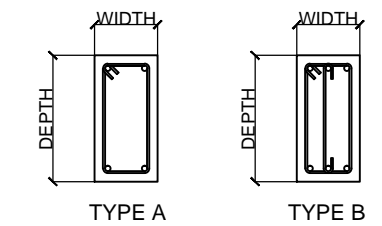
TYPICAL SLAB ELEVATION
SCALE NTS



TYPICAL BEAM ELEVATION
SCALE NTS



CONCRETE SUNBREAKER DETAIL
SCALE NTS

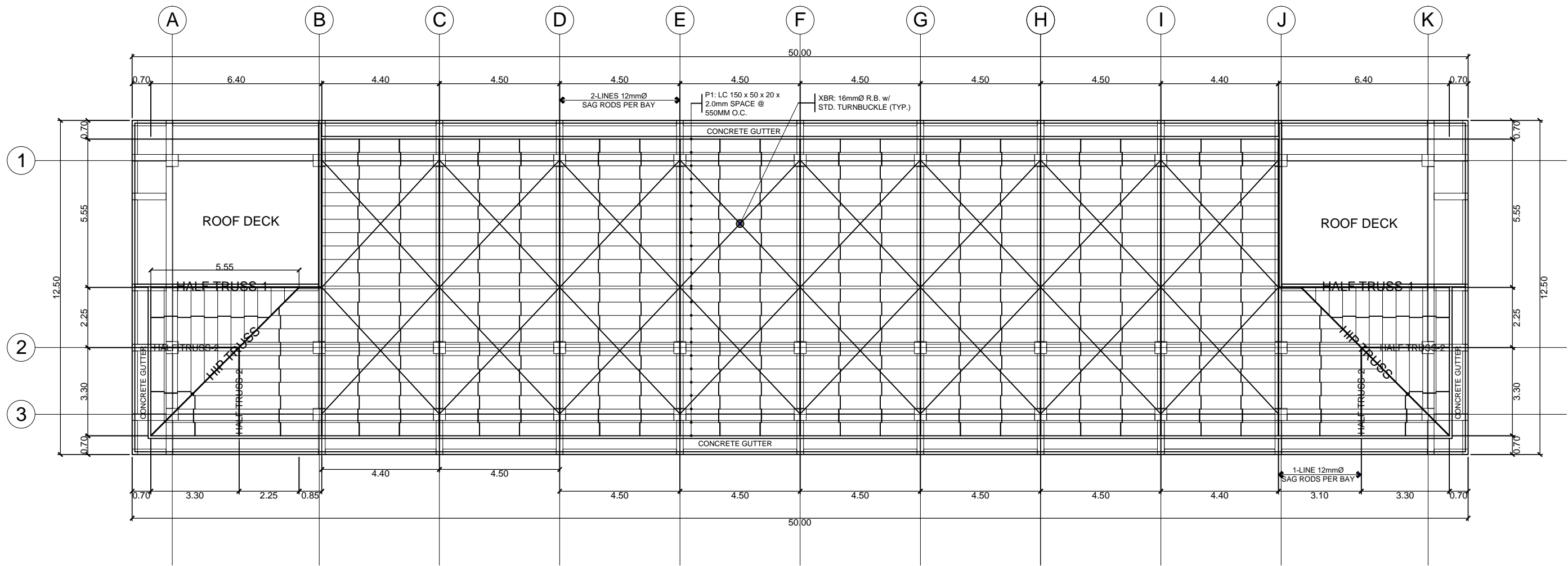


TYPE OF STIRRUPS
SCALE NTS

SCHEDULE OF BEAMS & GIRDERS														
FLOOR LEVEL	BEAM MARK	BEAM DIMENSIONS (IN (mm))		STEEL REINFORCEMENT						STIRRUPS (10mmØ BARS)		REMARKS		
				REBAR (mm Ø)	LEFT		MIDDLE		RIGHT		WEB BARS (12MM)		CONFIGURATION	TYPE
					TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM				
ROOF LEVEL	RB-1	250	500	Ø20mm	5	3	3	5	5	3	2	V	A	
	RB-2	250	500	Ø20mm	5	3	3	5	5	3	2	V	A	
	RB-3	250	500	Ø20mm	5	3	3	5	5	3	2	V	A	
	RB-4	250	500	Ø20mm	5	3	3	5	5	3	2	V	A	
	RB-5	250	500	Ø20mm	5	3	3	5	5	3	2	V	A	
	B-1	200	500	Ø16mm	5	3	5	3	5	3		VI	A	
	B-2	200	500	Ø16mm	5	3	5	3	5	3		VI	A	
2nd FLOOR LEVEL	G-1	300	600	Ø25mm	5	3	3	5	5	3	2	I	B	
	G-2	300	600	Ø25mm	7	3	5	5	7	3	2	II	B	
	G-3	300	600	Ø25mm	7	3	5	5	7	3	2	II	B	
	G-4	300	600	Ø25mm	5	3	3	5	5	3	2	III	B	
	G-5	300	600	Ø25mm	5	3	3	5	5	3	2	III	B	
	G-6	300	600	Ø25mm	5	3	3	5	5	3	2	III	B	
	G-7	300	600	Ø25mm	5	3	3	5	5	3	2	I	B	
	G-8	300	600	Ø25mm	5	3	3	5	5	3	2	I	B	
	G-9	300	600	Ø25mm	5	3	3	5	5	3	2	I	B	
	G-10	300	600	Ø25mm	5	2	3	4	5	2	2	IV	A	
	G-11	300	600	Ø25mm	5	3	3	5	5	3	2	I	B	
	G-12	300	600	Ø25mm	5	2	3	4	5	2	2	IV	A	
	STAIR BEAM	STB-1	200	400	Ø16mm	3	3	3	3	3	3		V	A
STB-2		200	400	Ø16mm	3	3	3	3	3	3		V	A	

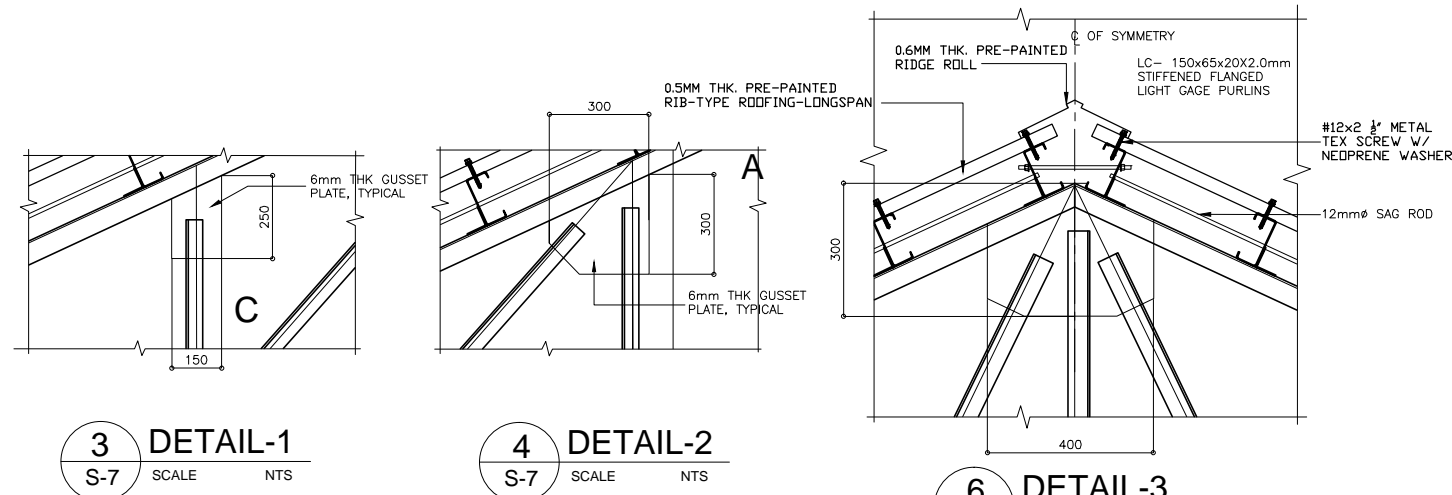


PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: <i>Abapol</i> AIVY B. GAROL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <i>[Signature]</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: <i>[Signature]</i> NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <i>[Signature]</i> RODRIGO P. MILLARES, JR., EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <i>[Signature]</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: S-6 6 12
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		



ROOF FRAMING PLAN
 SCALE 1:150M

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center;"> S-7 <hr style="width: 100%;"/> 7 12 </div> </div>
	LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		

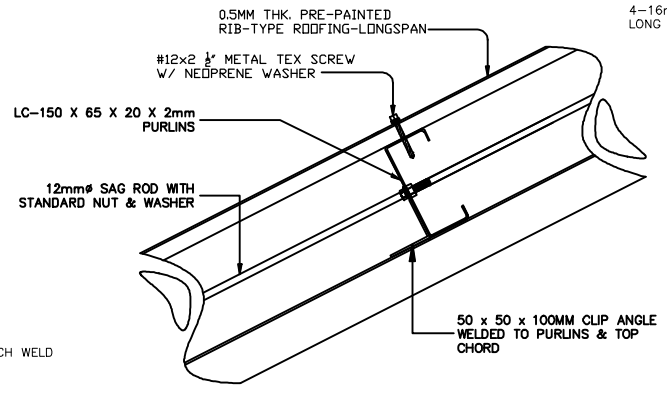


3 DETAIL-1
S-7 SCALE NTS

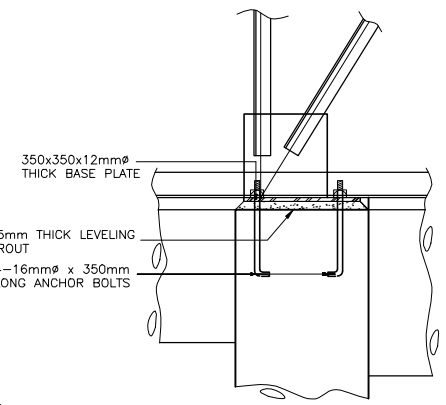
4 DETAIL-2
S-7 SCALE NTS

6 DETAIL-3
S-7 SCALE NTS

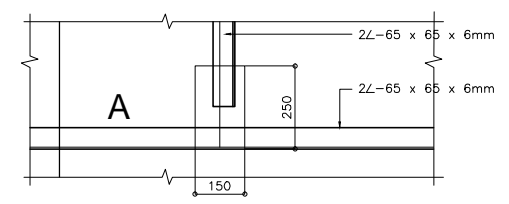
MARK	TRUSS MEMBERS SIZE mm	WELDS				REMARKS
		THICKNESS mm	LENGTH mm			
			L1	L2	L3	
A	2Ls-65x65x6 (TOP/BOTTOM CHORDS)	6	FULL WELD			
B	2Ls-65x65x6	6	125	100	65	
C	2Ls-50x50x6	6	100	75	50	



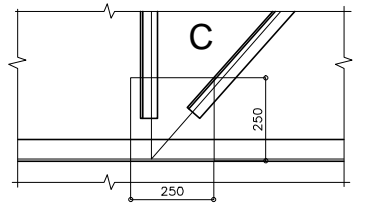
4 CONNECTION OF RIB-TYPE ROOFING TO PURLIN
S-7 SCALE NTS



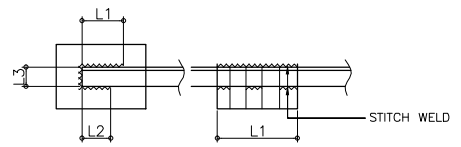
9B ELEVATION
S-7 SCALE



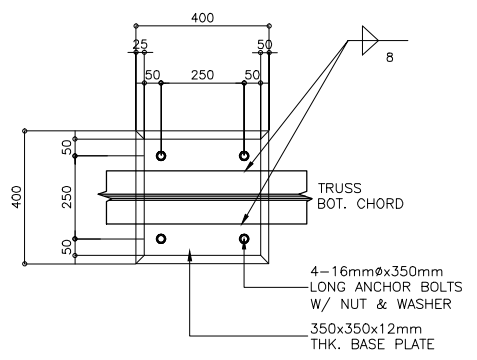
2 DETAIL
S-7 SCALE 1:10 M.



5 DETAIL-4
S-7 SCALE 1:10 M.

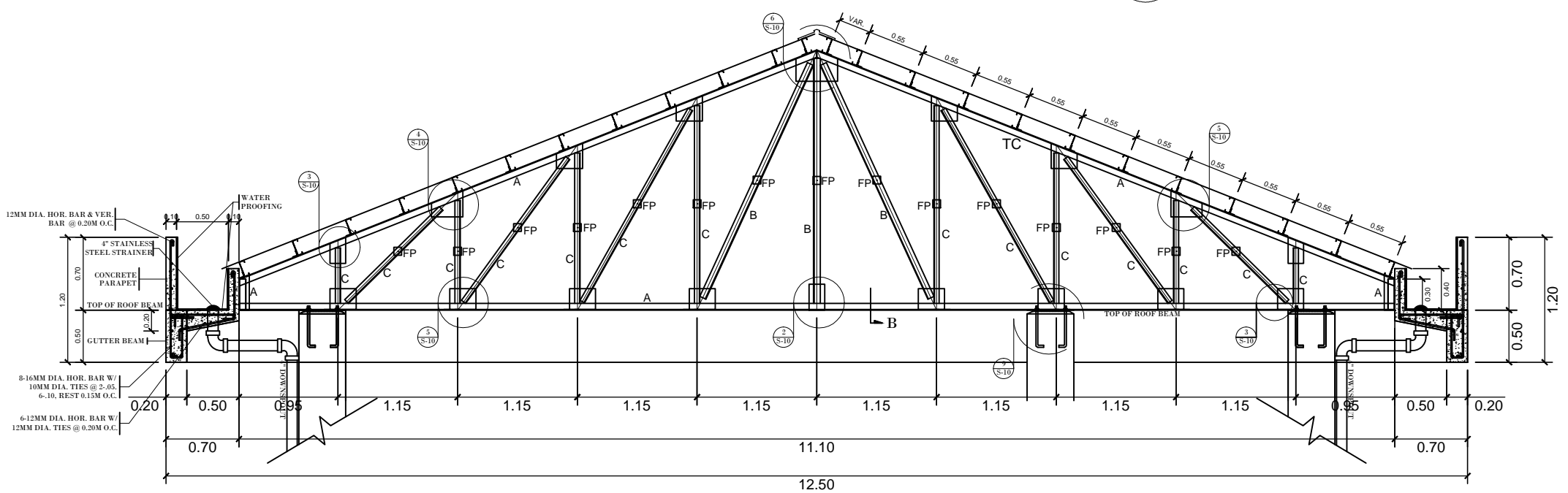


7 WELD DETAIL
S-7 NOT TO SCALE



9A PLAN
S-7 SCALE

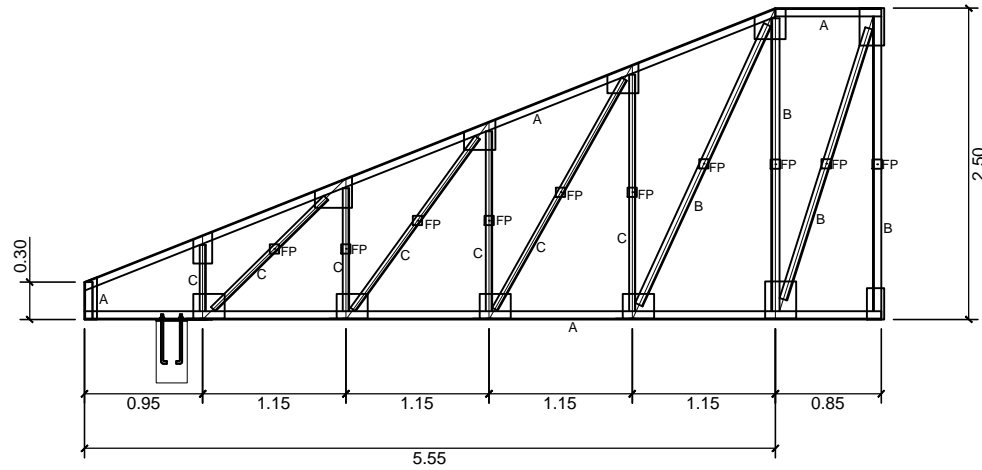
9 TRUSS SUPPORT CONNECTION DETAIL
S-7 SCALE AS SHOWN.



1 TRUSS-1 ELEVATION
S-7 SCALE 1:50

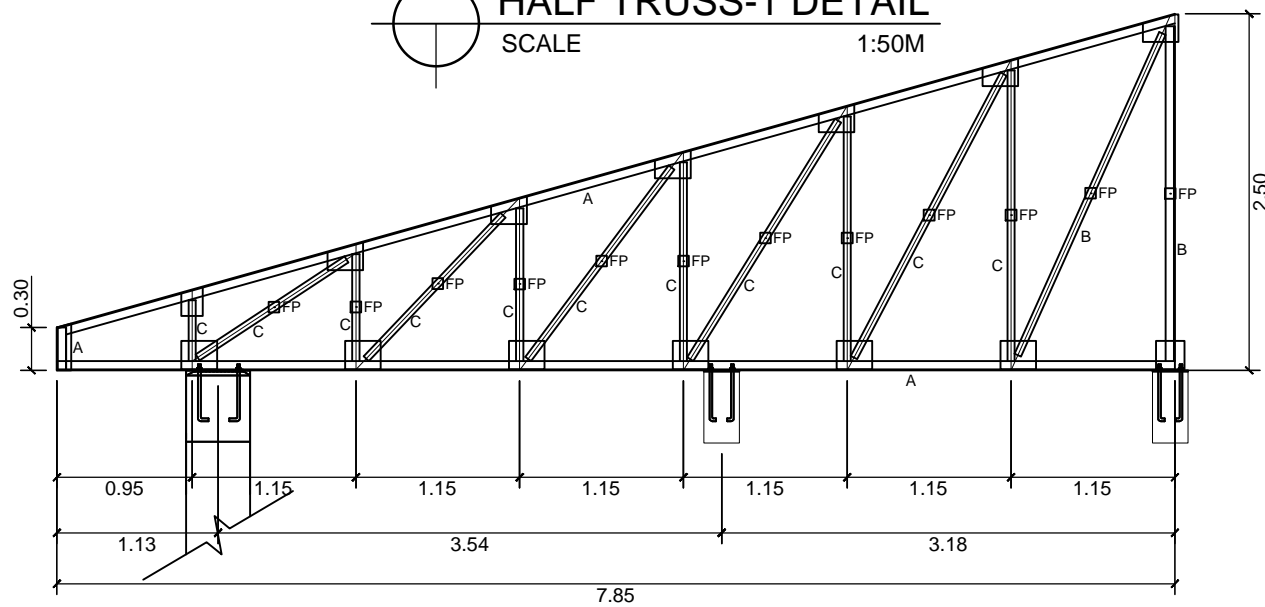


PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: <i>abapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <i>[Signature]</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: <i>[Signature]</i> NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <i>[Signature]</i> RODRIGO P. MILLARES, JR., EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <i>[Signature]</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: S-8 8 12
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		

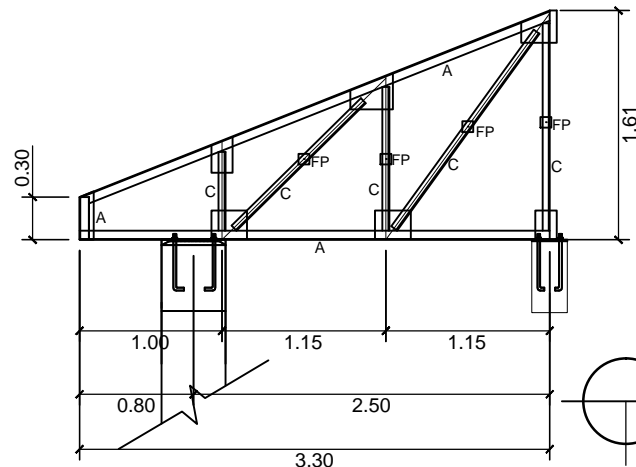


HALF TRUSS-1

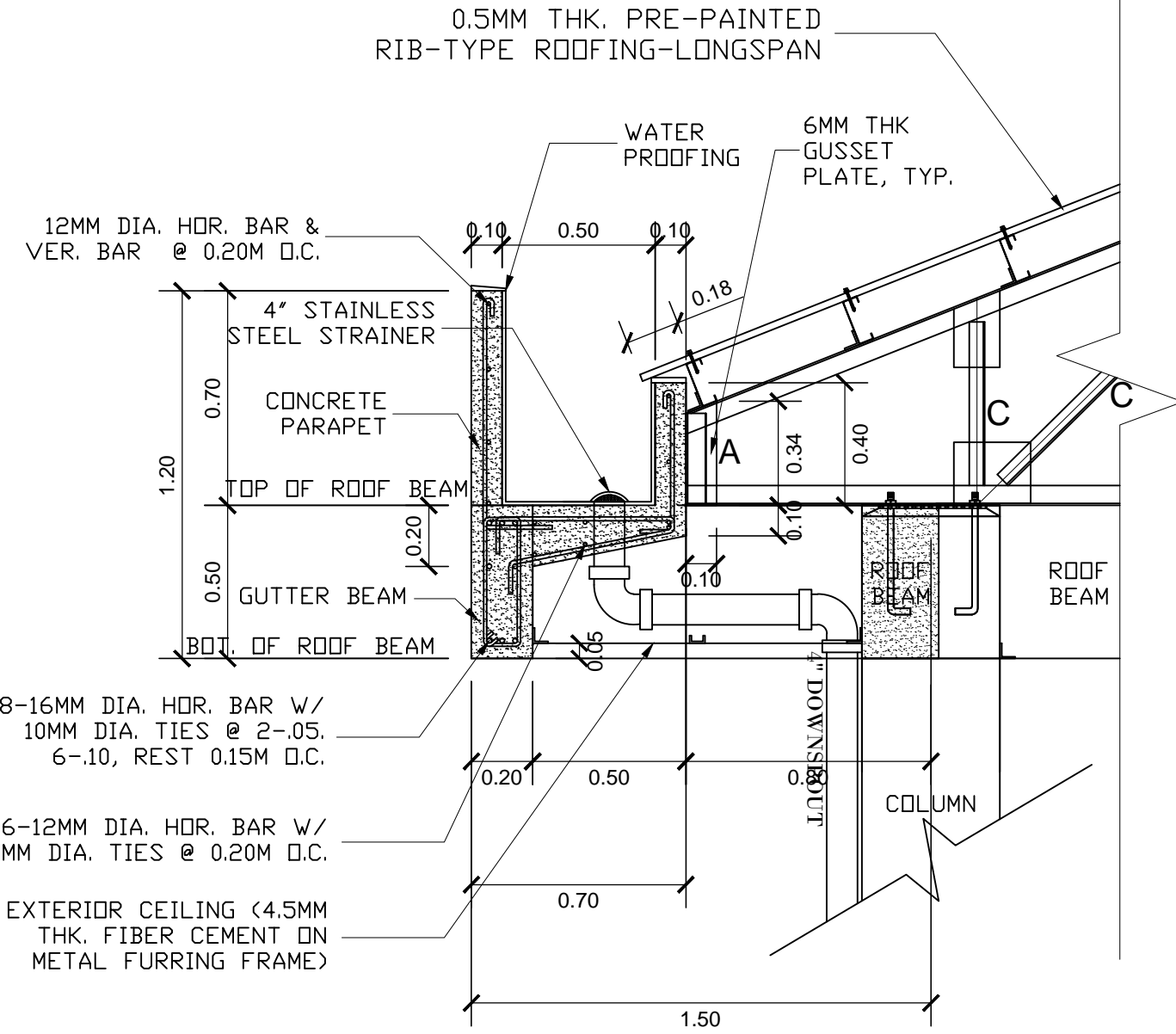
HALF TRUSS-1 DETAIL
SCALE 1:50M



HIP TRUSS DETAIL
SCALE 1:50M



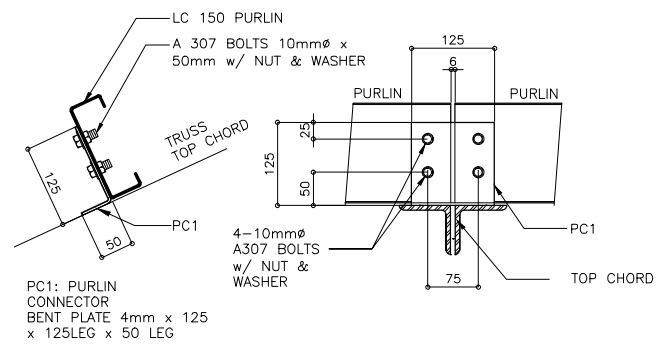
HALF TRUSS-2 DETAIL
SCALE 1:50M



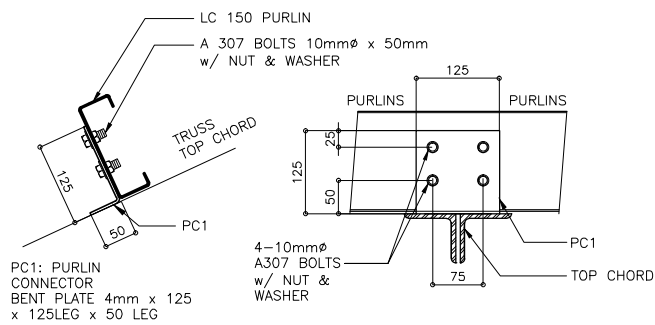
TRUSS DETAIL AT GUTTER END
SCALE 1:20M



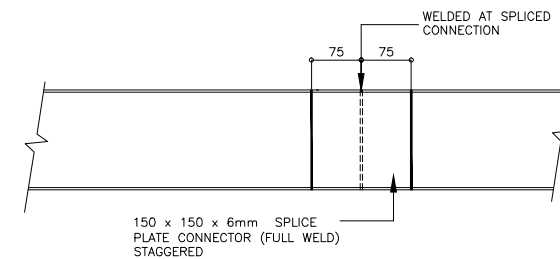
PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	PREPARED BY: <i>abapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <i>[Signature]</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: <i>[Signature]</i> NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <i>[Signature]</i> RODRIGO P. MILLARES, JR., REE, EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <i>[Signature]</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: S-9 9 12
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5A FOR NON - CONTINUOUS PURLINS
S-9 SCALE 1:5 M.

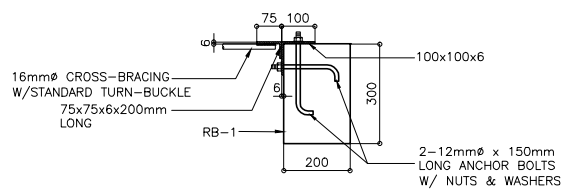


5B FOR CONTINUOUS PURLINS
S-9 SCALE 1:5 M.

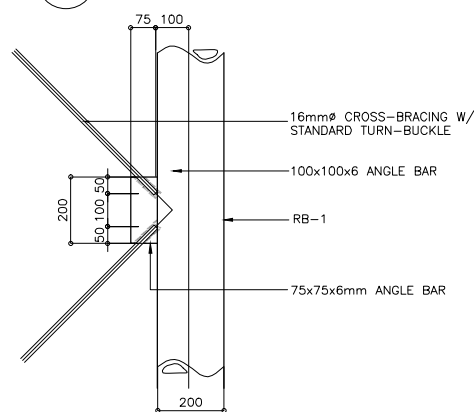


6 PURLIN SPLICE
S-9 SCALE

5 PURLIN CONNECTION DETAIL
S-9 SCALE 1:5 M.

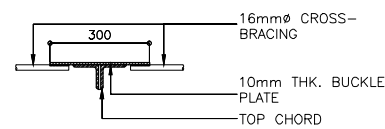


1B SECTION
S-8 SCALE 1:10 M

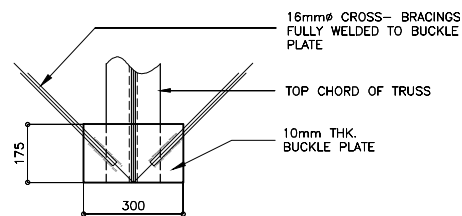


1A PLAN
S-8 SCALE 1:10 M

1 DETAIL CONN. OF CROSS-BRACING AT END WALL
S-9 SCALE 1:10 M.

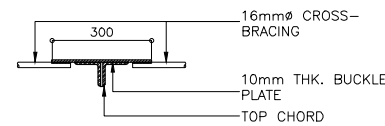


2B SECTION
S-9 SCALE 1:10 M

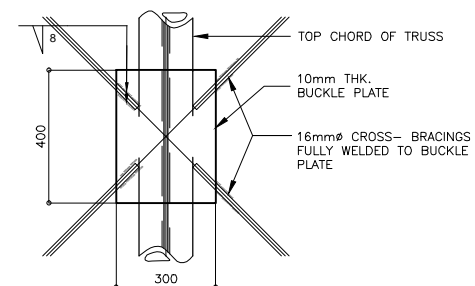


2A PLAN
S-9 SCALE 1:10 M

2 DETAIL CONN. OF CROSS-BRACING AT (GRID LINE A & C)
S-9 SCALE 1:10 M.

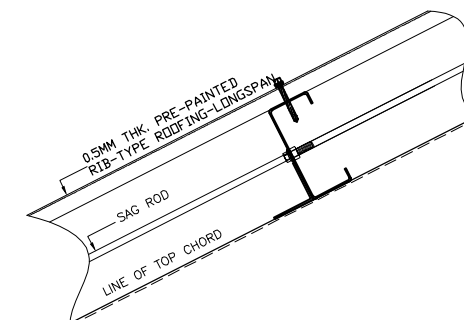


3B SECTION
S-9 SCALE 1:10 M

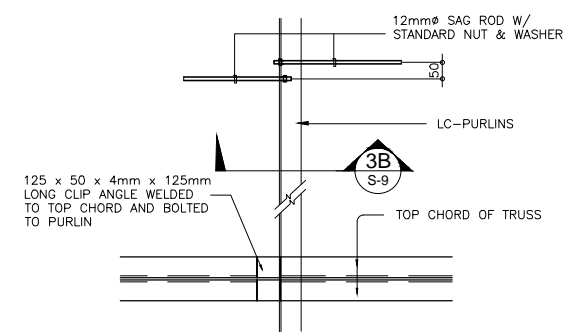


3A PLAN
S-9 SCALE 1:10 M

3 DETAIL CONN. OF CROSS-BRACING AT TRUSS @ APEX
S-9 SCALE 1:10 M.



4B SECTION
S-9 SCALE 1:5 M

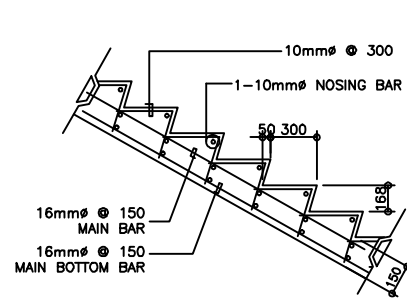


4A PLAN
S-9 SCALE 1:10 M

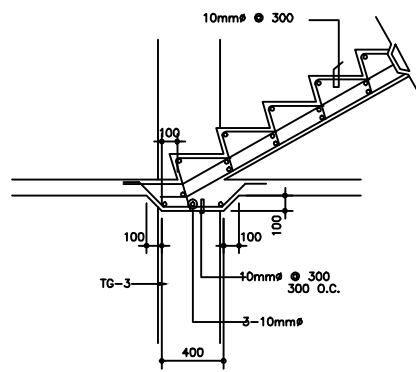
4 DETAIL OF PURLIN TO SAG ROD CONNECTION
S-9 SCALE SHOWN



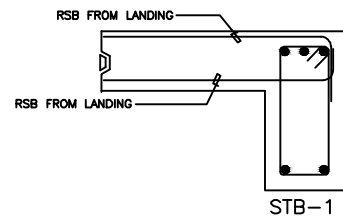
PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: <i>abapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED AND SUBMITTED BY: <i>[Signature]</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: <i>[Signature]</i> NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: <i>[Signature]</i> RODRIGO P. MILLARES, JR., REE, EnP PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: <i>[Signature]</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO.: S-10 10/12
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		



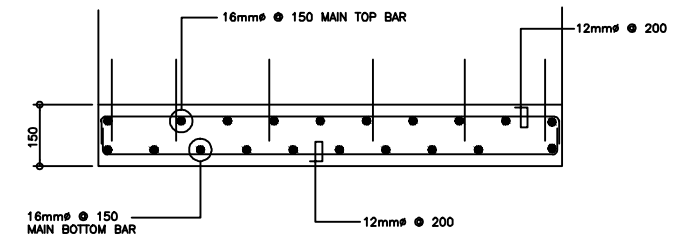
3 SPOT DETAIL
S-6 SCALE 1:20M



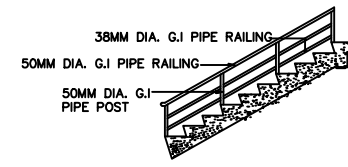
4 SPOT DETAIL
S-6 SCALE 1:20M



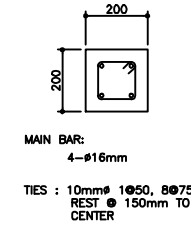
5 SPOT DETAIL
S-6 SCALE 1:20 M.



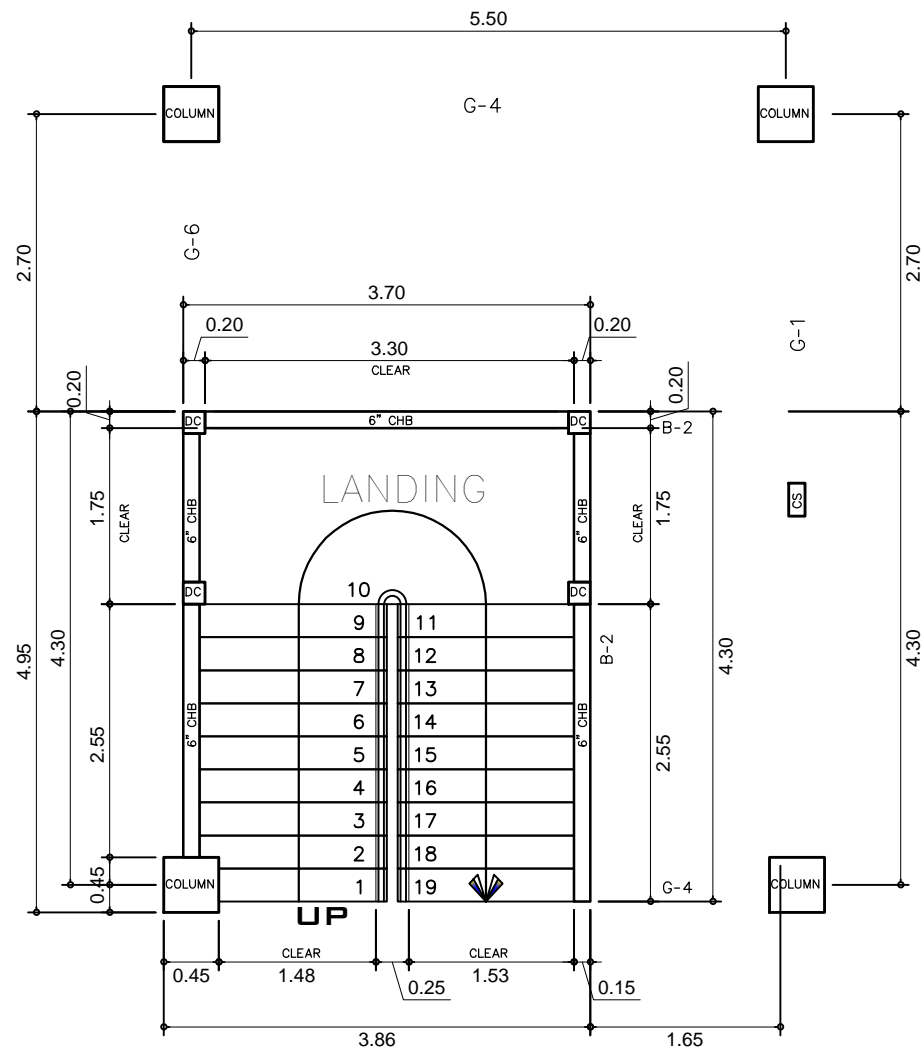
6 SECTION OF STAIR SLAB
S-6 SCALE 1:10M



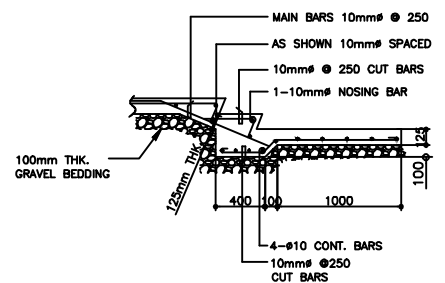
6 SPOT DETAIL
S-7 SCALE 1:20 M.



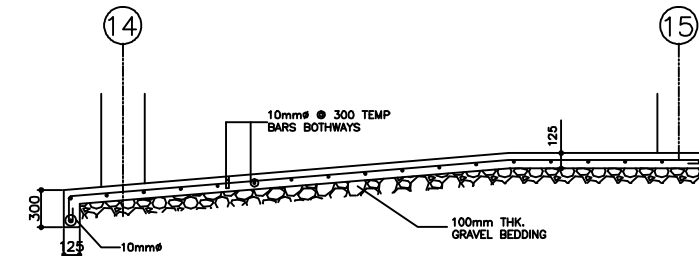
8 DETAIL OF DC
S-6 SCALE 1:10M



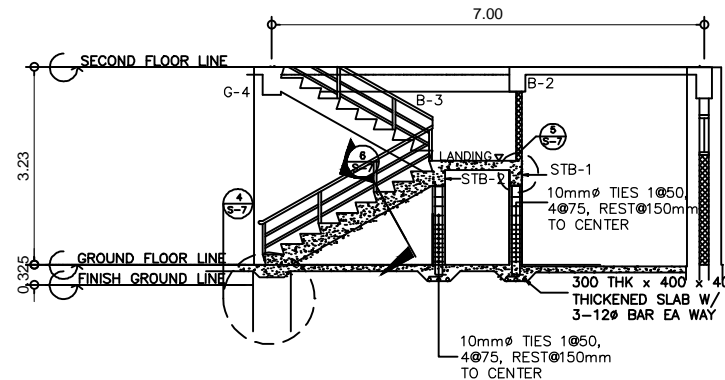
1 STAIR PLAN(TYP)
S-6 SCALE 1:50M



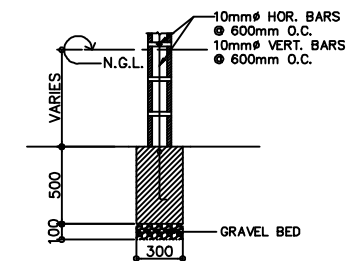
9 DET. OF STAIR ON GRADE
S-6 SCALE 1:25M



7 RAMP DETAIL
S-6 SCALE 1:30M



2 STAIR SECTION DETAIL
S-6 SCALE 1:50M



10 DET. OF WALL ON FTB
S-6 SCALE 1:20M.



PROJECT TITLE :
CONSTRUCTION OF TWO (2) STOREY
8 CL ACADEMIC BUILDING WITH
COMPLETE FURNITURES & FIXTURES
AT DUMINGAG CAMPUS
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR

PREPARED BY:
abapal
AIVY B. GAPOL, CE
ENGINEERING ASSISTANT
DATE :

CHECKED AND SUBMITTED BY:
[Signature]
PANGASIAN B. MAMINTAS, CE
COLLEGE ENGINEER
DATE :

NOTED BY:
[Signature]
NANETTE D. BILBAO, Ed.D
DUMINGAG CAMPUS ADMINISTRATOR
DATE :

RECOMMENDING APPROVAL:
[Signature]
RODRIGO P. MILLARES, JR., EnP
PLANNING AND DEVELOPMENT DIRECTOR
DATE :

APPROVED:
[Signature]
DR. FREDDIE T. BERNAL, CESO III
OIC-PRESIDENT
DATE :

SHEET CONTENT:
AS SHOWN

SHEET NO:
S-11
11/12

PANELBOARD: LPA FLUSH MOUNTED, NEMA 1 ENCLOSURE WITH GROUND TERMINAL

CKT. NO.	LOAD DESCRIPTION	VA LOAD	CIRCUIT LOAD					WIRE & CONDUIT SIZE
			VOLT	AMPERE	AT	AF	kAIC	
1	LIGHT OUTLETS, (26*40), LED BULB W/ PORCELAIN RECEPTACLE	1040	230	4.52	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
2	LIGHT OUTLETS, (24*40), LED TUBE	960	230	4.17	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
3	LIGHT OUTLETS, (24*40), LED TUBE	960	230	4.17	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
4	LIGHT OUTLETS, (26*40), LED BULB W/ PORCELAIN RECEPTACLE	1040	230	4.52	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
5	WALL/CEILING FAN OUTLET, (8*75)	600	230	2.61	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
6	WALL/CEILING FAN OUTLET, (8*75)	600	230	2.61	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
7	FIRE ALARM CONTROL PANEL	1000	230	4.35	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
8	SPARE							
TOTAL		6200						
TOTAL CONNECTED LOADS: 6120 VA $I_L @ 85\% DF = \frac{6200}{230} \cdot 0.85 = 22.91 \text{ AMPERES}$ LPA MAIN = 40 AT, 2P, 240V, 18kAIC								

PANELBOARD: LPB FLUSH MOUNTED, NEMA 1 ENCLOSURE WITH GROUND TERMINAL

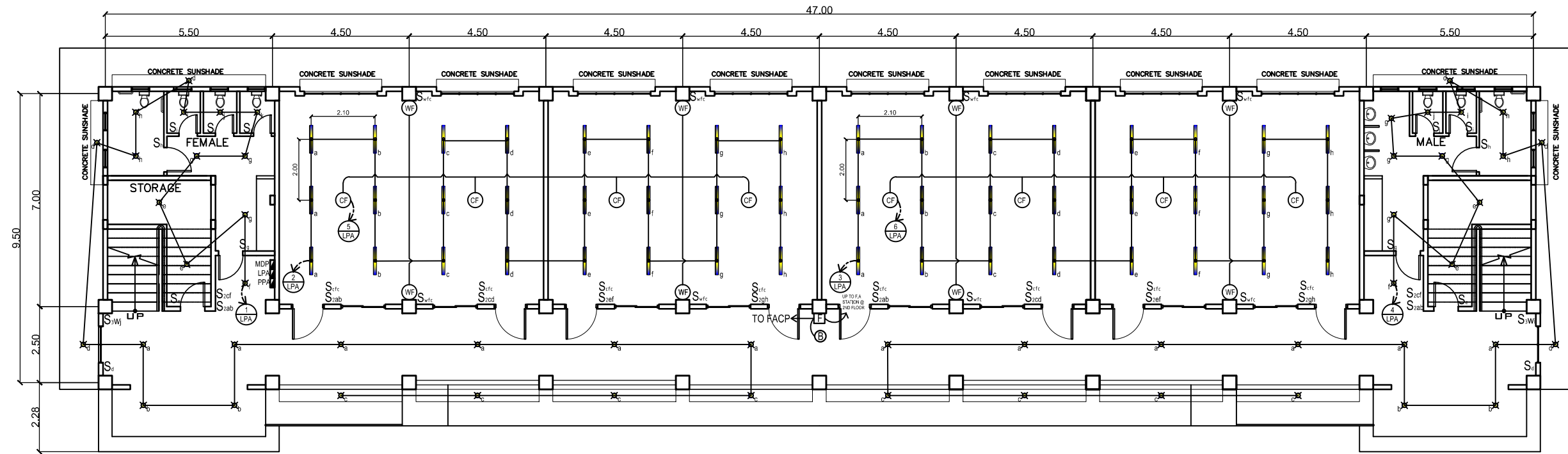
CKT. NO.	LOAD DESCRIPTION	VA LOAD	CIRCUIT LOAD					WIRE & CONDUIT SIZE
			VOLT	AMPERE	AT	AF	kAIC	
1	LIGHT OUTLETS, (20*40), LED BULB W/ PORCELAIN RECEPTACLE	800	230	3.48	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
2	LIGHT OUTLETS, (24*40), LED TUBE	960	230	4.17	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
3	LIGHT OUTLETS, (24*40), LED TUBE	960	230	4.17	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
4	LIGHT OUTLETS, (20*40), LED BULB W/ PORCELAIN RECEPTACLE	800	230	3.48	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
5	WALL/CEILING FAN OUTLET, (8*75)	600	230	2.61	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
6	WALL/CEILING FAN OUTLET, (8*75)	600	230	2.61	15	40	10	2 - 2.0mm ² THHN WIRE, STRANDED, + 1 - 2.0mm ² THHN WIRE (G), 12.7mmØ PVC
7	SPARE							
8	SPARE							
TOTAL		4720						
TOTAL CONNECTED LOADS: 4720 VA $I_L @ 85\% DF = \frac{4720}{230} \cdot 0.85 = 17.44 \text{ AMPERES}$ LPA MAIN = 40 AT, 2P, 240V, 18kAIC								

PANELBOARD: PPA FLUSH MOUNTED, NEMA 1 ENCLOSURE WITH GROUND TERMINAL

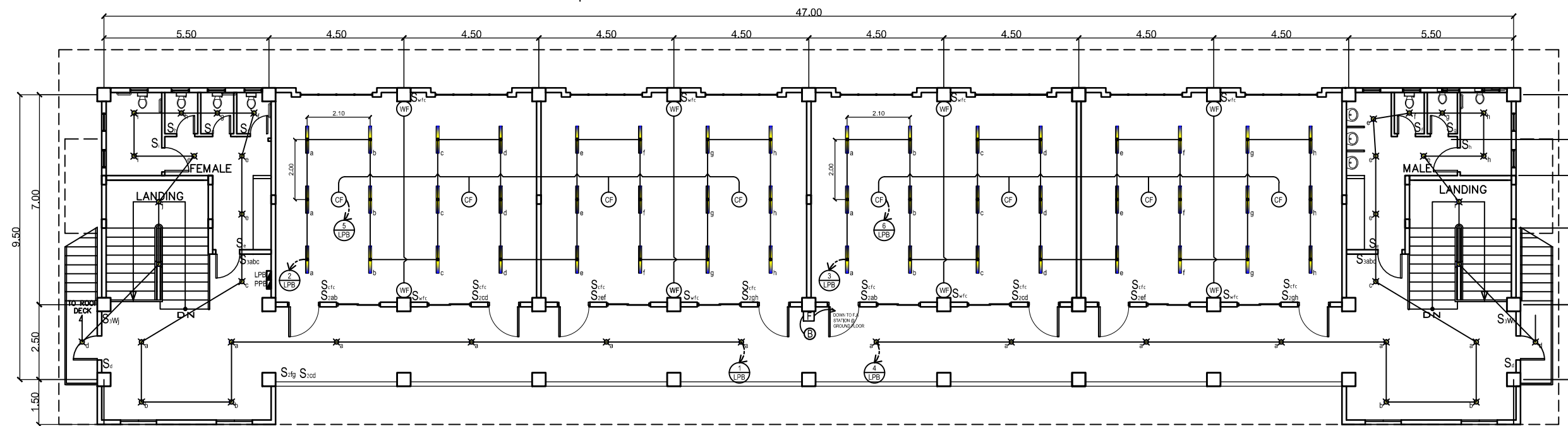
CKT. NO.	LOAD DESCRIPTION	VA LOAD	CIRCUIT LOAD					WIRE & CONDUIT SIZE
			VOLT	AMPERE	AT	AF	kAIC	
1	7 CONVENIENCE OUTLETS (180*7)	1260	230	5.48	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
2	6 CONVENIENCE OUTLETS (180*6)	1080	230	4.70	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
3	6 CONVENIENCE OUTLETS (180*6)	1080	230	4.70	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
4	7 CONVENIENCE OUTLETS (180*7)	1260	230	5.48	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
5	2 ACU (2 * 3.5 * 746)	5222	230	22.70	40	60	10	2 - 5.5mm ² THHN WIRE, STRANDED, + 1 - 5.5mm ² THHN WIRE (G), 25.0mmØ PVC
6	2 ACU (2 * 3.5 * 746)	5222	230	22.70	40	60	10	2 - 5.5mm ² THHN WIRE, STRANDED, + 1 - 5.5mm ² THHN WIRE (G), 25.0mmØ PVC
7	SPARE							
8	SPARE							
TOTAL		15124						
TOTAL CONNECTED LOADS: 15124 VA $I_L @ 85\% DF = \frac{15124}{230} \cdot 0.85 = 55.89 \text{ AMPERES}$ LPA MAIN = 80 AT, 2P, 240V, 18kAIC								

PANELBOARD: PPB FLUSH MOUNTED, NEMA 1 ENCLOSURE WITH GROUND TERMINAL

CKT. NO.	LOAD DESCRIPTION	VA LOAD	CIRCUIT LOAD					WIRE & CONDUIT SIZE
			VOLT	AMPERE	AT	AF	kAIC	
1	7 CONVENIENCE OUTLETS (180*7)	1260	230	5.48	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
2	6 CONVENIENCE OUTLETS (180*6)	1080	230	4.70	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
3	6 CONVENIENCE OUTLETS (180*6)	1080	230	4.70	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
4	7 CONVENIENCE OUTLETS (180*7)	1260	230	5.48	20	60	10	2 - 3.5mm ² THHN WIRE, STRANDED, + 1 - 3.5mm ² THHN WIRE (G), 19.0mmØ PVC
5	2 ACU (2 * 3.5 * 746)	5222	230	22.70	40	60	10	2 - 5.5mm ² THHN WIRE, STRANDED, + 1 - 5.5mm ² THHN WIRE (G), 25.0mmØ PVC
6	2 ACU (2 * 3.5 * 746)	5222	230	22.70	40	60	10	2 - 5.5mm ² THHN WIRE, STRANDED, + 1 - 5.5mm ² THHN WIRE (G), 25.0mmØ PVC
7	SPARE							
8	SPARE							
TOTAL		15124						
TOTAL CONNECTED LOADS: 15124 VA $I_L @ 85\% DF = \frac{15124}{230} \cdot 0.85 = 55.89 \text{ AMPERES}$ LPA MAIN = 80 AT, 2P, 240V, 18kAIC								

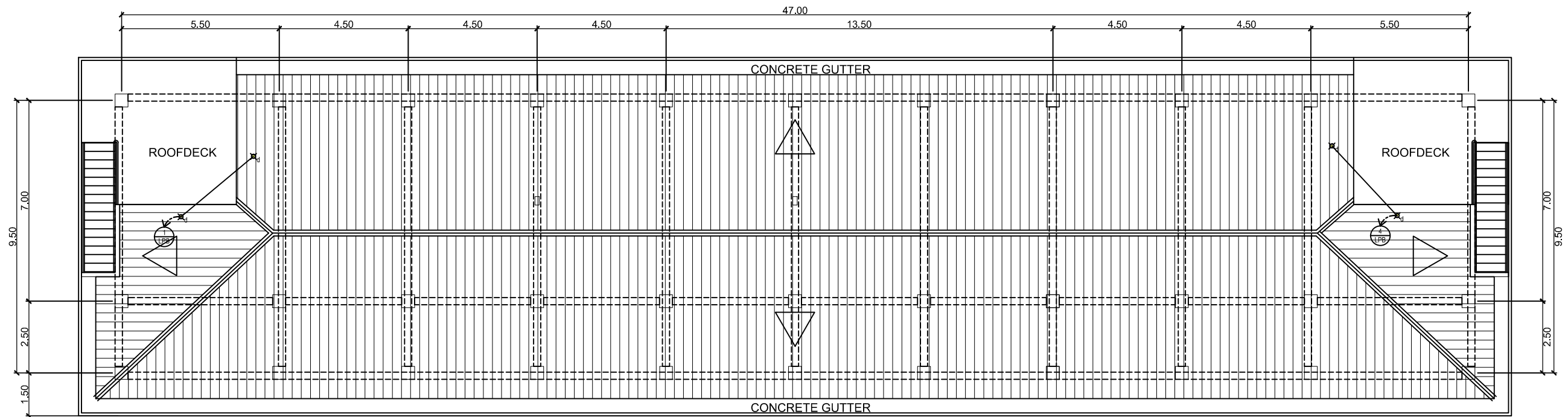


GROUND FLOOR LIGHTING LAYOUT
 SCALE: @ 1:150 MTS.



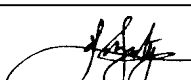
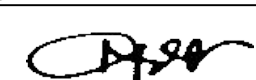

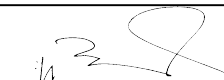


SECOND FLOOR LIGHTING LAYOUT
 SCALE: @ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: KENAN B. SAMSON, MSEE ELECTRICAL ENGINEER	CHECKED AND SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> E-4 4 / 5 </div>
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR		DATE :	DATE :	DATE :	DATE :	DATE :		




ROOF DECK LIGHTING LAYOUT
 SCALE: _____ @ _____ 1:150 MTS.

	PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS <small>LOCATION : DUMINGAG, ZAMBOANGA DEL SUR</small>	PREPARED BY:  KENAN B. SAMSON, MSEE ELECTRICAL ENGINEER	CHECKED AND SUBMITTED BY:  PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY:  NANETTE D. BILBAO, Ed.D DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL:  RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED:  DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET NO: <table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">E-5</td> </tr> <tr> <td style="padding: 5px;">5 5</td> </tr> </table>	E-5	5 5
E-5										
5 5										

DISTRICT/CITY/MUNICIPALITY

PLUMBING/SANITARY:

PLUMBING NOTES:

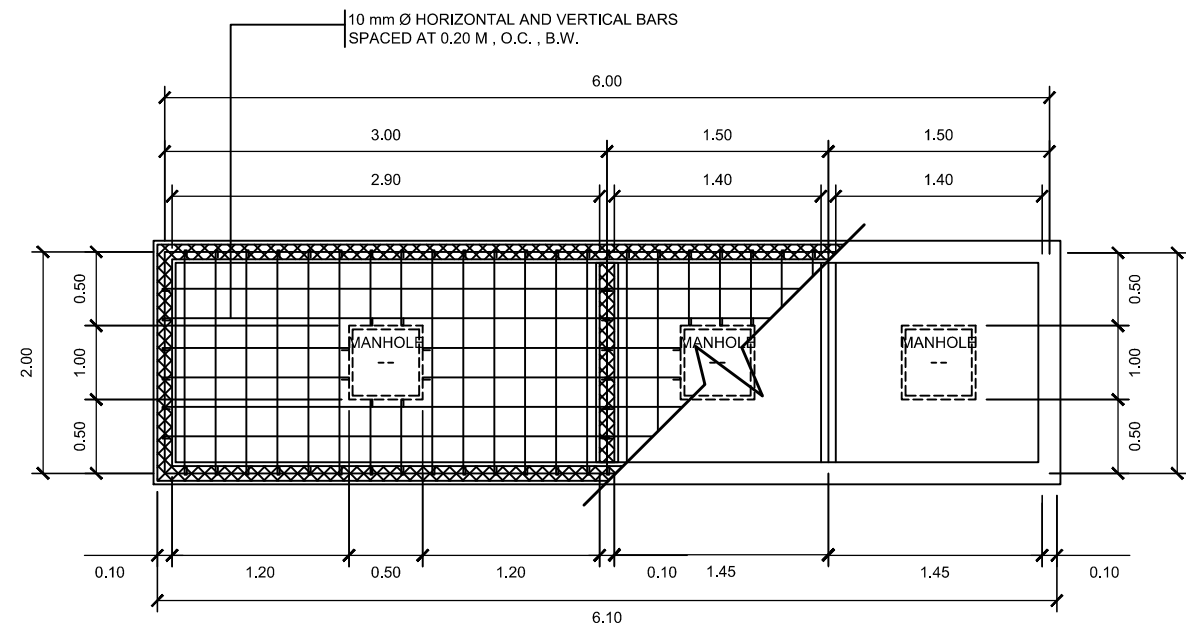
ALL PLUMBING INSTALLATION SHALL CONFORM TO THE STANDARD / RULES AND REGULATIONS OF THE NATIONAL PLUMBING CODE OF THE PHILIPPINES AND LOCAL GOVERNMENT.

ALL PLUMBING INSTALLATIONS SHALL BE UNDER THE DIRECT AND STRICT SUPERVISION OF DULY LICENSED PLUMBING ENGINEER OR REGISTERED MASTER PLUMBER.

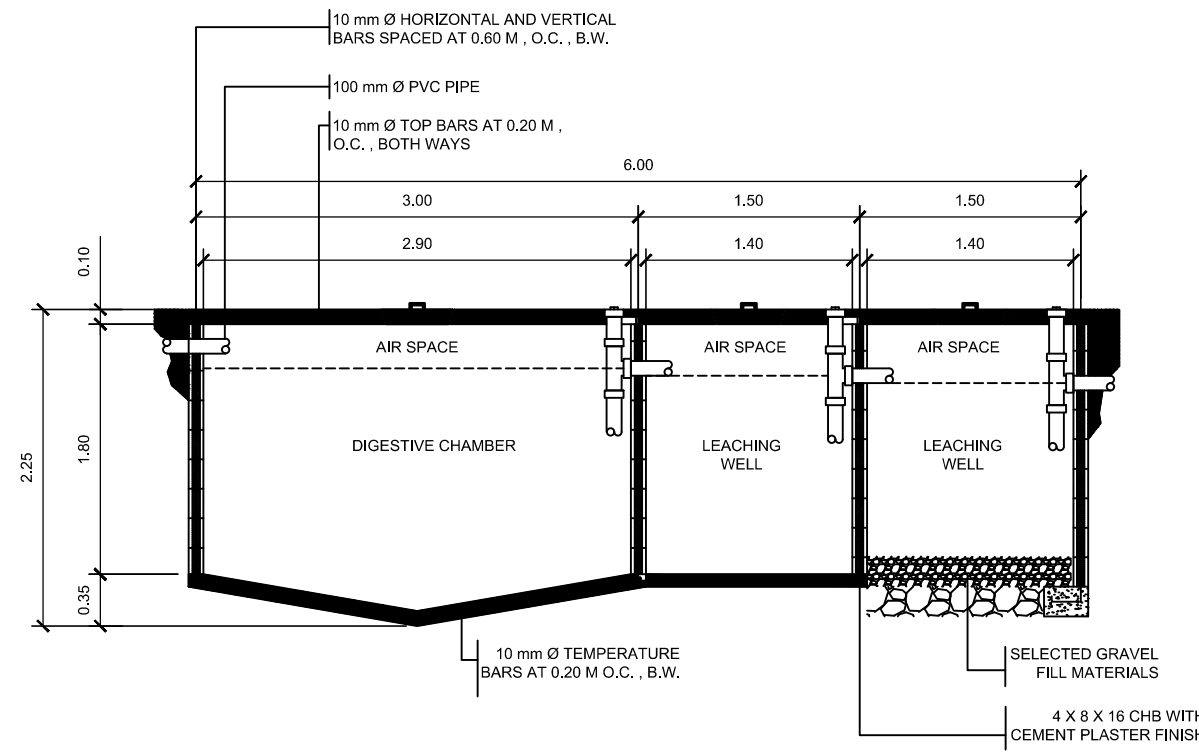
ALL SPECIFICATION ABOVE SHOULD BE STRICTLY OBSERVED.

PLUMBING SYMBOLS:

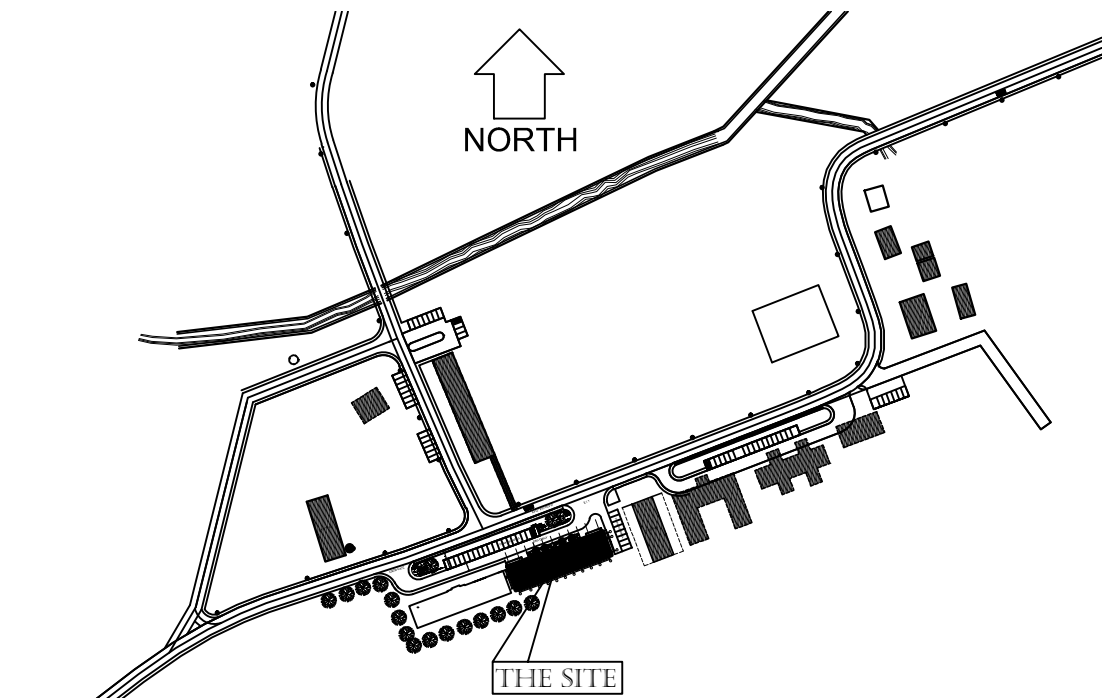
F	FAUCET
FD	FLOOR DRAIN
WC	WATER CLOSET
CO	CLEAN-OUT
DS	DOWNSPOUT
M	WATER METER
WHL	WALL HUNG LAVATORY
ST	SEPTIC TANK
MVTR	MAIN VENT THRU ROOF
GV	GATE VALVE
URI	URINAL
WEP	WATER ENTRANCE PIPE
	1/2" Ø WATER LINE (G.I. PIPE)
	2" Ø MVTR & FLOOR DRAIN
	3" Ø ROOF DRAIN PIPE
	4" Ø SOIL PIPE (WASTE/SANITARY)
B	BIDET



2
P-1 SCALE 1:50M
DETAIL OF SEPTIC TANK



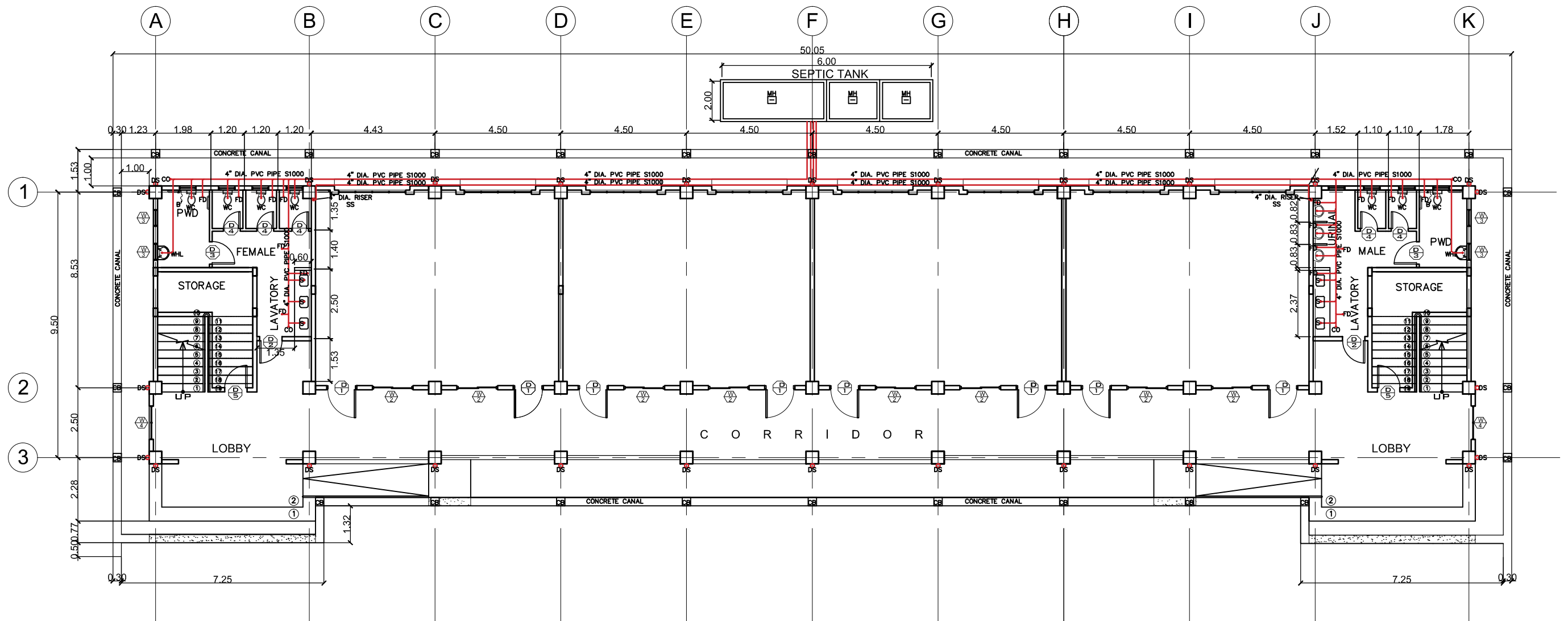
3
P-1 SCALE 1:50M
ELEVATION DETAIL OF SEPTIC TANK



1
P-1 SCALE NTS
VICINITY MAP



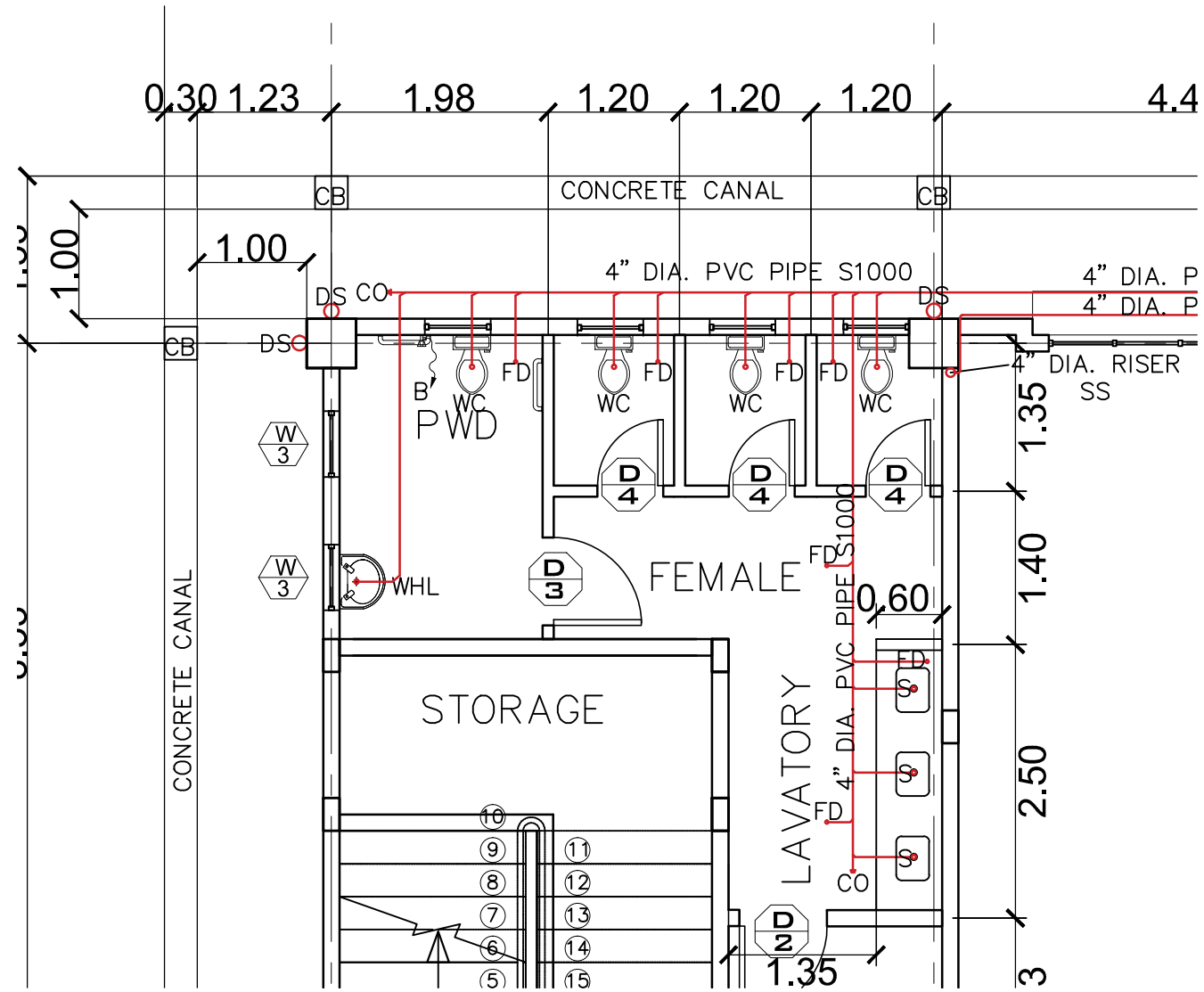
PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAROL, CE ENGINEERING ASSISTANT	CHECKED & SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. FILBAO, Ed.D. DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN	P-1 1 13
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		



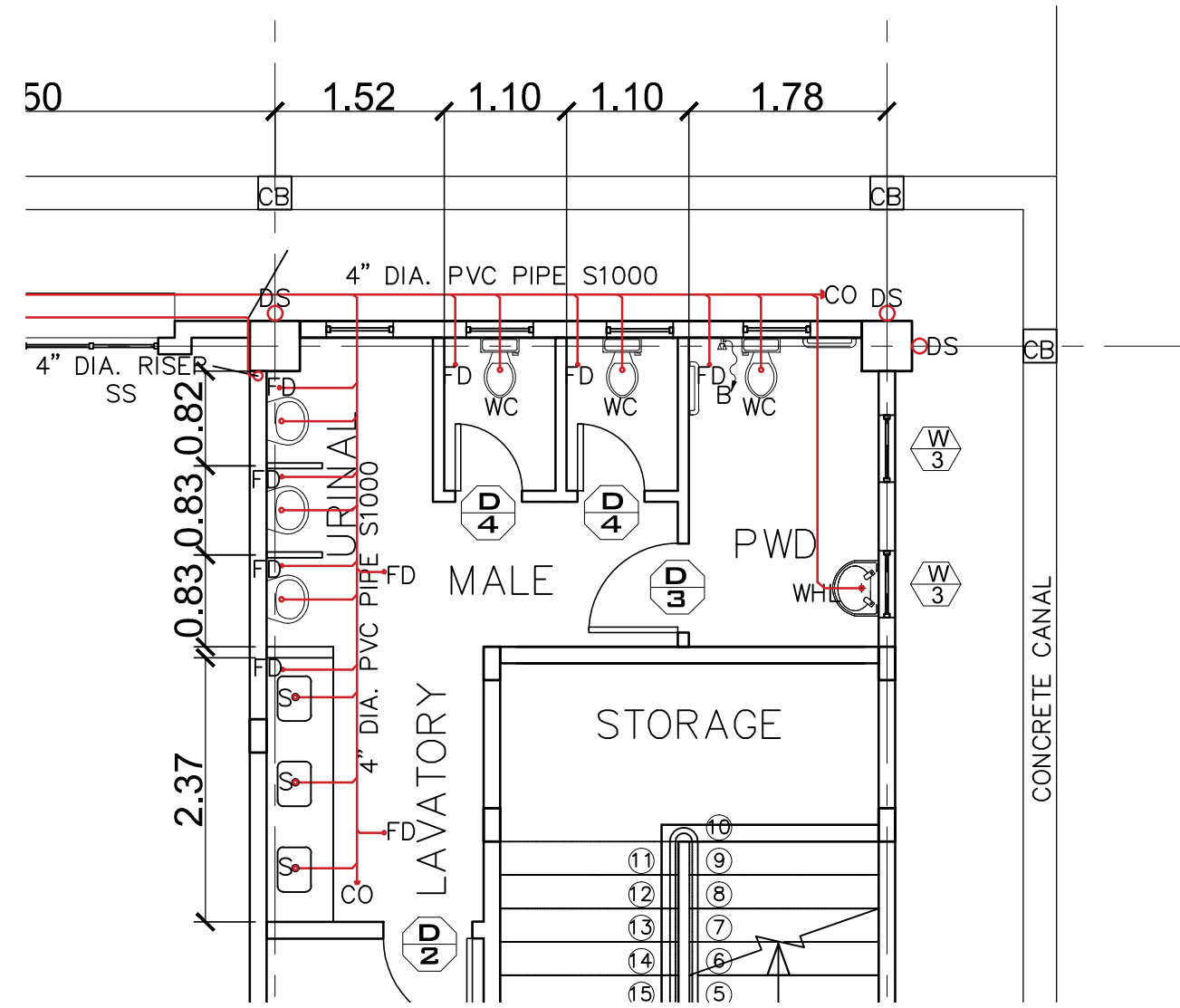
1
GROUND FLOOR SANITARY LAY - OUT
P-3 SCALE 1:150M



PROJECT TITLE : CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	PREPARED BY: AIVY B. GAPOL, CE ENGINEERING ASSISTANT	CHECKED & SUBMITTED BY: PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	NOTED BY: NANETTE D. B. BAO, Ed.D. DUMINGAG CAMPUS ADMINISTRATOR	RECOMMENDING APPROVAL: RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	APPROVED: DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT	AS SHOWN	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; width: 30px; margin: 0 auto;"> P-3 <hr style="border: 0; border-top: 1px solid black;"/> 3 13 </div>
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		



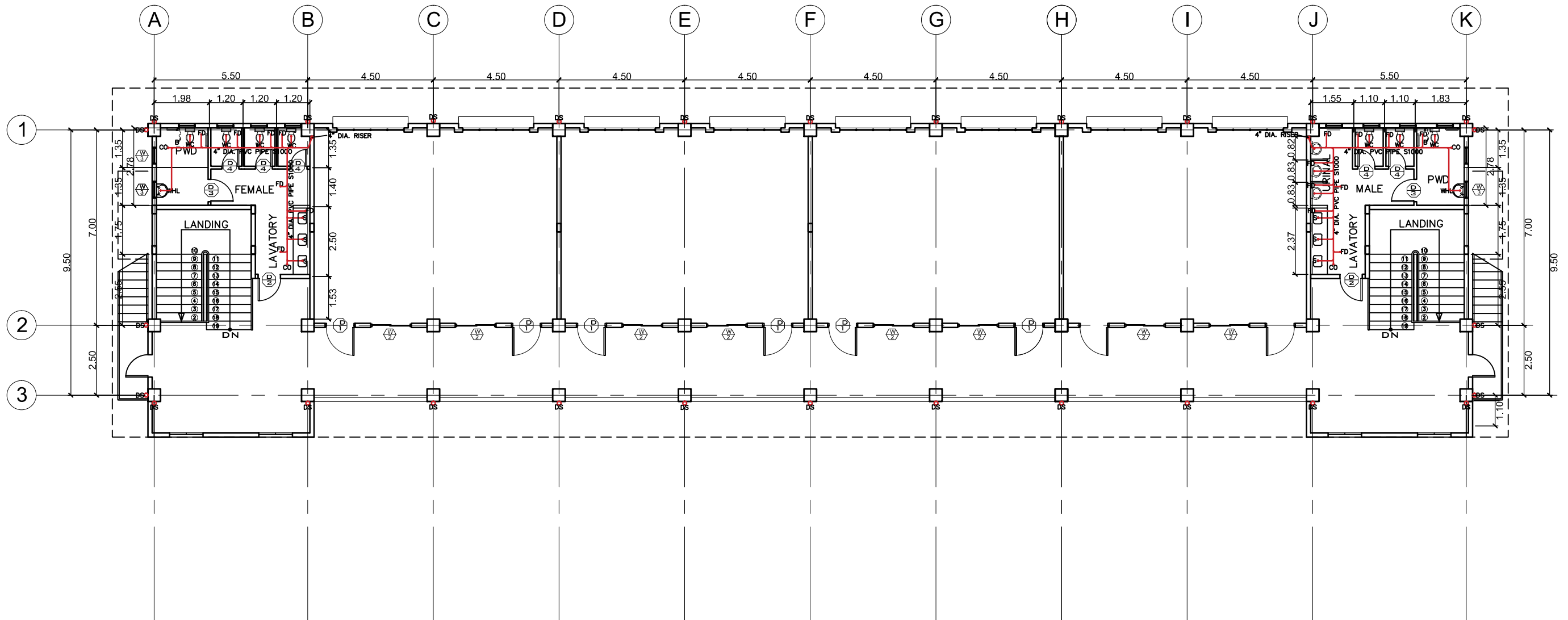
1 **BLOW - UP OF GND. FLR. FEMALE SANITARY LAY - OUT**
 P-4 SCALE 1:60M









2 **BLOW - UP OF GND. FLR. MALE SANITARY LAY - OUT**
 P-4 SCALE 1:60M

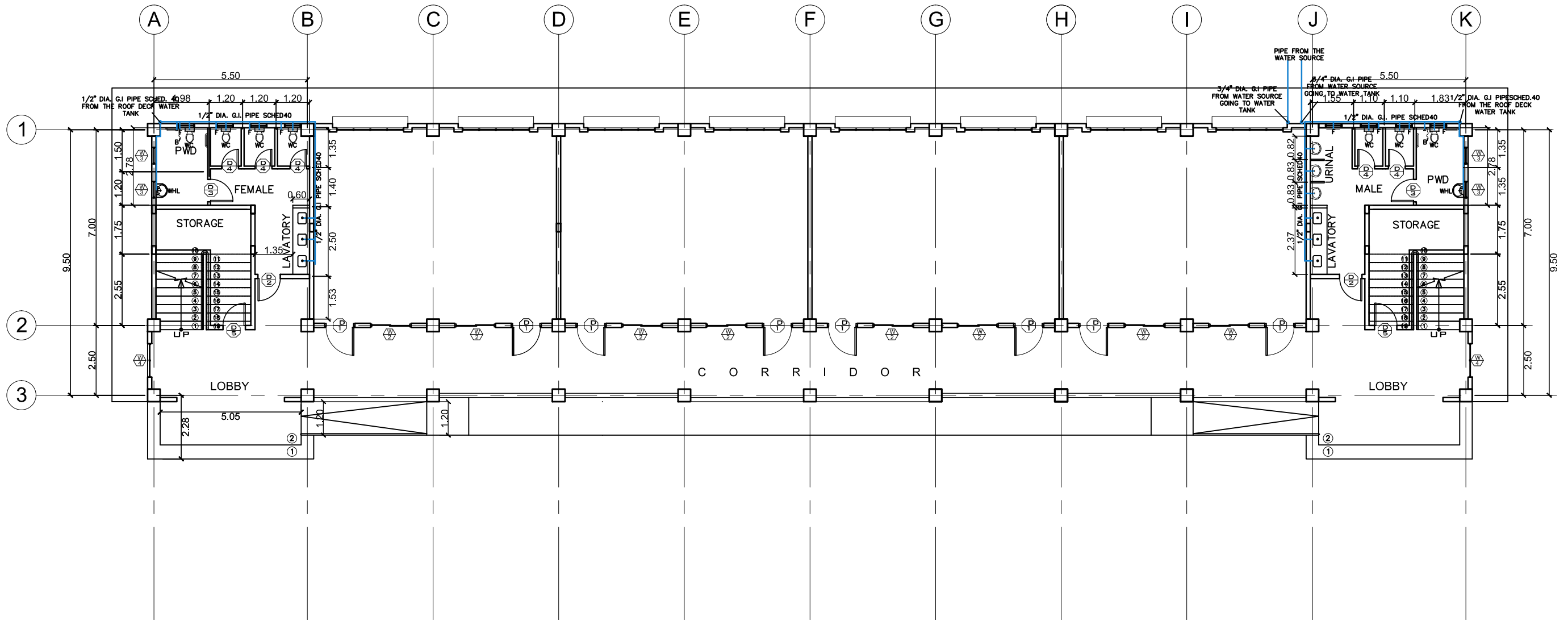


PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	AS SHOWN	P-4 4 13
CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	<i>abapol</i> AIVY B. GAPOL, CE ENGINEERING ASSISTANT	<i>Pangasian B. Marmintas</i> PANGASIAN B. MARMINTAS, CE COLLEGE ENGINEER	<i>Nanette D. B. BAO</i> NANETTE D. B. BAO, Ed.D. DUMINGAG CAMPUS ADMINISTRATOR	<i>Rodrigo P. Milares Jr.</i> RODRIGO P. MILARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	<i>Dr. Freddie T. Bernal</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT		
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :		




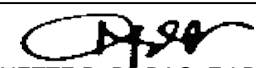
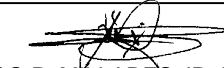



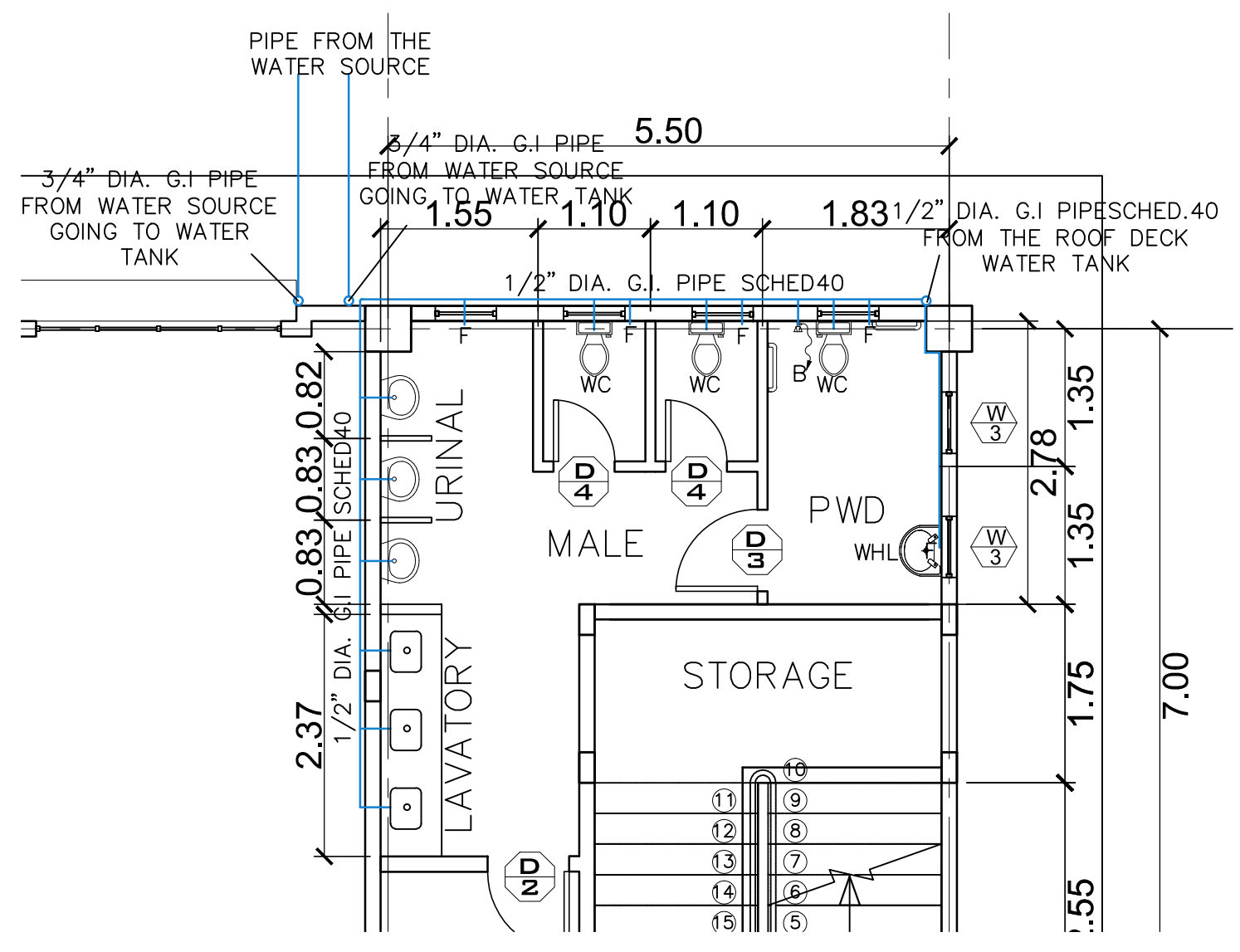
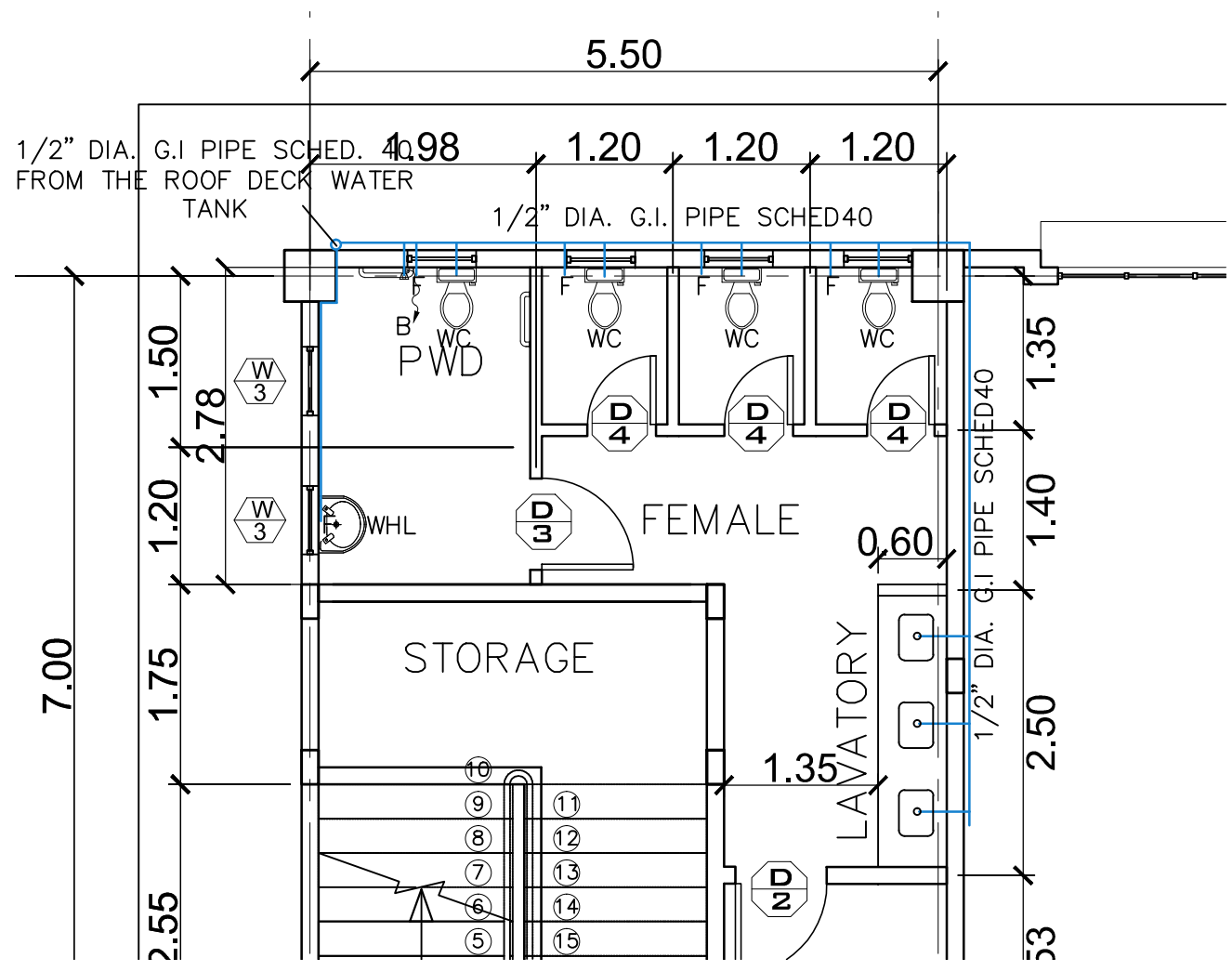
1 **SECOND FLOOR SANITARY LAY - OUT**
P-5 SCALE 1:150M

	PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	AS SHOWN	P-5 5 13
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS <small>LOCATION : DUMINGAG, ZAMBOANGA DEL SUR</small>	 AIVY B. GAPOL, CE <small>ENGINEERING ASSISTANT</small>	 PANGASIAN B. MAMINTAS, CE <small>COLLEGE ENGINEER</small>	 NANETTE D. BLBAO, Ed.D. <small>DUMINGAG CAMPUS ADMINISTRATOR</small>	 RODRIGO P. MILLARES, JR., REE, EnP. <small>PLANNING AND DEVELOPMENT DIRECTOR</small>	 DR. FREDDIE T. BERNAL, CESO III <small>OIC-PRESIDENT</small>		




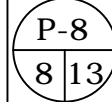
1
GROUND FLOOR WATER DISTRIBUTION LAY - OUT
P-7 SCALE 1:150M

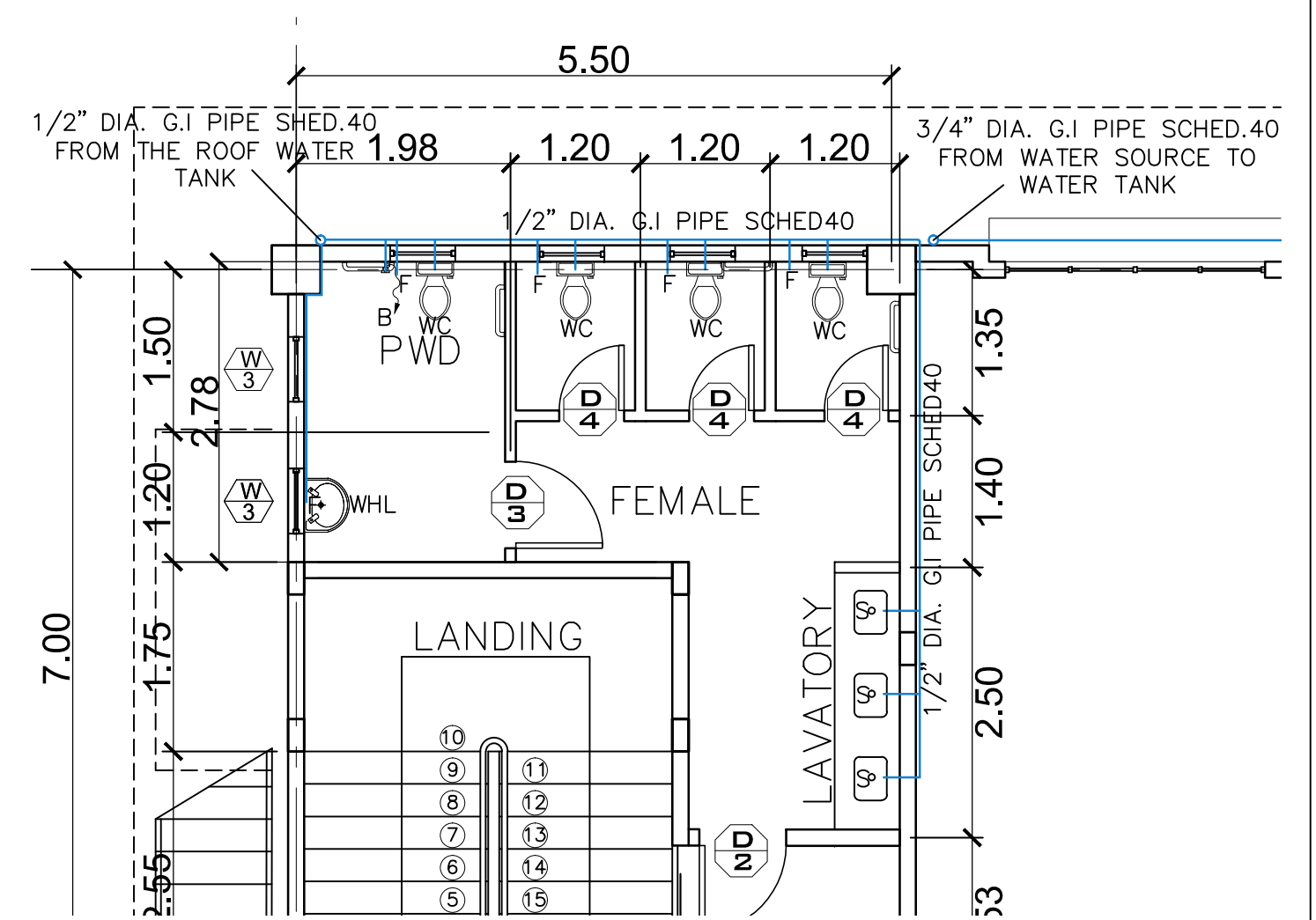
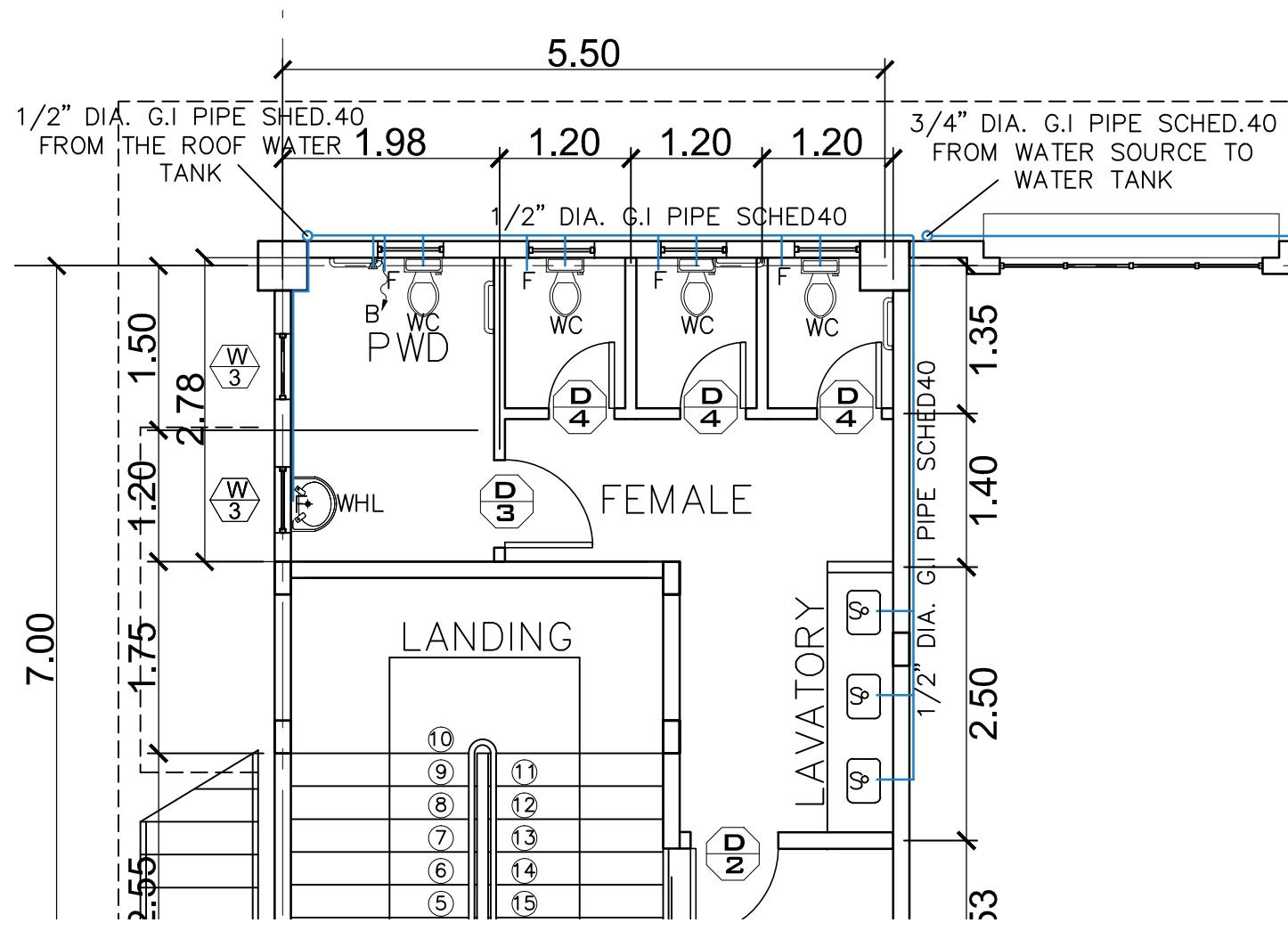
	PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	AS SHOWN	P-7 713
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS <small>LOCATION : DUMINGAG, ZAMBOANGA DEL SUR</small>	 AIVY B. GAPOL, CE <small>ENGINEERING ASSISTANT</small>	 PANGASIAN B. MAMINTAS, CE <small>COLLEGE ENGINEER</small>	 NANETTE D. B. BAO, Ed.D. <small>DUMINGAG CAMPUS ADMINISTRATOR</small>	 RODRIGO P. MILLARES, JR., REE, EnP. <small>PLANNING AND DEVELOPMENT DIRECTOR</small>	 DR. FREDDIE T. BERNAL, CESO III <small>OIC-PRESIDENT</small>		



1 BLOW - UP OF GND. FLR. FEMALE WATER DISTRIBUTION LAY - OUT
 P-8 SCALE 1:60M

2 BLOW - UP OF GND. FLR. MALE WATER DISTRIBUTION LAY - OUT
 P-8 SCALE 1:60M

	PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	AS SHOWN		
	CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	<i>abapd</i> AIVY B. GAROL, CE ENGINEERING ASSISTANT	<i>[Signature]</i> PANGASIAN B. MAMINTAS, CE COLLEGE ENGINEER	<i>[Signature]</i> NANETTE D. ELBAO, Ed.D. DUMINGAG CAMPUS ADMINISTRATOR	<i>[Signature]</i> RODRIGO P. MILLARES, JR., REE, EnP. PLANNING AND DEVELOPMENT DIRECTOR	<i>[Signature]</i> DR. FREDDIE T. BERNAL, CESO III OIC-PRESIDENT			
	LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :			

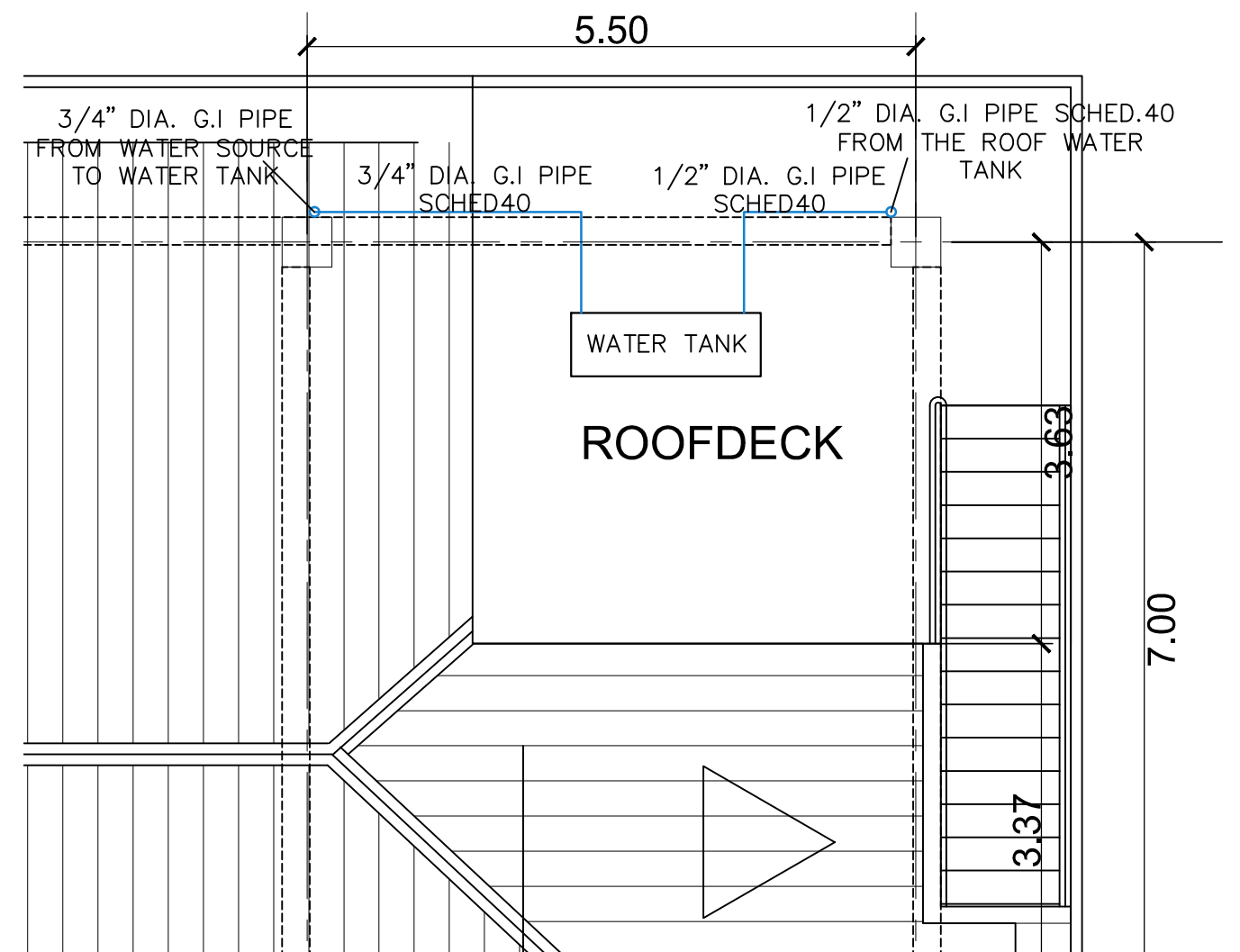
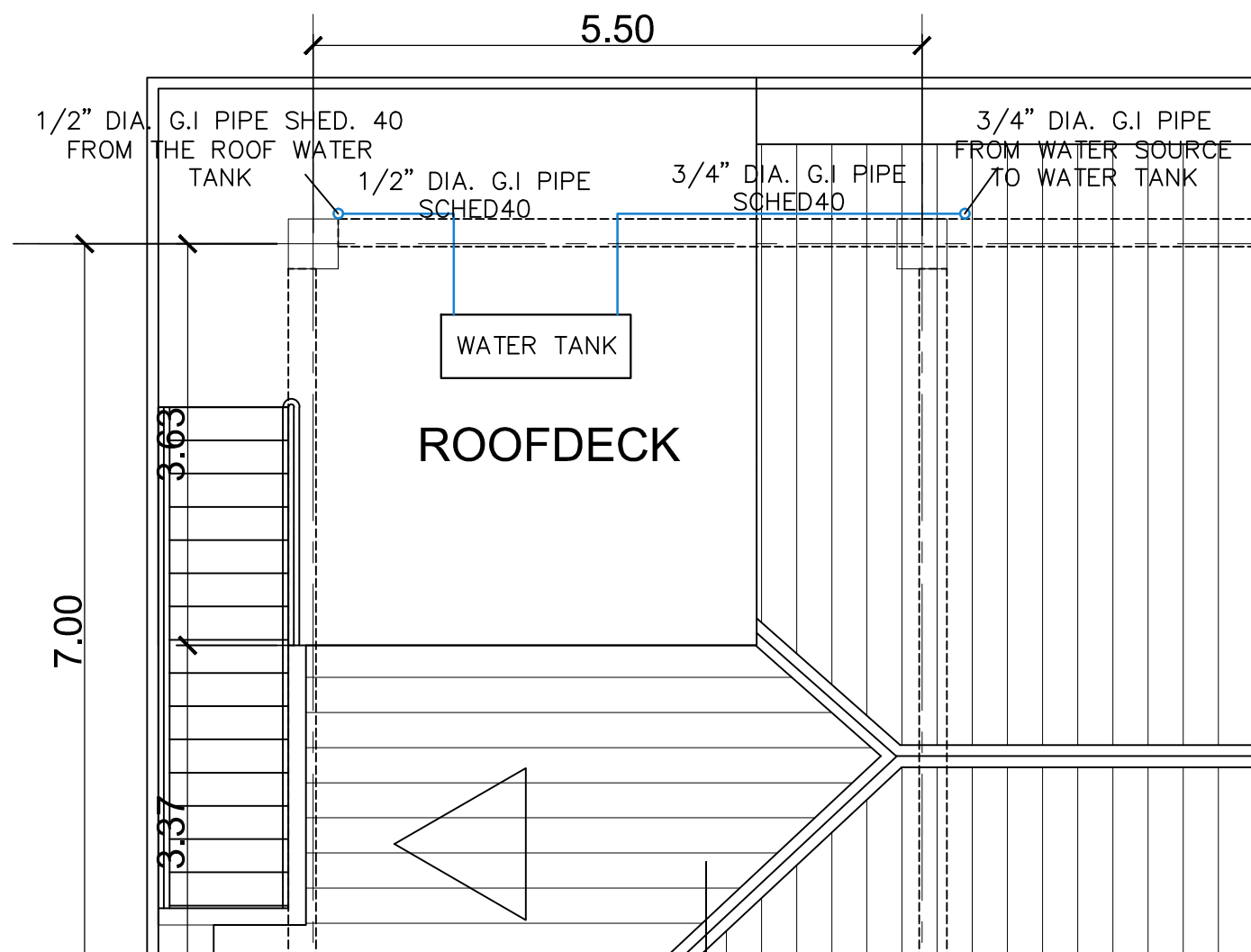


1 BLOW - UP OF 2ND. FLR. FEMALE WATER DISTRIBUTION LAY - OUT
 P-10 SCALE 1:60M

2 BLOW - UP OF 2ND. FLR. MALE WATER DISTRIBUTION LAY - OUT
 P-10 SCALE 1:60M



PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	
CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	<i>abapal</i> <u>AIVY B. GAPOL, CE</u> ENGINEERING ASSISTANT	<i>[Signature]</i> <u>PANGASIAN B. MAMINTAS, CE</u> COLLEGE ENGINEER	<i>[Signature]</i> <u>NANETTE D. B. BAO, Ed.D.</u> DUMINGAG CAMPUS ADMINISTRATOR	<i>[Signature]</i> <u>RODRIGO P. MILLARES, JR., REE, EnP.</u> PLANNING AND DEVELOPMENT DIRECTOR	<i>[Signature]</i> <u>DR. FREDDIE T. BERNAL, CESO III</u> OIC-PRESIDENT	AS SHOWN
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :	

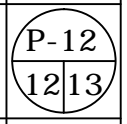


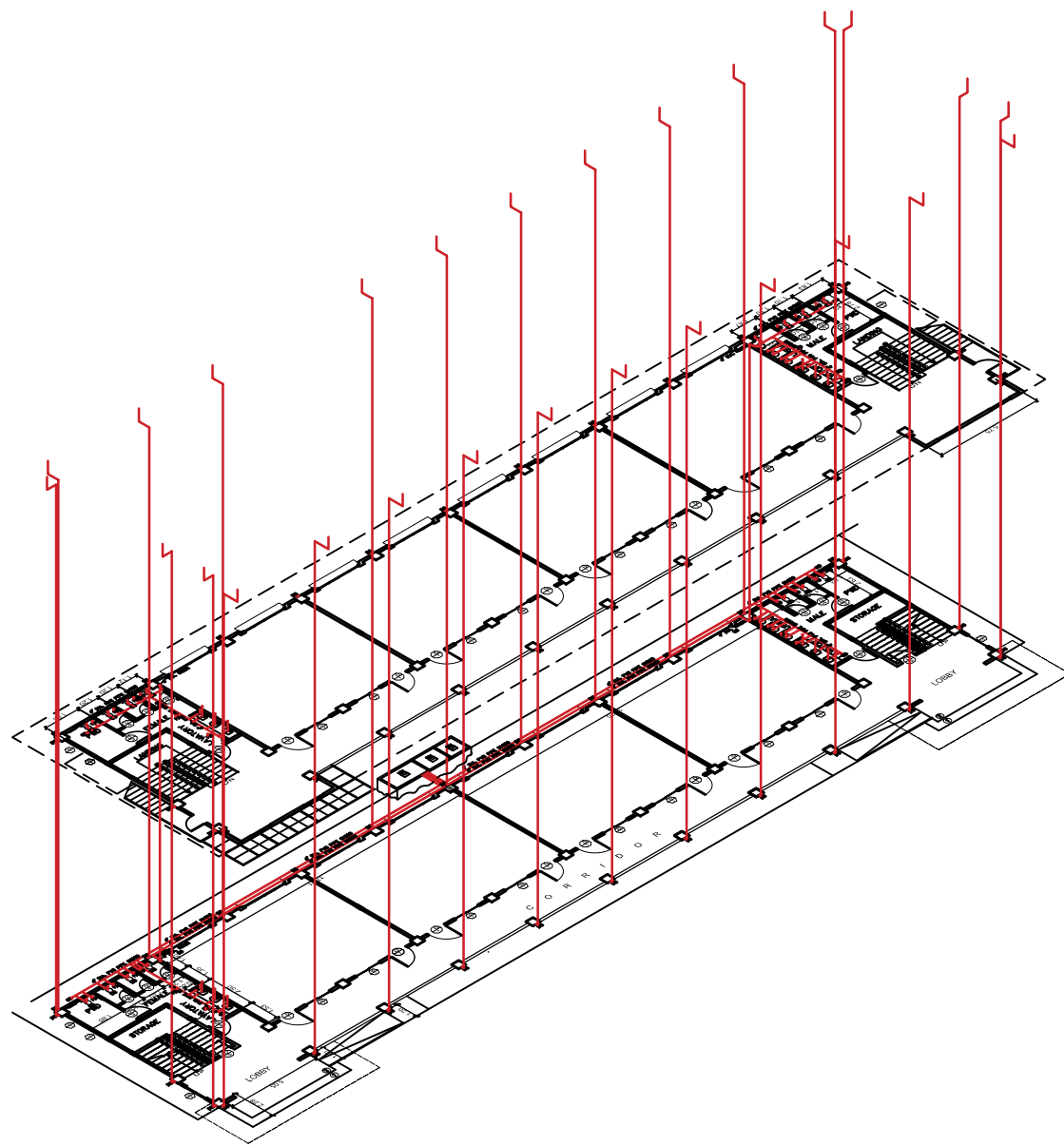
1 **BLOW - UP OF LEFT SIDE ROOF PLAN WATER DISTRIBUTION LAY - OUT**
 P-12 SCALE 1:60M

2 **BLOW - UP OF RIGHT SIDE ROOF PLAN WATER DISTRIBUTION LAY - OUT**
 P-12 SCALE 1:60M

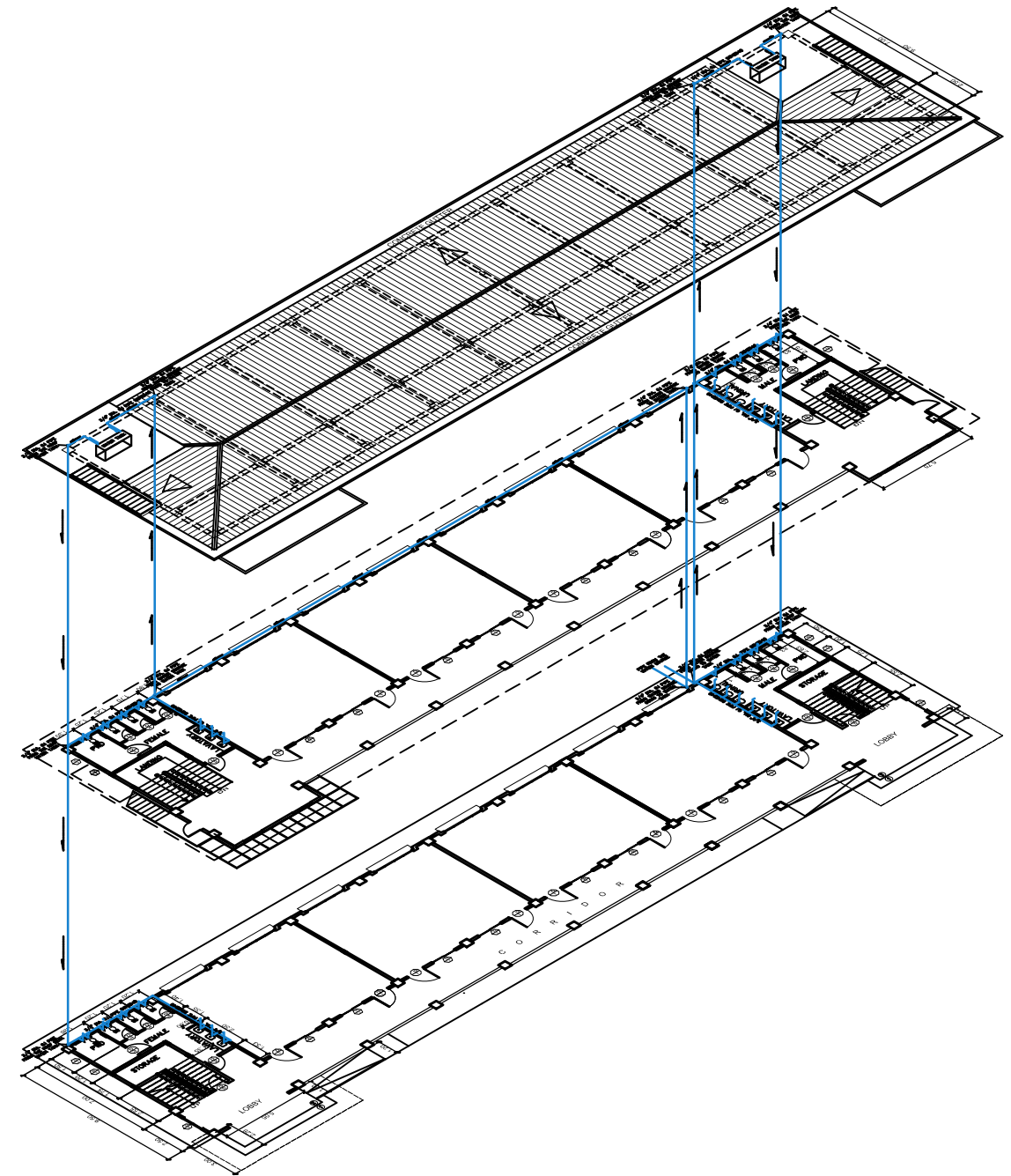


PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	
CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	<i>abapcl</i> <u>AIVY B. GAPOL, CE</u> ENGINEERING ASSISTANT	<i>Pangasian</i> <u>PANGASIAN B. MAMINTAS, CE</u> COLLEGE ENGINEER	<i>Nanette</i> <u>NANETTE D. BILBAO, Ed.D.</u> DUMINGAG CAMPUS ADMINISTRATOR	<i>Rodrigo</i> <u>RODRIGO P. MALLARES, JR., REE, EnP.</u> PLANNING AND DEVELOPMENT DIRECTOR	<i>Freddie</i> <u>DR. FREDDIE T. BERNAL, CESO III</u> OIC-PRESIDENT	AS SHOWN
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :	





1
P-13 SCALE
ISOMETRIC OF SANITARY LAY - OUT
NTS



1
P-13 SCALE
ISOMETRIC OF WATER DISTRIBUTION LAY - OUT
NTS



PROJECT TITLE :	PREPARED BY:	CHECKED & SUBMITTED BY:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED:	
CONSTRUCTION OF TWO (2) STOREY 8 CL ACADEMIC BUILDING WITH COMPLETE FURNITURES & FIXTURES AT DUMINGAG CAMPUS	<i>abapol</i> <u>AIVY B. GAYOL, CE</u> ENGINEERING ASSISTANT	<i>[Signature]</i> <u>PANGASIAN B. MAMINTAS, CE</u> COLLEGE ENGINEER	<i>[Signature]</i> <u>NANETTE D. FILBAO, Ed.D.</u> DUMINGAG CAMPUS ADMINISTRATOR	<i>[Signature]</i> <u>RODRIGO P. MILLARES, JR., REE, EnP.</u> PLANNING AND DEVELOPMENT DIRECTOR	<i>[Signature]</i> <u>DR. FREDDIE T. BERNAL, CESO III</u> OIC-PRESIDENT	AS SHOWN
LOCATION : DUMINGAG, ZAMBOANGA DEL SUR	DATE :	DATE :	DATE :	DATE :	DATE :	