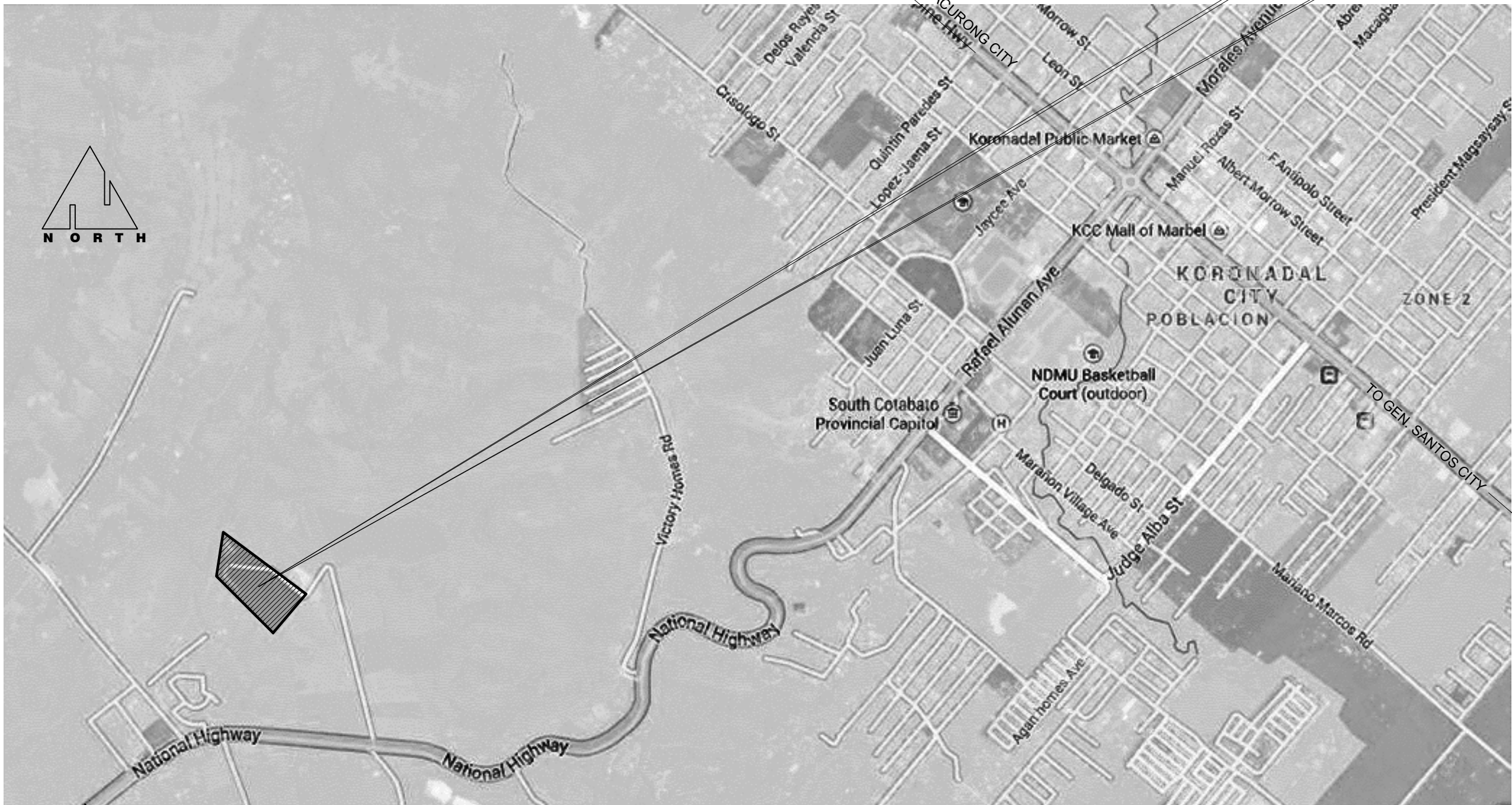
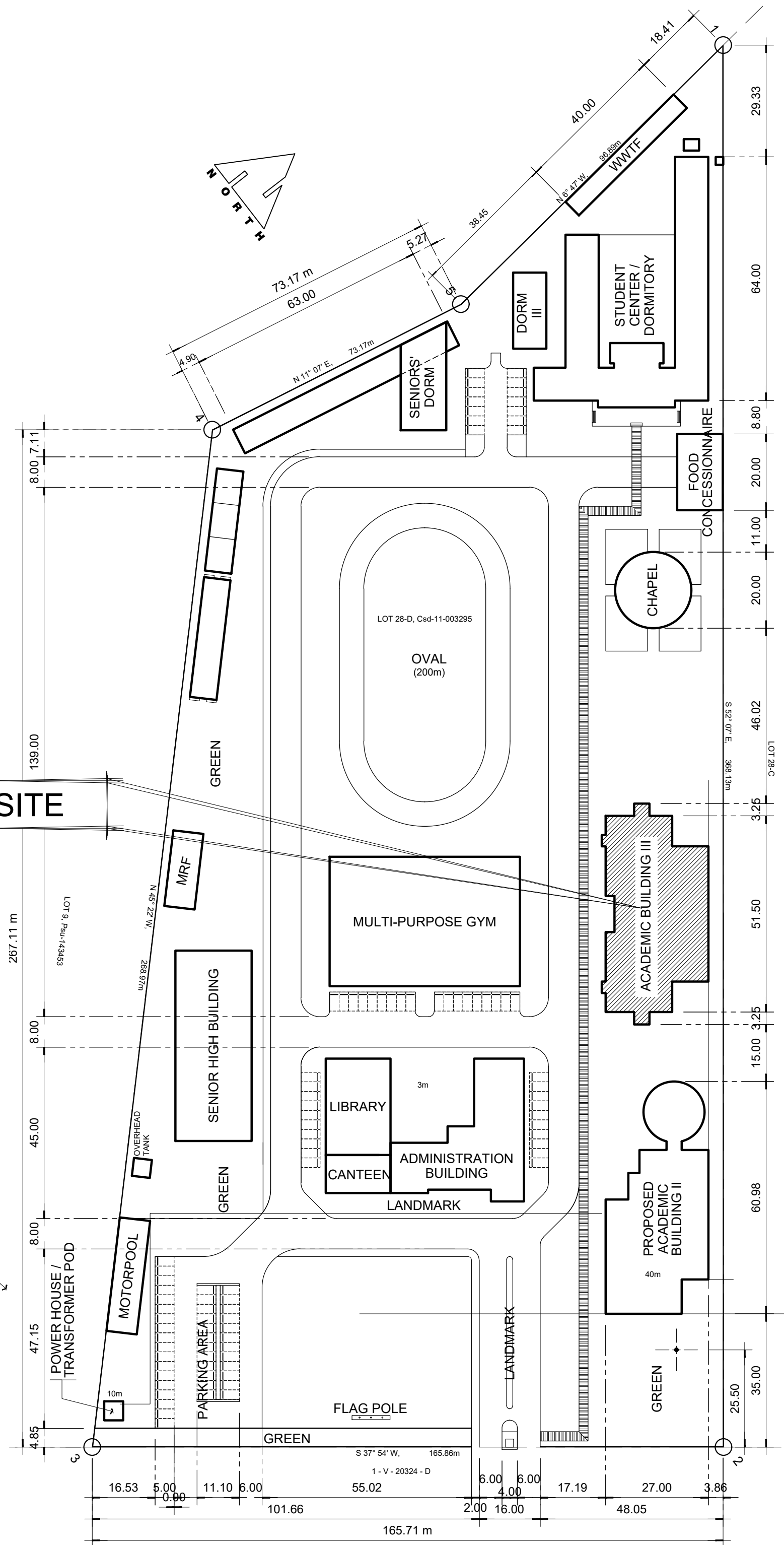




01 **PERSPECTIVE**
SCALE: NTS
A-01



02 **LOCATION PLAN**
SCALE: NTS
A-01



03 **SITE DEVELOPMENT PLAN**
SCALE: 1:1000
A-01

TABLE OF CONTENTS

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAY OFFICE OF THE BUILDING OFFICIAL KORONADAL CITY	
District / City / Municipality	
BUILDING OFFICIAL	
LAND USE AND ZONING	
LINE AND GRADE	
ARCHITECTURAL	
STRUCTURAL	
ELECTRICAL	
MECHANICAL	
SANITARY	
ELECTRONICS	



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

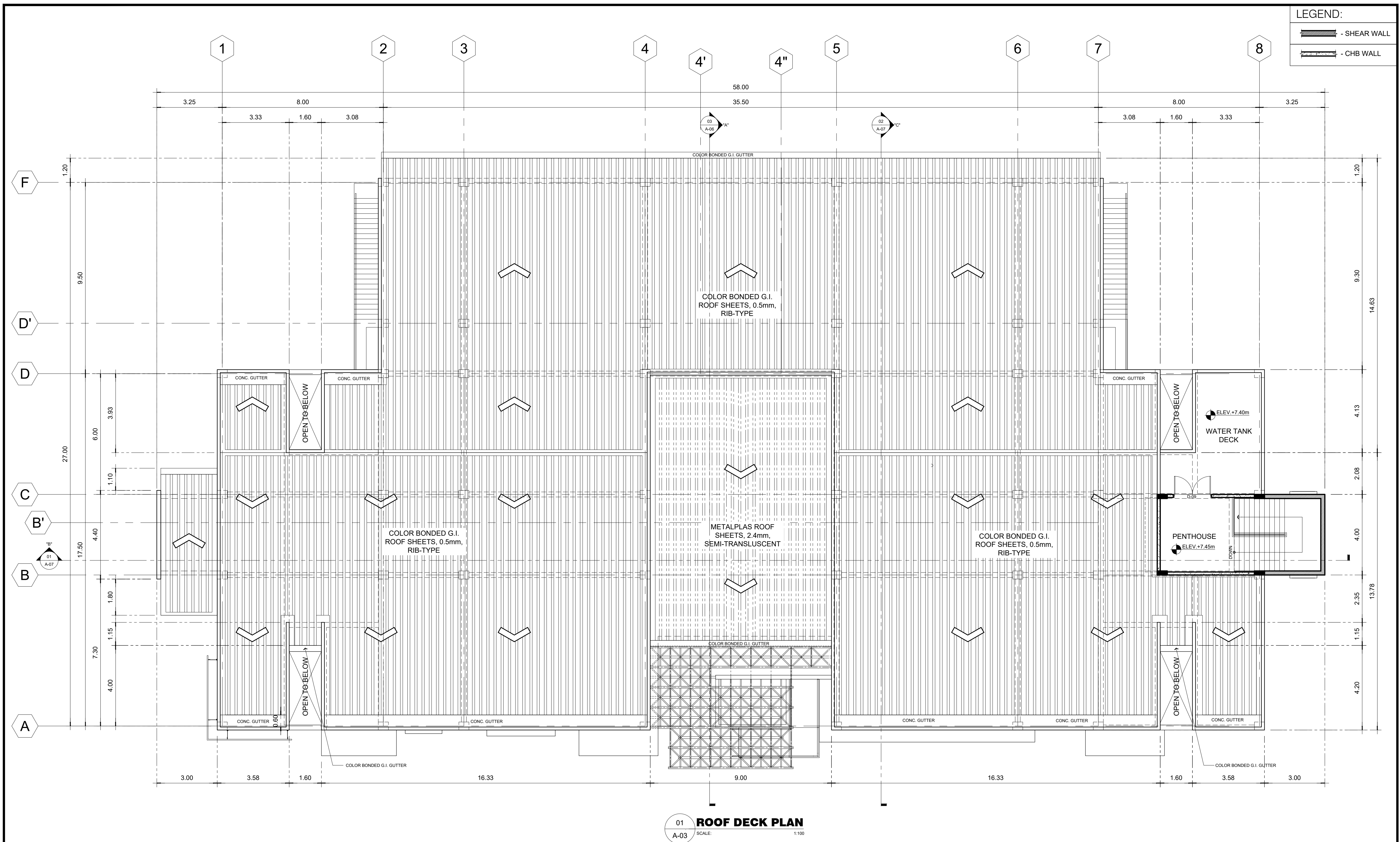
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

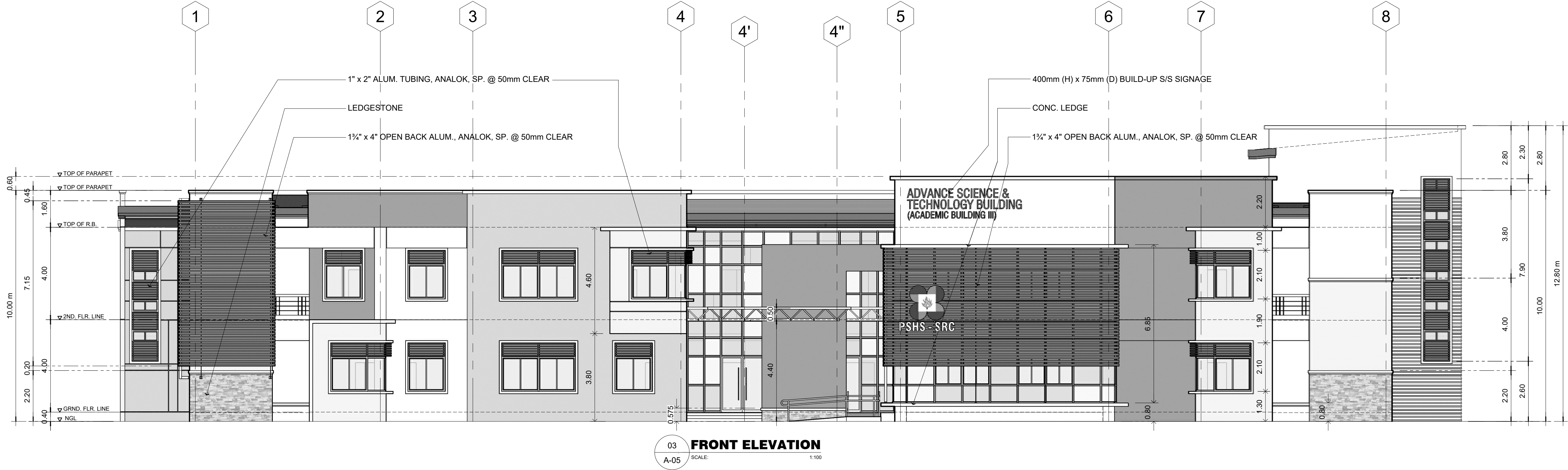
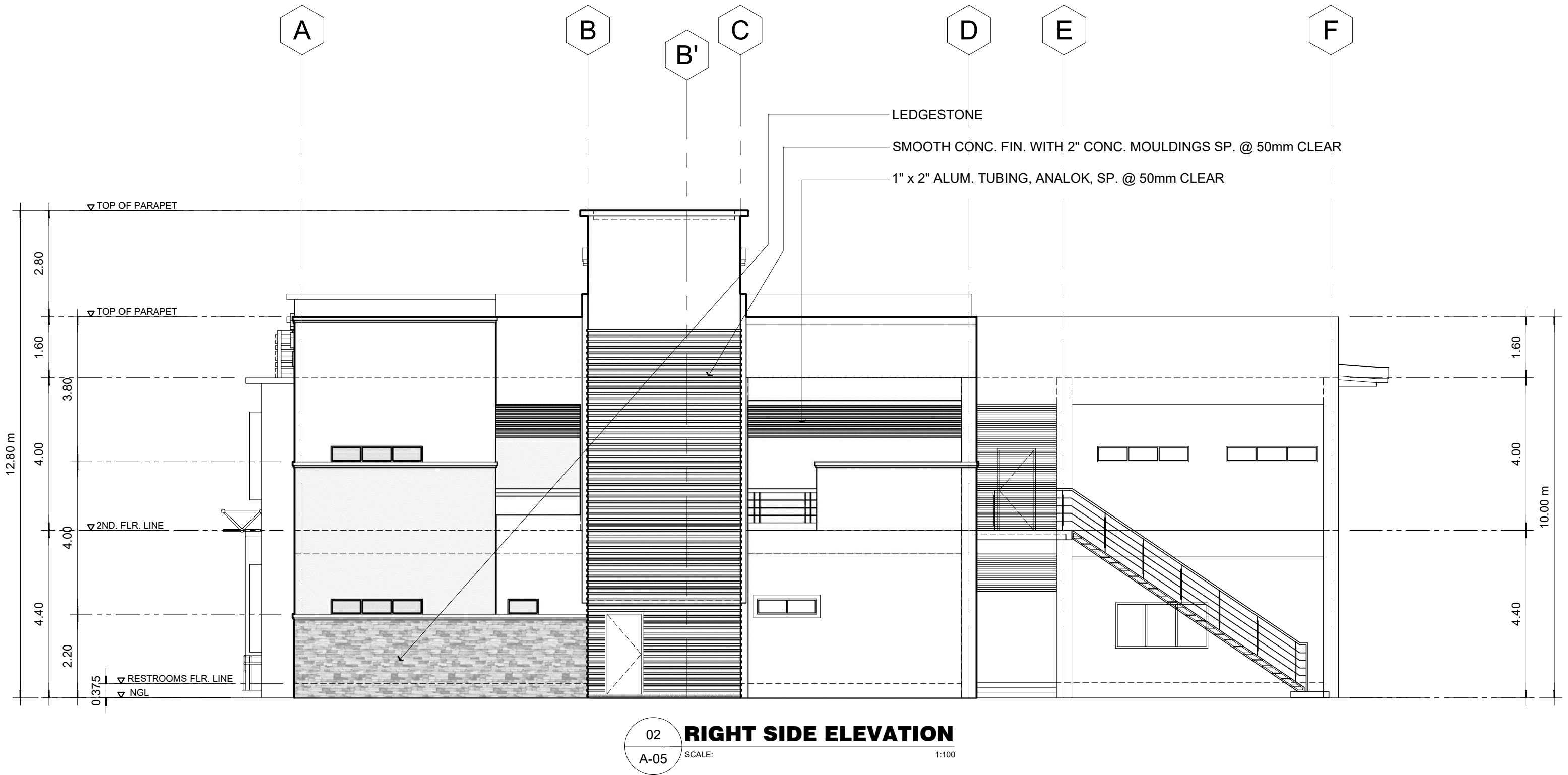
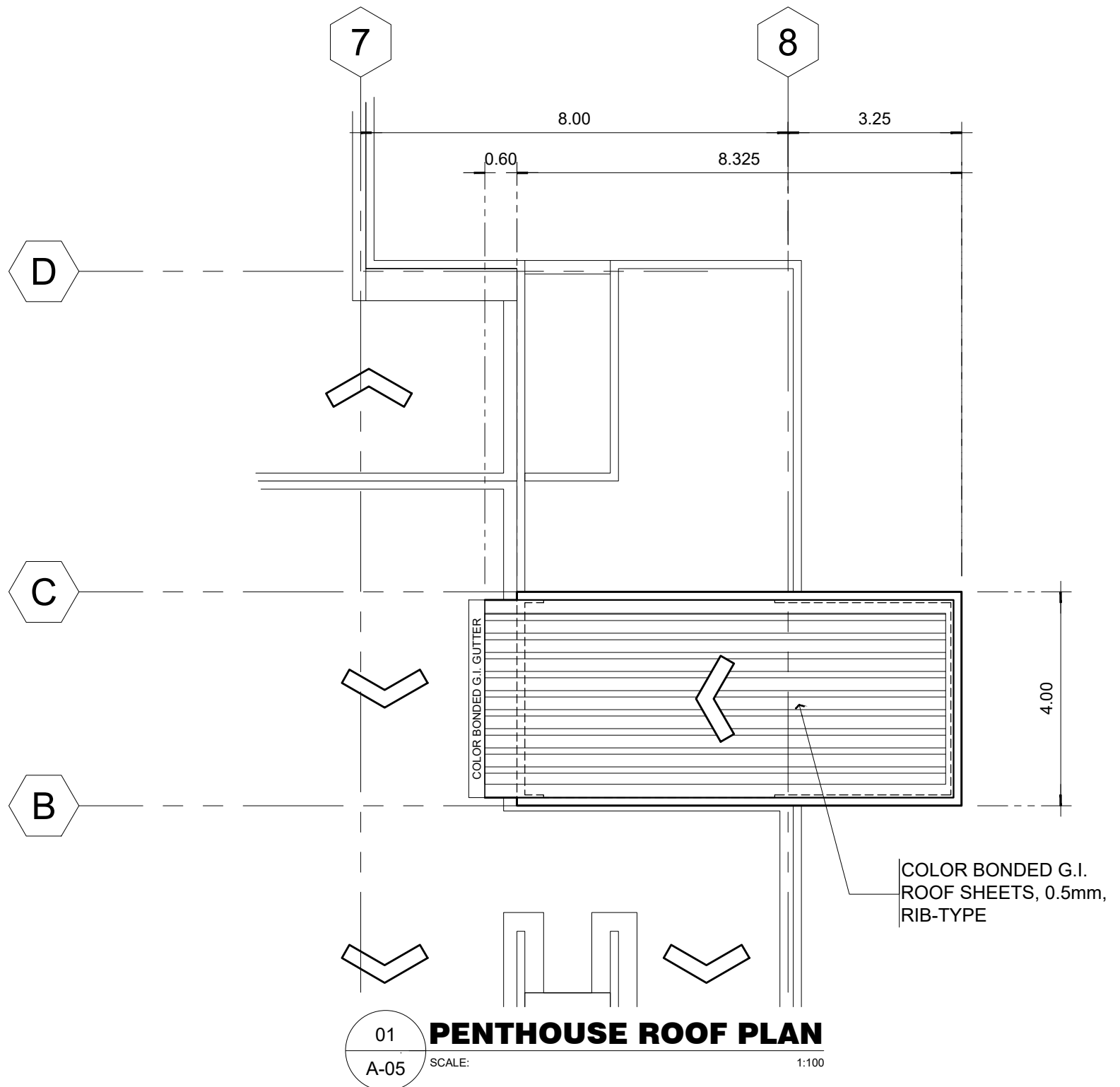
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
A-01
01 51





M.T. Ang
architectural designs
PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN
27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

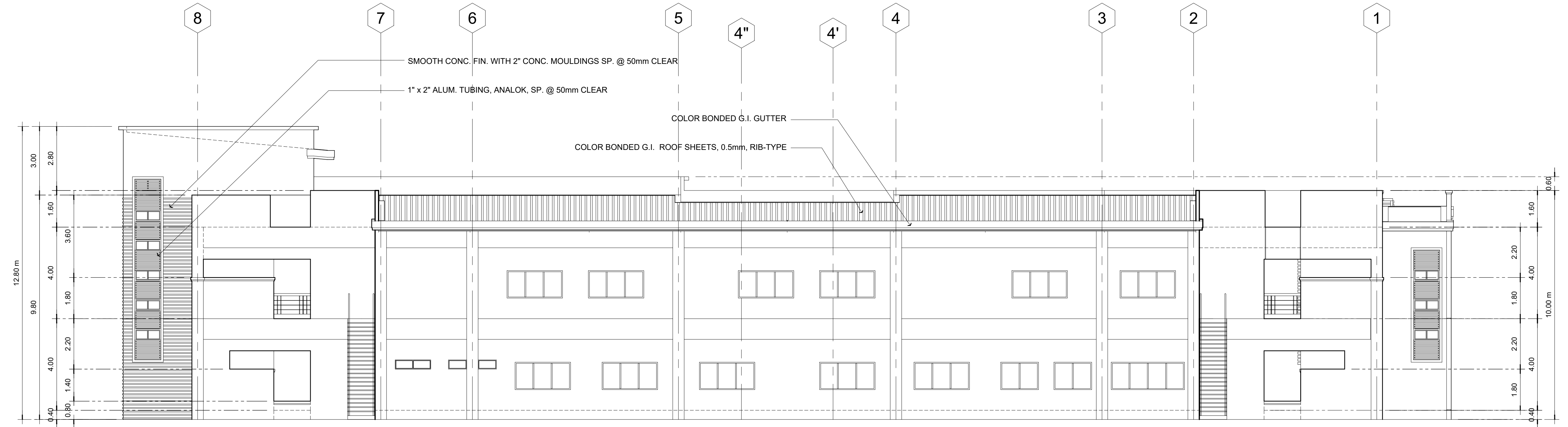
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

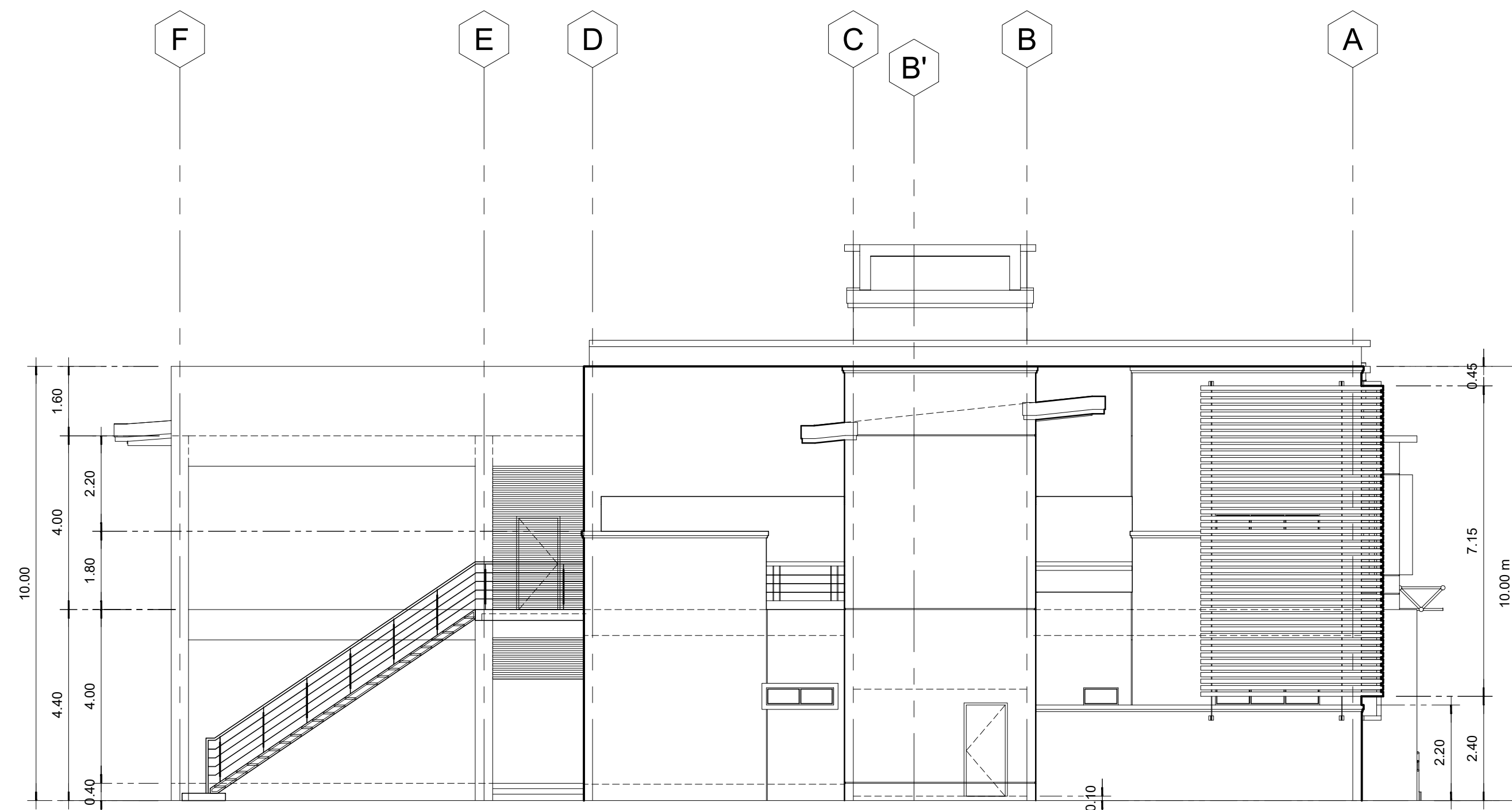
APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

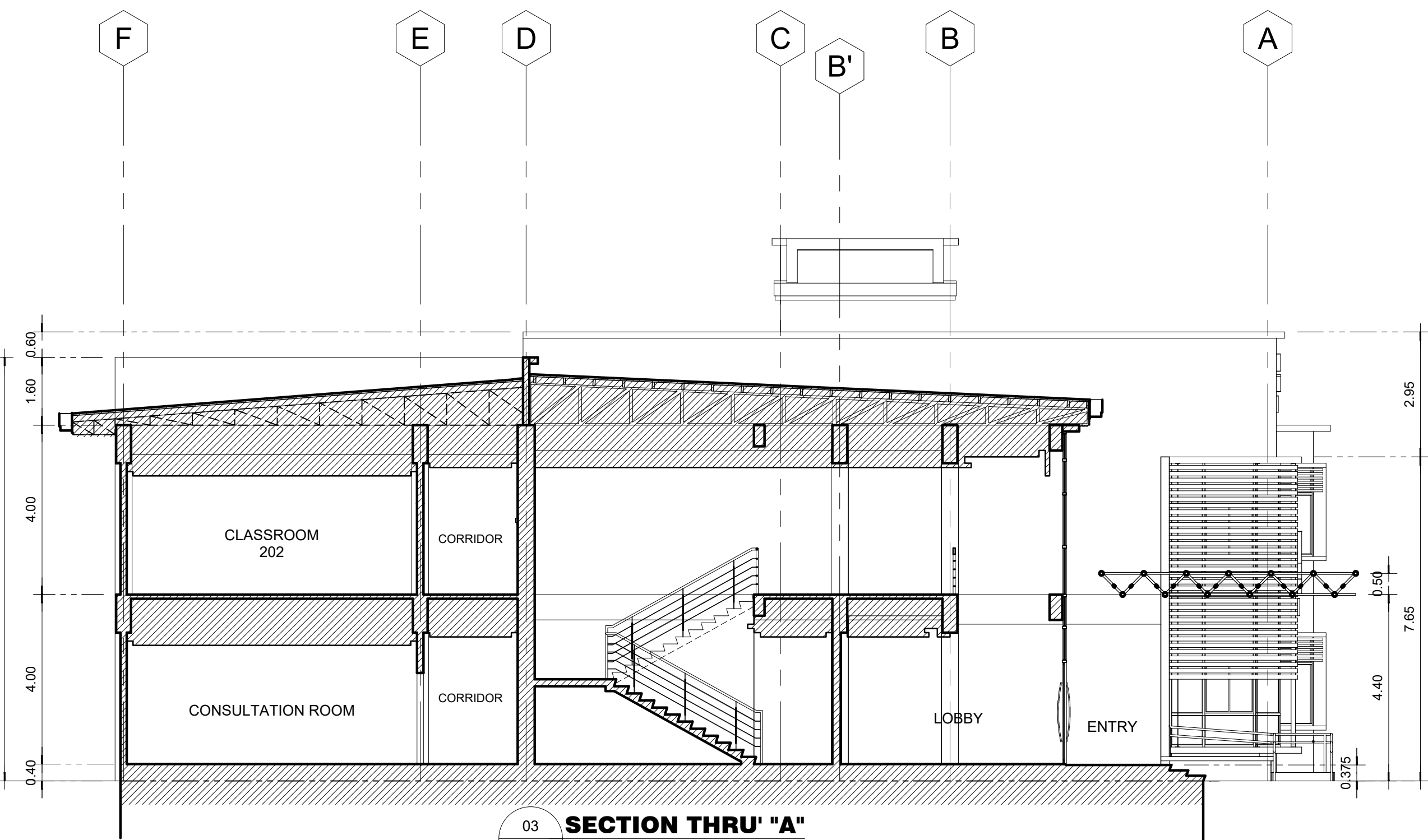
SHEET NO.	
A-05	
05	51



01 **REAR ELEVATION**
A-06 SCALE: 1:100



02 **LEFT SIDE ELEVATION**
A-06 SCALE: 1:100



03 **SECTION THRU\"/>**



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

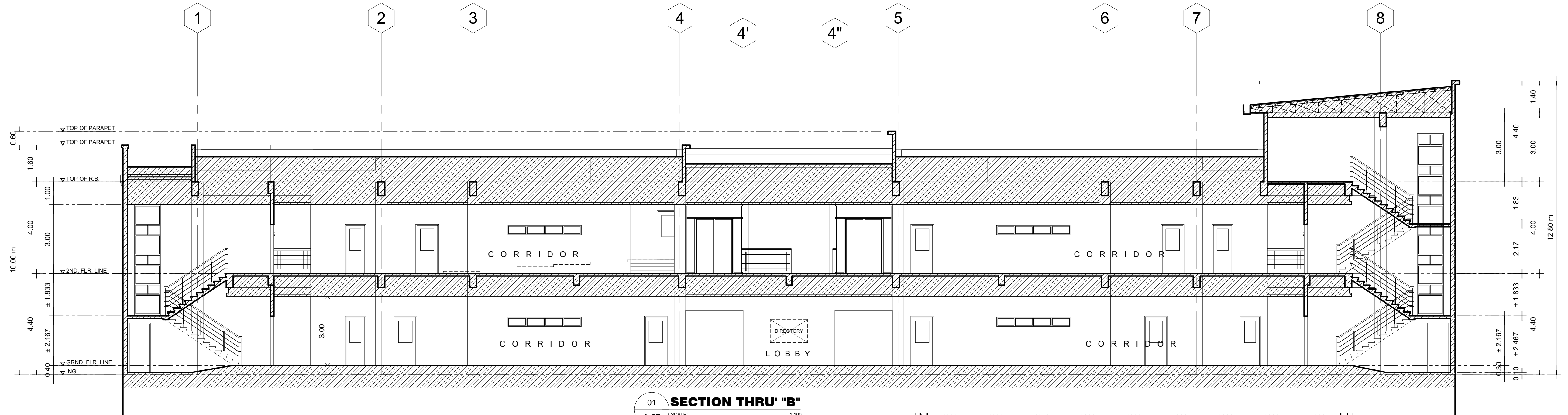
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

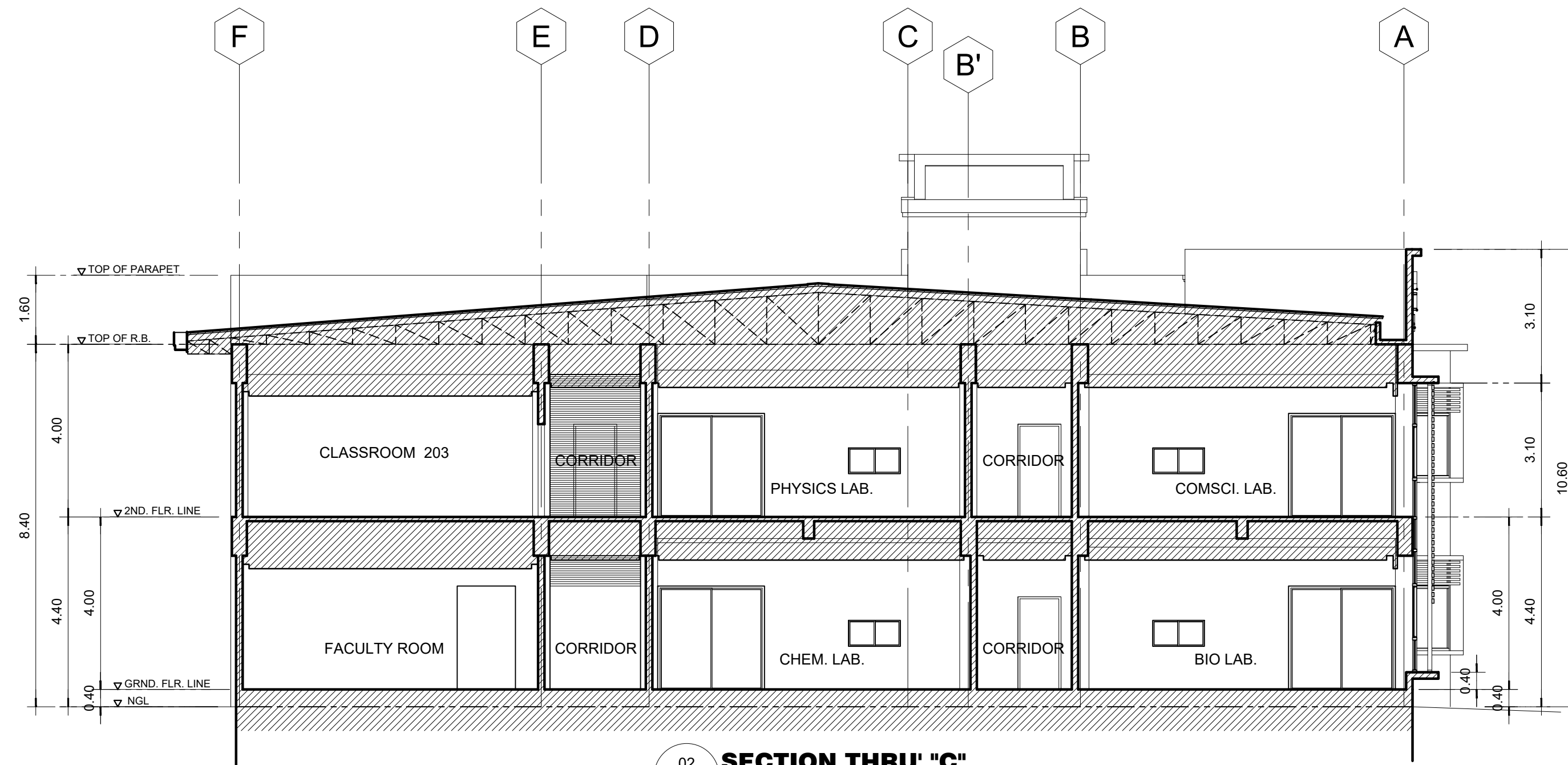
APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

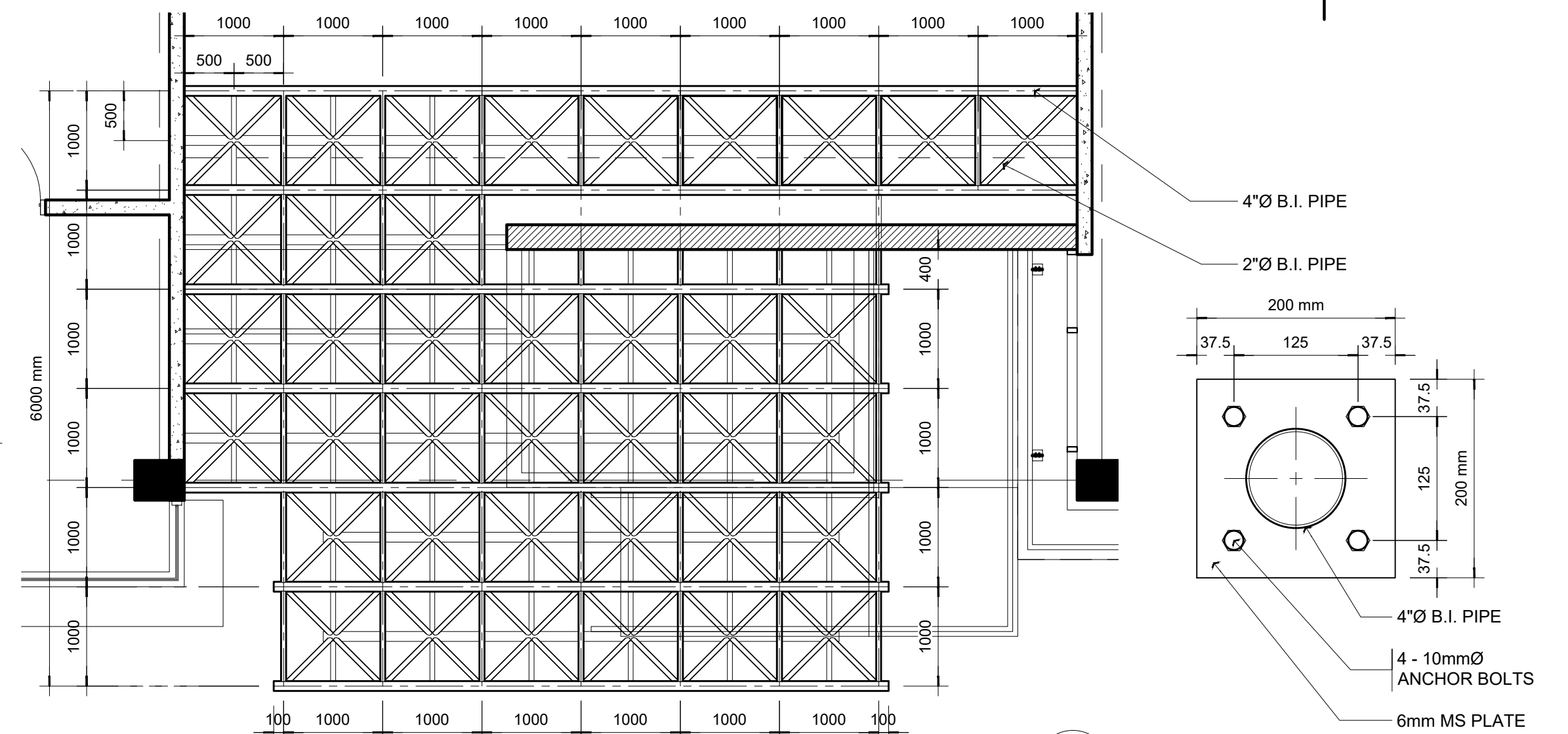
SHEET NO.
A-06
06 51



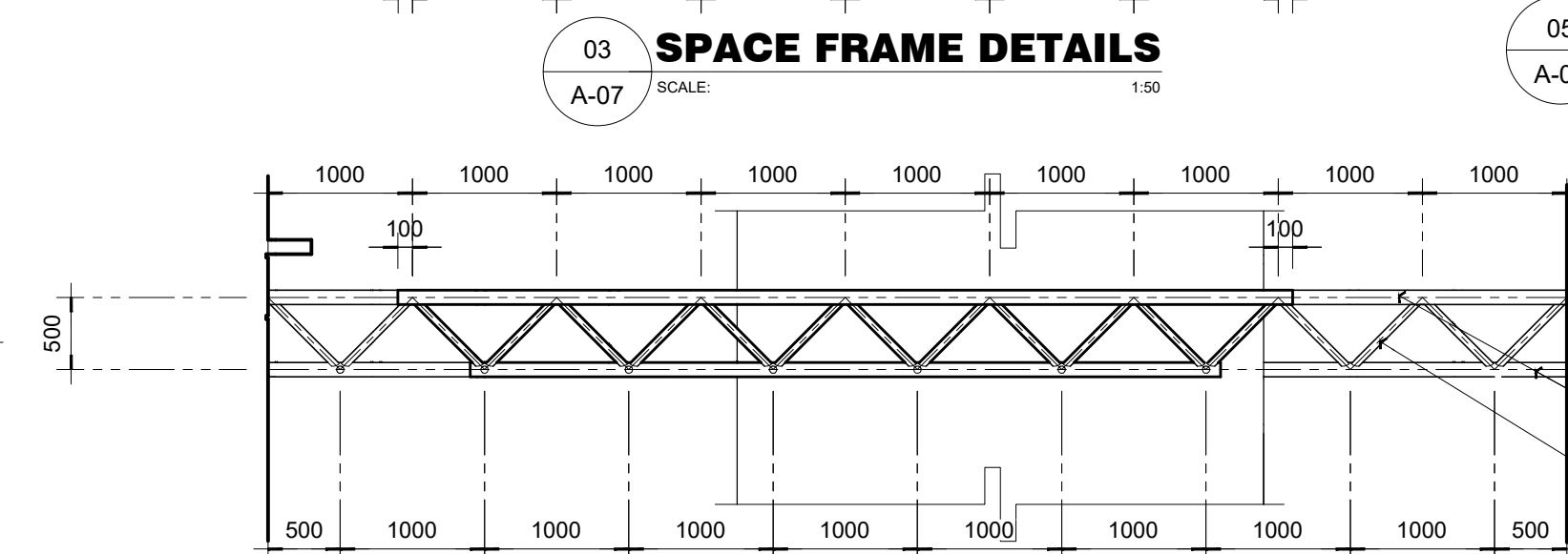
01 **SECTION THRU "B"**
A-07 SCALE: 1:100



02 **SECTION THRU "C"**
A-07 SCALE: 1:100



05 **SPACE FRAME CONN. DET. "01"**
A-07 SCALE: 1:5



04 **FRONT ELEVATION**
A-07 SCALE: 1:50



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

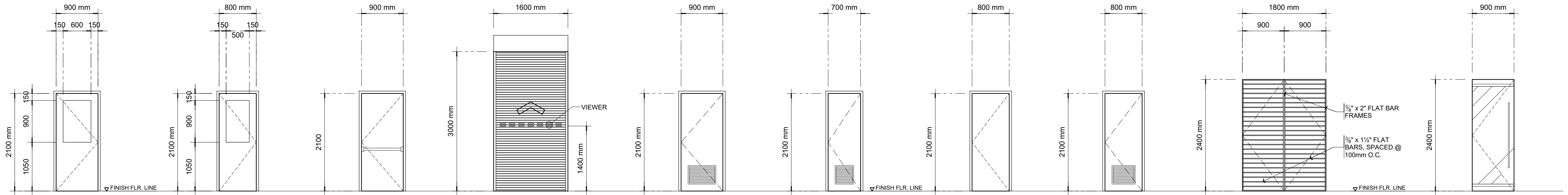
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
A-07
07 51



D-01 HOLLOW CORE BUILD-UP FLUSH DOORS WITH 1/2" CLEAR GLASS VIEWER, SWING ON 2" x 6" WOODEN JAMB & 4 - 3 1/2" LOOSE PIN HINGES
REQ.: 23 SETS

D-02 HOLLOW CORE BUILD-UP FLUSH DOORS WITH 1/2" CLEAR GLASS VIEWER, SWING ON 2" x 6" WOODEN JAMB & 4 - 3 1/2" LOOSE PIN HINGES
REQ.: 16 SETS

D-03 HOLLOW CORE STEEL FLUSH DOORS WITH PANIC DEVICE, SWING ON STEEL JAMBS
REQ.: 6 SETS

D-04 G.I. ROLL-UP DOOR WITH VIEWING SLOTS
REQ.: 4 SETS

D-05 PVC FLUSH DOOR
REQ.: 2 SET

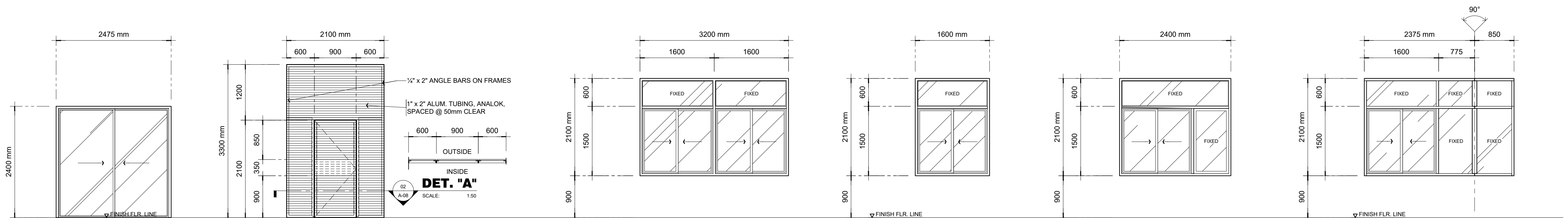
D-06 PVC FLUSH DOOR
REQ.: 2 SET

D-07 HOLLOW CORE BUILD-UP FLUSH DOORS, SWING ON 2" x 6" WOODEN JAMB & 4 - 3 1/2" LOOSE PIN HINGES
REQ.: 3 SETS

D-08 PVC FLUSH DOOR
REQ.: 2 SET

D-09 GRILL DOOR, SWING TYPE
REQ.: 1 SETS

D-10 10mm THK. ANALOK GLASS DOOR ON FD-150 ALUM. FRAMES, ANALOK FIN., SWING TYPE
REQ.: 2 SETS



D-11 ALUM. SLIDING DOORS, ANALOK WITH 8mm THK. CLEAR FLOAT GLASS GLAZING
REQ.: 8 SETS

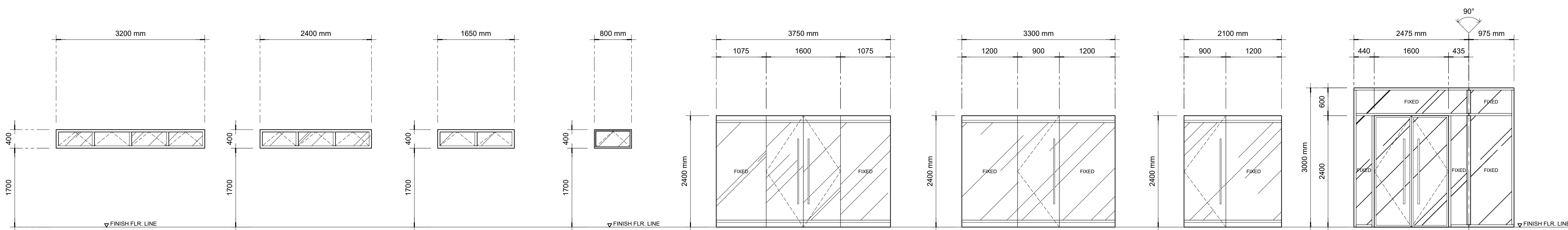
D-12 GRILL DOOR, SWING TYPE
REQ.: 2 SETS

W-01 ALUM. SLIDING WINDOWS WITH TRANSOM; REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 6 SETS

W-02 ALUM. SLIDING WINDOWS WITH TRANSOM; REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 13 SETS

W-03 ALUM. SLIDING WINDOWS WITH TRANSOM; REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 17 SETS

W-04 ALUM. SLIDING WINDOWS WITH TRANSOM & CORNER FIXED SIDE LIGHTS; REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 8 SETS



W-05 ALUM. AWNING WINDOWS WITH REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 7 SETS

W-06 ALUM. AWNING WINDOWS WITH REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 24 SETS

W-07 ALUM. AWNING WINDOWS WITH REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 2 SETS

W-08 ALUM. AWNING WINDOWS WITH REF. GREEN GLASS GLAZING, POWDER COATED WHITE
REQ.: 2 SETS

DW-01 10mm THK. CLEAR FLOAT GLASS DOORS WITH SIDE LIGHTS ON FD-150 ALUM. FRAMES, ANALOK
REQ.: 1 SET

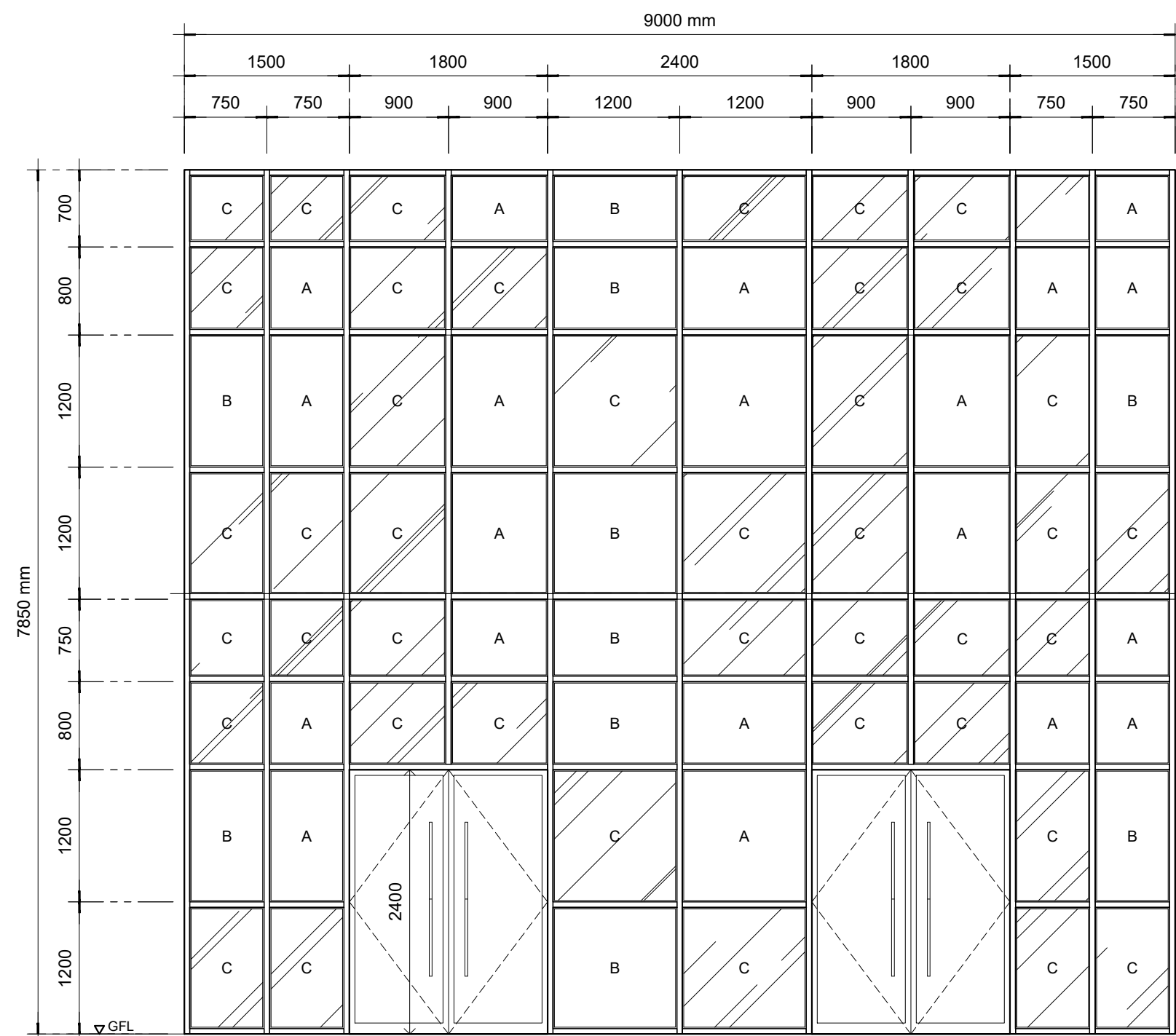
DW-02 10mm THK. CLEAR FLOAT GLASS DOORS WITH SIDE LIGHTS ON FD-150 ALUM. FRAMES, ANALOK
REQ.: 1 SET

DW-03 10mm THK. CLEAR FLOAT GLASS DOORS WITH SIDE LIGHTS ON FD-150 ALUM. FRAMES, ANALOK
REQ.: 3 SETS

DW-04 GLASS DOOR ON ALUM. FRAMES, ANALOK, SWING TYPE WITH TRANSOM & SIDE LIGHTS
REQ.: 2 SETS

01 SCHEDULE OF DOORS & WINDOWS
A-08 SCALE: 1:50

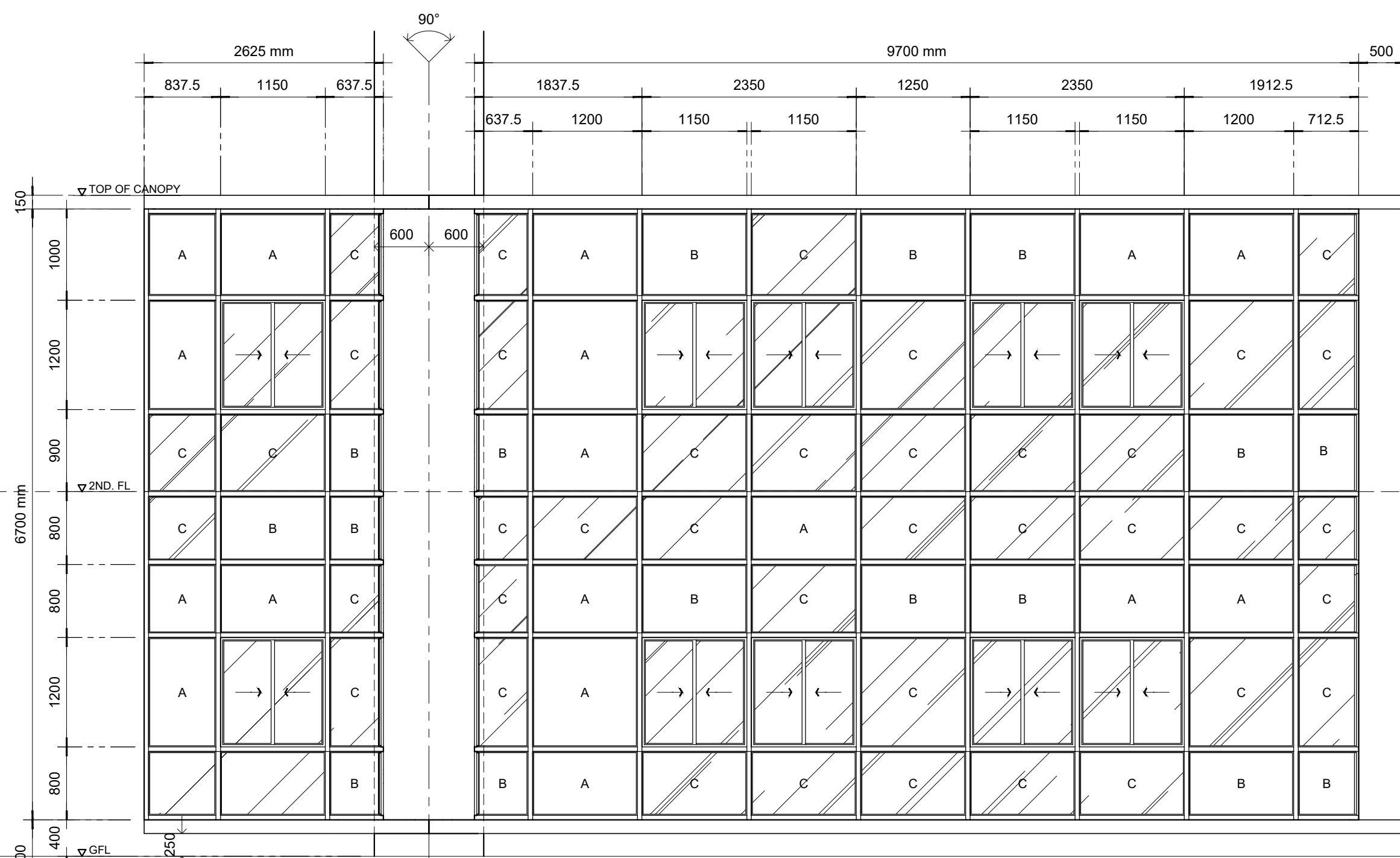
 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: RANILE ESPINA CORDOVA, uap JUNIOR ARCHITECT CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. A-08 08 51
		VALIDITY 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE 141342 16JULY15 PTR 6600933 DATE ISS. 05 JAN 2016 PLACE ISS. GSC TIN 123-875-856					



CW-01
2" x 4" ALUM. FRAMES, POWDER COATED WHITE WITH 2 SETS DOUBLE LEAF GLASS DOOR INFILLS

LEGEND:
A - 6mm ACP, AF-425 BROWN SILVER, PVDF
B - 6mm ACP, AF-403 SILVER METALLIC, PVDF
C - 6mm THK. REF. GREEN GLASS

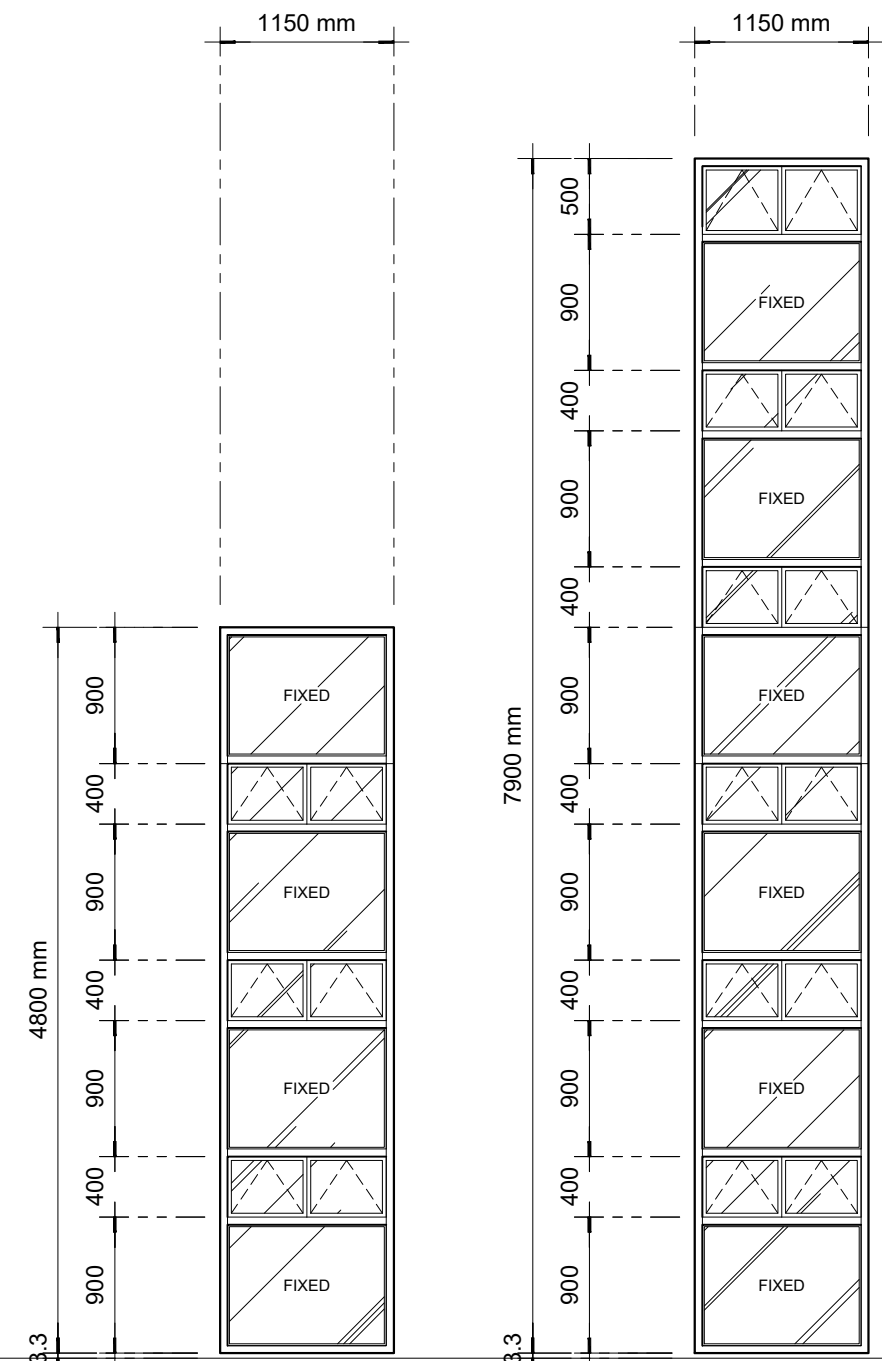
REQ.: 1 SET



CW-02
2" x 4" ALUM. FRAMES, POWDER COATED WHITE

LEGEND:
A - 6mm ACP, AF-425 BROWN SILVER, PVDF
B - 6mm ACP, AF-403 SILVER METALLIC, PVDF
C - 6mm THK. REF. GREEN GLASS

REQ.: 1 SET



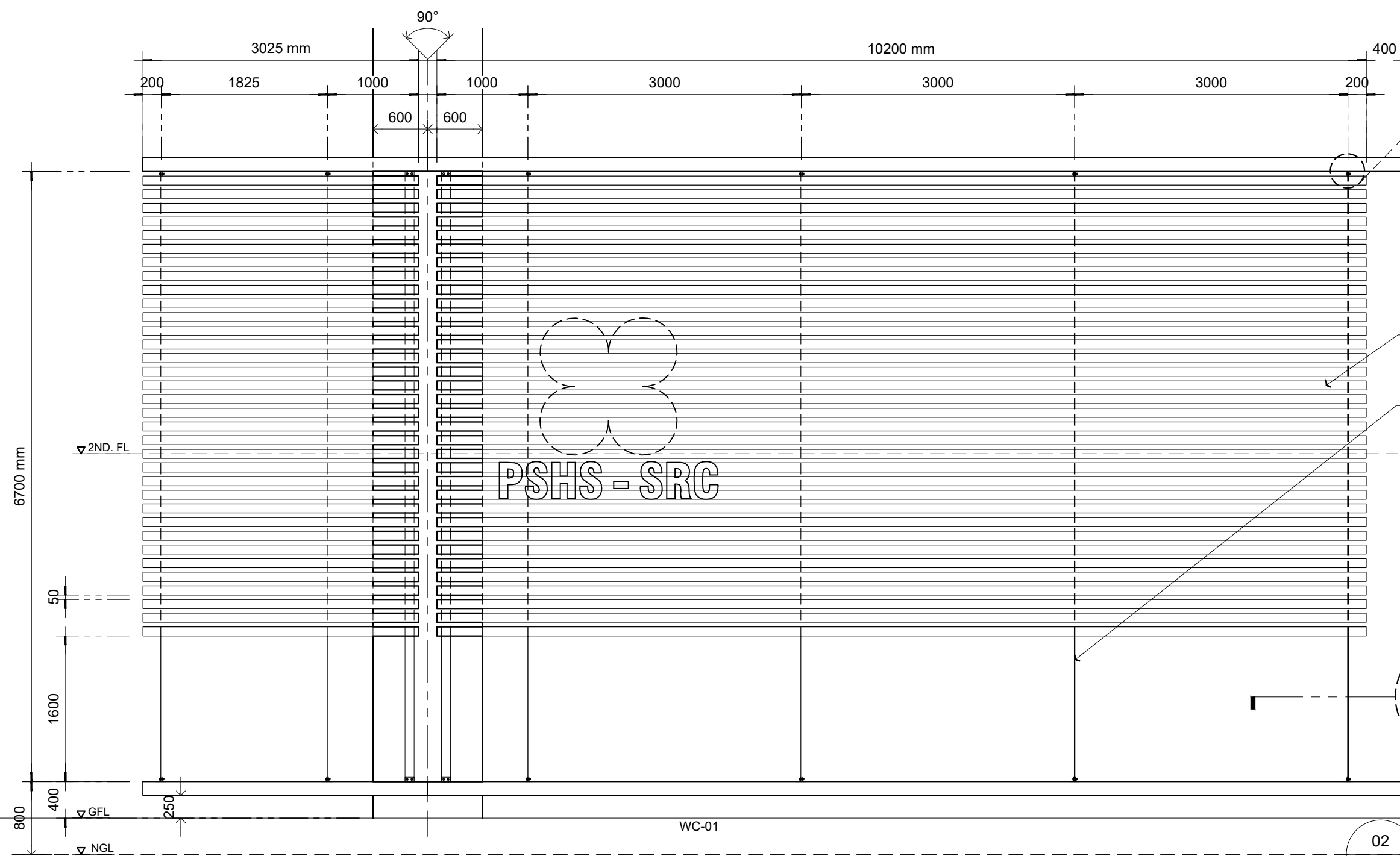
CW-03
2" x 4" ALUM. FRAMES, POWDER COATED WHITE WITH AWNING INFILLS

REQ.: 2 SETS

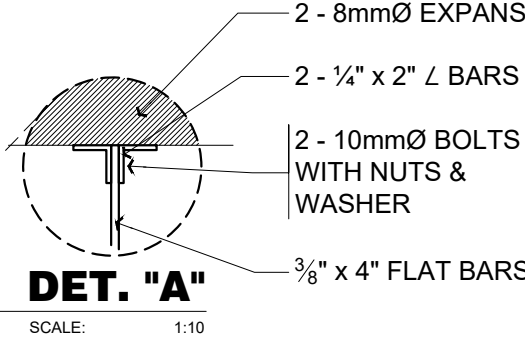
CW-04
2" x 4" ALUM. FRAMES, POWDER COATED WHITE WITH AWNING INFILLS

REQ.: 2 SETS

01 CURTAIN WALL DETAILS
A-09 SCALE: 1:50



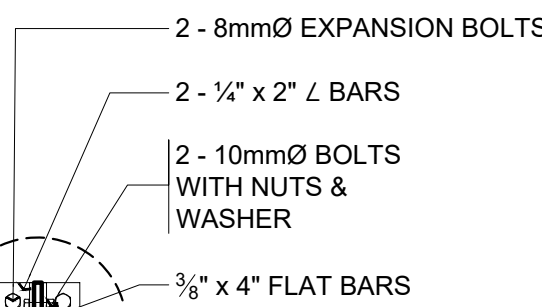
WC-01



DET. "A"
SCALE: 1:10

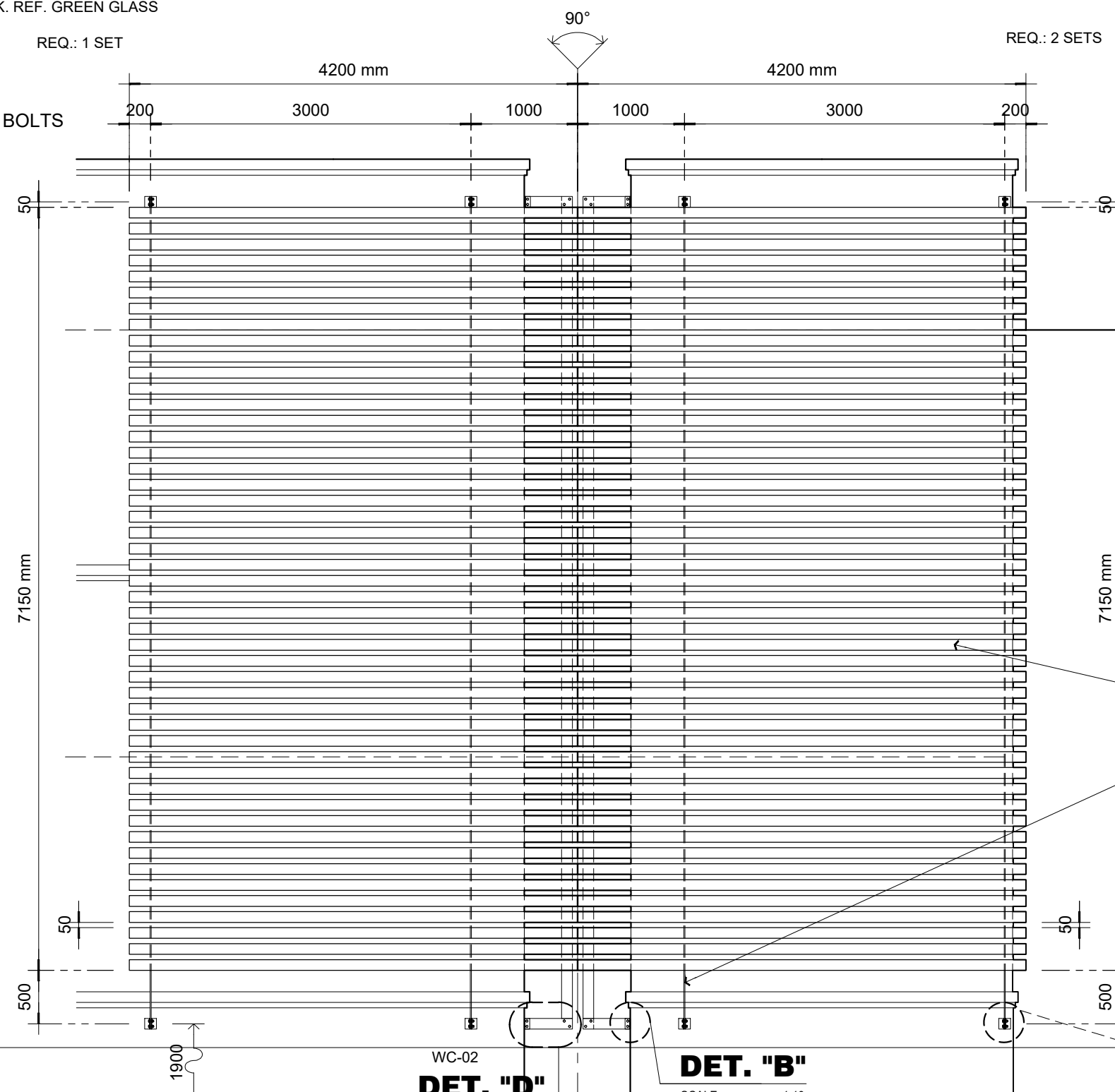
1 1/2" x 4" OPEN BACK ALUM.
ANALOK, SP. @ 50mm CLEAR

3/8" x 4" FLAT BARS



DET. "B"
SCALE: 1:10

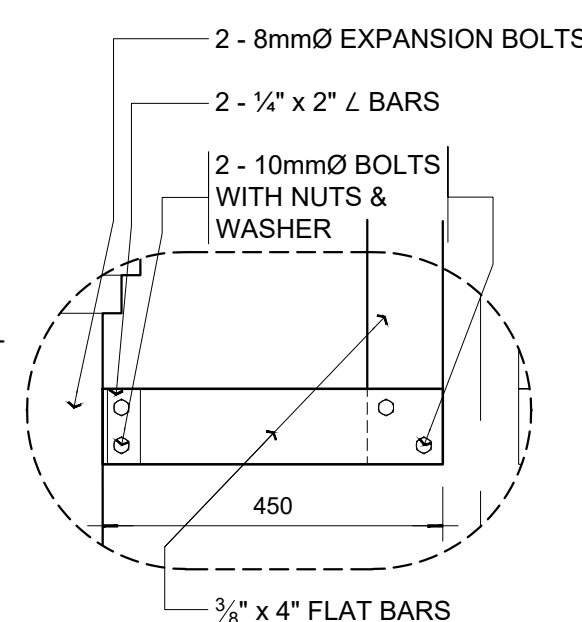
02 WALL CLADDING DETAILS
A-09 SCALE: 1:50



WC-02

DET. "D"
SCALE: 1:10

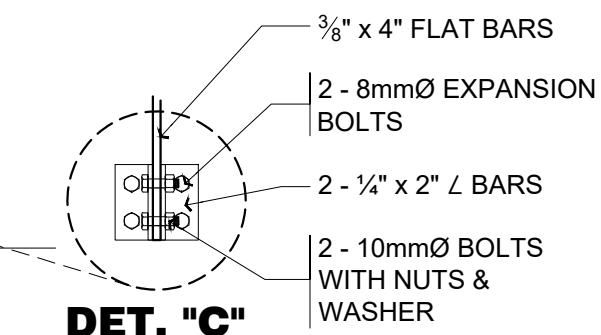
DET. "B"
SCALE: 1:10



DET. "D"
SCALE: 1:10

1 1/2" x 4" OPEN BACK ALUM.
ANALOK, SP. @ 50mm CLEAR

3/8" x 4" FLAT BARS



DET. "C"
SCALE: 1:10



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

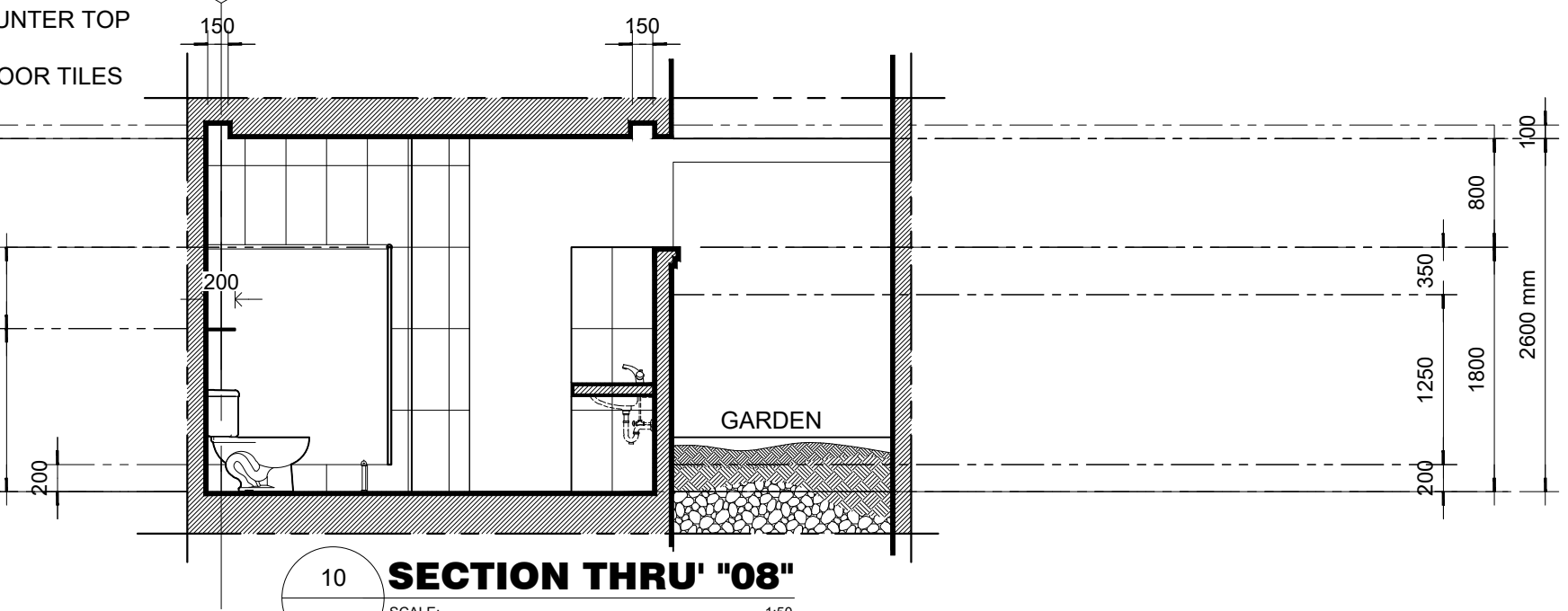
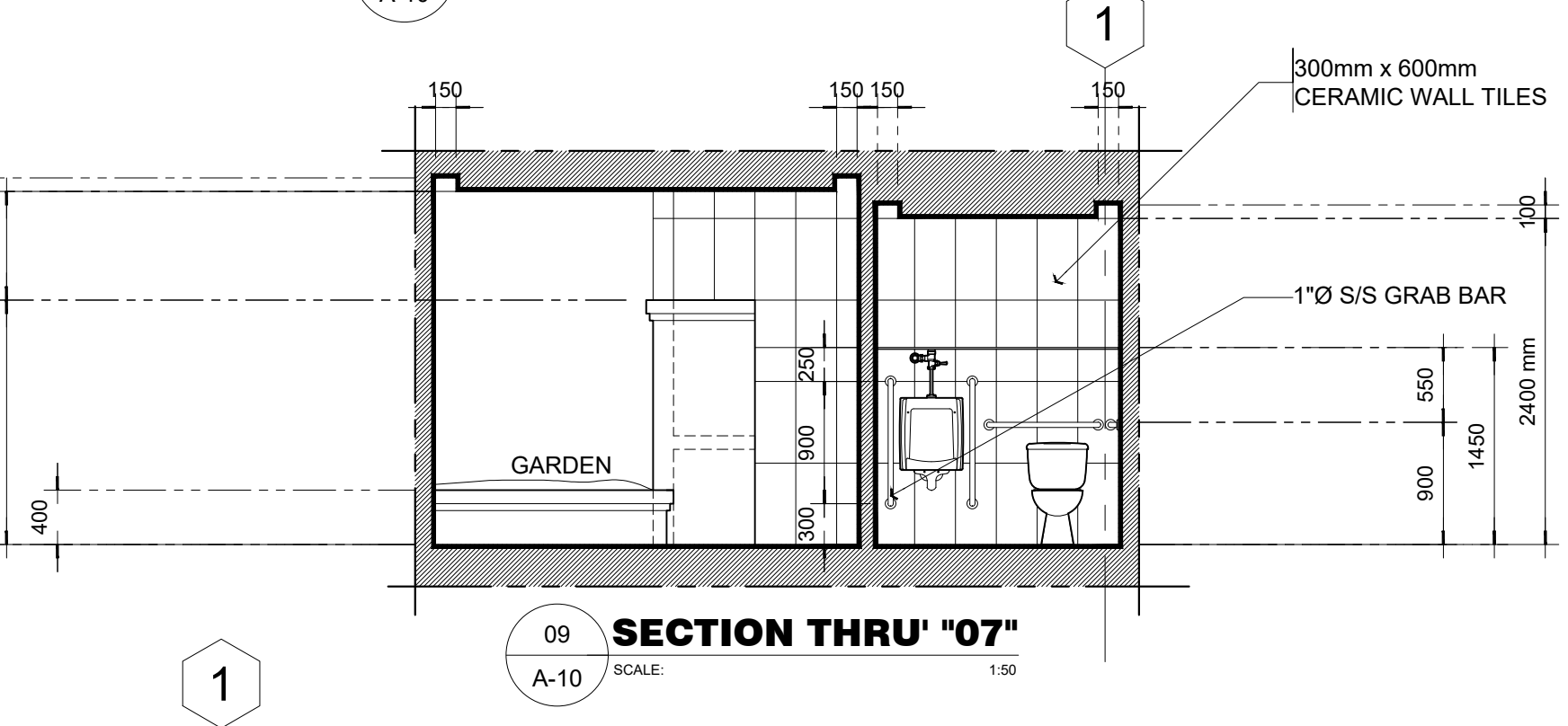
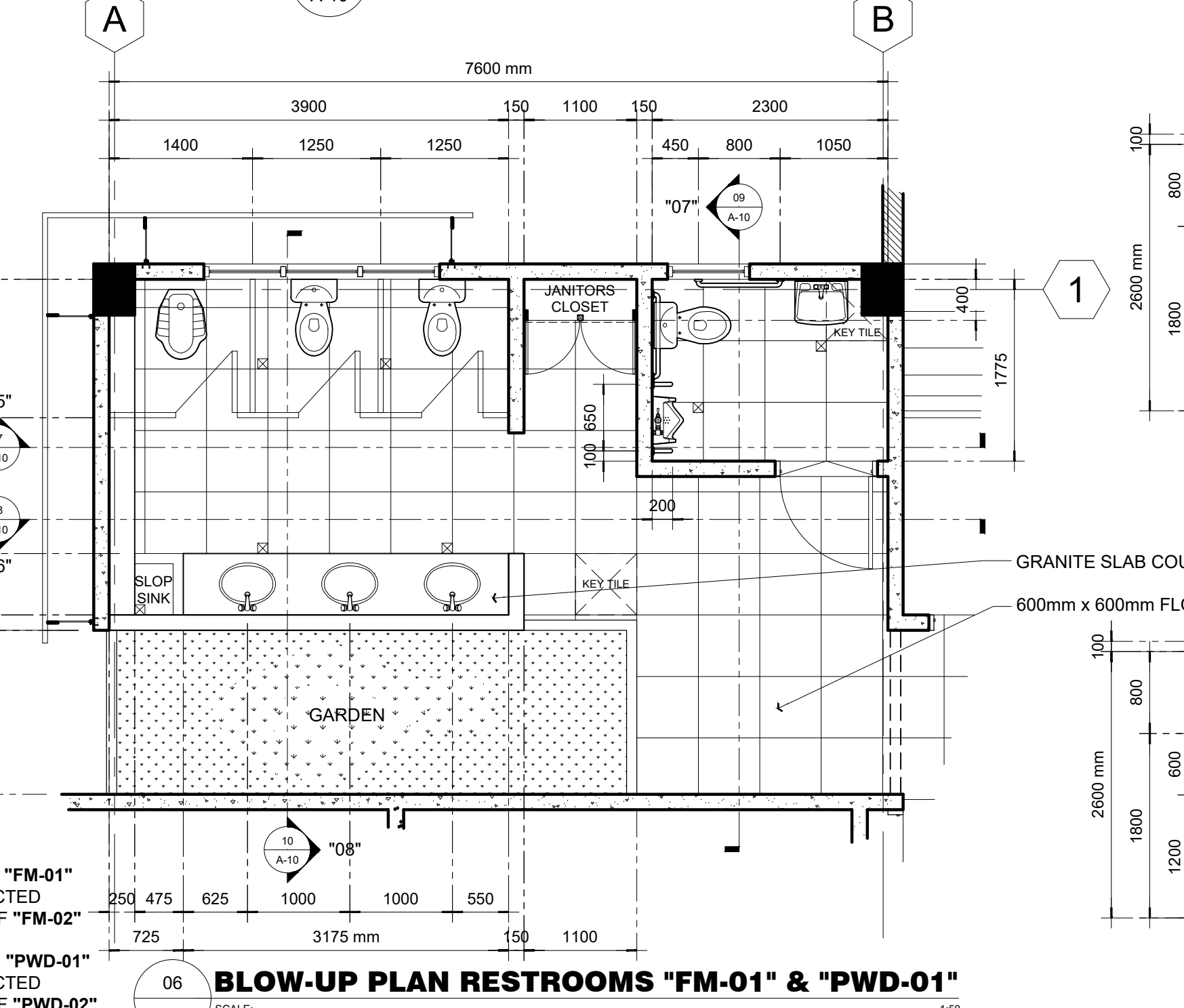
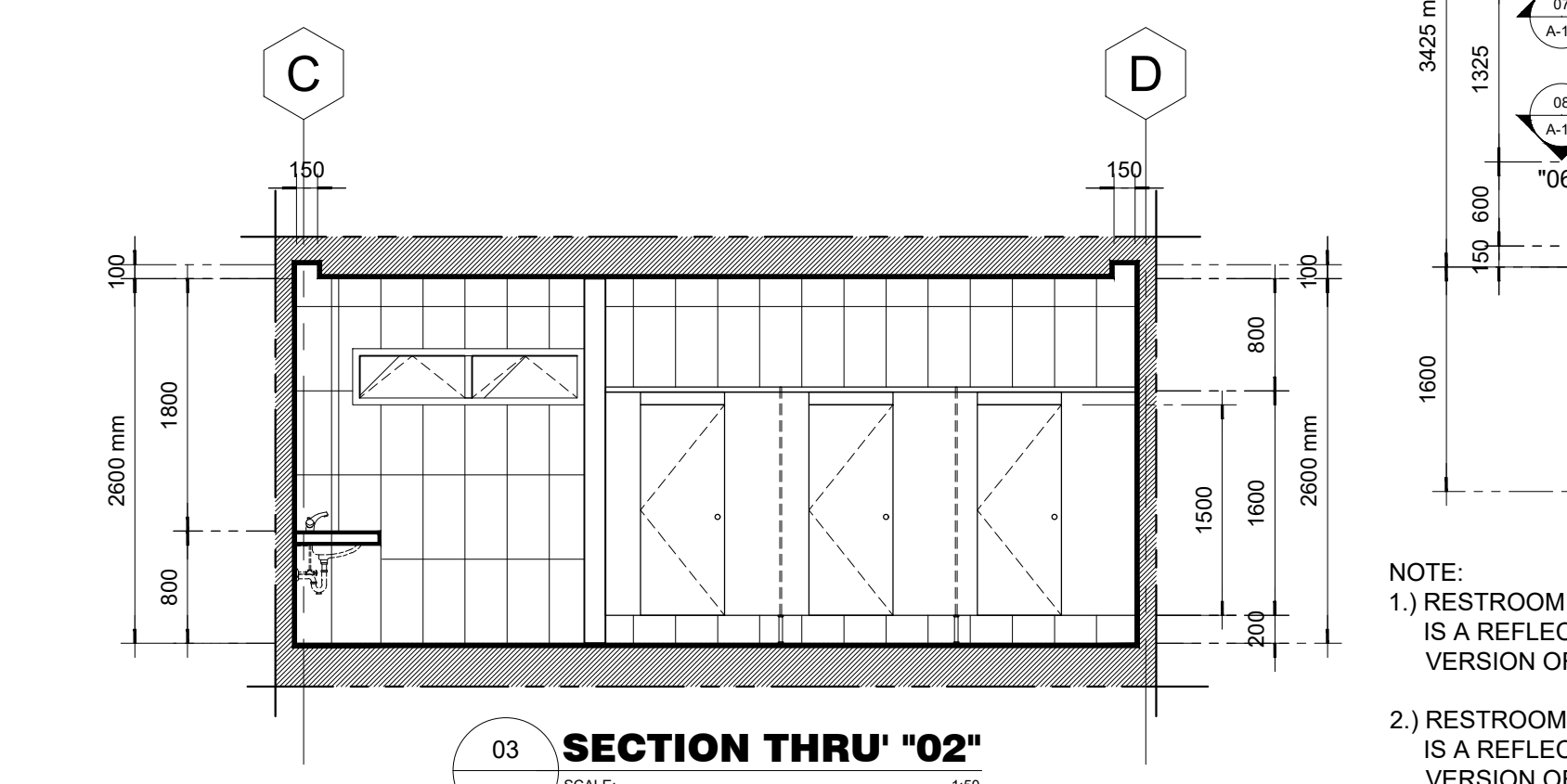
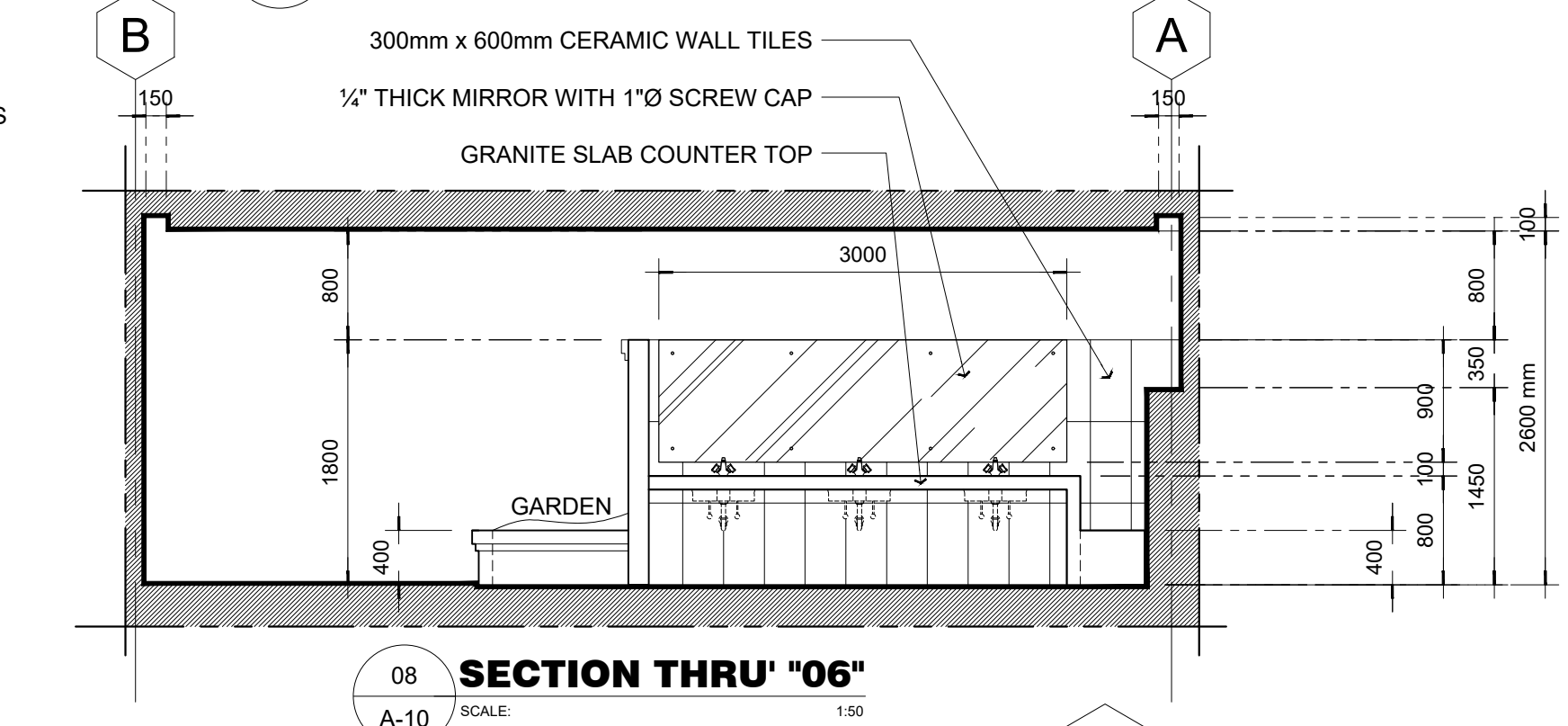
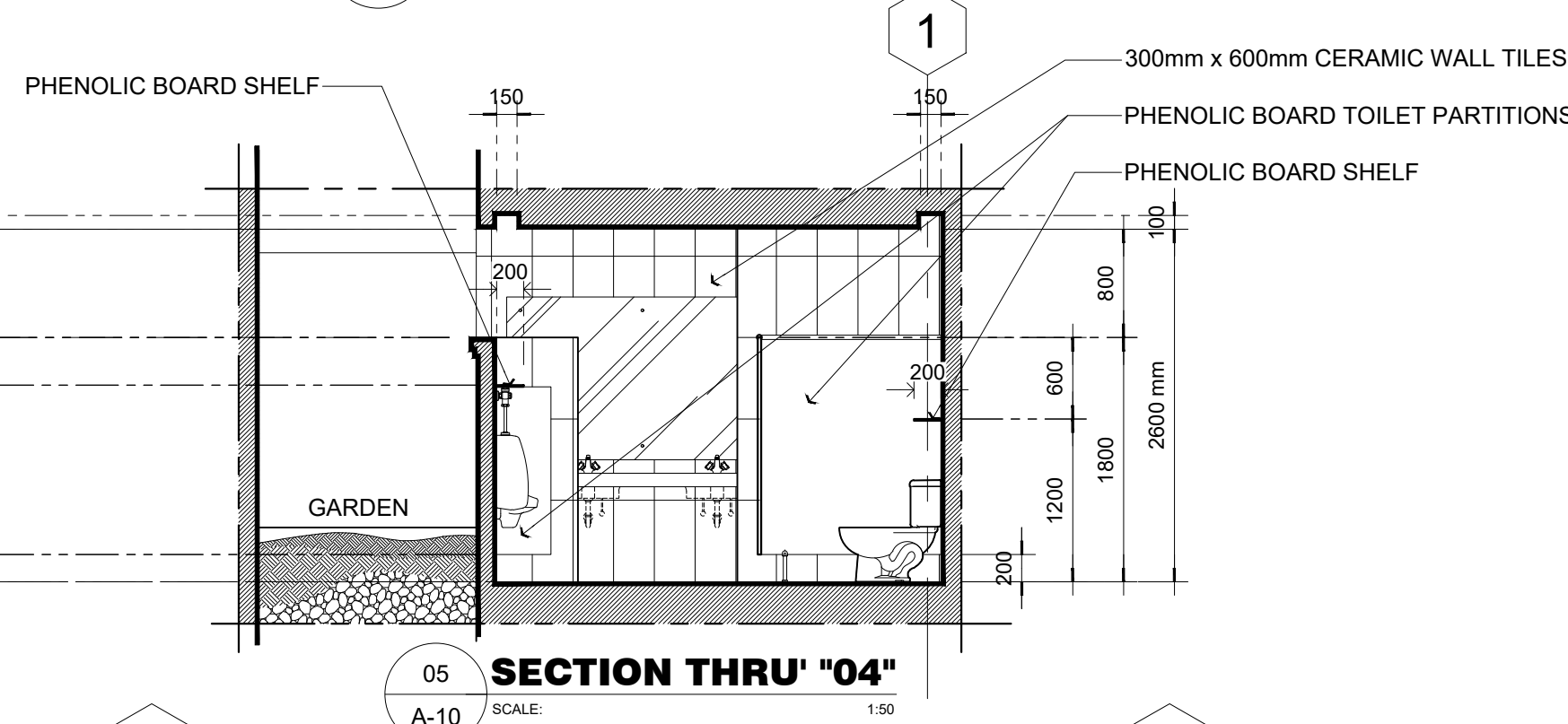
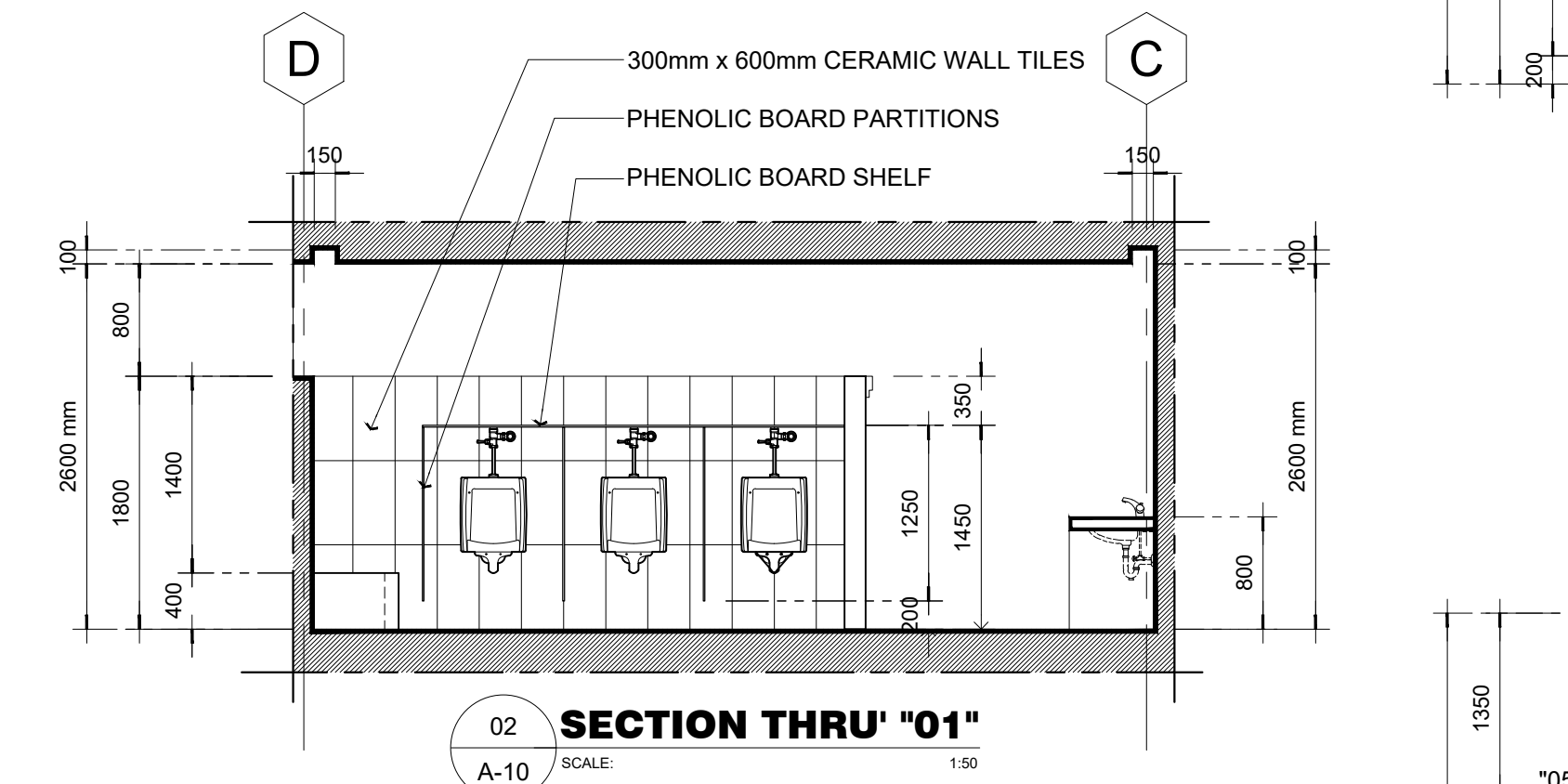
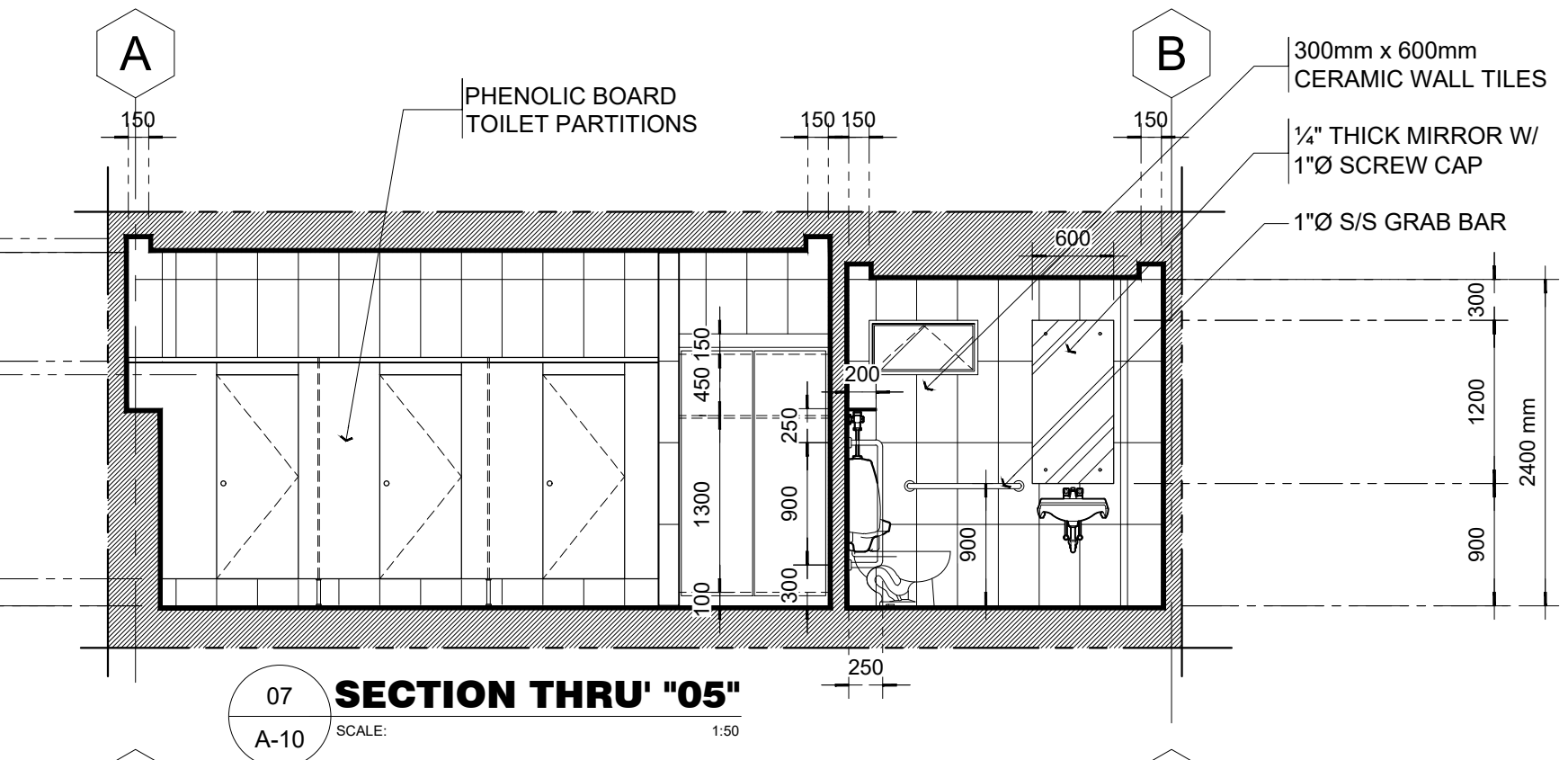
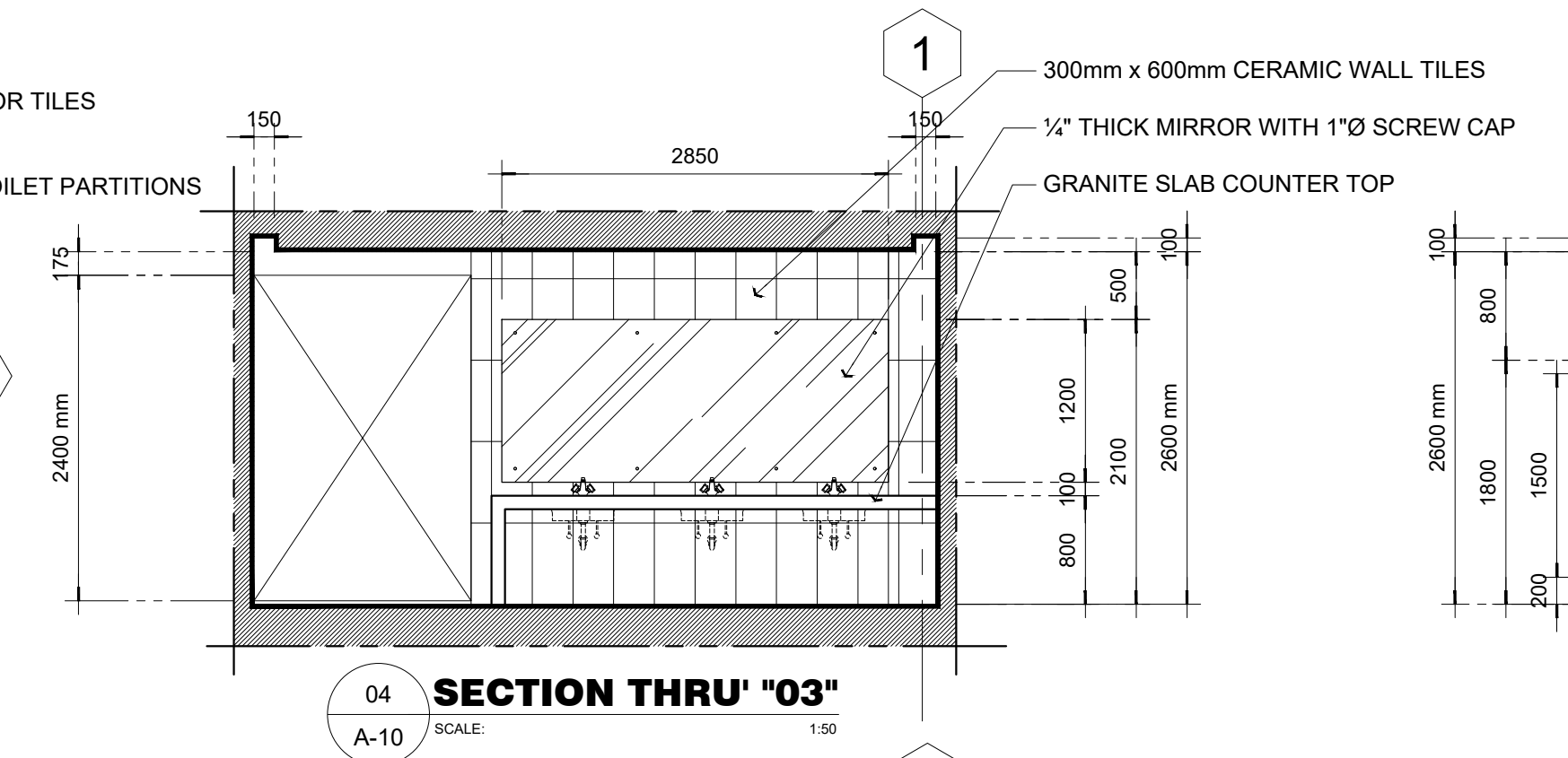
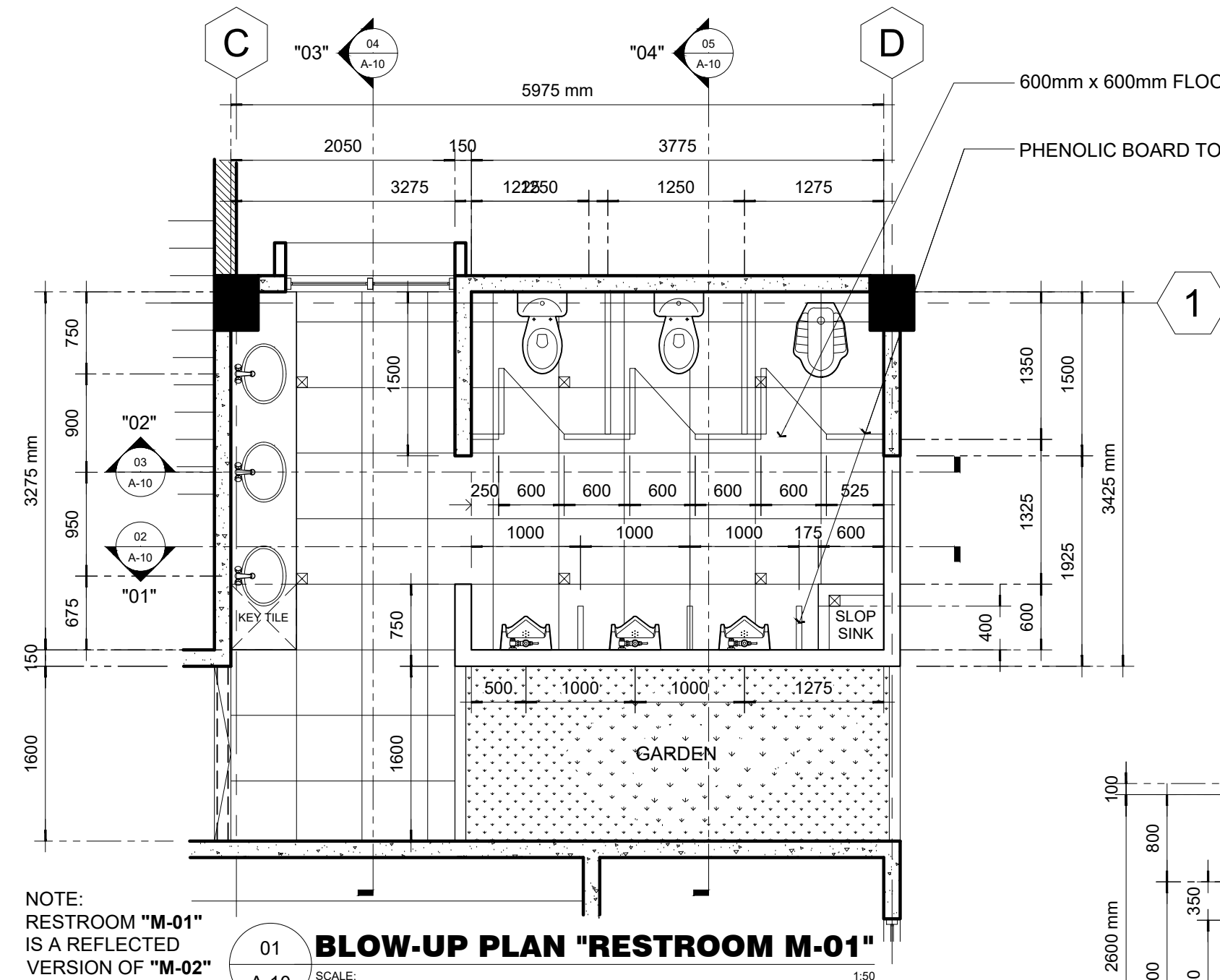
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

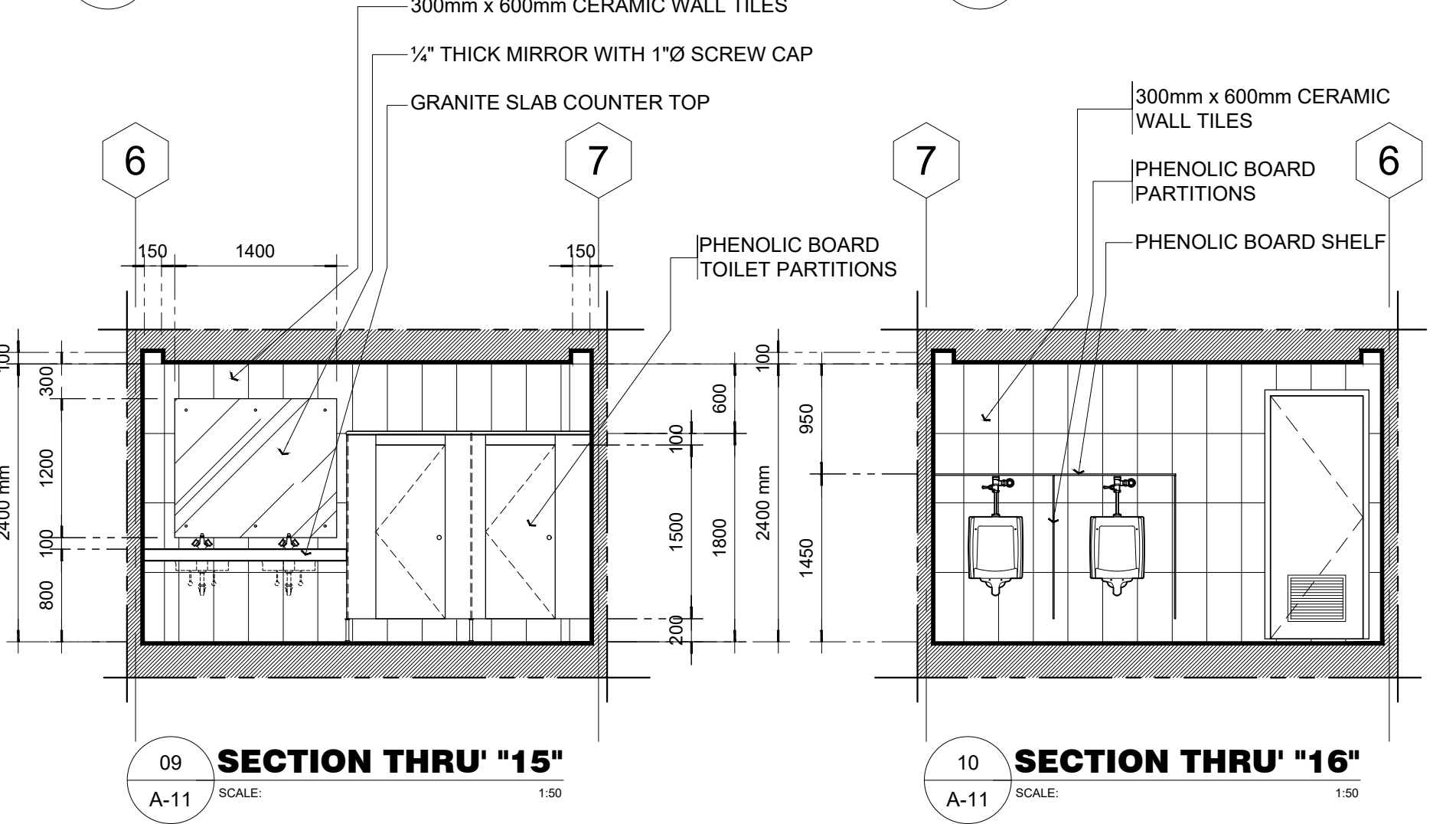
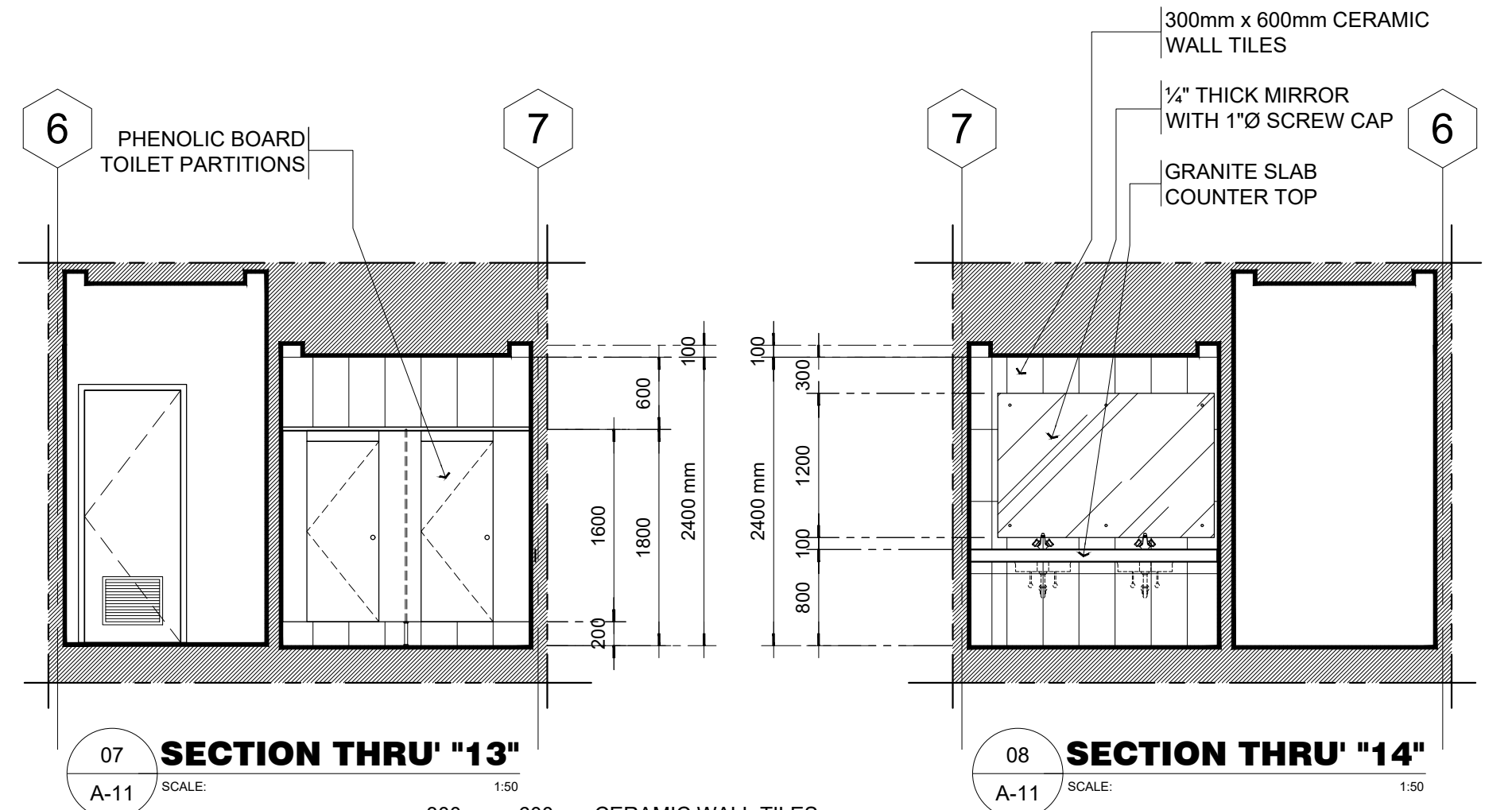
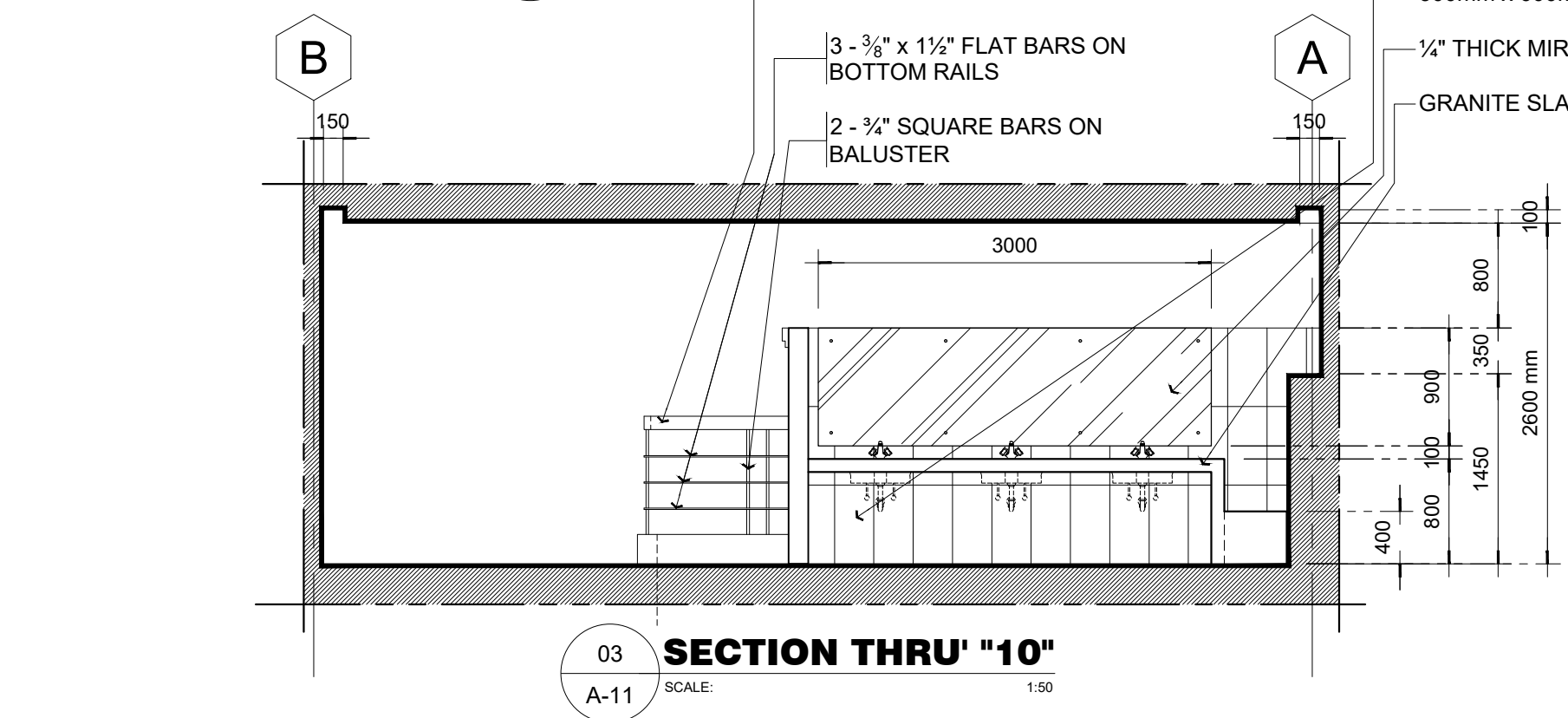
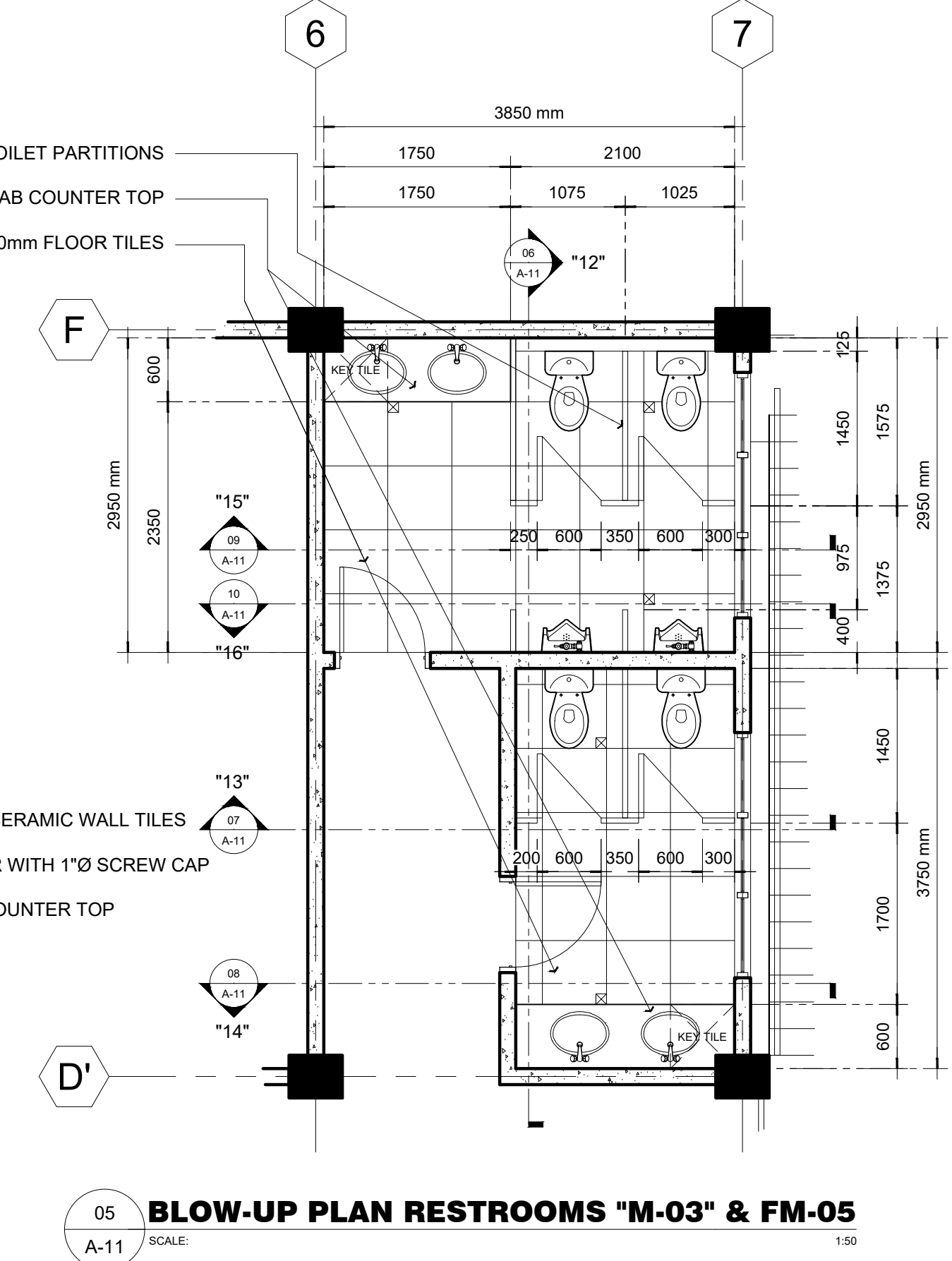
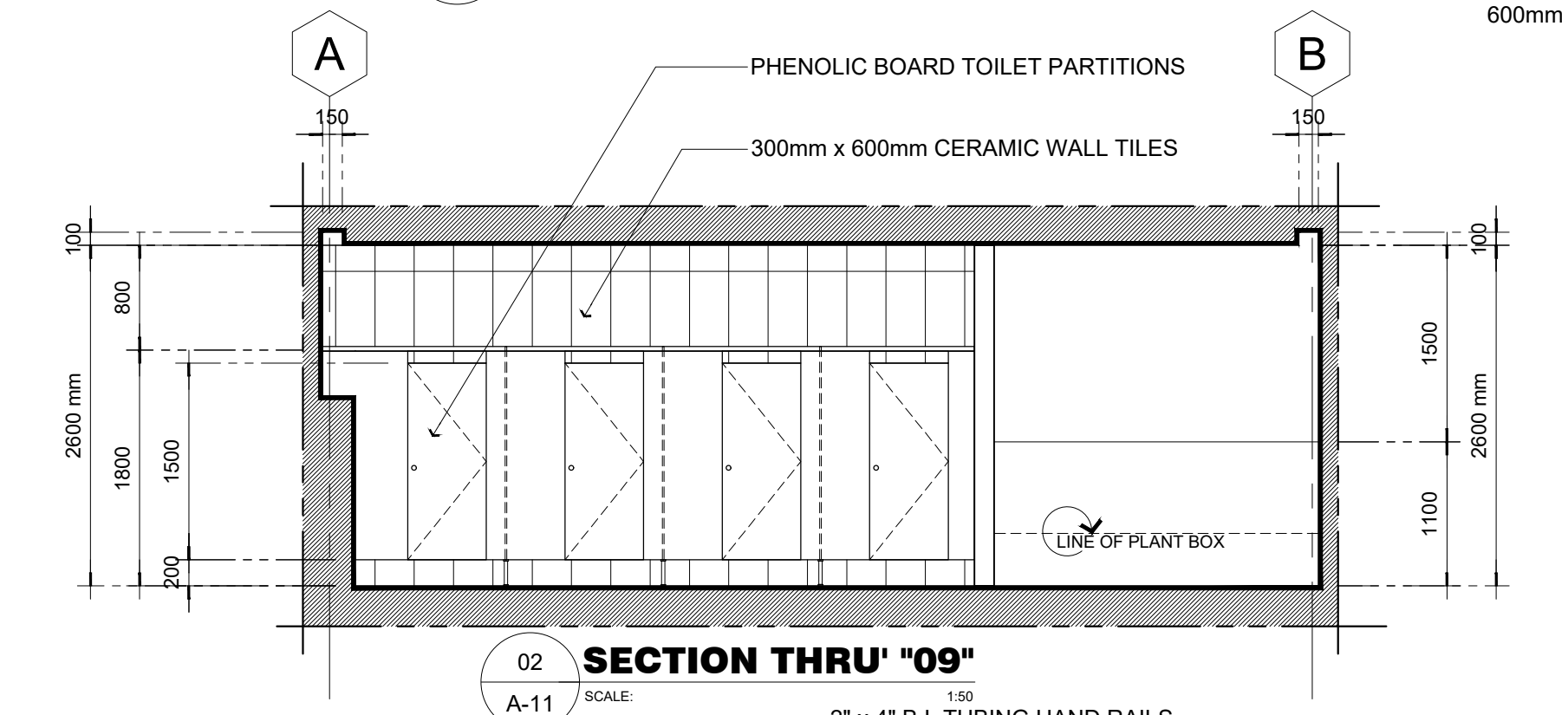
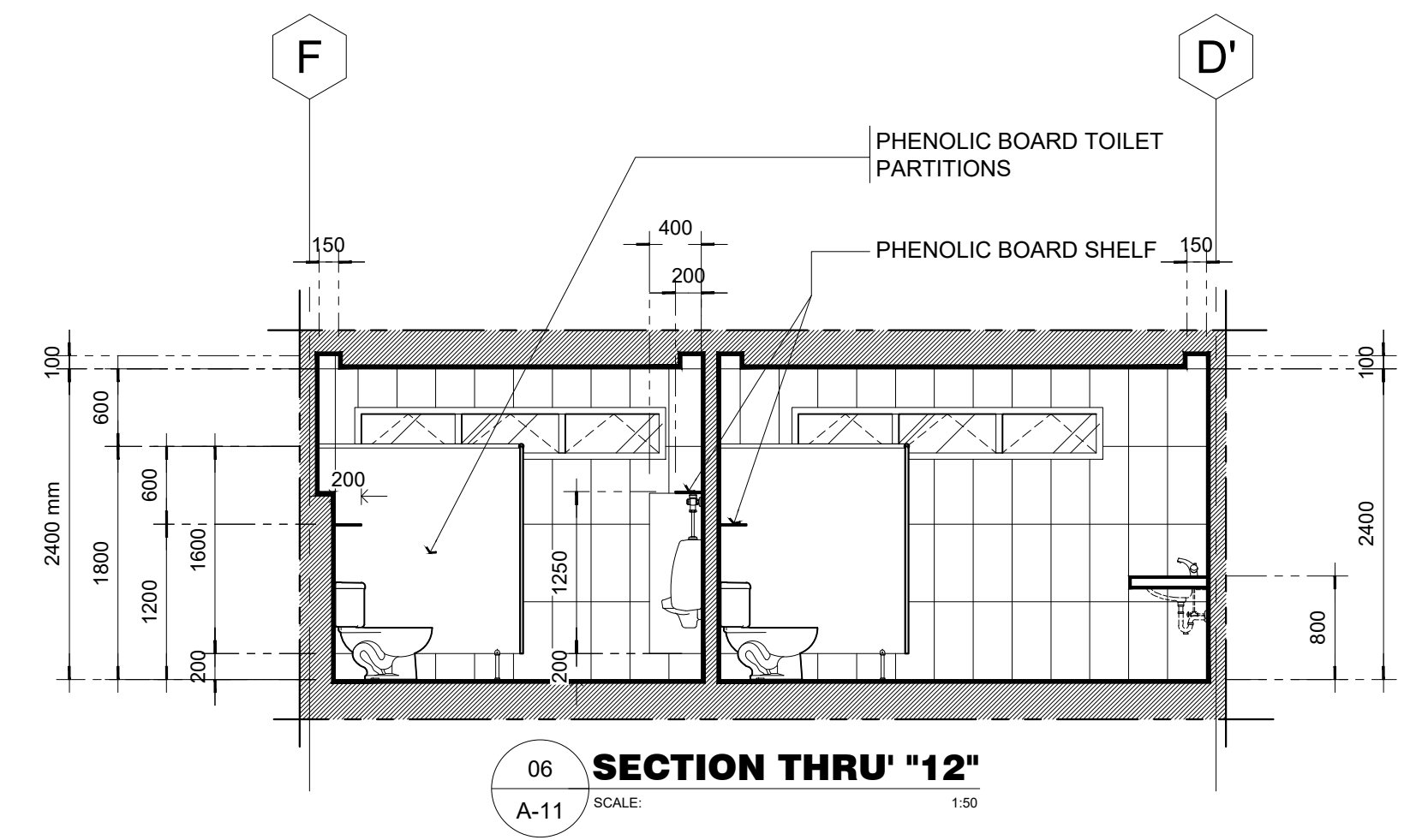
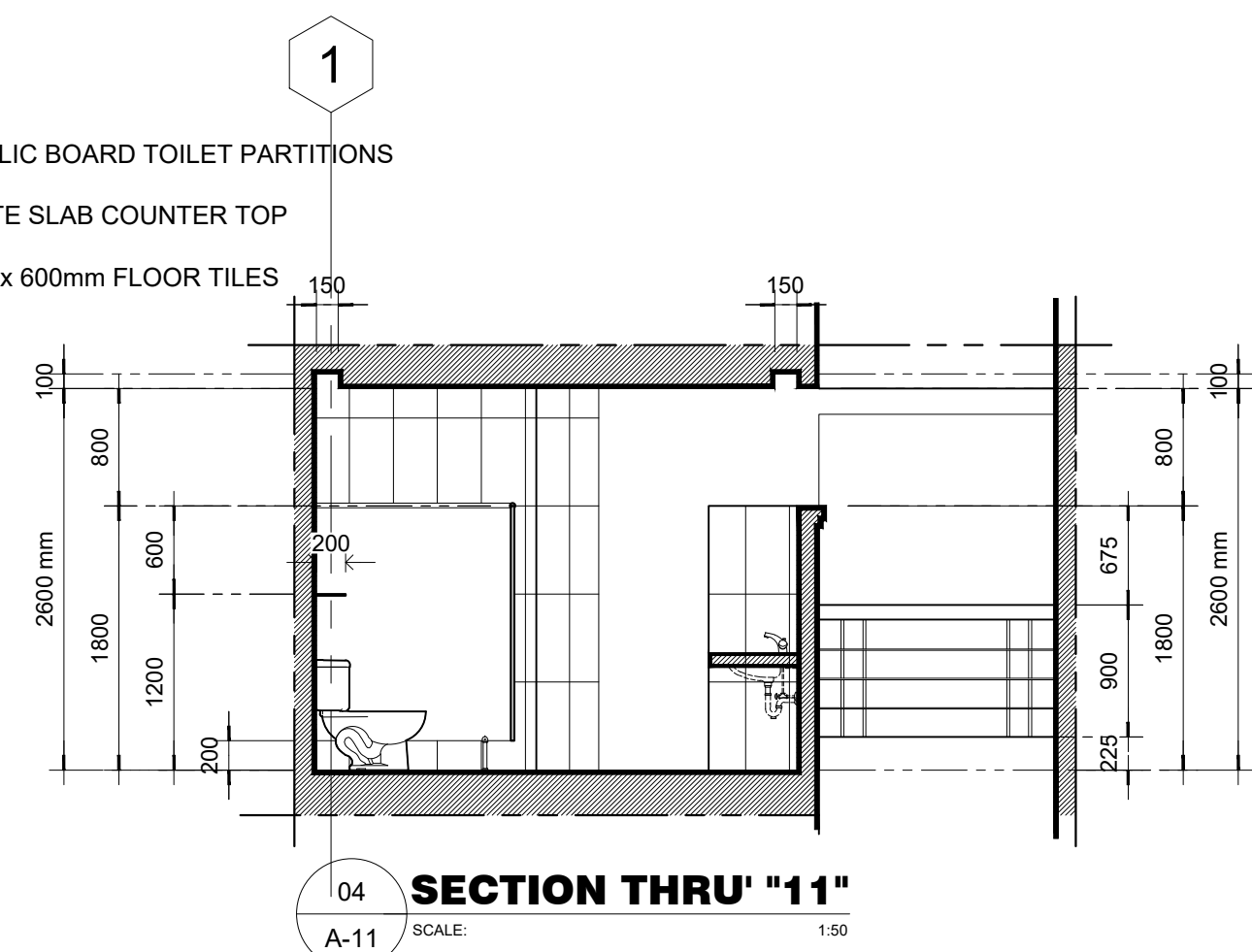
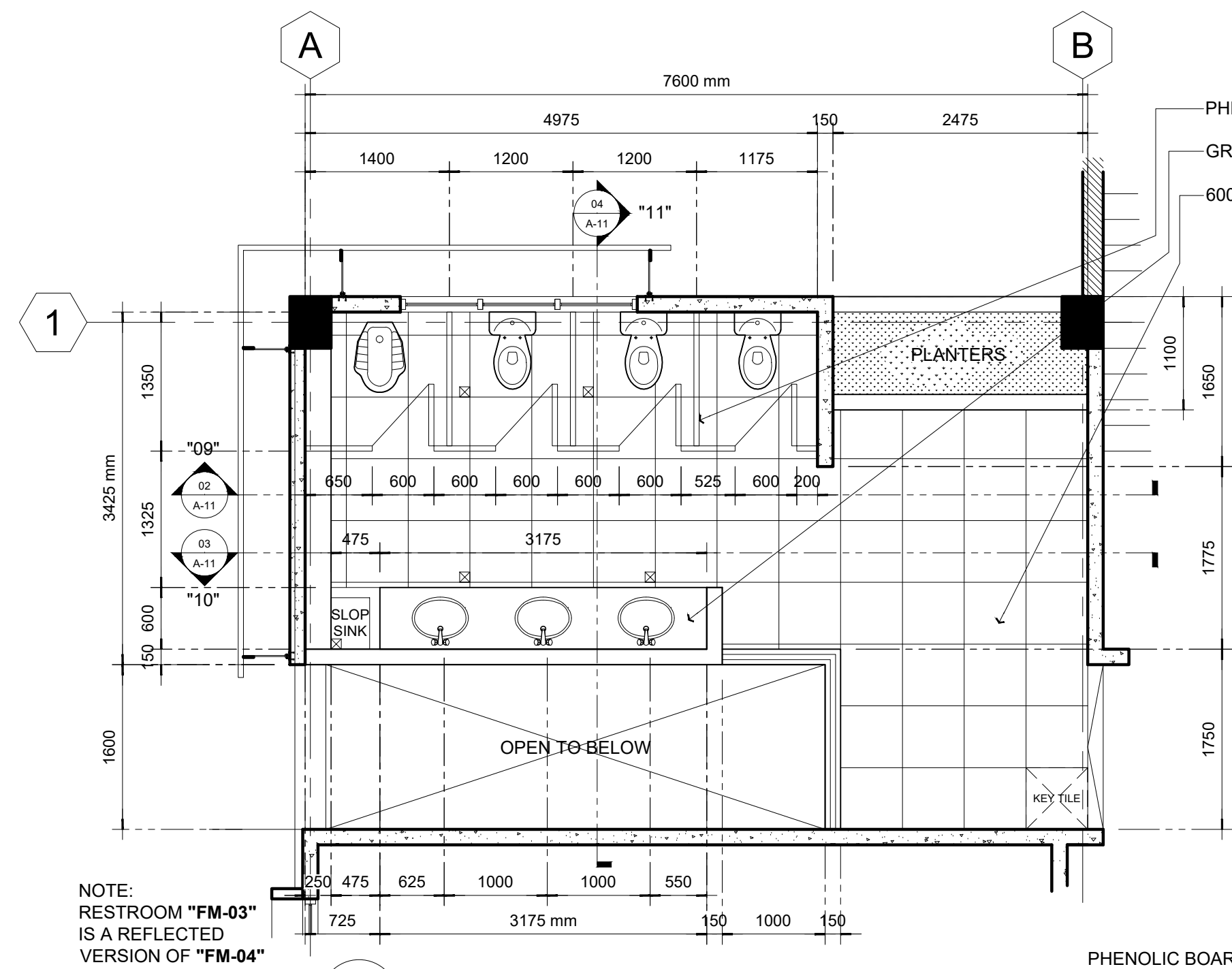
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

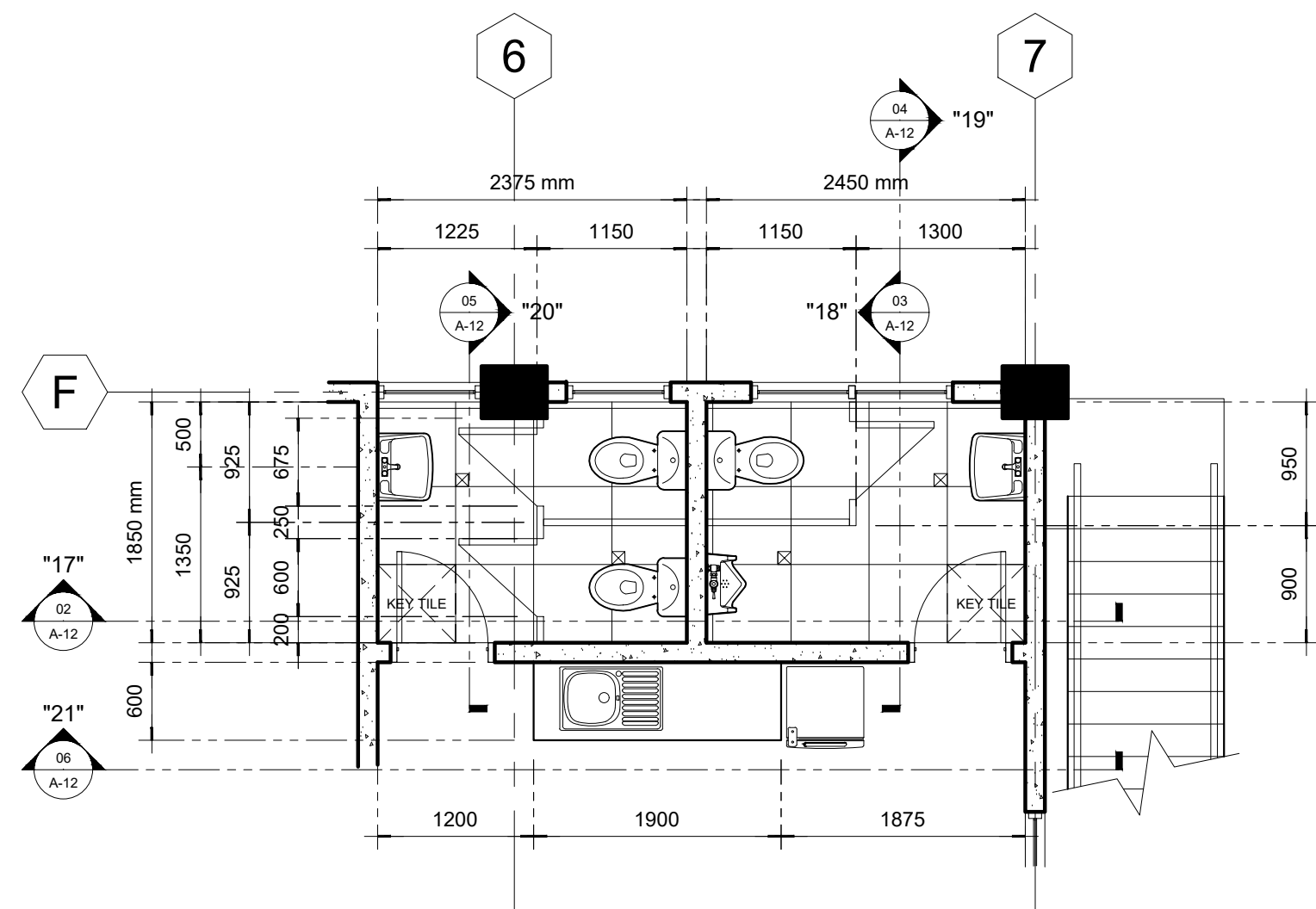
APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

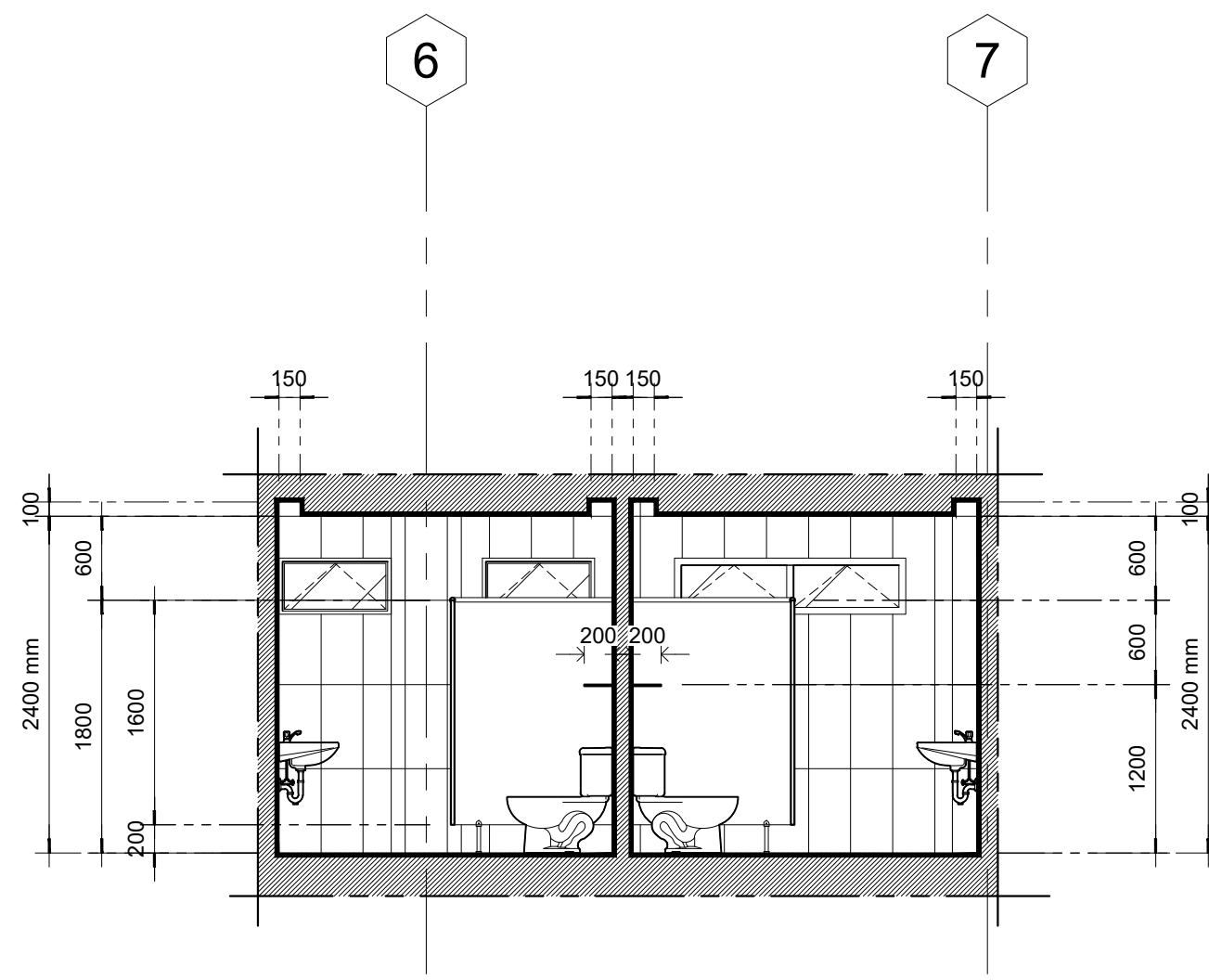
SHEET NO.
A-09
09 51



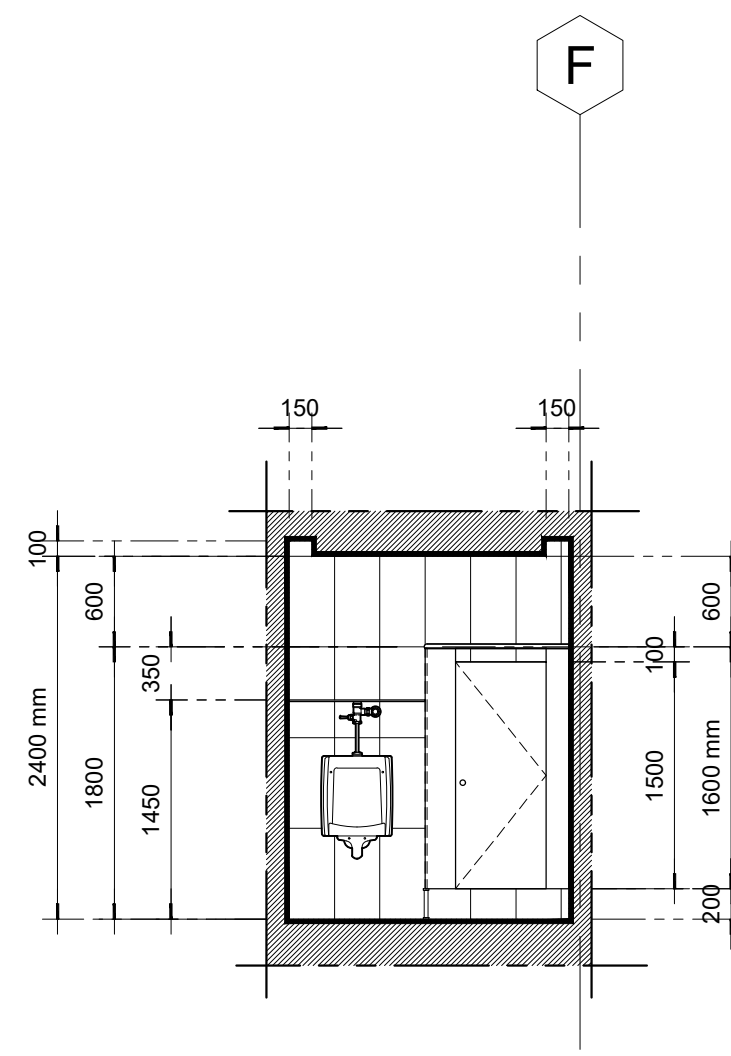




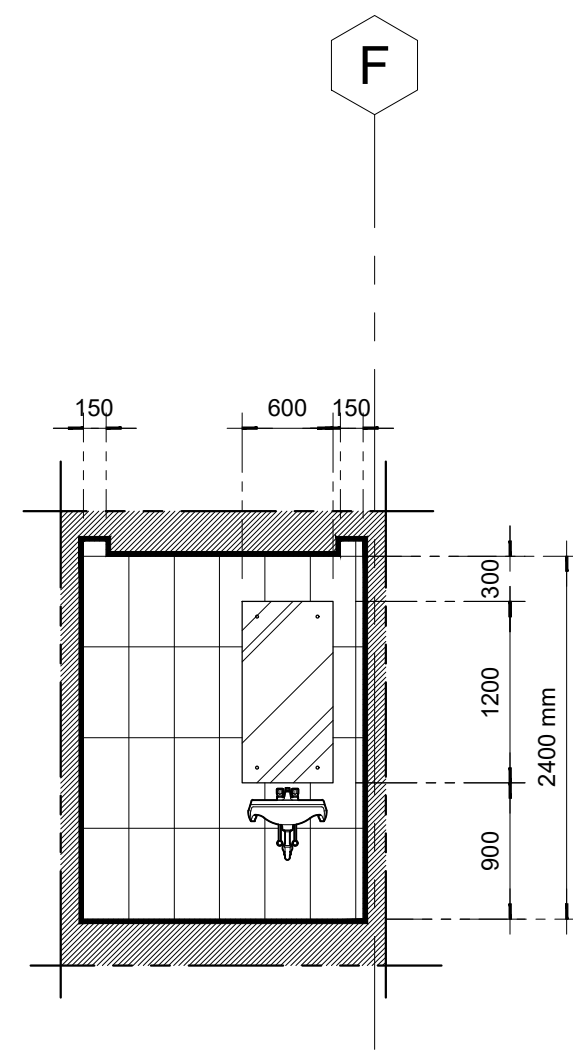
01 **BLOW-UP PLAN "FACULTY RESTROOM"**
SCALE: 1:50
A-12



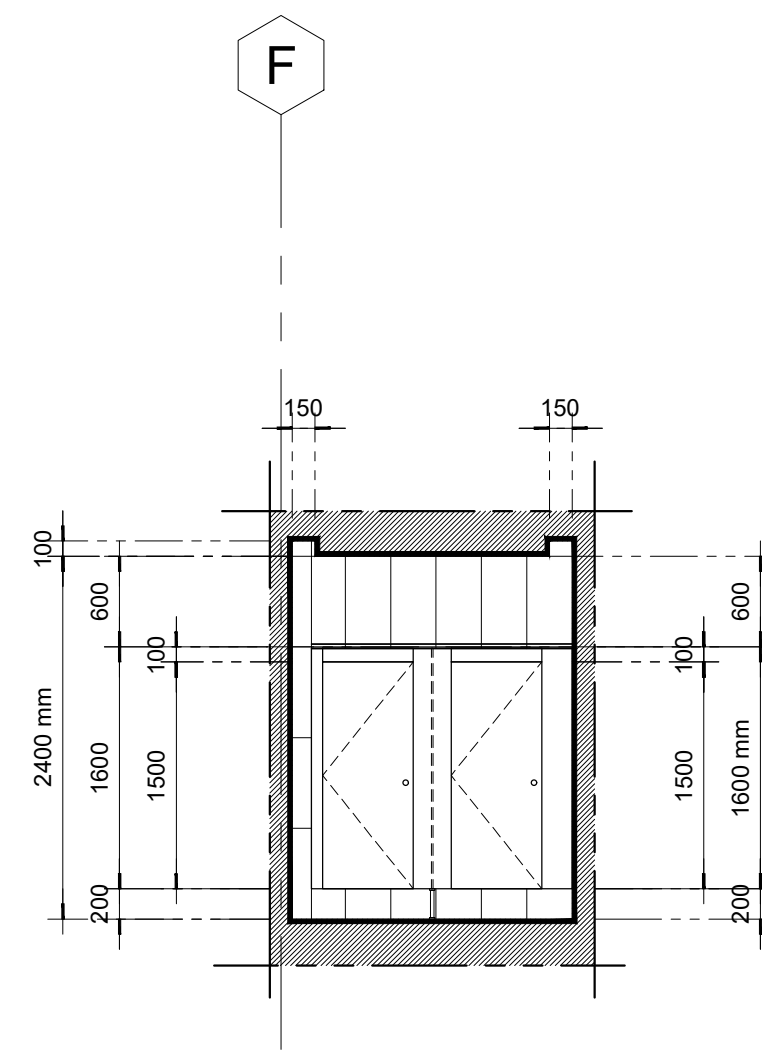
02 **SECTION THRU "17"**
SCALE: 1:50
A-12



03 **SECTION THRU "18"**
SCALE: 1:50
A-12



04 **SECTION THRU "19"**
SCALE: 1:50
A-12

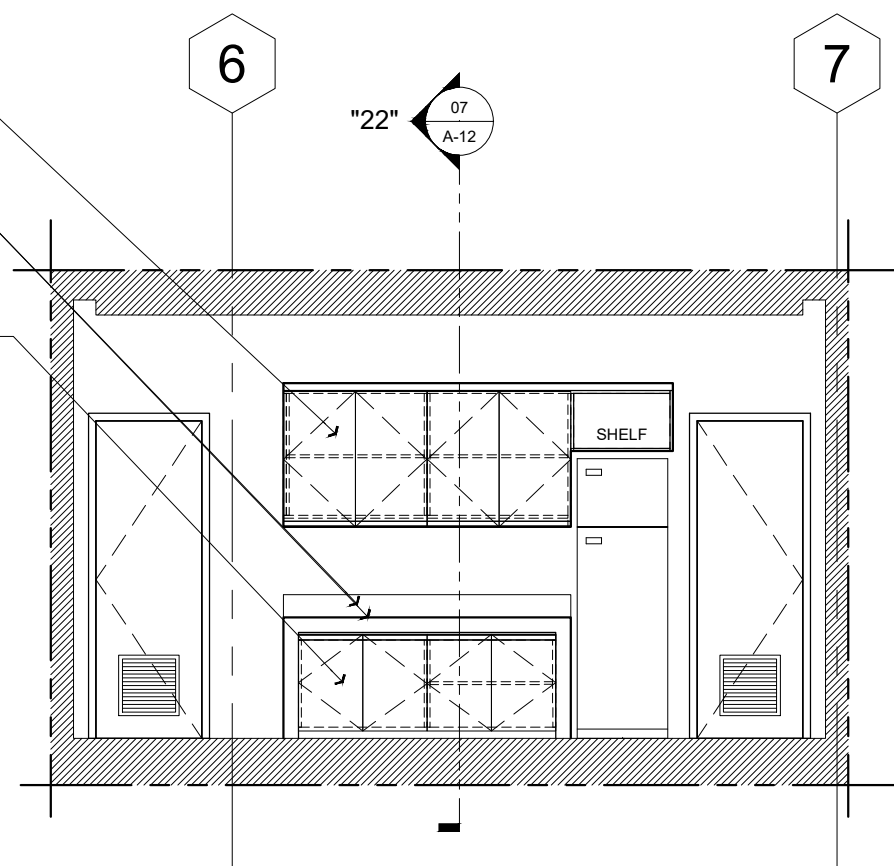


05 **SECTION THRU "20"**
SCALE: 1:50
A-12

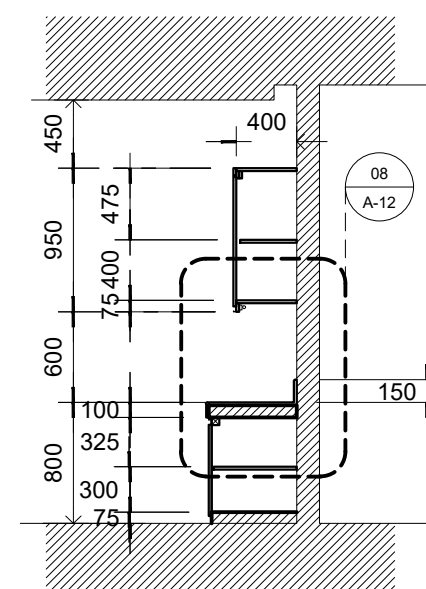
HANGING CABINET & SHELVES:
¾" MAR. PLYWOOD; HIGH
DENSITY LAMINATE FINISH

GRANITE COUNTER TOP WITH
150mm (H) SPLASH BOARD

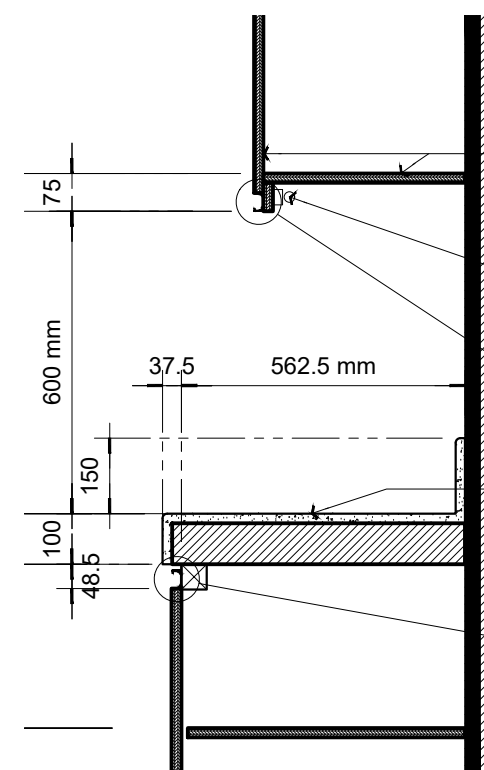
BASE CABINET DOORS &
SHELVES: ¾" MAR. PLYWOOD;
HIGH DENSITY LAMINATE FIN.



06 **SECTION THRU "21"**
SCALE: 1:50
A-12



07 **SECTION THRU "22"**
SCALE: 1:50
A-12



08 **BLOW-U DETAIL "22.1"**
SCALE: 1:15
A-12

HANGING CABINET &
SHELVES: ¾" MAR.
PLYWOOD; HIGH DENSITY
LAMINATE FINISH

T5 COVE LIGHTING

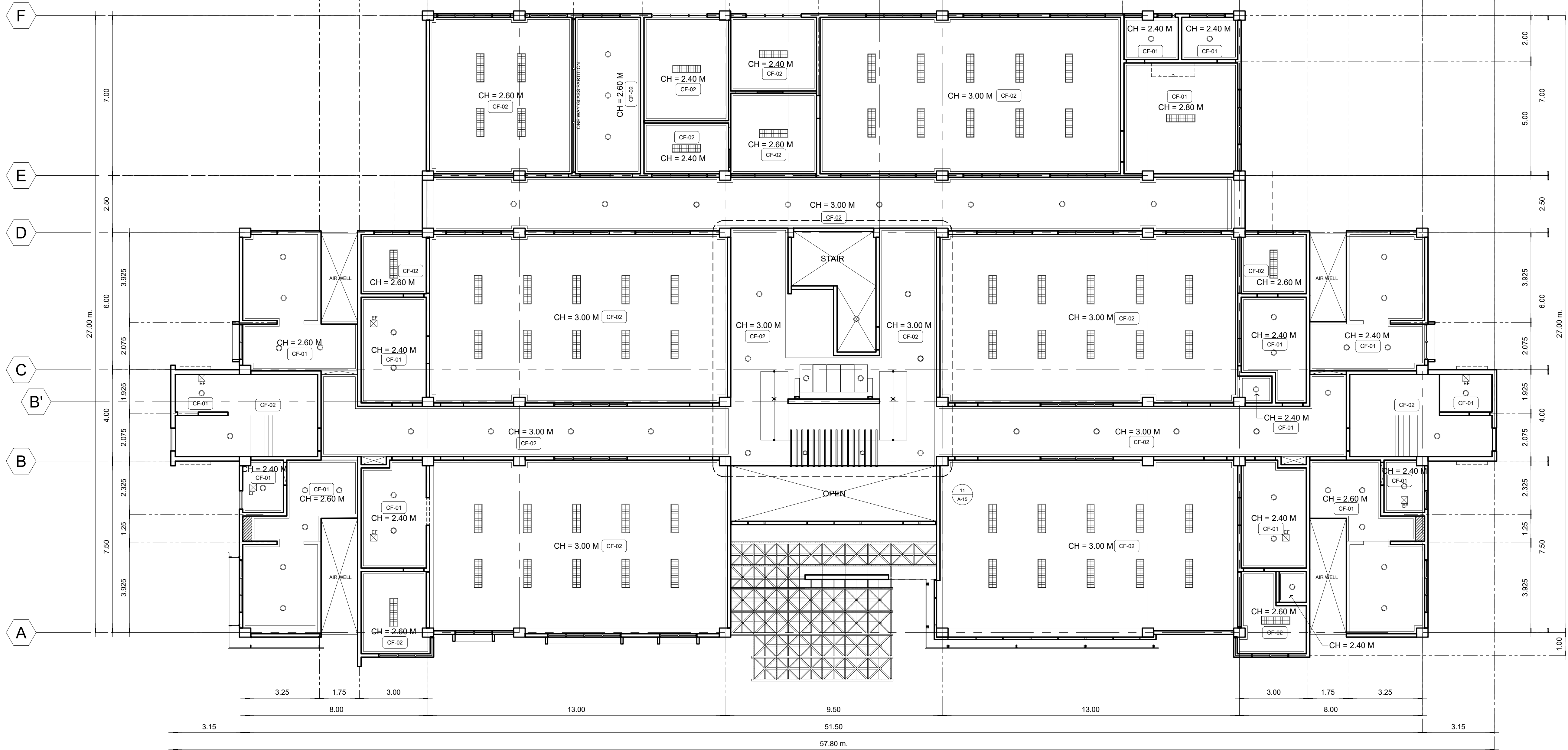
ALUM. GRIP PROFILE
HANDLES; SILVER
COLORED ANODIZED FIN.

GRANITE COUNTER TOP
WITH 150mm (H) SPLASH
BOARD

ALUM. GRIP PROFILE
HANDLES; SILVER
COLORED ANODIZED FIN.

LEGEND:

- CF-01 6mm FICEM BOARD ON METAL FRAMES
- CF-02 12mm GYPSUM BOARD ON METAL FRAMES
- CF-03 PVC SOFFIT ON METAL FRAMES



01 GROUND FLOOR REFLECTED CEILING PLAN
A-13 SCALE: 1:100



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
A-13
13 51

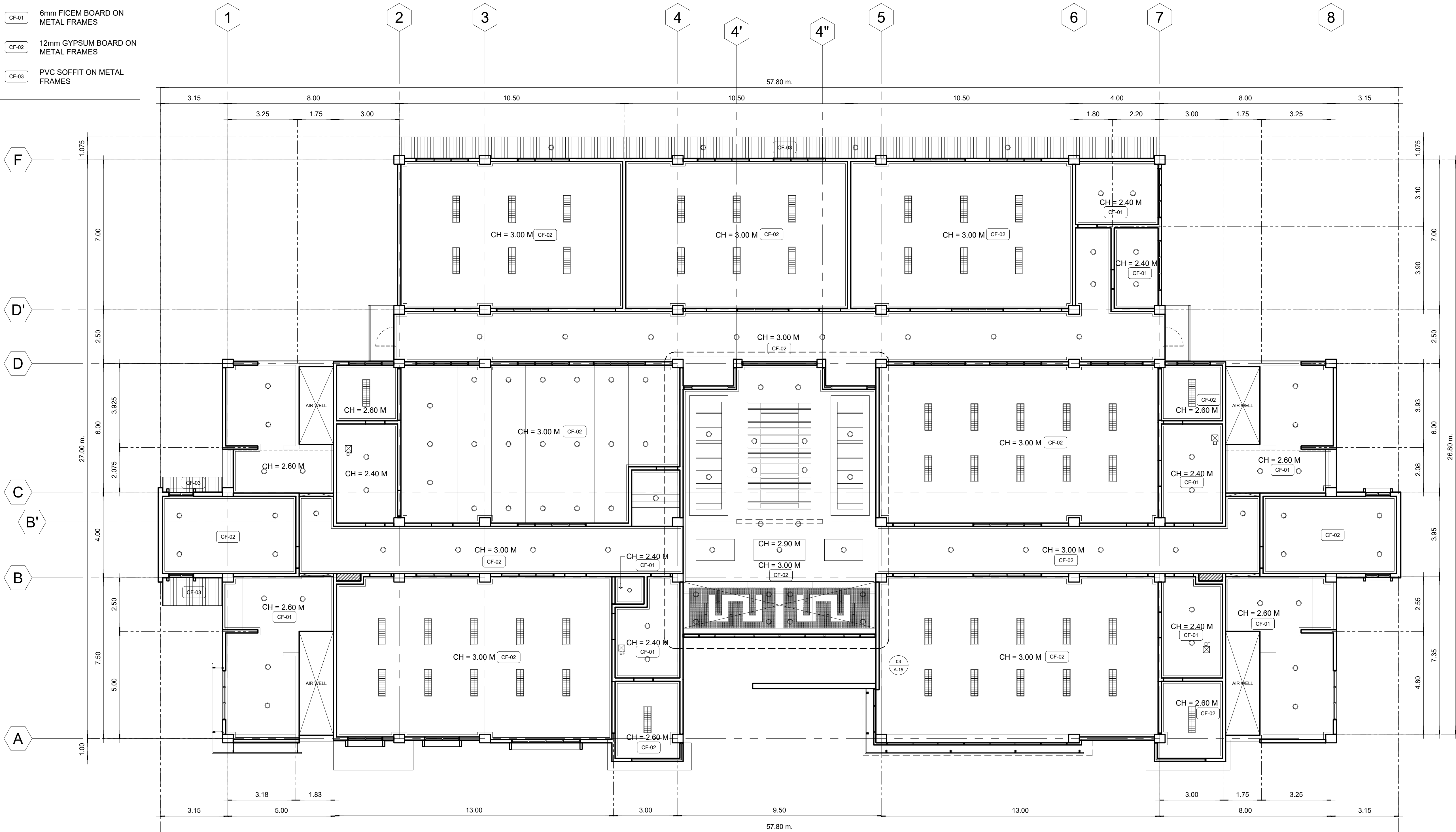
LEGEND:

- CF-01

6mm FICEM BOARD ON METAL FRAMES
- CF-02

12mm GYPSUM BOARD ON METAL FRAMES
- CF-03

PVC SOFFIT ON METAL FRAMES



01 **SECOND FLOOR REFLECTED CEILING PLAN**
A-14 SCALE: 1:100



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

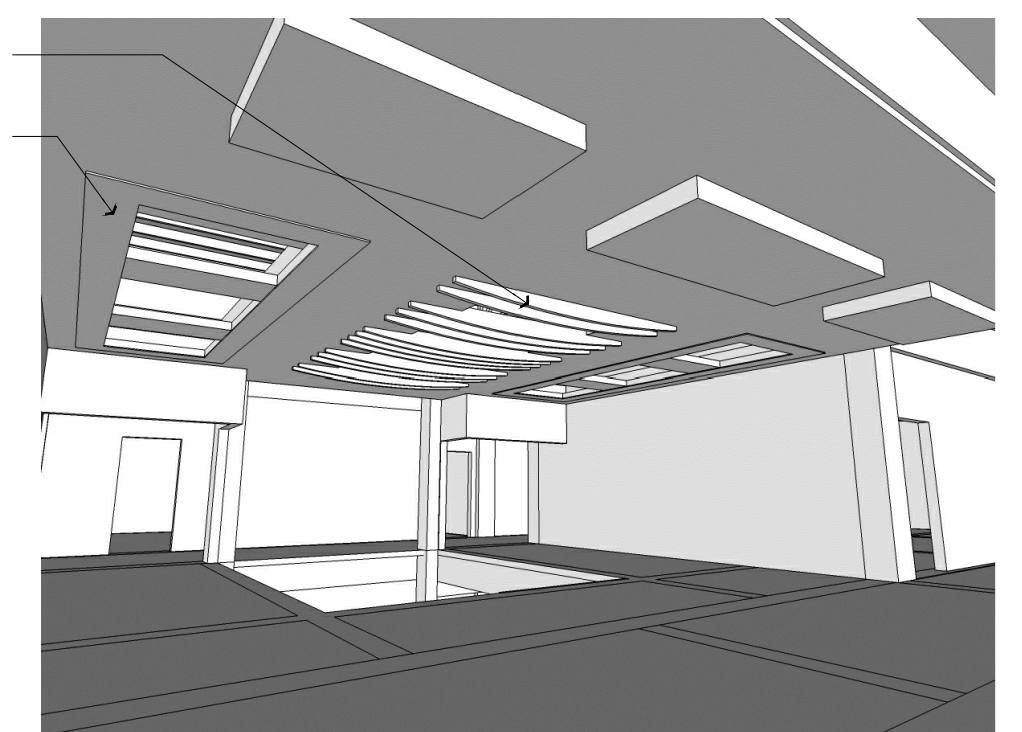
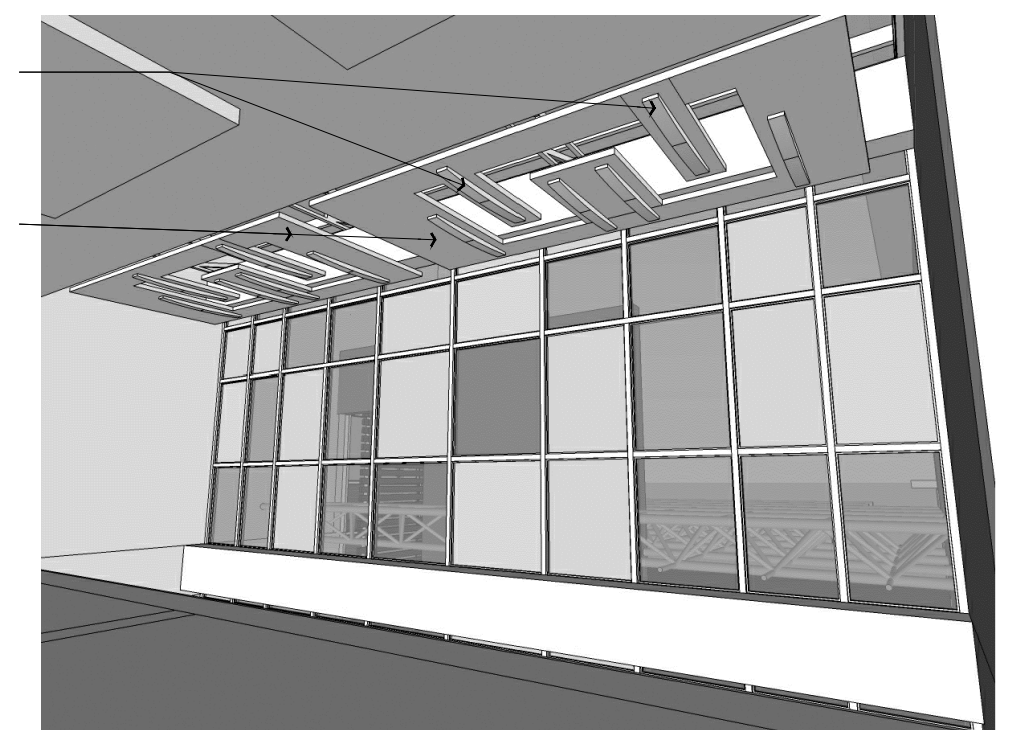
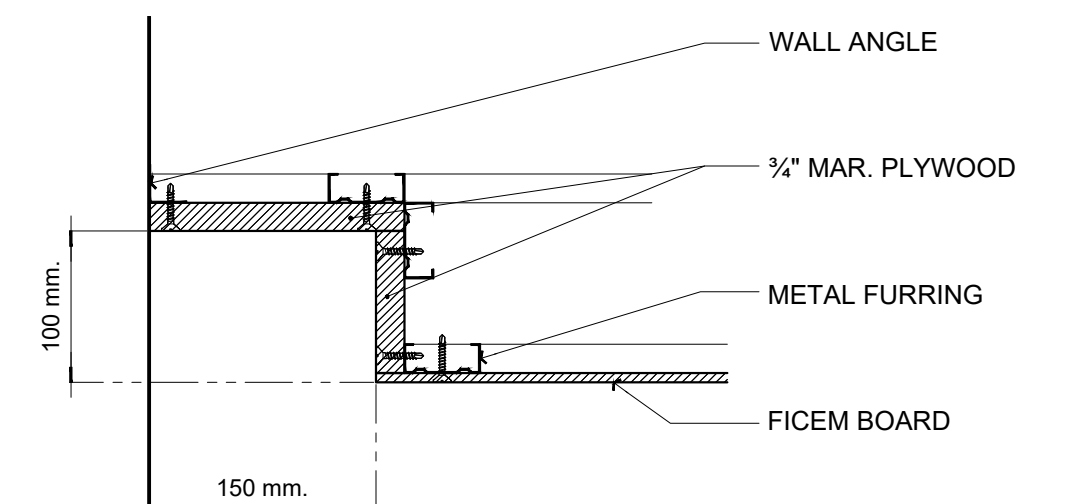
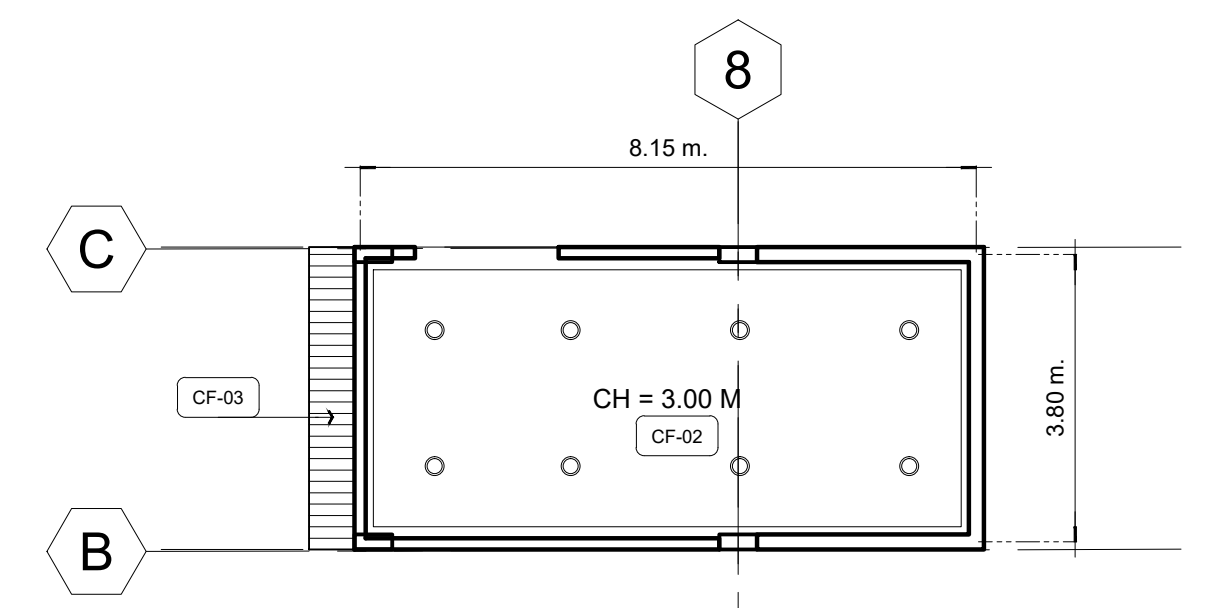
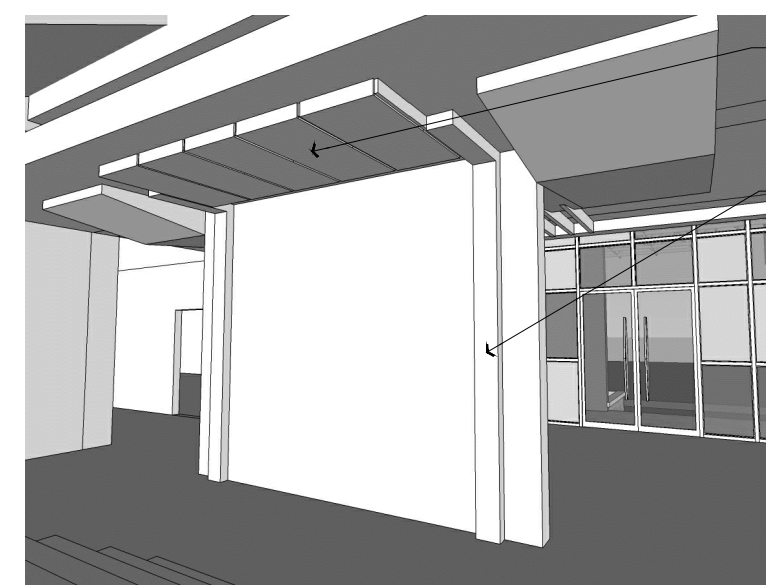
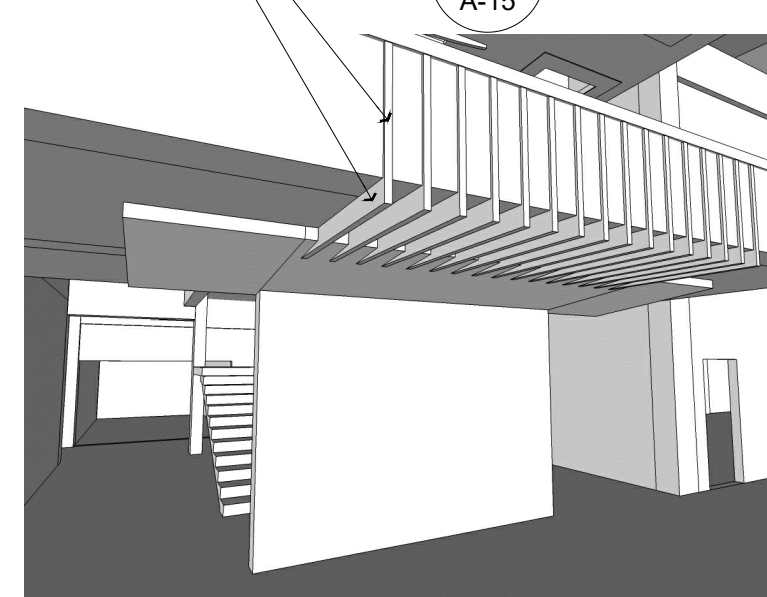
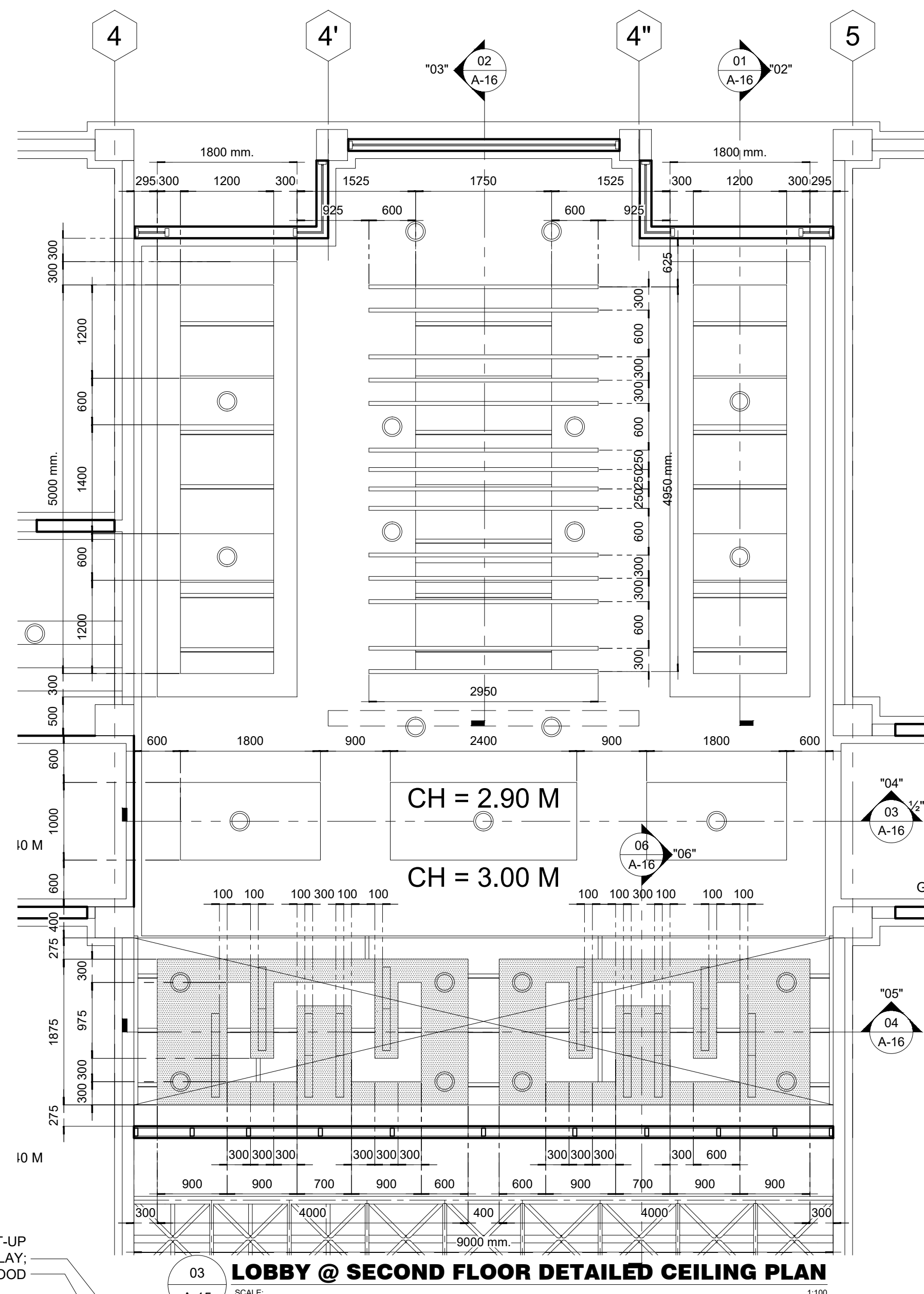
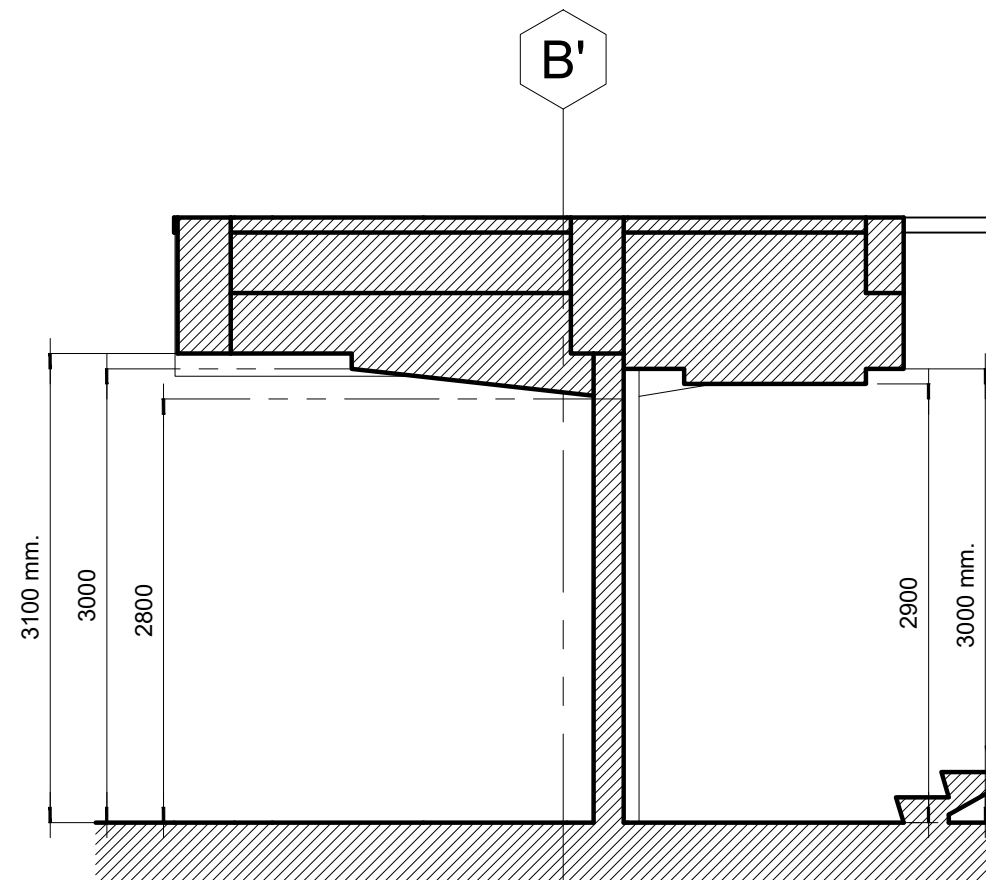
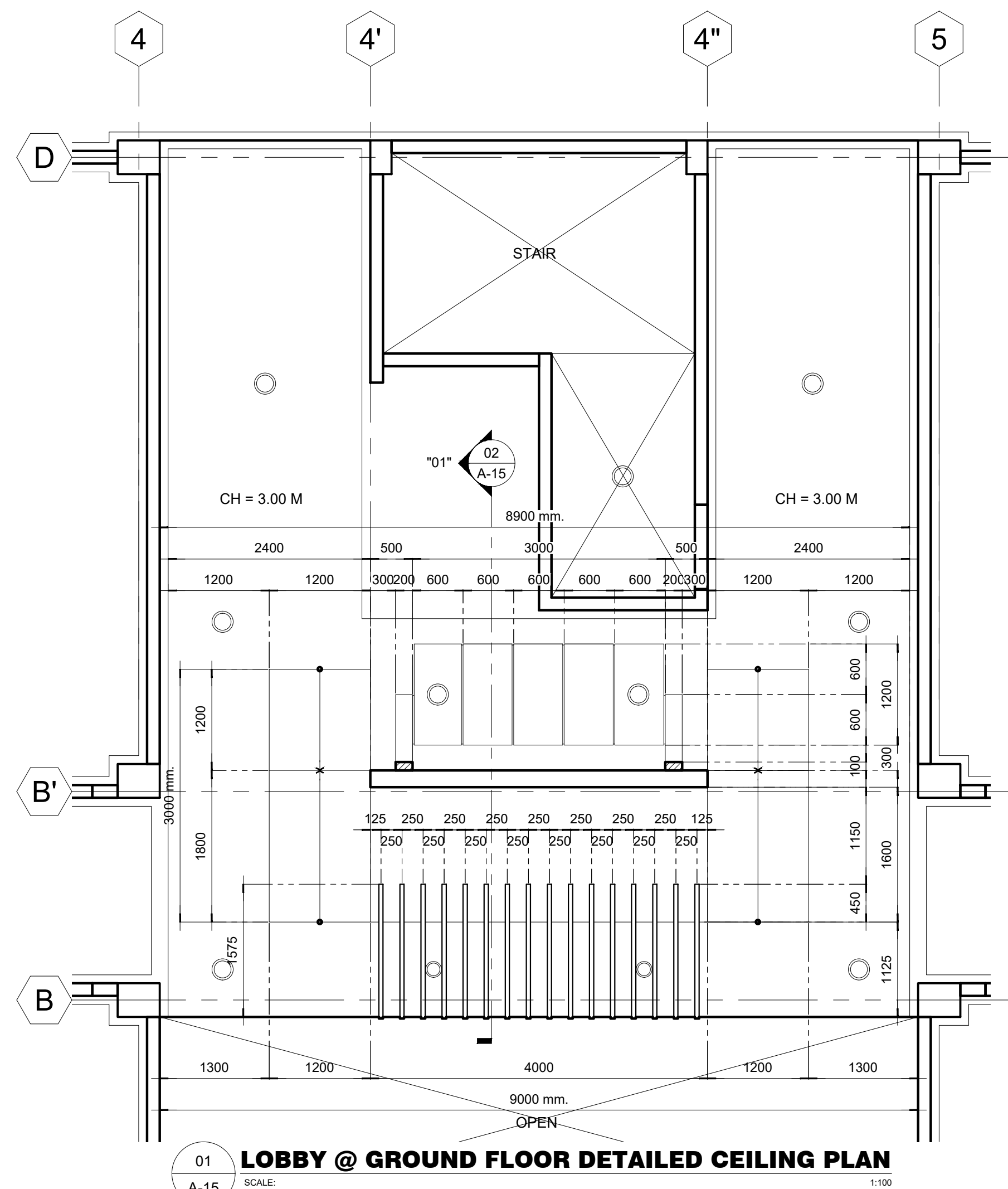
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
A-14
14 51



M.T. Ang
architectural designs

PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎No: 301-19

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 0716
O.R. DATE	141342 16JULY
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

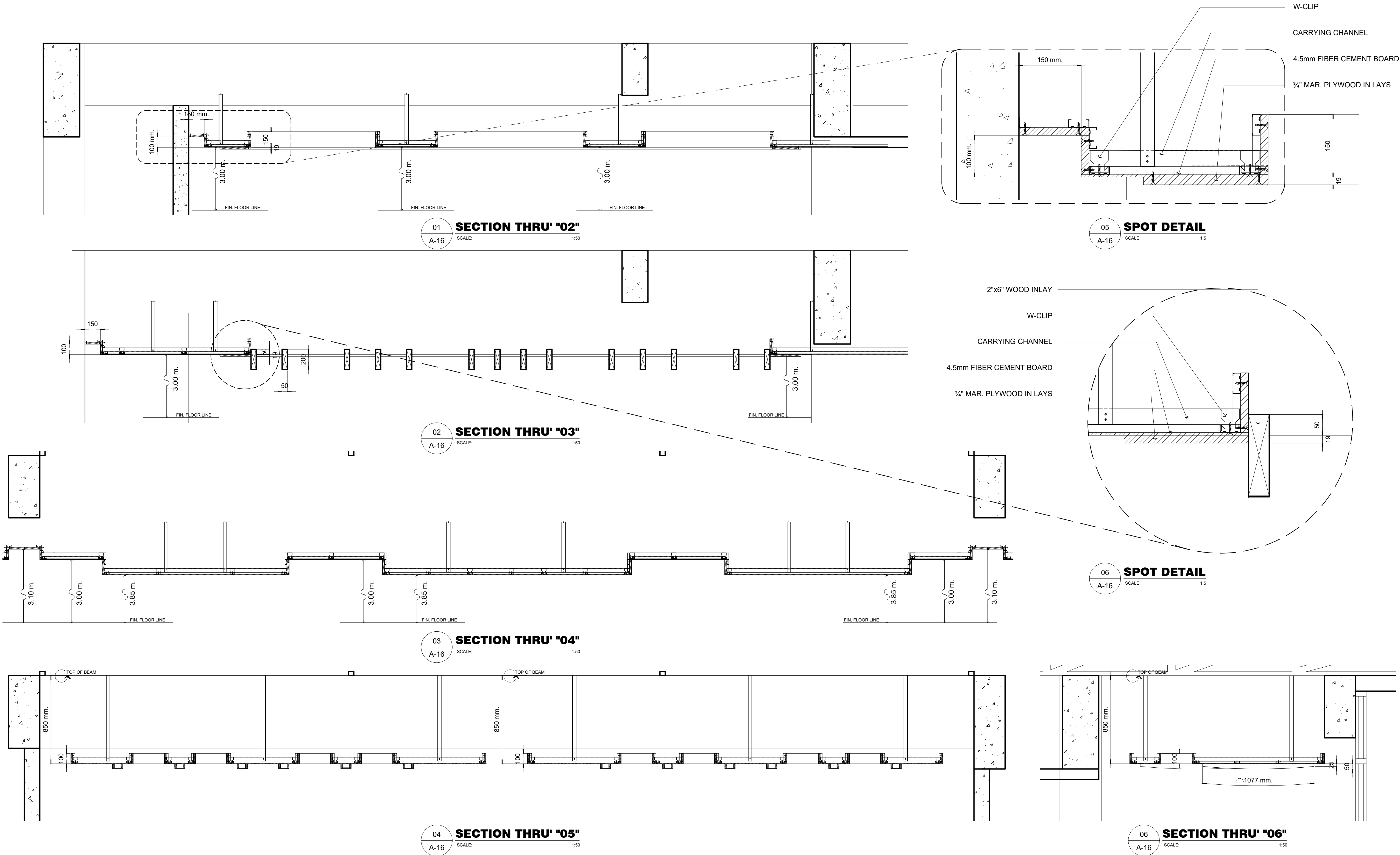
SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamped or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
<p>PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)</p> <p>PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City</p>

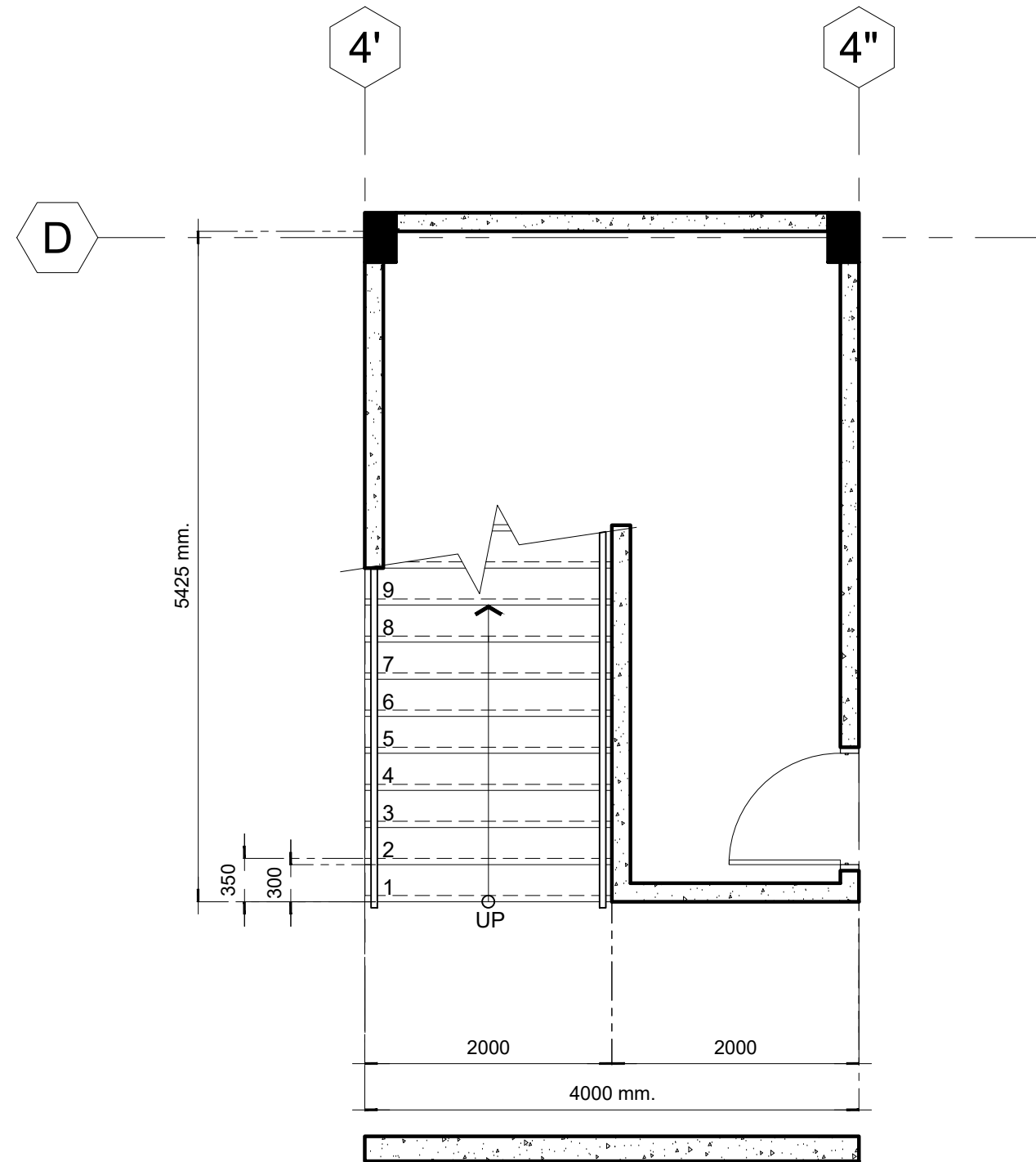
APPROVED BY	
CHUCHI P. GARGANERA, PH. D.	
DIRECTOR III	
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	

<p>PREPARED BY:</p> <p>NELSON LEANDRO R. BRETaña, uap</p> <p>JUNIOR ARCHITECT</p>	<p>CHECKED BY:</p> <p>ROSARIO P. LEONORA</p> <p>RESIDENT ENGINEER</p>
---	---

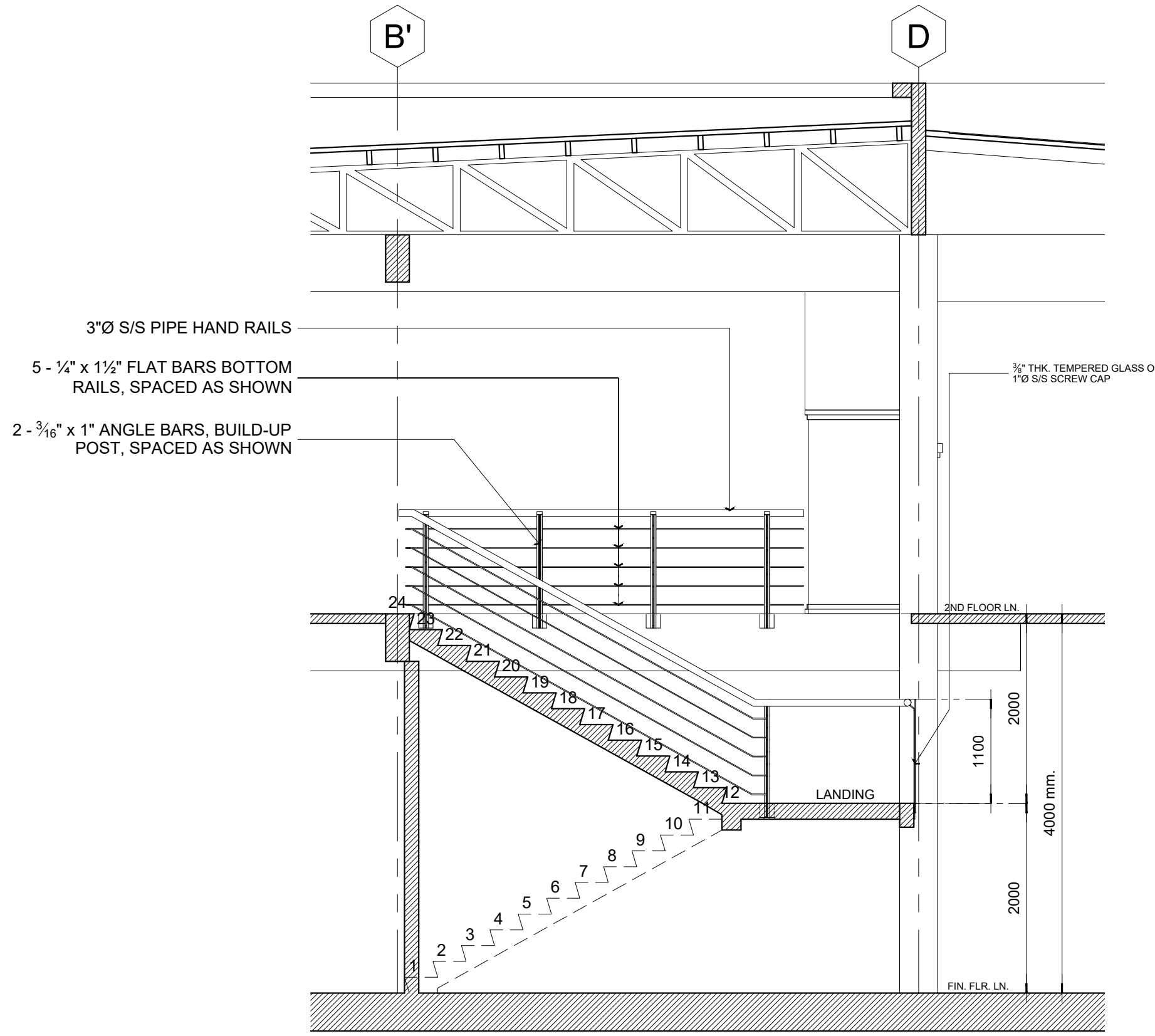
SHEET NO.	
A-15	
15	51



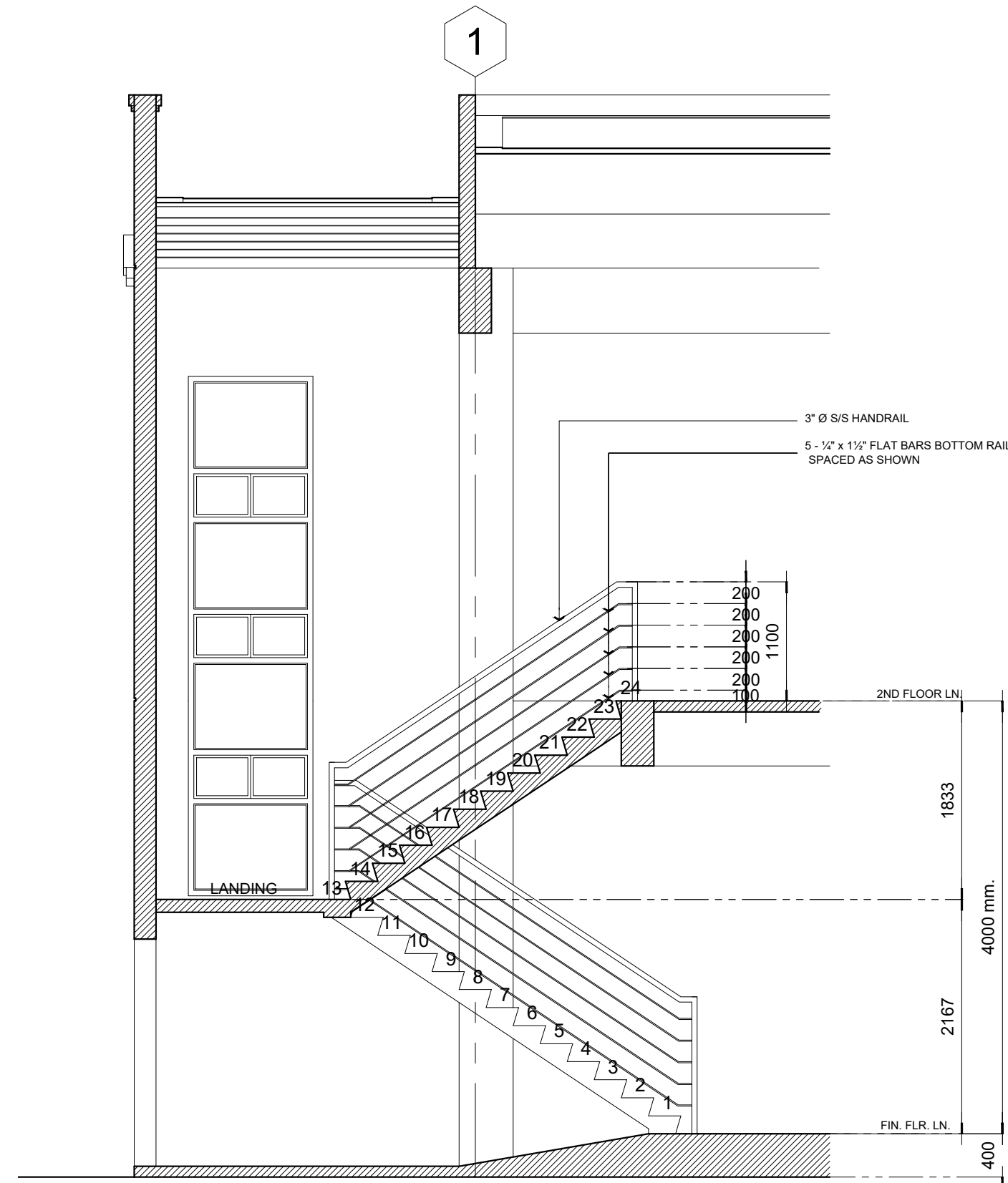
<div><div><div></div><div>M.T. Ang</div><div>architectural designs</div></div><div>PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN</div><div>27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ 301-1917</div></div>	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.		PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: NELSON LEANDRO R. BRETAÑA, uap JUNIOR ARCHITECT CHECKED BY: ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. A-16 16 51



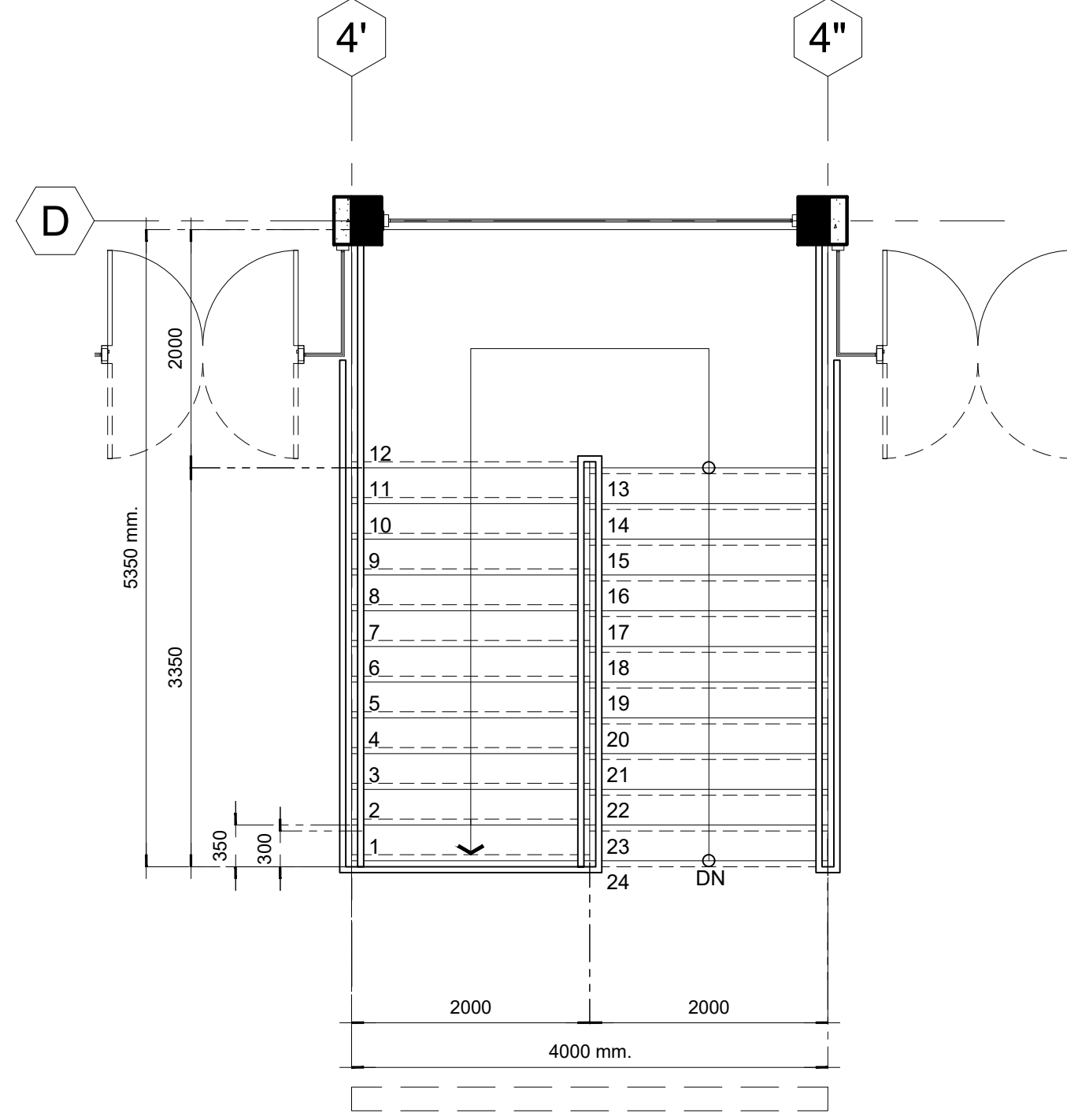
01 **STAIR "ST-01" PLAN @ GROUND FLOOR**
A-17 SCALE: 1:50



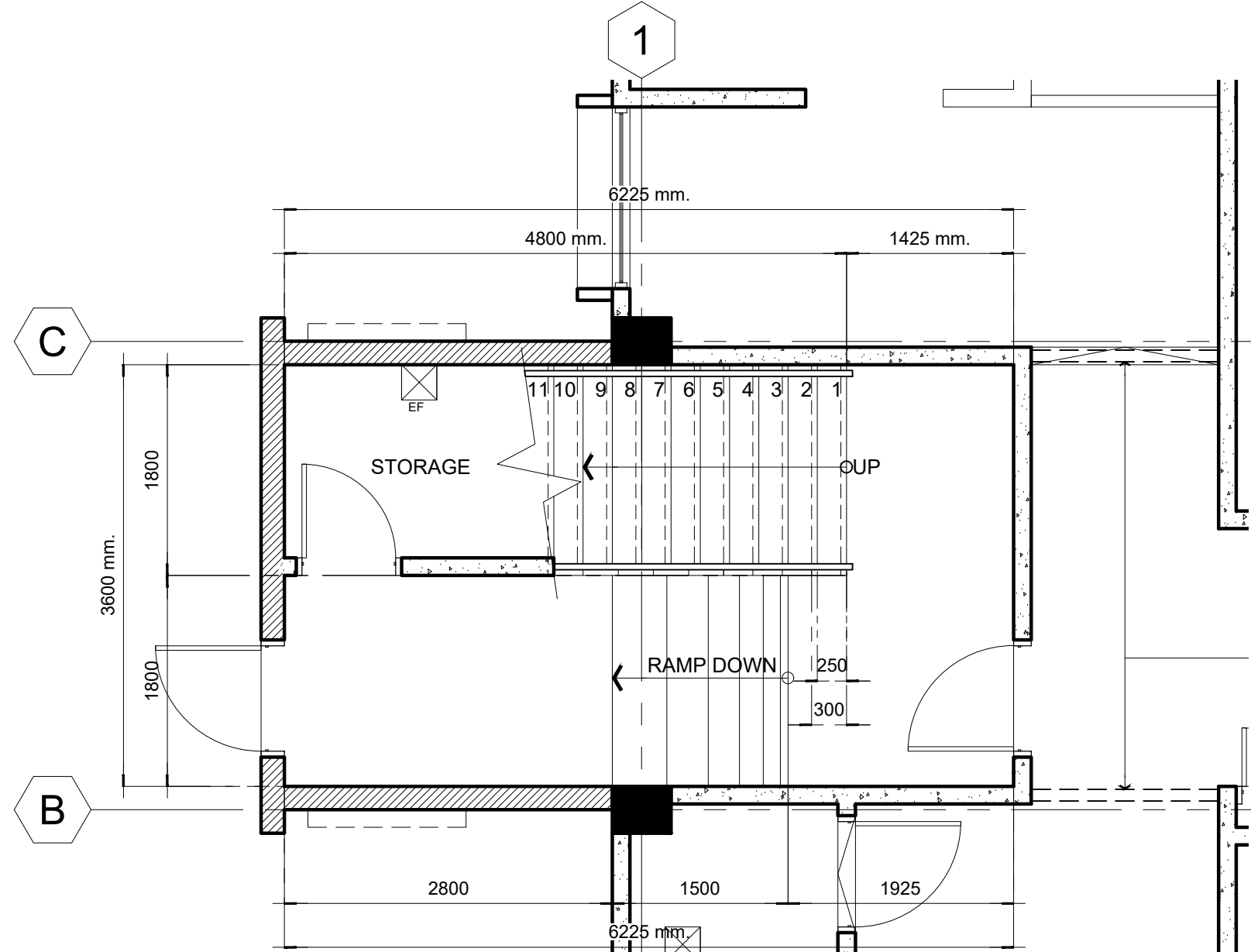
02 **STAIR "ST-01" SECTION**
A-17 SCALE: 1:50



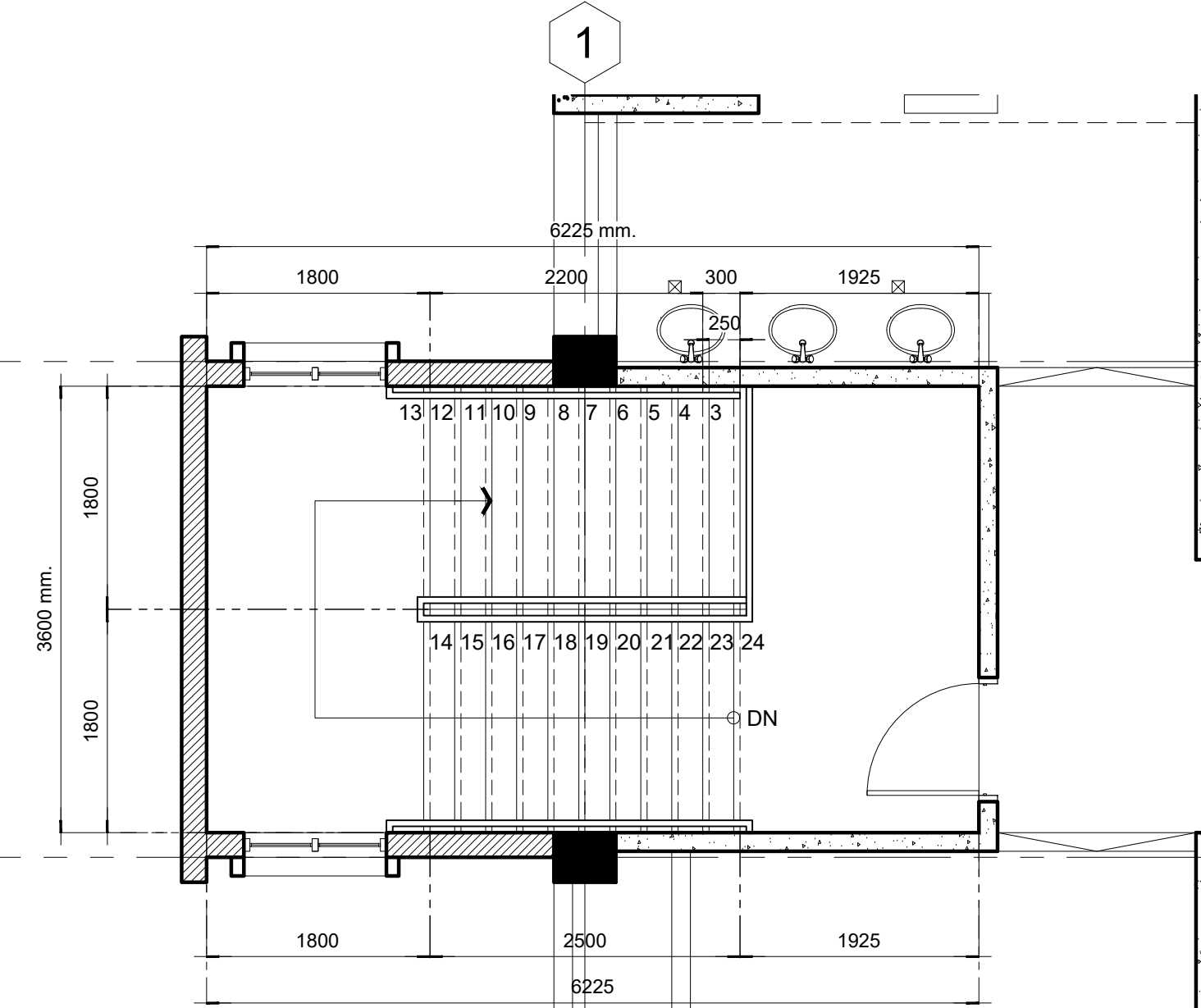
03 **STAIR "ST-02" SECTION**
A-17 SCALE: 1:50



04 **STAIR "ST-01" PLAN @ SECOND FLOOR**
A-17 SCALE: 1:50



05 **STAIR "ST-02" PLAN @ GROUND FLOOR**
A-17 SCALE: 1:50



06 **STAIR "ST-02" PLAN @ SECOND FLOOR**
A-17 SCALE: 1:50



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, without the written consent of architect or author of said documents.

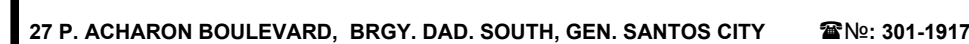
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.	
A-17	
17	51

FILE NAME: MTA16-001.2-PHILsci_ASTB.dwg | February 13, 2016



ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamped or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PROJECT TITLE / LOCATION
<p>PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)</p> <p>PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City</p>

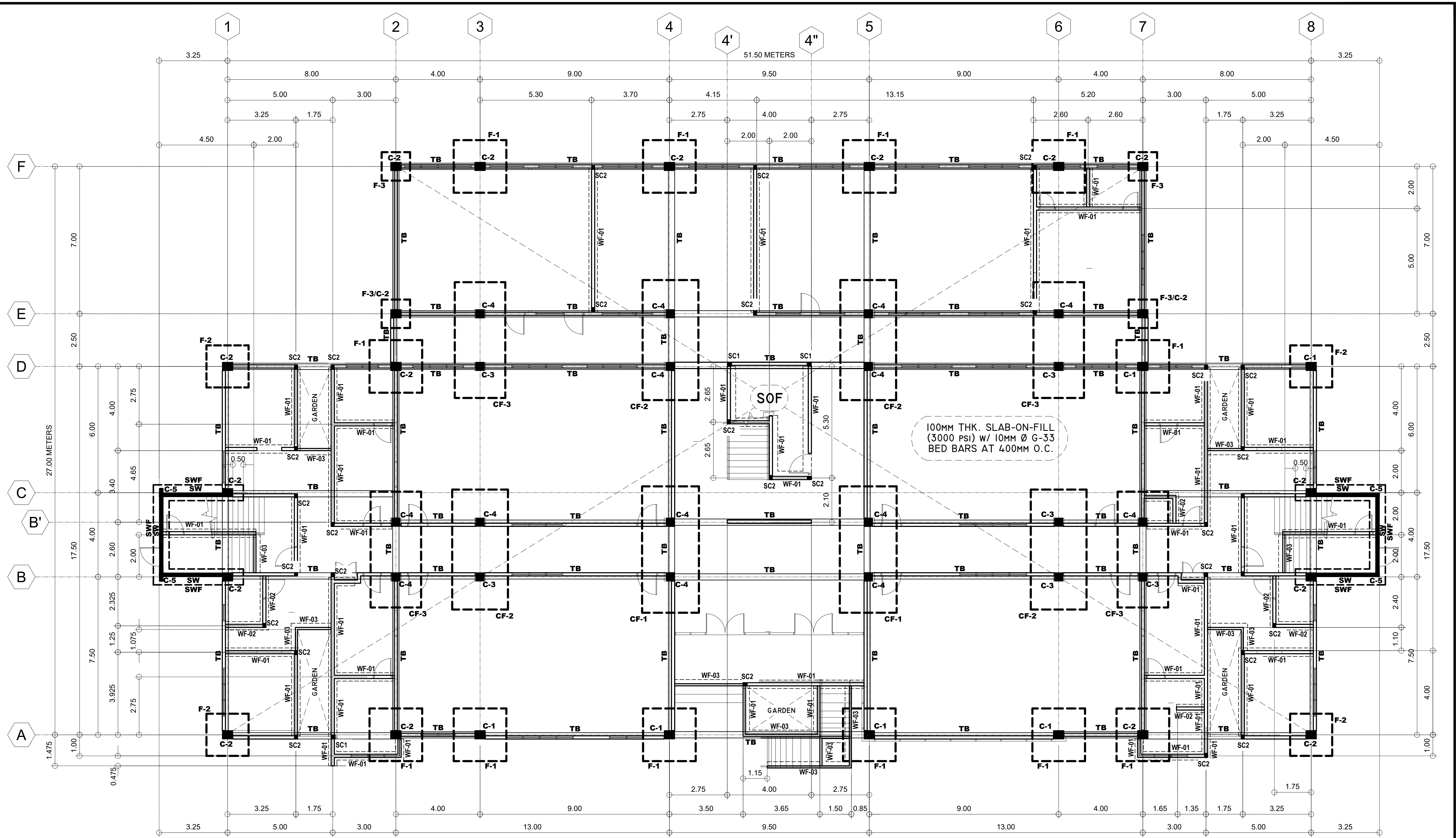
APPROVED BY
<p>CHUCHI P. GARGANERA, PH. D.</p> <hr/> <p>DIRECTOR III</p>
<p>ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City</p>

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT

CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

HEET NO.

A-18	
18	51



NOTE: UNLESS OTHERWISE SPECIFIED
1. TIE BEAM (TB) SHALL BE THE WALL FOOTINGS IF THERE ARE CHB WALLS TO BE PLACED ON TOP.
2. ALL STIFFENER COLUMNS' MAIN RSB SHALL BE ANCHORED EITHER ON TIE BEAMS OR WALL FOOTINGS
(PLEASE SEE FOUNDATION PLAN)

01 FOUNDATION PLAN
S-01 SCALE: 1:100



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PCE,ASEP
CIVIL/STRUCTURAL ENGINEER

PRC: 52853
PTR No.: 6601121
ISS. AT: G.S.C.
ASEP: 52853-111
DATE: 01/07/16
TIN No.: 102-900-986

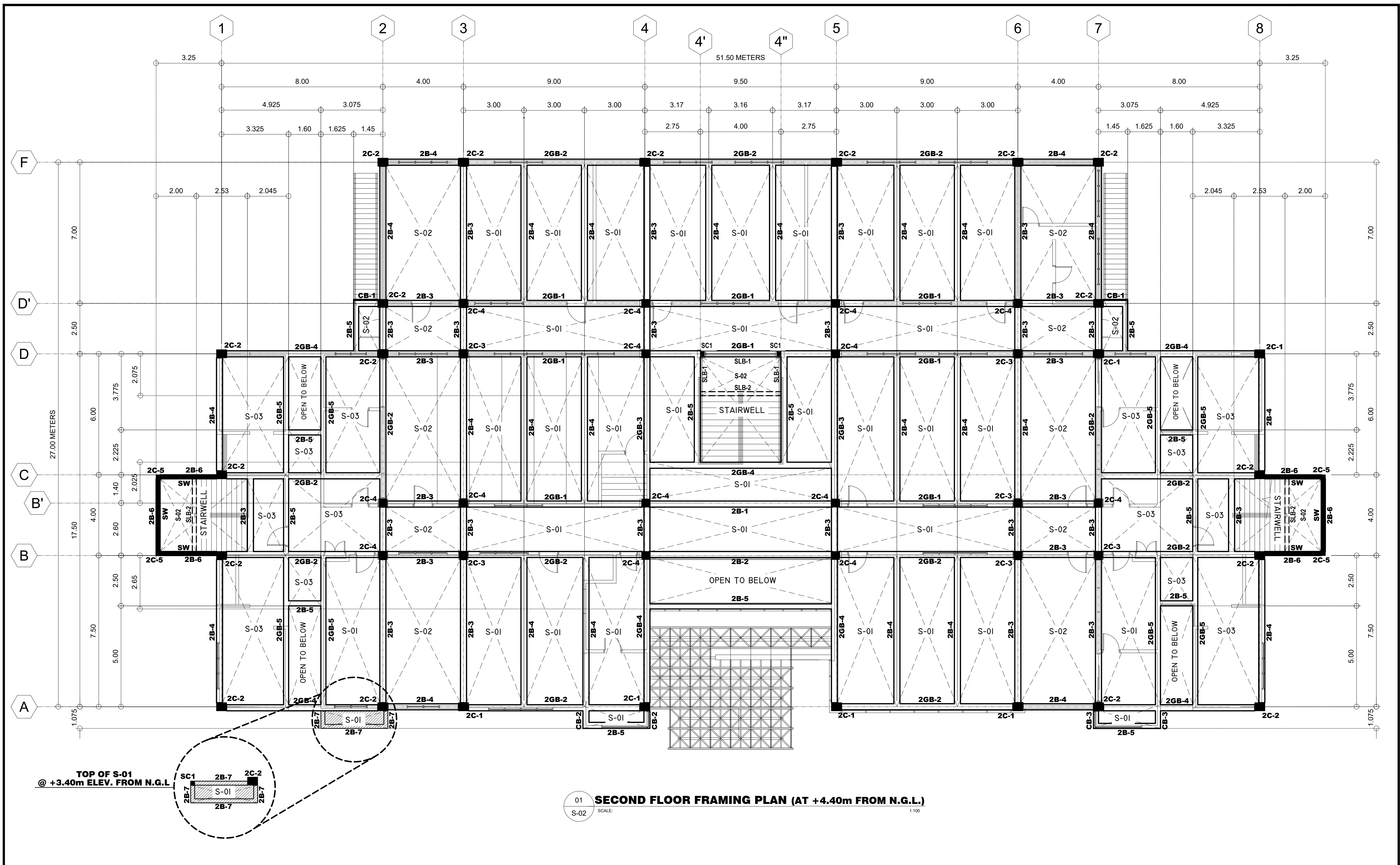
PROJECT TITLE / LOCATION
**PROPOSED ADVANCE SCIENCE
& TECHNOLOGY BLDG.
(ACADEMIC BUILDING III)**
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,
Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.
Paraiso, Koronadal City

PREPARED BY:

CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
S-01
19 51



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed party or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PCE,ASEP
CIVIL/STRUCTURAL ENGINEER

PRC: 52853
PTR No.: 6601121
ISS. AT: G.S.C.
ASEP: 52853-111
DATE: 01/07/16
T I N No.:102-900-986

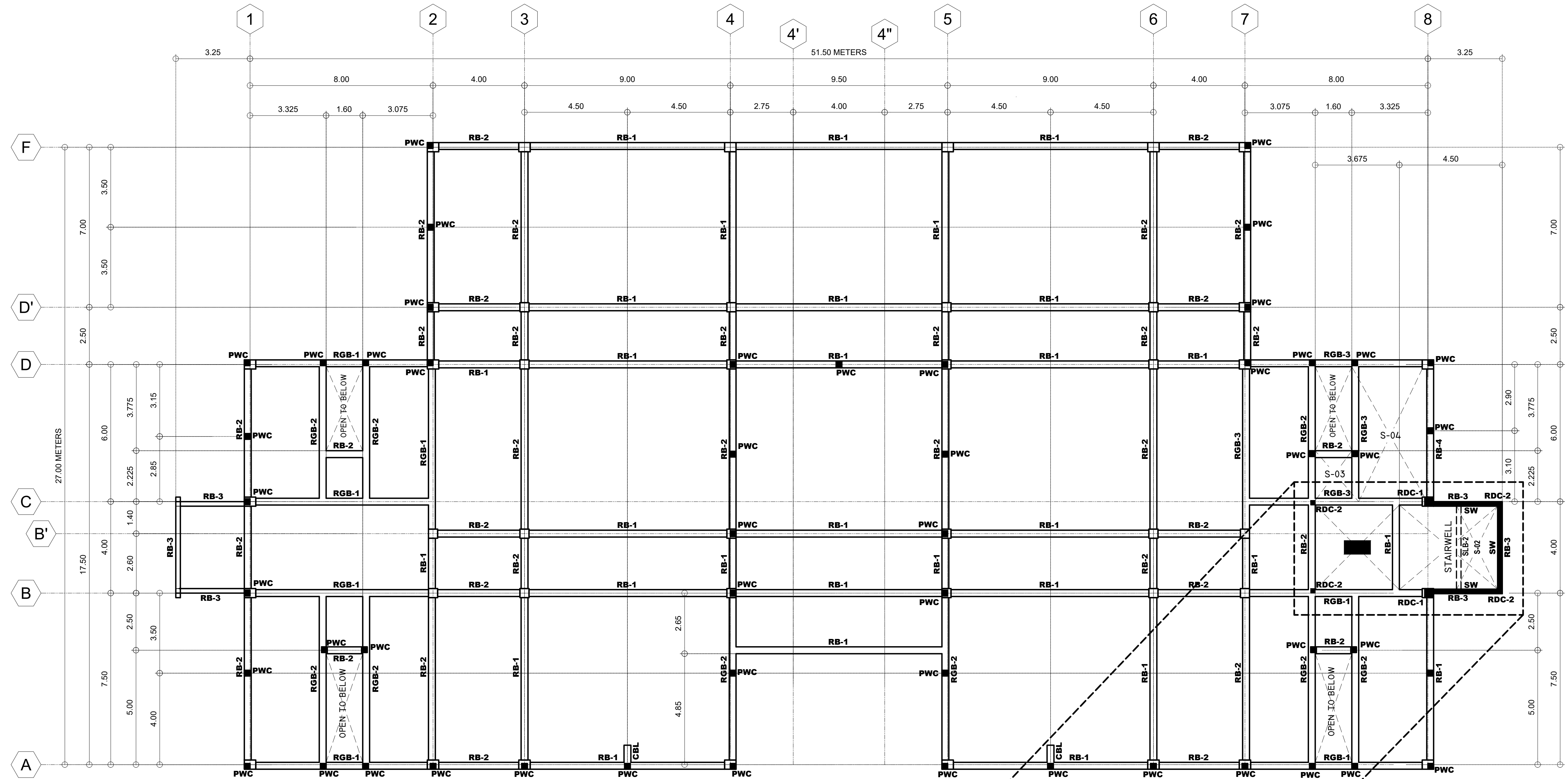
PROJECT TITLE / LOCATION
**PROPOSED ADVANCE SCIENCE
& TECHNOLOGY BLDG.
(ACADEMIC BUILDING III)**
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,
Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.
Paraiso, Koronadal City

PREPARED BY:

CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

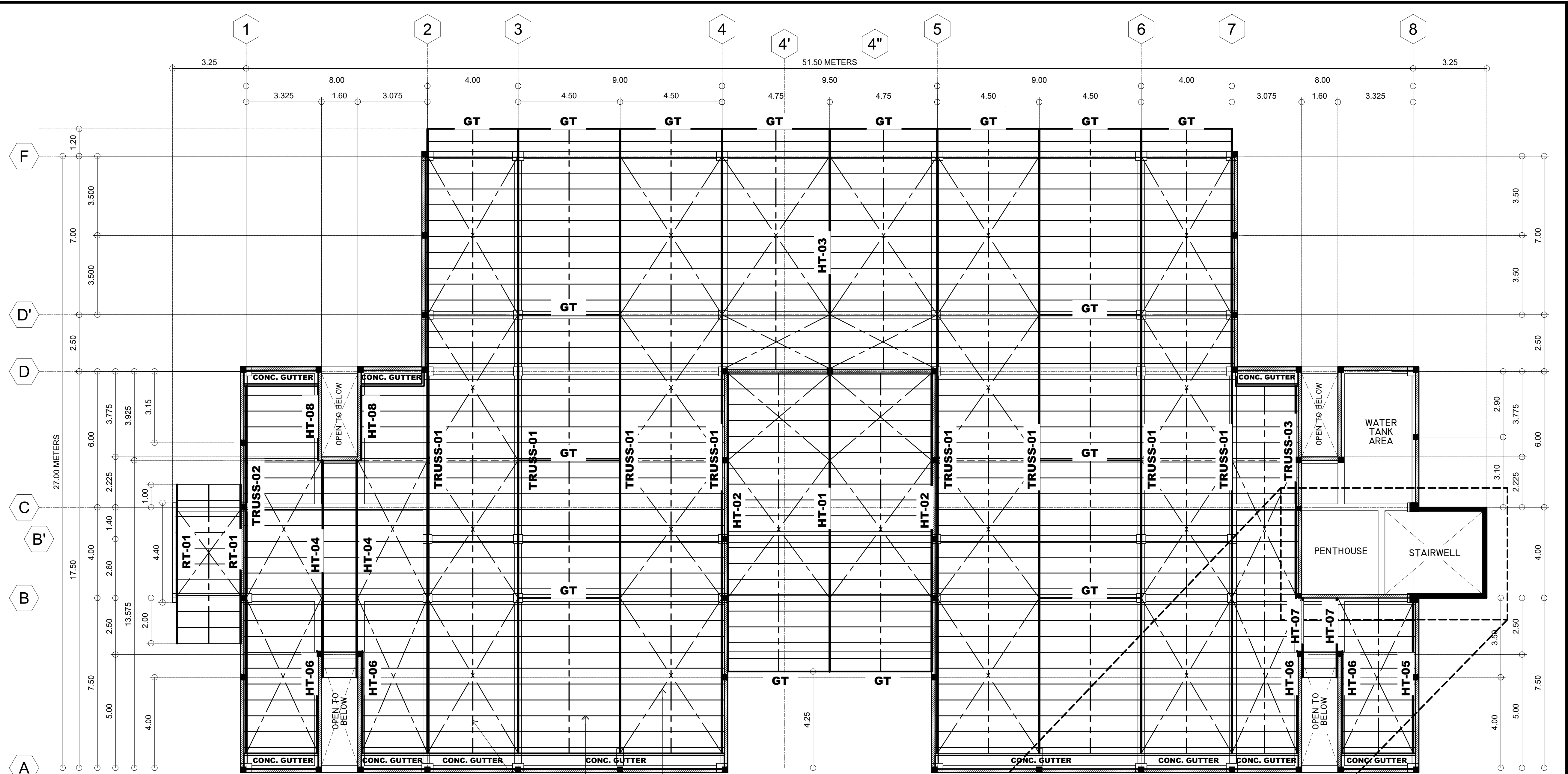
SHEET NO.
S-02
20 51



01
S-03
SCALE: 1:100
MAIN ROOF BEAM FRAMING PLAN

02
S-03
SCALE: 1:100
UPPER ROOF BEAM FRAMING PLAN

 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.	JAMES P. PACIS ,PICE,ASEP CIVIL/STRUCTURAL ENGINEER PRC: 52853 PTR No.: 6601121 ISS. AT: G.S.C.	ASEP: 52853-111 DATE: 01/07/16 T I N No.:102-900-986	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. S-03 21 51	

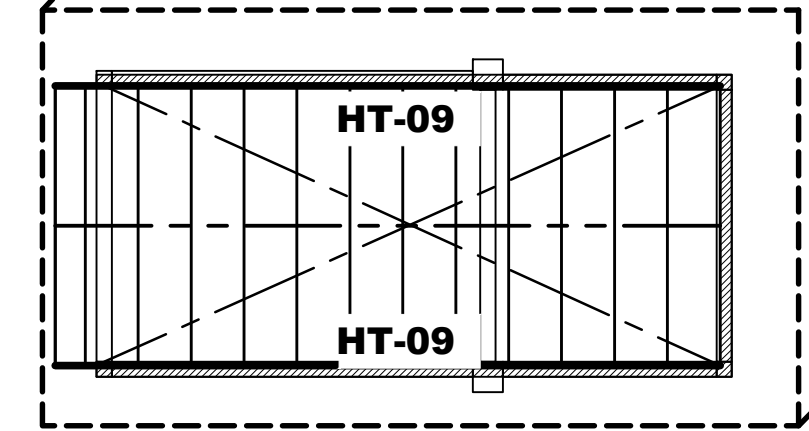


2 - 10mm Ø PLAIN ROUND BAR SAGROD AT MIDSPAN.

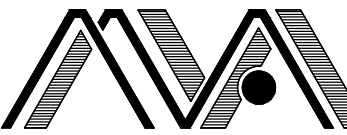
1.5mm THICK x 2" x 6" CEE-PURLINS AT 700mm O.C.

12mm Ø PLAIN ROUND BAR CROSS-BRACE
w/ 12mm Ø TURNBUCKLE AT ONE END

01 **MAIN ROOF FRAMING PLAN**
SCALE: 1:100



02 **UPPER ROOF FRAMING PLAN**
SCALE: 1:100



M.T. Ang
architectural designs

PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY 301-1917

MICHAEL T. ANG, fuap

ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PCE,ASEP

CIVIL/STRUCTURAL ENGINEER

PRC: 52853 ASEP: 52853-111

PTR No.: 6601121 DATE: 01/07/16

ISS. AT: G.S.C. TIN No.: 102-900-986

PROJECT TITLE / LOCATION

PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)

PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:

CHECKED BY :

ROSARIO P. LEONORA

RESIDENT ENGINEER

SHEET NO.

S-04

22 51

CONSTRUCTION NOTES:

A. GENERAL

1. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
2. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMMS OF ALL STRUCTURAL STEEL, MISCELLANEOUS IRON, PRE-CAST CONCRETE ETC SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL BEFORE FABRICATION.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BEGIN, CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR CONDUITS, PIPE SLEEVES, ETC TO BE EMBEDDED IN CONCRETE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORINGS AND BRACINGS OF THE STRUCTURE FOR ALL LOADS THAT MAYBE IMPOSED DURING CONSTRUCTION.

B.CONCRETE & REINFORCEMENTS

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF THE PHILS. AND BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318).
2. ALL CONCRETE SHALL DEVELOP A COMPRESSIVE STRENGTH AT THE END OF TWENTY-EIGHT (28) DAYS, SUCH AS FOLLOW:
- FOUNDATION..... 4000 psi (27.60 MPa)
- COLUMNS & SHEARWALL 4000 psi (27.60 MPa)
- BEAMS, CORBEL & SLABS 4000 psi (27.60 MPa)
- STAIR STEPS4000 psi (27.60 MPa)
- CONCRETE GUTTER3500 psi (24.00 MPa)
- SLABS-ON-GRADE/FILL, WALL FOOTINGS & CURBS3000 psi (21.00 MPa)
3. ALL REINFORCING BARS SHALL CONFORM TO THE ASTM A615 (PNS 49) AS FOLLOW:
- FOUNDATION..... GRADE 60 (414 MPa)
- COLUMNS & SHEARWALL GRADE 60 (414 MPa)
A. COLUMN STIRRUPS GRADE 33 (227 MPa)
- BEAMS, CORBEL & SLABSGRADE 60 (414 MPa)
A. BEAM STIRRUPSGRADE 33 (227 MPa)
- STAIR STEPSGRADE 40 (275 MPa)
- CONCRETE GUTTERGRADE 40 (275 MPa)
- SLABS-ON-GRADE/FILL, WALL FOOTINGS & CURBSGRADE 33 (227 MPa)
4. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL BARS AS FOLLOWS:
- SUSPENDE SLABS $\frac{3}{4}$ " (20mm)
- SLAB-ON- FILL $1\frac{1}{2}$ " (40mm)
- WALLS ABOVE GRADE & SHEARWALL1" (25mm)
- COLUMN & BEAMS STIRRUPS $1\frac{1}{2}$ " (40mm)
- WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS2" (50mm)
- WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH 2" (75mm)
5. SPLICES SHALL BE SECURELY WIRED TOGETHER AND SHALL LAP OR EXTEND IN ACCORDANCE WITH THE ALLOWABLE LAP SPLICES AND ANCHORAGE LENGTH, UNLESS OTHERWISE SHOWN ON DRAWINGS. SPlice SHALL BE STAGGERED WHENEVER POSSIBLE.
6. ALL ANCHOR BOLTS, DOWELS AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED AN SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
7. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP FAG SPRAYING, CURING COMPOUND OR OTHER ANY APPROVED METHODS.
8. STRIPPING OF FORMS AND SHORES SHALL BE:
- FOUNDATION..... 24 HOURS
- SUSPENDE SLABS EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED 8 DAYS
- WALLS18 HOURS
- BEAMS & COLUMNS14 DAYS

C. FOUNDATION

1. FOUNDATION IS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 2000 psf OR 96.0 kPa.
2. FOUNDATION SHALL REST ON NATURAL SOIL, UNLESS OTHERWISE NOTED BY THE STRUCTURAL ENGINEER. NO PART OF THE FOUNDATION SHALL REST ON FILL.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER FOOTING EXCAVATION HAVE BEEN COMPLETED AND PRIOR TO CONCRETING TO CONFIRM THE DESIGN SOIL BEARING CAPACITY.

SCHEDULE OF COLUMNS

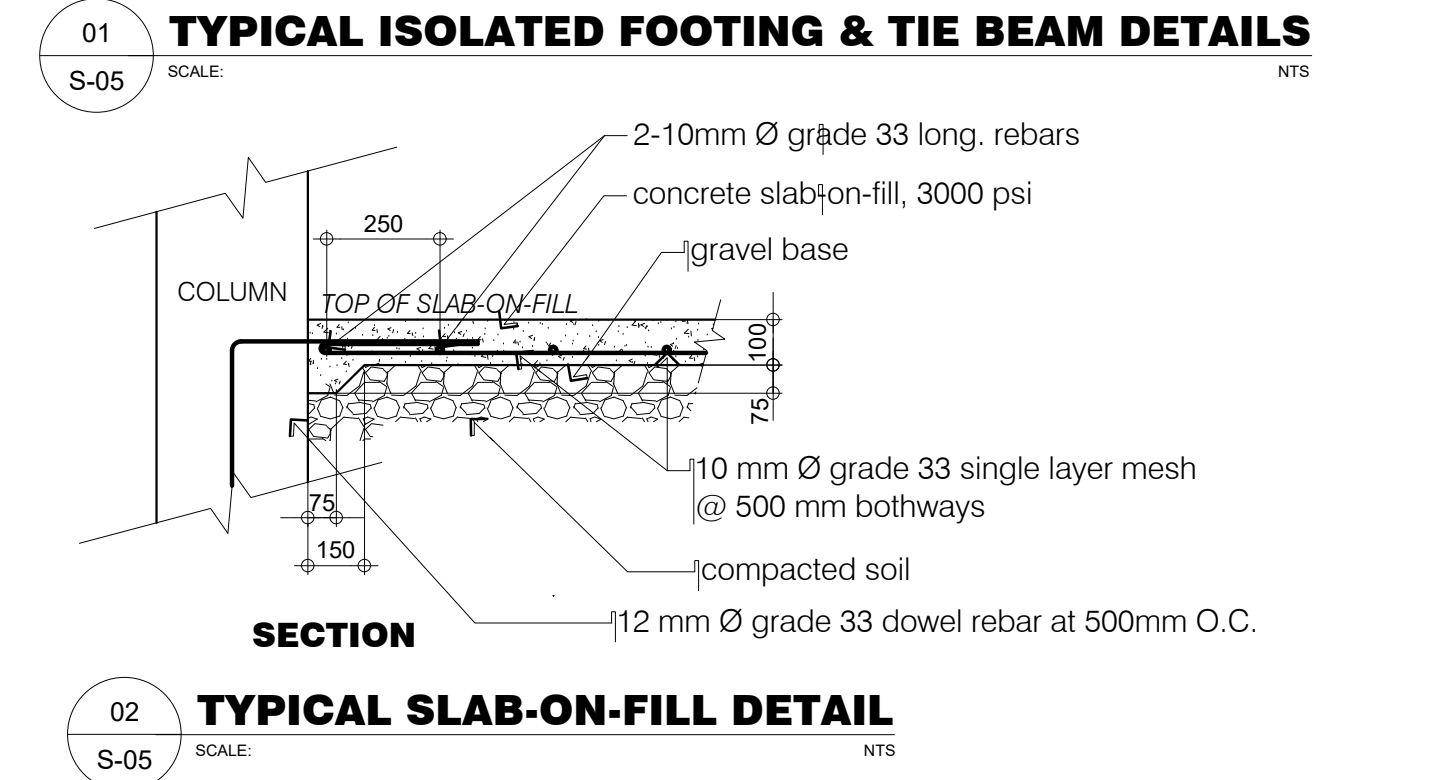
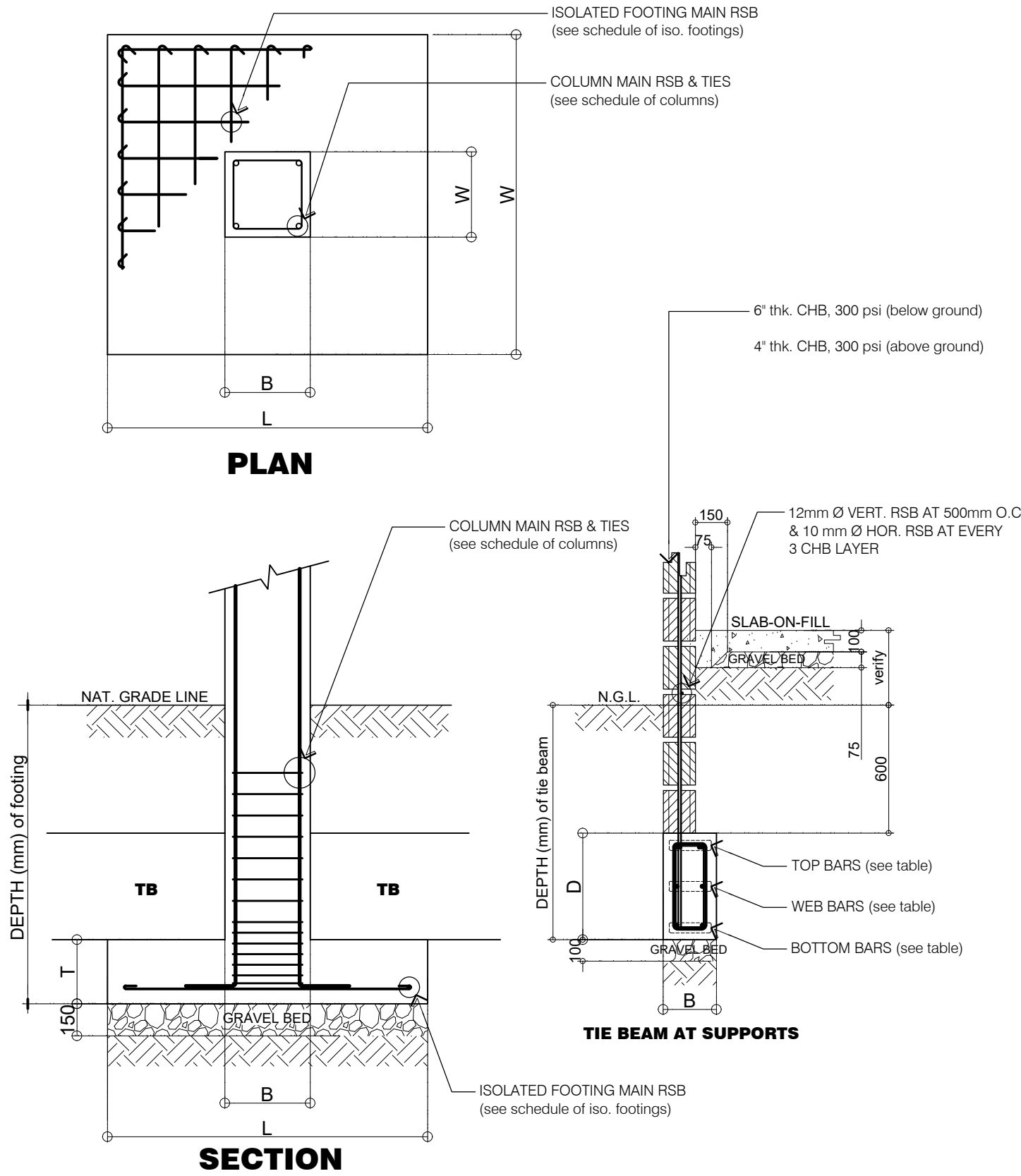
MARK	DIMENSIONS (mm)		REBARS & TIES ARRANGEMENT	REINFORCEMENTS		f'c (concrete)	REMARKS
	B, base	W, width		MAIN REBARS	STIRRUPS		
C-1	500	400		12 -20mm Ø	10mm Ø (G-33) DOUBLE TIES:	4000 psi or 27.60 MPa	primary columns
2C-1	500	400		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
C-2	500	400		8 -20mm Ø	10mm Ø (G-33) DOUBLE TIES:	4000 psi or 27.60 MPa	primary columns
2C-2	500	400		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
C-3	400	400		12 -20mm Ø	10mm Ø (G-33) TRIPLE TIES:	4000 psi or 27.60 MPa	primary columns
2C-3	400	400		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
C-4	400	400		8 -20mm Ø	10mm Ø (G-33) DOUBLE TIES:	4000 psi or 27.60 MPa	primary columns
2C-4	400	400		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
RDC-1	400	400		4 -20mm Ø	10mm Ø (G-33) SINGLE TIE:	4000 psi or 27.60 MPa	primary columns
C-5	200	200		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
2C-5	200	200		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
RDC-2	200	200		4 -20mm Ø	10mm Ø (G-33) SINGLE TIE:	4000 psi or 27.60 MPa	parapet wall column
PWC	250	250		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		
SC1	200	200		4 -16mm Ø	10mm Ø (G-33) SINGLE TIE:	4000 psi or 27.60 MPa	stiffener column
SC2	150	200		GRADE 60 or 414 MPa	5 @ 50mm, 10 @ 100mm, 5 @ 120mm, REST @ 150mm		


SCHEDULE OF COMBINED FOOTINGS

"MARK"	DIMENSION (mm)			DEPTH (mm)	LOCATION	REINFORCEMENTS		f'c (concrete)	fy (steel rebars)
	L	W	T			ALONG LONG	ALONG SHORT		
CF-1	6000	2700	350	1500	TOP	14 - 16mm Ø CB	30 - 16mm Ø CB	4000 psi or 27.60 MPa	GRADE 60 or 414 MPa
					BOTTOM	24 - 16mm Ø CB	30 - 16mm Ø CB		
CF-2	5700	2650	350	1500	TOP	14- 16mm Ø CB	28 - 16mm Ø CB		
					BOTTOM	22 - 16mm Ø CB	28 - 16mm Ø CB		
CF-3	5500	2400	350	1500	TOP	13 - 16mm Ø CB	27 - 16mm Ø CB		
					BOTTOM	21 - 16mm Ø CB	27 - 16mm Ø CB		

SCHEDULE OF ISOLATED FOOTINGS

"MARK"	DIMENSION (mm)			DEPTH (mm)	REINFORCEMENTS	f'c (concrete)	fy (steel rebars)
	L	W	T				
F-1	2500	2500	350	1500	13 - 16mm Ø BED BARS B.W.	4000 psi or 27.60 MPa	GRADE 60 or 414 MPa
F-2	2000	2000	300	1500	10 - 16mm Ø BED BARS B.W.		
F-3	1350	1350	300	1500	9 - 16mm Ø BED BARS B.W.		





PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎No: 301-1917

MICHAEL T. ANG, fuap

ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS ,PICE,ASEP

CIVIL/STRUCTURAL ENGINEER

PRC: 52853
PTR No.: 6601121
ISS. AT: G.S.C.

ASEP: 52853-111
DATE: 01/07/16
T I N No.:102-900-986

PROJECT TITLE / LOCATION

PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)

PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:

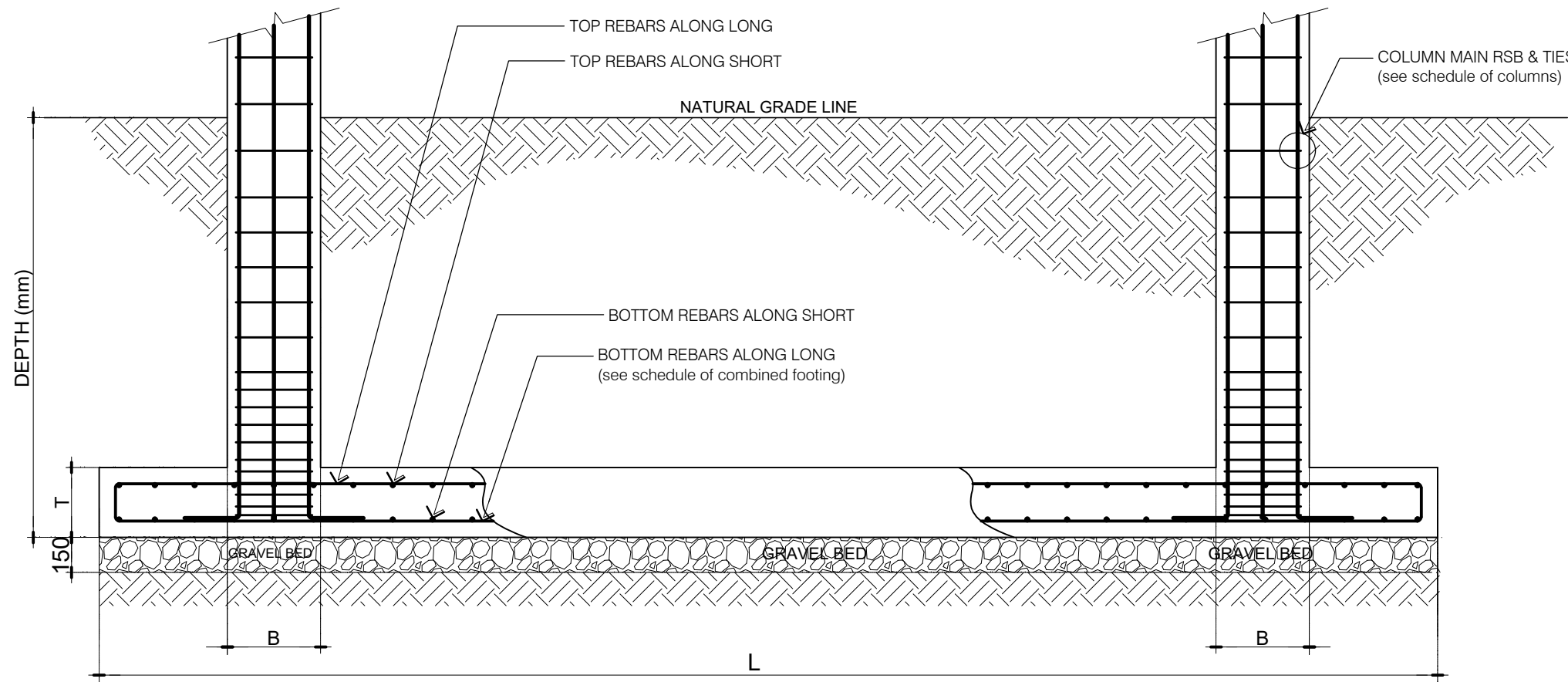
CHECKED BY :

ROSARIO P. LEONORA
RESIDENT ENGINEER

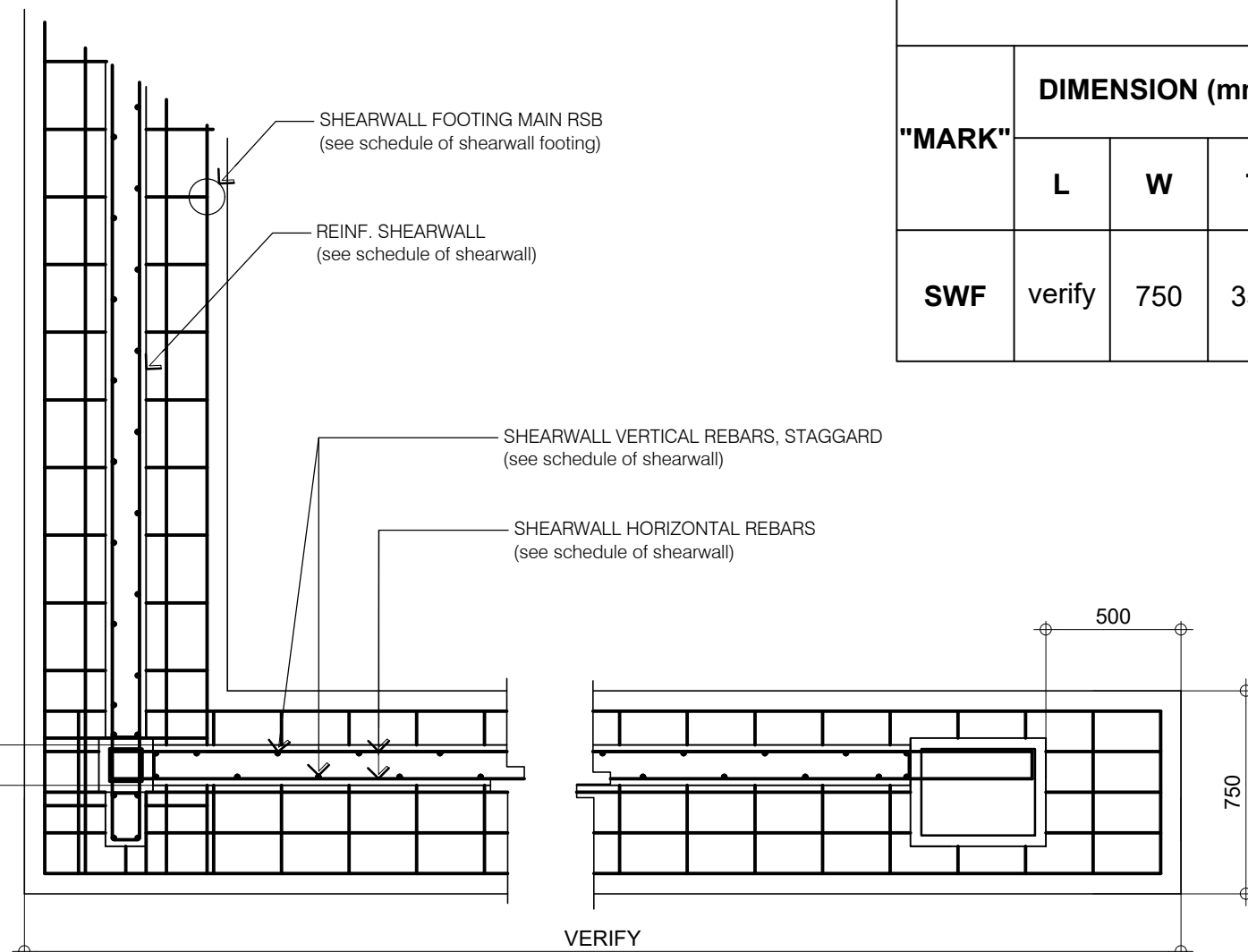
SHEET NO.

S-05

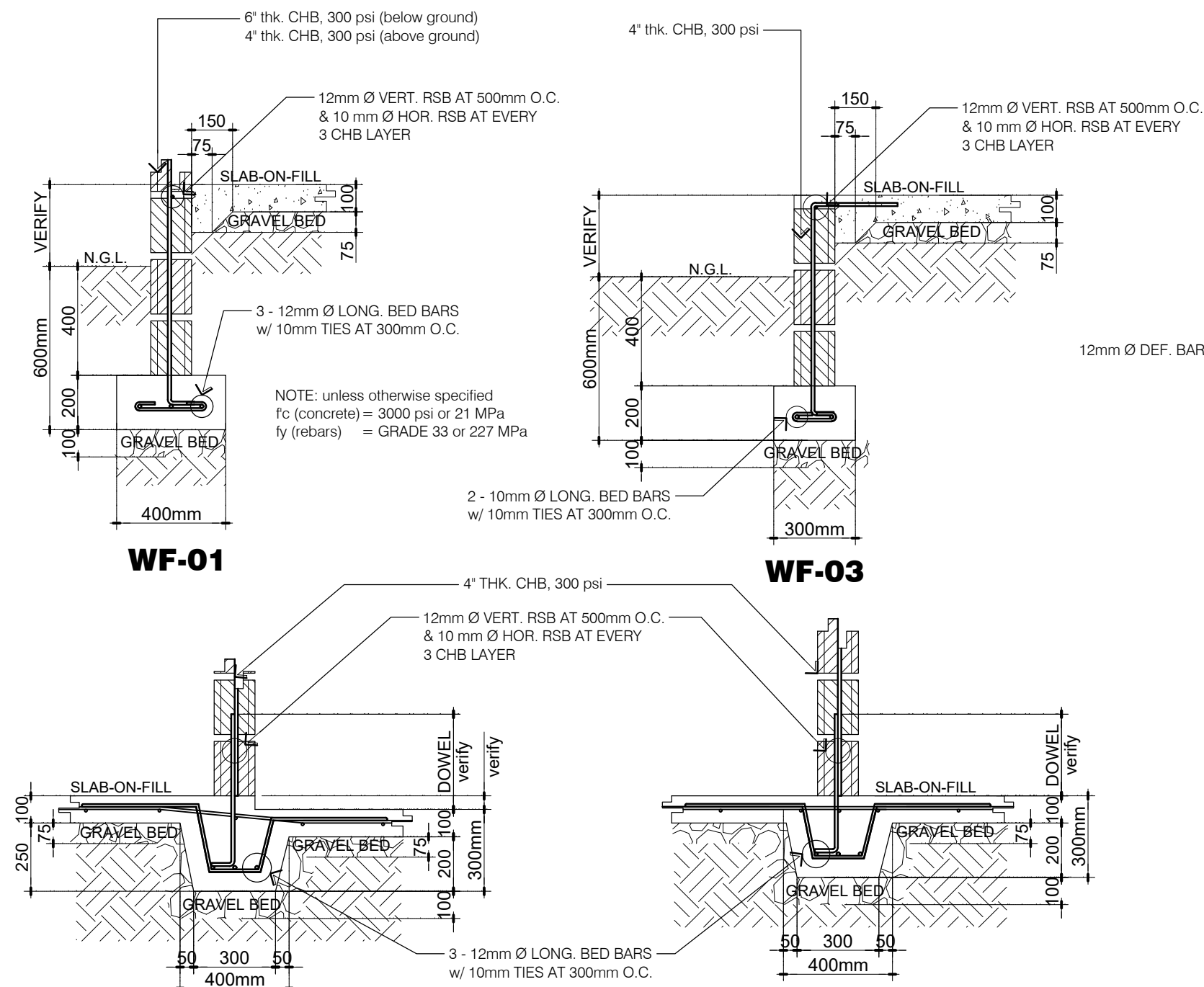
23 51



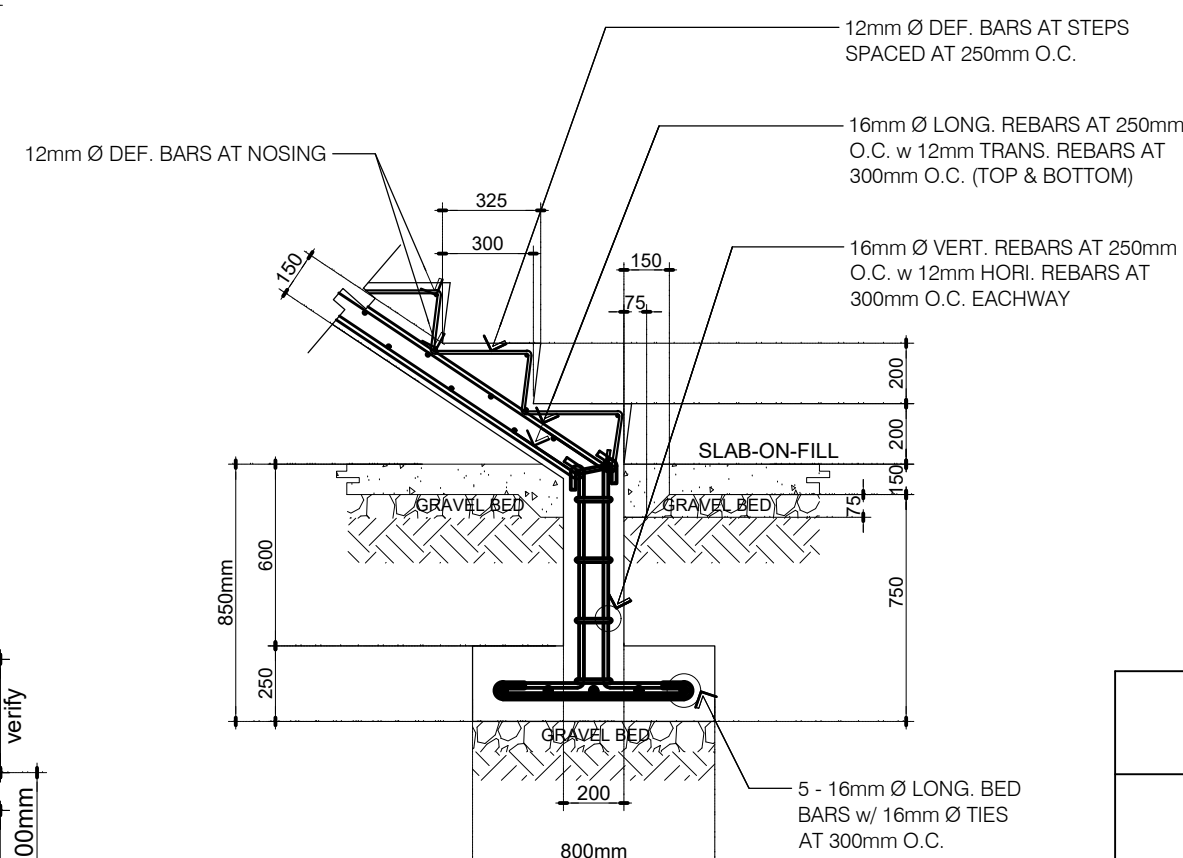
01
S-06 SCALE: NTS
TYPICAL COMBINED FOOTING DETAIL



02
S-06 SCALE: 1:25
TYPICAL SHEARWALL FOOTING DETAIL



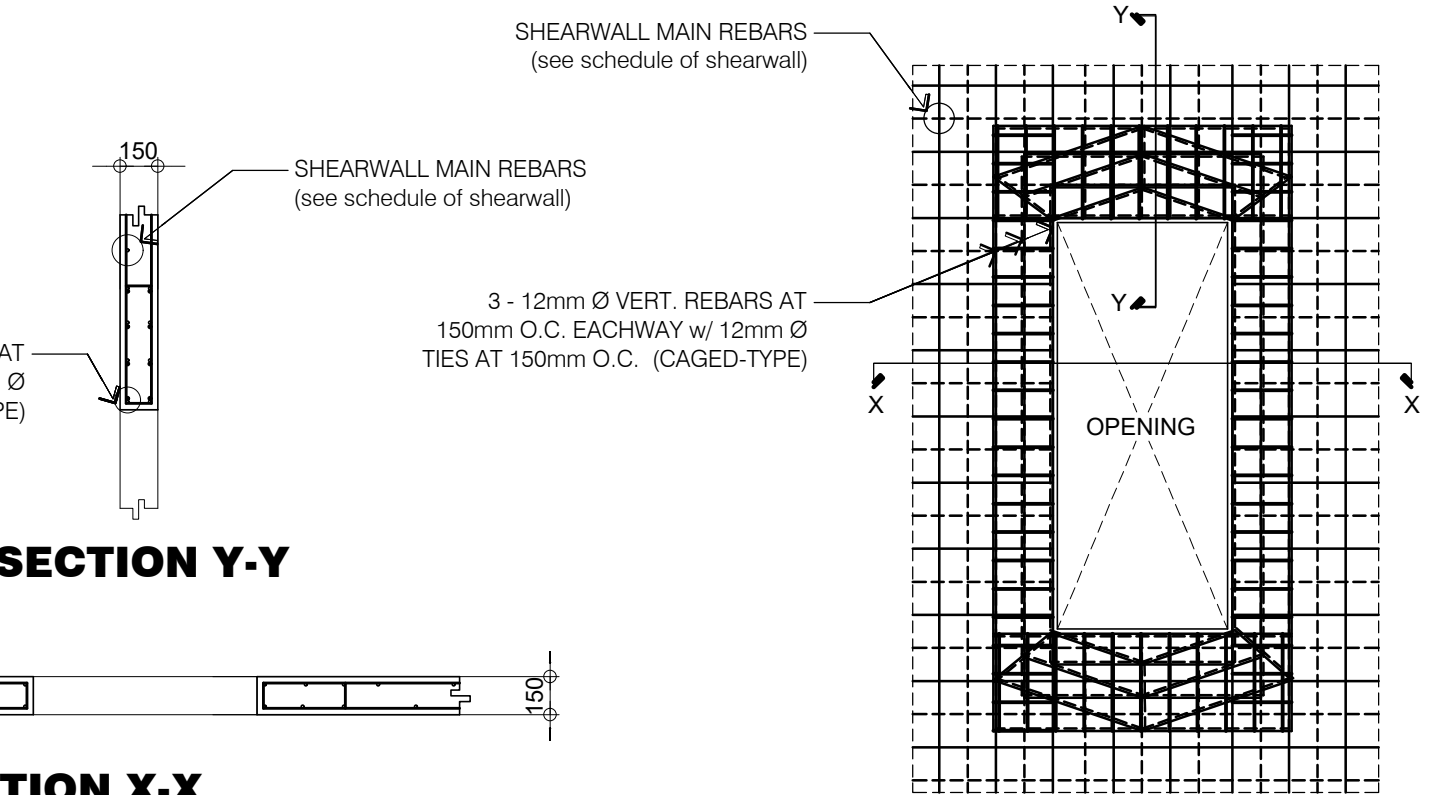
04
S-06 SCALE: 1:20
TYPICAL WALL FOOTING DETAILS



05
S-06 SCALE: 1:25
TYPICAL STAIR FOOTING DETAIL

SCHEDULE OF SHEARWALL FOOTING										
"MARK"	DIMENSION (mm)			DEPTH (mm)	LOCATION	REINFORCEMENTS		REMARKS	f'c (concrete)	fy (steel rebars)
	L	W	T			ALONG LONG	ALONG SHORT			
SWF	verify	750	350	1500	TOP	5 - 20mm Ø CB	16mm Ø AT 250mm O.C.	SEE SWF DETAIL	4000 psi or 27.60MPa	GRADE 60 or 414 MPa

SCHEDULE OF SHEARWALL					
"MARK"	T (mm)	REINFORCEMENTS	f'c (concrete)	fy (steel rebars)	REMARKS
SW	150	12mm Ø VERTICAL RSB @ 300mm O.C. EACHWAY w/ 12mm Ø HOR. RSB @ 350mm O.C. EACHWAY NOTE: SHEARWALL SHALL BE ANCHORED & MONOLITHIC TO COLUMNS & BEAMS.	4000 psi or 27.60 MPa	GRADE 60 or 414 MPa	SEE SHEARWALL DETAILS



03
S-06 SCALE: 1:25
TYPICAL SHEARWALL DETAILS w/ OPENING

SCHEDULE OF SUSPENDED SLABS							
"MARK"	T (mm)	LOCATION	REINFORCEMENTS		REMARKS	f'c (concrete)	fy (steel rebars)
			ALONG TRANSVERSE DIRECTION	ALONG LONGITUDINAL DIRECTION			
S-01	100	MAIN BARS	12mm Ø BENT-UP BARS AT 300mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	--	ONE-WAY SLAB	4000 psi or 27.60 MPa	GRADE 60 or 414 MPa
		TEMP. BARS	12mm Ø CONT. BARS AT 300mm O.C. (BOTTOM)	12mm Ø CONT. BARS AT 300mm O.C. (TOP & BOTTOM)			
S-02	100	MAIN BARS	12mm Ø BENT-UP BARS AT 450mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	12mm Ø BENT-UP BARS AT 450mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	TWO-WAY SLAB		
		TEMP. BARS	12mm Ø CONT. BARS AT 450mm O.C. (BOTTOM)	12mm Ø CONT. BARS AT 450mm O.C. (BOTTOM)			
S-03	100	MAIN BARS	12mm Ø BENT-UP BARS AT 450mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	10mm Ø BENT-UP BARS AT 450mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN	TWO-WAY SLAB		
		TEMP. BARS	12mm Ø CONT. BARS AT 450mm O.C. (BOTTOM)	10mm Ø CONT. BARS AT 450mm O.C. (BOTTOM)			
S-04	110	MAIN BARS	12mm Ø BENT-UP BARS AT 400mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	12mm Ø BENT-UP BARS AT 400mm O.C. w/ 12mm Ø CUT BARS IN BETWEEN	WATER TANK SLAB		
		TEMP. BARS	12mm Ø CONT. BARS AT 400mm O.C. (BOTTOM)	12mm Ø CONT. BARS AT 400mm O.C. (BOTTOM)			

SCHEDULE OF TIE BEAM											
"MARK"	DIMENSION (mm)		LOCATION	REINFORCEMENTS				DEPTH	f'c (concrete)	fy (steel rebars)	
	B	D		SUPPORT	MID-SPAN	WEB BARS	STIRRUPS			main rebars	stirrups
TB	250	500	TOP	2-20mm Ø CB	2-20mm Ø CB + 2-20mm Ø EB	2-20mm Ø CB	10mm Ø: 5 @ 50mm, 10 @ 125mm, REST @ 150mm O.C.	(1100 mm) SEE TIE BEAM DETAIL	4000 psi or 27.60MPa	GRADE 60 or 414 MPa	GRADE 33 or 227 MPa
			BOTTOM	2-20mm Ø CB + 2-20mm Ø EB	2-20mm Ø CB						



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PCE,ASEP
CIVIL/STRUCTURAL ENGINEER

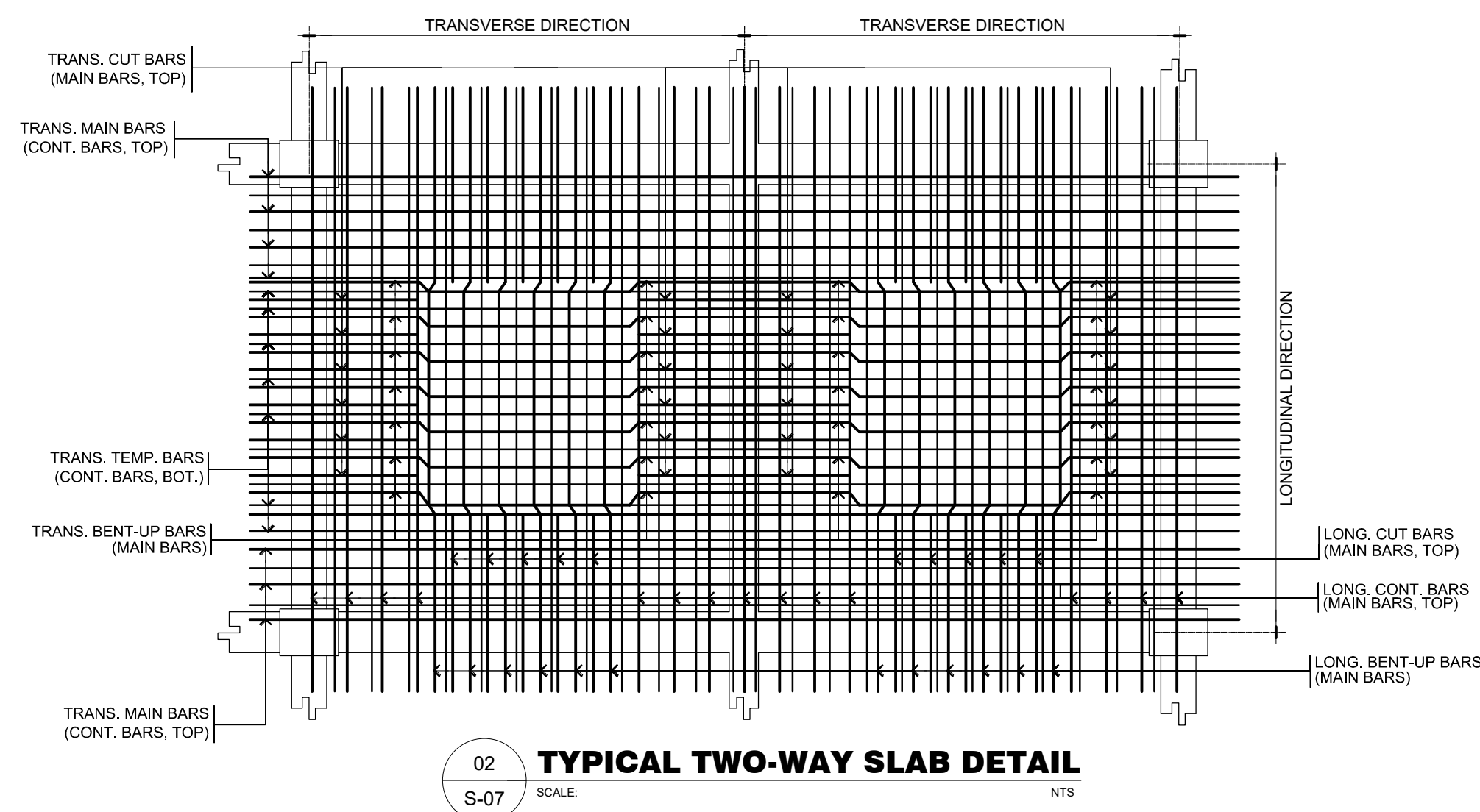
PRC: 52853
PTR No.: 6601121
ISS. AT: G.S.C.
ASEP: 52853-111
DATE: 01/07/16
TIN No.: 102-900-986

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

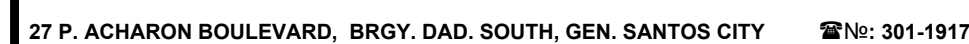
APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
S-06
24 51



The diagram illustrates the distribution of reinforcement bars in a continuous beam over two spans. The beam is divided into three sections: the left span (length L_1), the middle support region (length $2H$), and the right span (length L_2). Reinforcement bars are shown as vertical lines within the beam cross-section. The diagram indicates the maximum region of no splice for the reinforcement bars. Key dimensions and labels include: L_1 , L_2 , $0.33 L_1$, $0.33 L_2$, $0.20 L_1$, $0.20 L_2$, $2H$, 600 , NO SPLICE, EXTERIOR SPAN, INTERIOR COLUMN SUPPORT, INTERIOR TO EXTERIOR COLUMN & CANTILEVER SUPPORT, and MAXIMUM REGION OF NO SPLICE.



ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071
O.R. DATE	141342 16JUL
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamped or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

PRC: 52853	ASEP: 52853-111
PTR No.: 6601121	DATE : 01/07/16
ISS. AT: G.S.C.	T I N No.:102-900-986

PROJECT TITLE / LOCATION
**PROPOSED ADVANCE SCIENCE
 & TECHNOLOGY BLDG.
 (ACADEMIC BUILDING III)**
 PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,
 Koronadal City

APPROVED BY

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.
Paraiso, Koronadal City

PREPARED BY: _____

CHECKED BY: _____

ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.	
S-07	
25	51

CONSTRUCTION NOTES

A. GENERAL NOTES

- IN THE INTERPRETATION OF THESE DRAWINGS INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
- THE CONTRACTOR SHALL COORDINATE WITH THE AR, CE, ME, SE, EE AND OTHER UTILITIES AND EQUIPMENT PLANS FOR THE EXACT SIZE, NUMBER AND LOCATIONS OF ALL SLEEVES OR OPENING THRU FLOOR SLABS, BEAMS AND WALLS AND ALSO DIMENSIONS.
- ALL REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI-318-95 BUILDING CODE, AND ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS (LATEST EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENTS.
- ALL SLABS, BEAMS, GIRDERS AND OTHER STRUCTURAL ELEMENTS WHICH ARE NOT INDICATED, DETAILED, DESIGNATED OR INADVERTENTLY OMITTED BUT ARE NECESSARY TO BE COORDINATED WITH ARCHITECTURAL AND OTHER ALLIED ENGINEERING PLANS AS WELL AS TO COMPLETE THE STRUCTURAL WORKS IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT UP DURING PRE-BIDS/ MEETINGS/NEGOTIATIONS. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS PROVIDED AND INCLUDED ALL THESE ITEMS IN THEIR BID.

B. NOTES ON CONCRETE MIXES AND PLACING

- UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN THE SPECIFICATIONS THE MINIMUM 28-DAYS CYLINDER COMPRESSIVE STRENGTH OF CONCRETE f_c SHALL BE AS FOLLOWS :
 - FOUNDATIONS & TIE BEAMS 27.60 MPa (4000 psi)
 - COLUMNS & RC WALLS 27.60 MPa (4000 psi)
 - FOUNDATION TO ROOF BEAM 27.60 MPa (4000 psi)
 - FLOOR SLABS, BEAMS & GIRDERS 27.60 MPa (4000 psi)
 - CONCRETE GUTTER & STAIRS 24 MPa (3500 psi)
 - SLAB-ON-GRADE & WALL FOOTING 21 MPa (3000 psi)
- CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, RE-HANDLING OR FLOWING, PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEEL BARROWS. NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEEL BARROWS OR BUCKETS, IN WHICH CASE THEY SHALL NOT EXCEED SIX THOUSAND (6000 mm) IN AGGREGATE LENGTH.
- NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER AND ONLY FOR USUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.

C. NOTES ON REINFORCING STEEL BARS

- ALL REINFORCING STEEL BARS SHALL BE NEW BILLET, HOT ROLLED, WELDABLE DEFORMED BARS CONFORMING TO THE SPECIFICATIOND OF PNS 49: 1986 (ASTM 615) WHOSE GRADE IS SHOWN ON TABLE 1.

TABLE - 1		
GRADE	BAR DIAMETER	REMARKS
GRADE 414 ($f_y = 60$ ksi)		PLEASE REFER TO TABULATIONS & DETAILED DRAWINGS OF EACH STRUCTURAL MEMBERS.
GRADE 275 ($f_y = 40$ ksi)		
GRADE 227 ($f_y = 33$ ksi)		

- THE SUPPLEMENTARY REQUIREMENTS OF WELDABLE DEFORMED REINFORCING BARS SHALL BE AS FOLLOWS :
 - THE MAXIMUM YIELD STRENGTH OF WELDABLE BARS = 540 MPa (FOR GRADE 40).
 - THE TENSILE STRENGTH SHALL NOT BE LESS THAN 1.25 TIMES THE ACTUAL YIELD STRENGTH.
- NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER AND ONLY FOR USUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.
- ALL REINFORCING BARS SHALL BE CLEANED THOROUGHLY OF ALL LOOSE RUST, SOIL OR OTHER MATERIAL IMMEDIATELY PRIOR TO PLACING CONCRETE.
- THE REQUIRED LENGTH OF LAP FOR TENSION SPLICES IS BASED ON THE DEVELOPMENT LENGTH, L_d , SHOWN IN THE TABLE 2 AND TABLE 3 FOR RC BEAMS AND GIRDERS, RESPECTIVELY AND ON THE FOLLOWING CLASSIFICATIONS :

TENSION SPLICES CLASSIFICATION	SPLICE LENGTH
CLASS A	1.0 L_d
CLASS B	1.3 L_d

TABLE - 2 DEVELOPMENT LENGTH, L_d , IN TENSION					
BAR SIZE (mm)	$f_c = 27.60$ MPa (4000 psi)		$f_c = 24$ MPa (3500 psi)		$f_c = 21$ MPa (3000 psi)
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS
16 Ø	390	300	390	300	360
20 Ø	650	500	580	450	540
25 Ø	1010	780	910	700	800

- TOP BARS ARE HORIZONTAL BARS WITH AT LEAST 300 mm OF CONCRETE CAST BELOW IT.

TABLE - 3 DEVELOPMENT LENGTH, L_d , IN TENSION FOR R.C. GIRDERS (PRISMATIC & NON-PRISMATIC)					
BAR SIZE (mm)	$f_c = 27.60$ MPa		$f_c = 24$ MPa		$f_c = 21$ MPa
	TOP BARS (mm)	OTHER BARS (mm)	TOP BARS (mm)	OTHER BARS (mm)	TOP BARS (mm)
16 Ø	390	390	390	390	360
20 Ø	580	580	580	580	540
25 Ø	910	910	910	910	800

NOTE : FOR BUNDLE BARS (3 BUNDLE) MULTIPLY ABOVE TABLE BY 1.3

- THE REQUIRED LENGTH OF LAP FOR COMPRESSION SPLICES SHALL BE AS SHOWN IN TABLE 4.

TABLE - 4 LENGTH OF LAP COMPRESSION SPLICES (mm)			
BAR SIZE (mm)	$f_c = 27.60$ MPa (4000 psi)	$f_c = 24$ MPa (3500 psi)	$f_c = 21$ MPa (3000 psi)
16 Ø	320	320	320
20 Ø	600	600	600
25 Ø	750	750	750

- CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS :

- CONCRETE CAST AGAINST EARTH - 75 mm
- CONCRETE EXPOSED TO EARTH 20 mm TO 36 mm BARS 16 mm BARS AND SMALLER - 50 mm - 40 mm
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER SLABS, WALLS, AND JOINTS BEAMS AND COLUMNS - 20 mm - 40 mm

D. NOTES ON FOUNDATION

- FOOTING ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 110.0 KPa. AT A MINIMUM DEPTH OF 2.0 METERS FROM THE NATURAL GRADE LINE. CONTRACTOR SHALL REPORT IN WRITING TO THE STRUCTURAL ENGINEER ON THE ACTUAL SOIL CONDITIONS UNCOVERED AND CONFIRM ACTUAL BEARING CAPACITY OF SOIL BEFORE DEPOSITING CONCRETE.
- NO FOOTING SHALL REST ON FILL. FOOTINGS FOR CHB WALLS AND OTHER MINOR STRUCTURES SHALL BE EMBEDDED AT LEAST 600 mm FROM THE NATURAL GRADE LEVEL.
- PROVIDE TEMPORARY REMOVAL OF WATER FROM ANY SOURCE DURING CONSTRUCTION DE-WATERING SHALL BE CAREFULLY AND PROPERLY REFORMED TO AVOID DISTURBING THE FOUNDATIONS AND SLAB BEARING SURFACES.
- CONTRACTOR SHALL DESIGN, INSTALL AND MONITOR EXCAVATIONS RETENTION SYSTEMS, AS REQUIRED FOR PROTECTION OF ADJACENT PROPERTIES AND PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO MINIMIZE SETTLEMENT AND PREVENT DAMAGE TO ADJACENT EXISTING OR NEW CONSTRUCTION.
- PREPARE CONDITIONS OF CONCRETE SUPPLY AND PLACEMENT OF THE COMPLETE FOUNDATION FOR THE FULL THICKNESS AS A CONTINUOUS MONOLITHIC CASTING.
- DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL GROUND FLOOR SLABS HAVE BEEN PLACED AND THE CONCRETE HAS ATTAINED THE REQUIRED STRENGTH.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELEVATOR DETAILS. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND OTHER TRADES FOR SUBSOIL DRAINAGE SYSTEM, MACHINERY, ANCHORS AND OTHER EMBEDDED ITEMS, DEPRESSIONS, FINISHES, DOWELS FOR MASONRY WALLS, CURBS, ETC.
- SEE TYPICAL DETAIL OF LIMITING SLOPE OF ADJACENT FOOTING AT DIFFERENT ELEVATION. (REFER TO FIGURE 2)

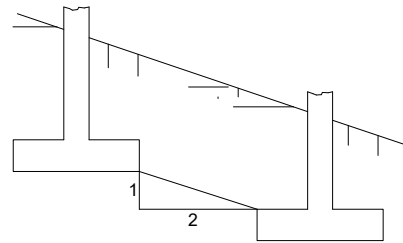


FIGURE 2. DETAIL OF LIMITING SLOPE OF ADJACENT FOOTINGS

E. NOTES ON SLAB - ON - GRADE

- THE SOIL SUBGRADE AND FILL LAYERS BELOW ALL SLABS ON GRADE, PAVING AND PIT SLABS SHALL BE MECHANICALLY COMPACTED IN LAYERS TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR DENSITY, PER ASTM D1557.
- ALL SLABS-ON-GRADE SHALL BE PROVIDED WITH A MINIMUM OF 150 mm THK. COMPACTED CLEAN COARSE SAND BED.
- UNLESS OTHERWISE NOTED, ALL BEDDED SLABS SHALL BE REINFORCED WITH 10 mm BARS AT 400 mm O.C. BOTHWAYS.
- PLACE CONCRETE FOR ALL SLABS-ON-GRADE IN CHECKERBOARD FASHION BETWEEN CONSTRUCTION JOINTS IN AREAS NOT TO EXCEED 300 SQ. METERS WITH A MINIMUM OF 24 HOURS BETWEEN ADJACENT AREAS OF PLACEMENT. CONSTRUCTION JOINTS SHALL NOT BE FARTHER APART THAN 8.00 METERS IN ANY DIRECTION. ALL SLABS-ON-GRADE SHALL BE SAW CUT ON EACH GRID LINE AND MID BAY LINE (IN BOTH DIRECTION) WITHIN 24 HOURS AFTER CASTING.

F. NOTES OF CONCRETE WALLS

- ALL WALLS SHALL BE REINFORCED ACCORDING TO THE FOLLOWING SCHEDULE OF WALL REINFORCEMENT UNLESS OTHERWISE INDICATED IN THE PLANS. (REFER TO TABLE-5)

TABLE - 5 SCHEDULE OF WALL REINFORCEMENT				
WALL THICKNESS (mm)	REINFORCEMENT		REMARKS	VERTICAL SECTION
	HORIZONTAL	VERTICAL		
100	10 mm at 250 O.C.	10 mm at 300 O.C.	HORIZONTAL BAR AT CENTER	
125	10 mm at 250 O.C.	10 mm at 250 O.C.	DITTO	
150	12 mm at 288 O.C.	12 mm at 250 O.C.	DITTO	
175	20 mm at 250 O.C.E.F.	12 mm at 200 O.C.E.F.	DITTO	
200	10 mm at 288 O.C.E.F.	10 mm at 250 O.C.E.F.	BOTH FACES HORIZONTAL SHALL BE OUTSIDE	

- REINFORCING BARS SHALL 25 mm MINIMUM CLEAR DISTANCE FROM WALL EXCEPT FOR WALLS DEPOSITED AGAINST THE GROUND WHERE A MINIMUM OF 63 mm SHALL BE PROVIDED AND FOR EXPOSED FACES OF FORMED WALLS WHERE THE MINIMUM SHALL BE 50 mm. CLEAR FOR BARS LARGER THAN 16 mm. AND 38 mm FOR 16 mm BARS OR SMALLER.

- CARRY VERTICAL BARS AT LEAST 600 mm ABOVE FLOOR LEVEL TO PROVIDE FOR SPLICES WHEN NECESSARY. STOP AT 50 mm BELOW BETWEEN TOP OF THE SLAB OR SOLID BAND WHERE THE WALLS END. HORIZONTAL AND VERTICAL BARS SHALL BE SPLICE BY LAPPING A DISTANCE EQUAL TO 40 DIAMETER AND WIRED SURELY WITH NO. 16 G.I. WIRE PROVIDED THAT SPLICES IN ADJACENT BARS ARE STAGGERED AT LEAST 1520 mm ON CENTER. (SEE FIGURE 3)

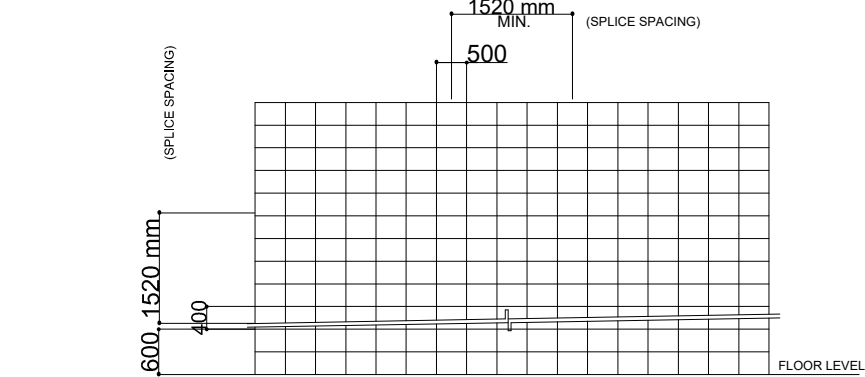
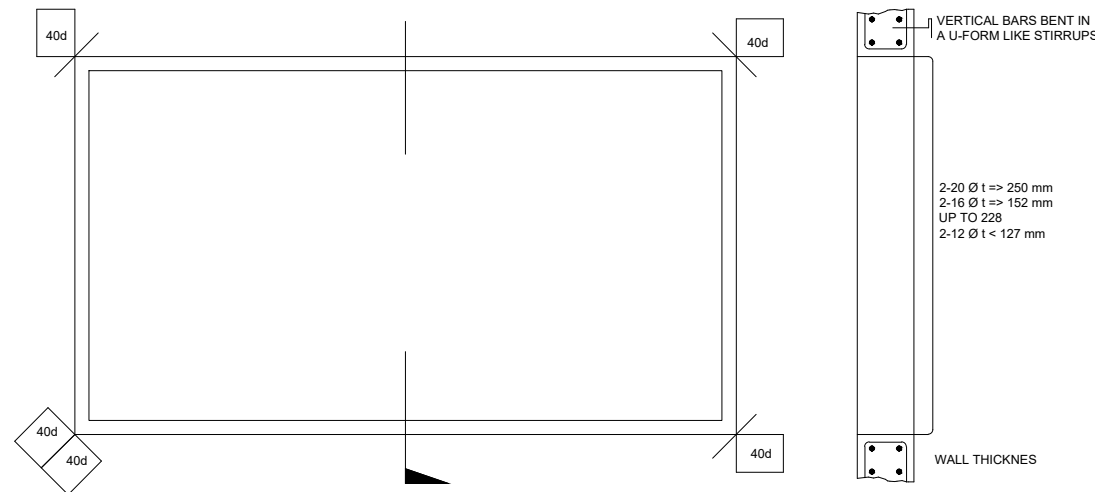


FIGURE 3

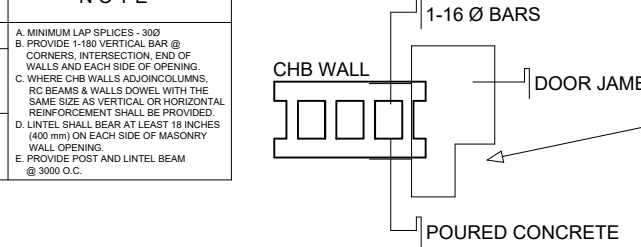


SECTION

G. NOTES ON MASONRY WALLS

- ALL MATTERS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE NATIONAL CONCRETE MASONRY ASSOCIATION AND UNIFORM BUILDING CODE.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 GRADE N.
- MORTAR AND GROUT FOR ALL REINFORCED MASONRY SHALL CONFORM TO ASTM 270-TYPE M AND SHALL HAVE A MINIMUM 28 DAYS STANDARD CYLINDER COMPRESSIVE OF 21 MPa (3000 PSI).
- ALL MASONRY WALLS SHALL BE REINFORCED ACCORDING TO THE FOLLOWING SCHEDULE OF CONCRETE HOLLOW BLOCK REINFORCEMENT UNLESS OTHERWISE INDICATED IN THE PLANS.
- ALL CELLS CONTAINING REINFORCING BARS OR INSERTS SHALL BE SOLIDLY FILLED WITH CONCRETE GROUT.
- FOR TYPICAL CONNECTION DETAILS ON MASONRY UNITS. REFER TO FIGURES 5, 6 & 7 RESPECTIVELY.

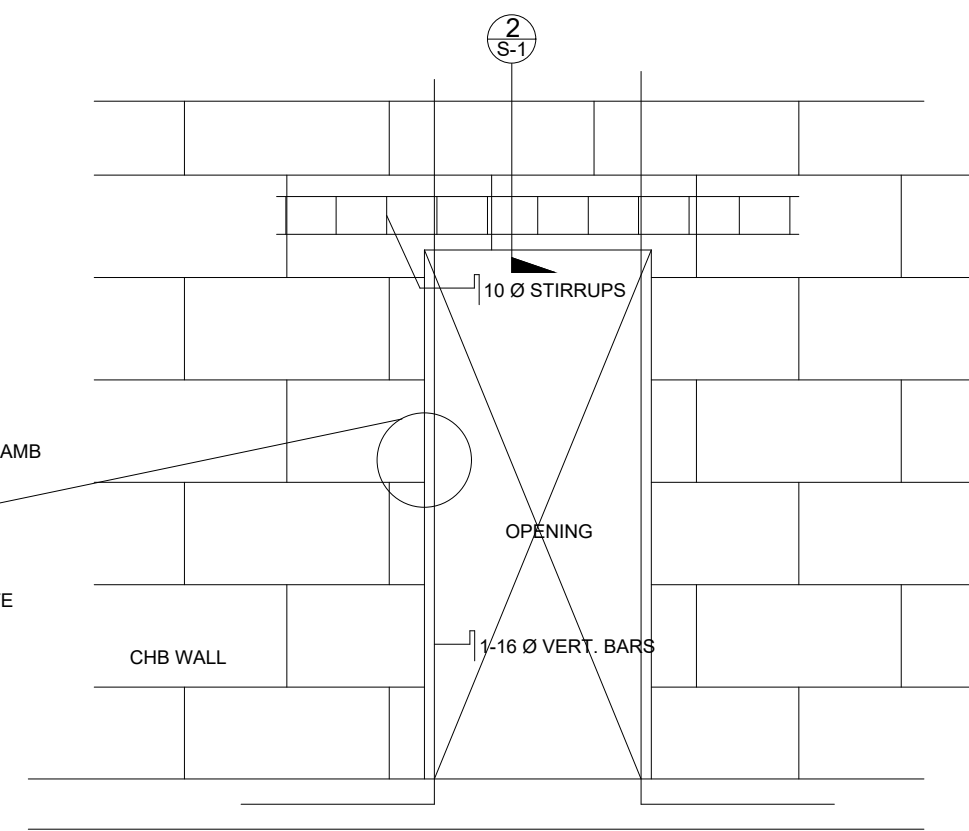
TABLE - 6		
SCHEDULE OF CONCRETE HOLLOW BLOCK REINFORCEMENT		
BLOCK THICKNESS (mm)	REINFORCEMENT	
	HORIZONTAL	VERTICAL
100	10 Ø at 400 O.C.	12 mm at 600 O.C.
150	10 Ø at 400 O.C.	12 mm at 600 O.C.



SECTION

TYPICAL DETAIL OF 100 & 150 CHB CONCRETE POSTS @ 3,000 mm O.C.

SECTION



ELEVATION



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap

ARCHITECT

PRC: 8270
VALIDITY 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE 141342 | 16JULY15
PTR 6600933
DATE ISS. 05 JAN 2016
PLACE ISS. GSC
TIN 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PICE,ASEP

CIVIL/STRUCTURAL ENGINEER

PRC: 52853 ASEP: 52853-111
PTR No.: 6601121 DATE: 01/07/16
ISS. AT: G.S.C. T I N No.:102-900-986

PROJECT TITLE / LOCATION

PROPOSED ADVANCE SCIENCE
& TECHNOLOGY BLDG.
(ACADEMIC BUILDING III)

PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,
Koronadal City

APPROVED BY

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.
Paraiso, Koronadal City

PREPARED BY:

CHECKED BY :

ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.

S-09

27 51

CONSTRUCTION NOTES

BEAM REINFORCING BARS BOTH TOP AND TERMINATING IN A WALL SHALL EXTEND AT THE MOST 50 mm FROM THE FACE OF THE WALL AND SHALL TERMINATE IN A STANDARD 90°.

5. WHEN A BEAM CROSSES A GIRDERS REST BEAM BARS ON TOP OF THE GIRDER BARS- PROVIDE ADDITIONAL TIES AS SHOWN IN FIGURE 14 WHEN BEAMS OF DIFFERENT TOP ELEVATIONS CROSS A GIRDER.

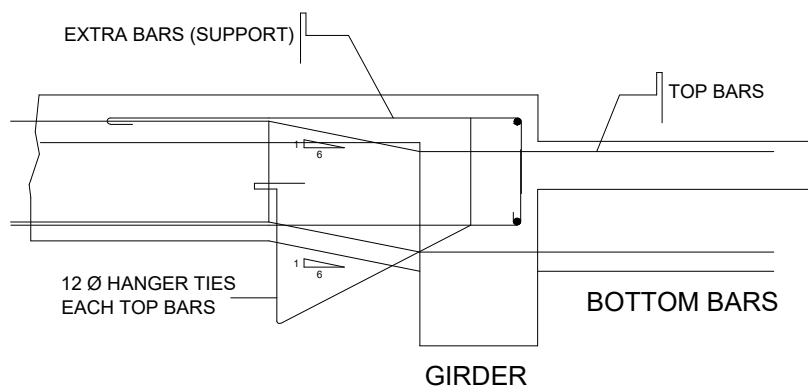


FIGURE 14. EXTRA TIES FOR UNLEVELLED BEAMS (TYPICAL FOR 150' & SMALLER DROP ONLY)

6. LONGITUDINAL REINFORCEMENT OF GIRDERS, BOTH TOP AND BOTTOM, TERMINATED IN A COLUMN SHALL BE EXTENDED TO THE FAR FACE OF THE CONFINED CONCRETE CORE OF THE COLUMN AND TERMINATED BY A STANDARD 90° HOOK.
7. GENERALLY, NO LAP SPLICE SHALL BE PERMITTED ON BEAMS AND GIRDERS AT POINTS WHERE CRITICAL BENDING STRESSES OCCUR. IN ADDITION, FOR GIRDERS, NO LAP SPLICE SHALL BE LOCATED WITHIN THE JOINTS OR WITHIN A DISTANCE EQUAL TO TWICE THE MEMBER DEPTH FROM THE FACE OF THE JOINT.
8. PROVIDE LAP SPLICES IN GIRDERS WITH HOOP REINFORCEMENT OVER THE LENGTH OF THE LAPPED BARS SPACED NO FARTHER THAN ONE - FOURTH THE NOMINAL DEPTH, OR 100 mm.
9. WELDED SPLICES AND MECHANICAL CONNECTIONS MAY BE USED FOR SPLICING BEAMS AND GIRDERS PROVIDED THAT NO MORE THAN ALTERNATE BARS IN EACH LAYER OF LONGITUDINAL REINFORCEMENT AND SPLICES AT A SECTION AND THE CENTER TO CENTER DISTANCE BETWEEN SPLICES OF ADJACENT BARS IS AT LEAST 600 mm MEASURED ALONG THE AXIS OF THE MEMBER.
10. UNLESS OTHERWISE DETAILED, TYPICAL BAR CUTTING DETAILS ARE AS SHOWN IN FIGURES 15 & 16 AND 10 OF THE NOTES ON REINFORCING STEEL BARS ON SHEET - 1.
11. SEE MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR ALL SUSPENDED AND EMBEDDED PIPING, CONDUITS, DUCTWORKS, EQUIPMENTS, ETC.
12. PIPE AND DUCT SLEEVES SHALL BE LOCATED WITHIN THE REGION BOUNDED BY ONE-FOURTH OF CLEAR SPAN LENGTH FROM THE SUPPORTS. (SEE FIGURE 18)
13. SHEAR REINFORCEMENT SHALL BE IN THE FORM OF HOOPS IN REGIONS WHERE CONFINEMENT IS REQUIRED, SINGLE AND TWO-PIECE HOOPS SHALL BE AS DETAILED IN FIGURE 19.

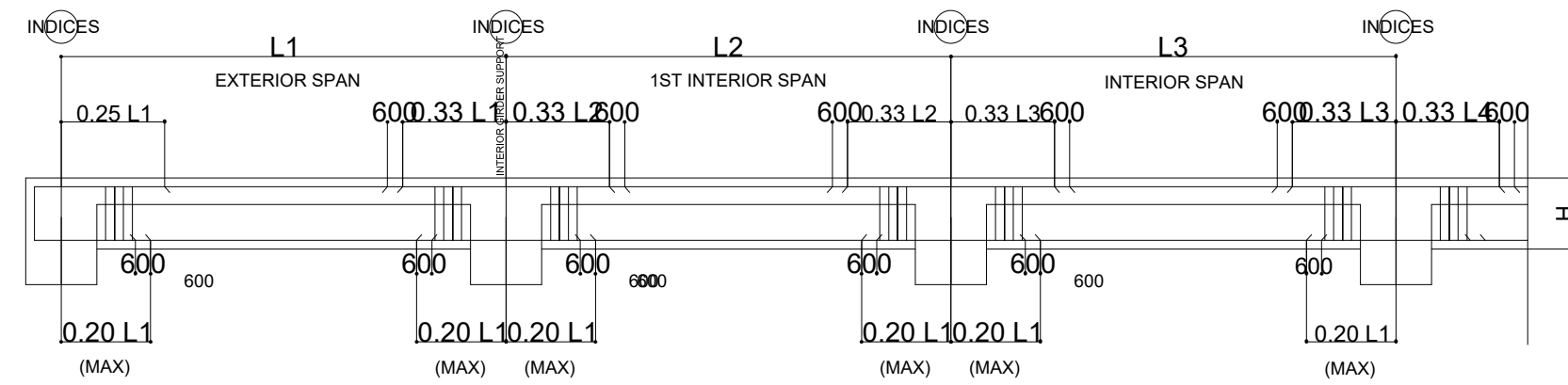


FIGURE 15. TYPICAL BAR DETAILS FOR BEAMS

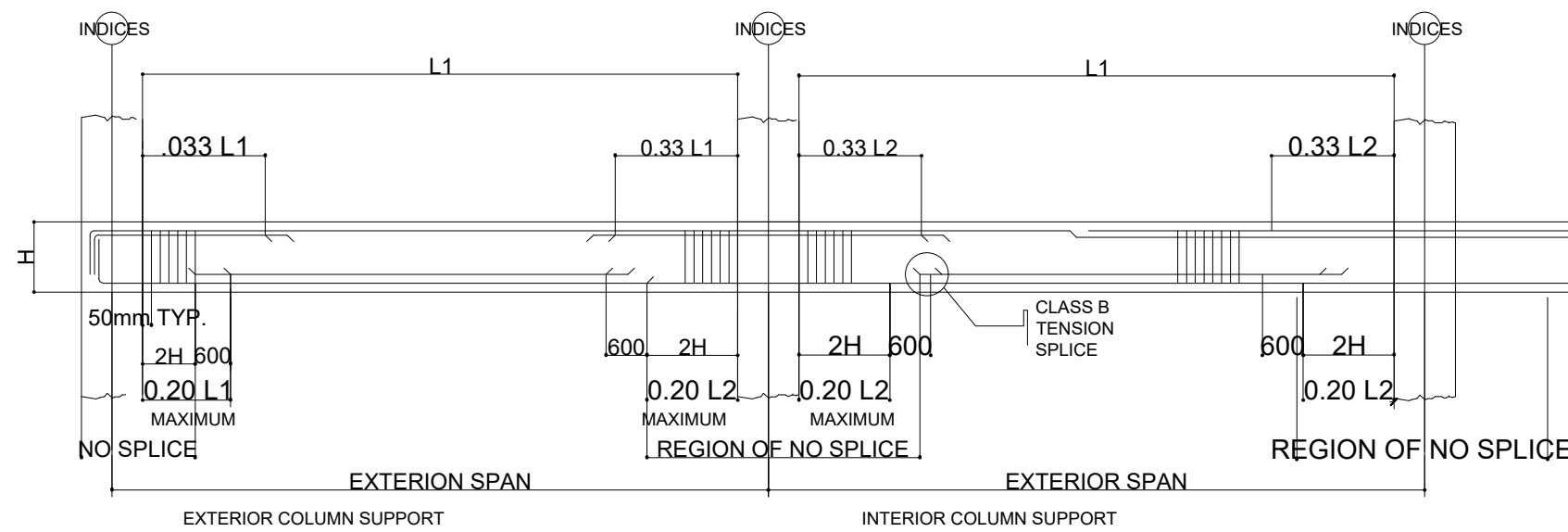


FIGURE 16. TYPICAL BAR DETAILS FOR PRISMATIC GIRDERS

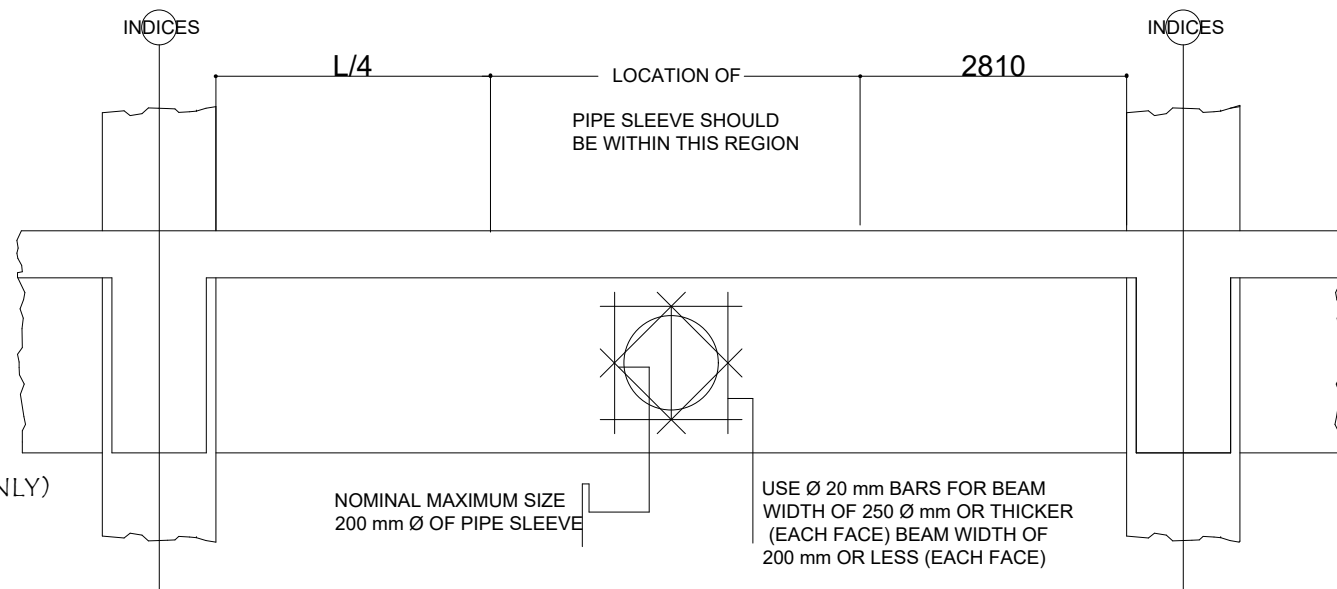


FIGURE 17. TYPICAL PIPE SLEEVE DETAIL

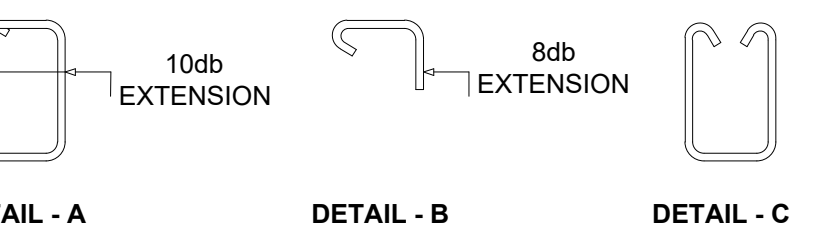
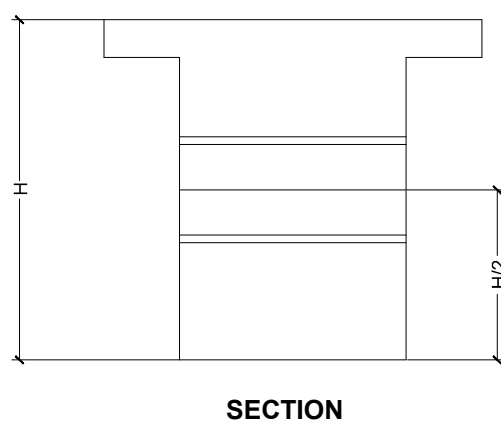
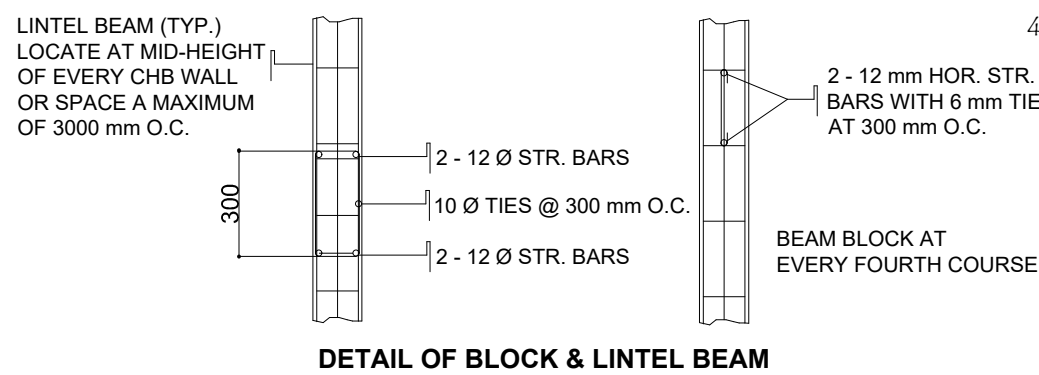


FIGURE 18. SINGLE AND TWO-PIECE HOOPS



H. NOTES ON CONCRETE SLABS

1. ALL SLABS REINFORCEMENTS SHALL HAVE A MINIMUM CLEAR DISTANCE OF 20 mm FROM THE BOTTOM AND FROM THE TOP OF SLABS.
2. UNLESS OTHERWISE DETAILED, FOR CONTINUOUS SLABS WITH THE MAIN REINFORCEMENT RUNNING IN ONE DIRECTION, REINFORCING BARS SHALL BE BENT UP, EXTENDED OR CUT AS FOLLOWS :

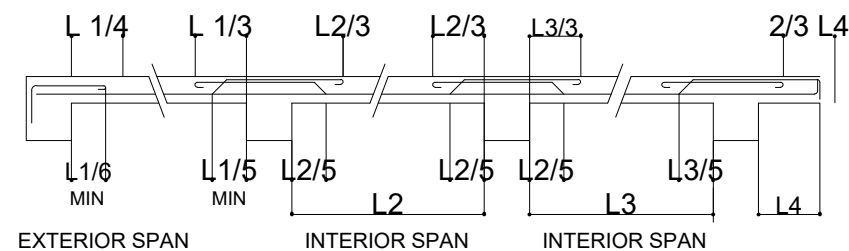


FIGURE 8.

3. IF SLABS ARE REINFORCED BOTH HAY, BARS ALONG THE SHORTER SPAN BE PLACED BELOW THOSE ALONG THE LONG SPAN AT THE CENTER OF THE SLAB AND BE PLACED OVER THE LONGER SPAN BARS ON AREAS NEAR THE SUPPORTS. THE SPACING OF THE BARS AT THE COLUMN STRIPS SHALL BE APPROXIMATELY ONE AND ONE-HALF (1½) TIMES THAT IN THE MIDDLE STRIPS BUT IN NO CASE GREATER THAN TWO AND ONE-HALF (2½) TIMES THE SLAB THICKNESS OR 450mm.
4. TEMPERATURE BARS FOR SLABS SHALL BE GENERALLY PLACED NEAR THE FACE IN TENSION AND SHALL NOT BE LESS THAN 0.0025 B. (SEE TABLE 7)
5. UNLESS OTHERWISE NOTED, DROP SLABS SHALL BE PROVIDED WITH ADDITIONAL REINFORCEMENT AT THE LOCATION OF DROPS AS SHOWN IN FIGURE 9.
6. PROVIDE EXTRA REINFORCEMENT FOR CORNER SLAB (TWO ADJACENT DISCONTINUOUS EDGES) AS SHOWN BELOW AND AT ENDS CORNERS OF SHEAR WALL (SEE FIGURE 10).

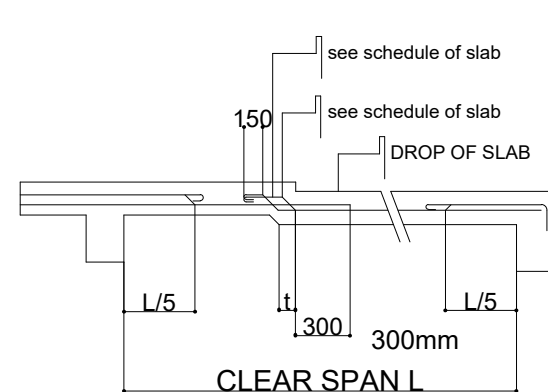


FIGURE 9. DROP SLAB

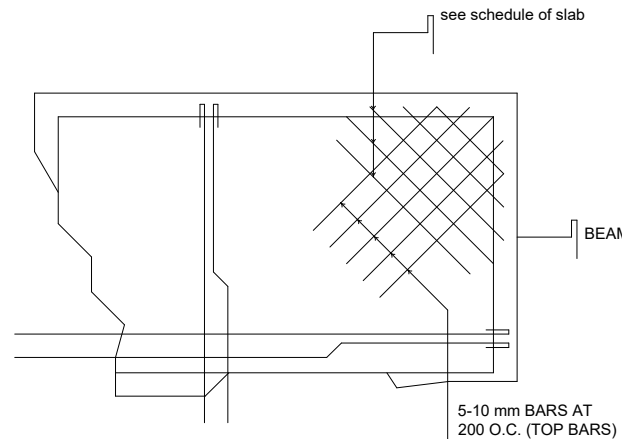
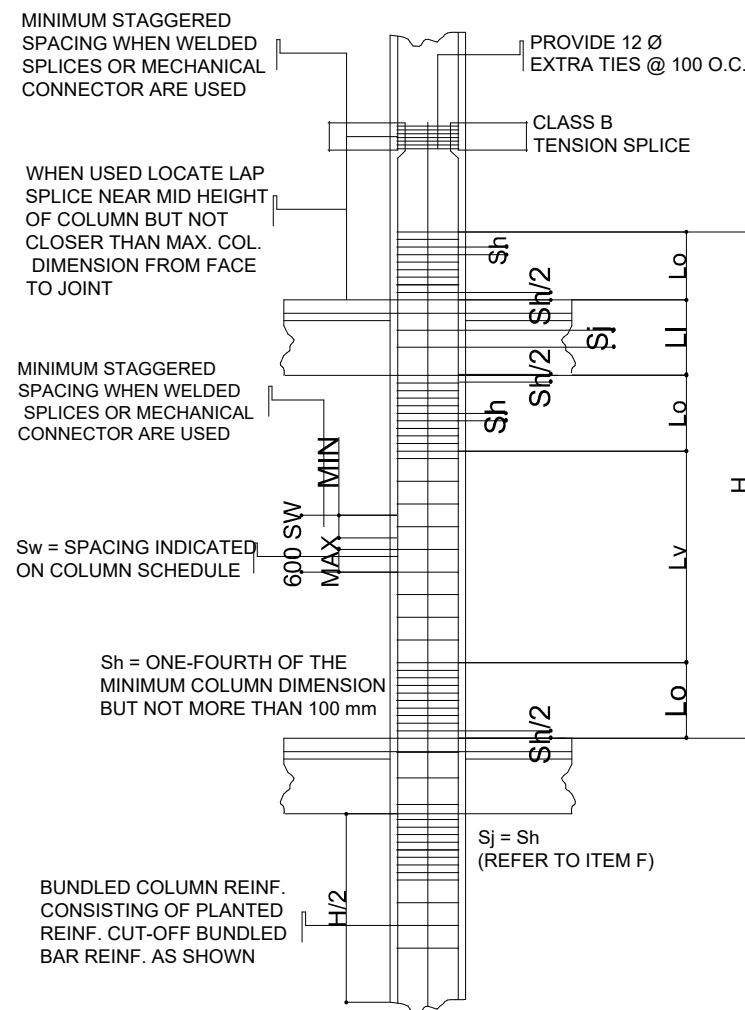


FIGURE 10. CORNER SLAB

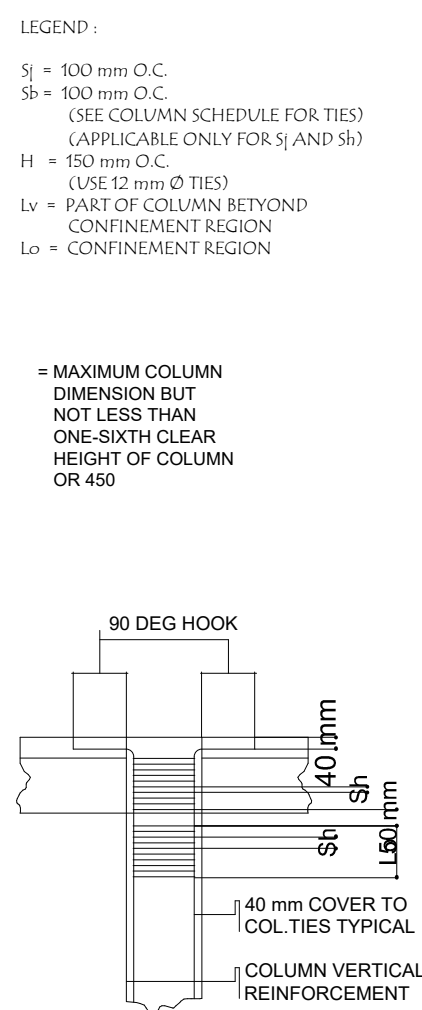
7. SEE MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR ALL SUSPENDED AND EMBEDDED PIPING CONDUITS DUCTWORK EQUIPMENT ETC.
8. UNLESS OTHERWISE NOTED, EMBEDDED CONDUITS SHALL BE RUN GENERALLY AT MID-BAY AND PARALLEL CONDUITS SHALL BE AT THREE DIAMETERS ON CENTER. CONDUIT SIZE NOT EXCEED 1/4 OF THE SLAB THICKNESS AND SHALL BE LOCATED AT MID THICKNESS OF THE SLAB.

I. NOTES ON COLUMNS

1. WHERE COLUMNS CHANGE IN SIZE, VERTICAL REINFORCEMENTS SHALL BE OFFSET AT A SLOPE NOT MORE THAN 1 in 6. PROVIDE TRANSVERSE REINFORCEMENT AS PER ITEM 6 BELOW FOR JOINTS WITH BAR OFFSET (AS SHOWN IN FIGURE 11.)
2. LAP SPLICES, WHEN REQUIRED, ARE PERMITTED ONLY WITHIN THE CENTER OF THE COLUMN LENGTH AND SHALL BE PROPORTIONED AS TENSION SPLICES. IN NO CASE SHALL THE LAP SPLICE BE LOCATED CLOSER THAN A DISTANCE EQUAL TO THE MAXIMUM COLUMN DIMENSION FROM THE FACE OF THE BEAM-COLUMN JOINT, PROVIDE EXTRA TRANSVERSE REINFORCEMENT OF THE SAME SIZE AND ARRANGEMENT INDICATED IN THE COLUMN SCHEDULE SPACED AT MOST ONE-FOURTH THE MINIMUM COLUMN SECTION DIMENSION THROUGHOUT THE LENGTH OF THE SPLICE OR 100 mm.
3. FOR ALL TIED COLUMNS, PROVIDE TRANSVERSE REINFORCEMENT OF THE SAME SIZE AND ARRANGEMENT INDICATED IN THE COLUMN SECTION SCHEDULE AND SPACED NO GREATER THAN ONE-QUARTER THE MINIMUM COLUMN SECTION DIMENSION NOR 100 mm, OVER A DISTANCE FROM EACH JOINT FACE OF NOT LESS THAN THE LARGER OF THE MAXIMUM COLUMN SECTION DIMENSION, OR ONE-SIXTH OF THE CLEAR HEIGHT OF THE COLUMN OR 450 mm.
4. UNLESS OTHERWISE DETAILED, TYPICAL BAR DETAILS FOR TIED COLUMNS ARE AS SHOWN IN FIGURE 12.



TYPICAL TIED COLUMN BARS DETAIL



DETAIL OF REINFORCEMENTS OF TIED COLUMN AT TOP

FIGURE 12. TYPICAL SLICE & OFFSET DETAIL OF COLUMN BARS

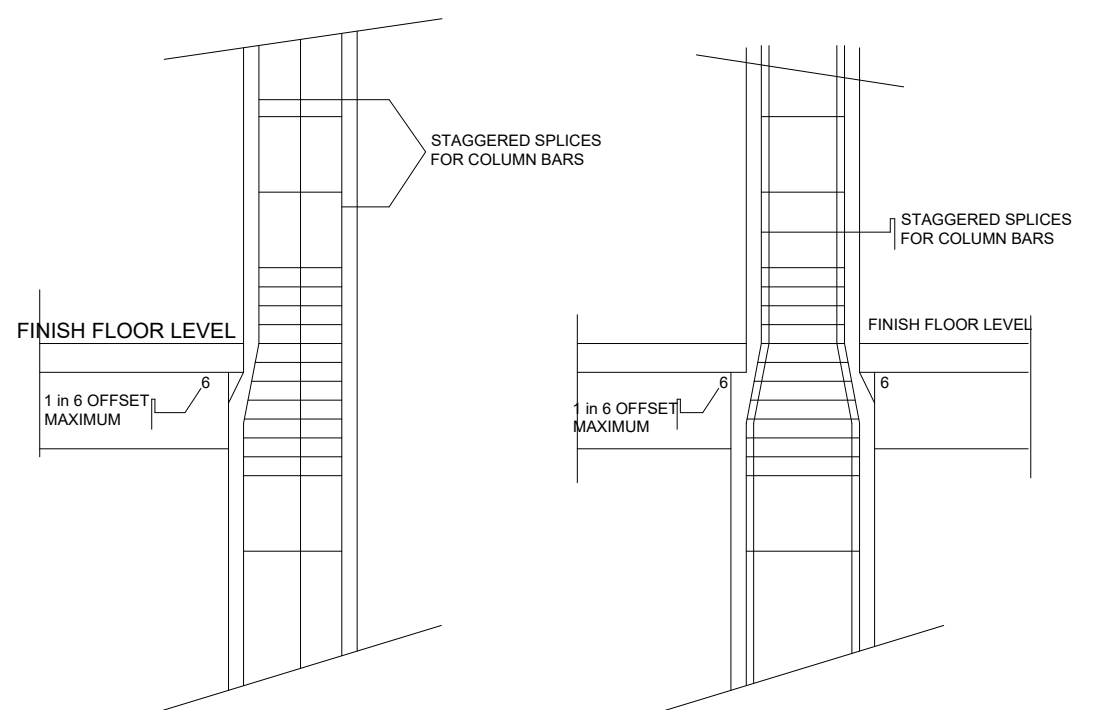
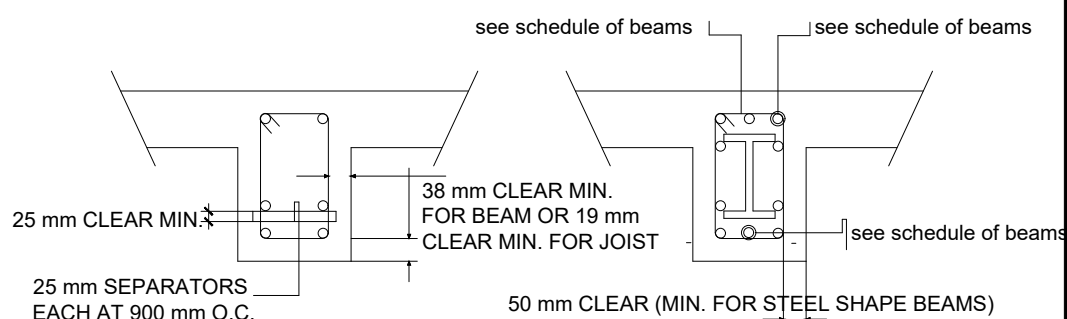


FIGURE 11. TYPICAL SLICE & OFFSET DETAIL OF COLUMN BARS

J. NOTES ON BEAMS AND GIRDERS

1. UNLESS OTHERWISE NOTED IN PLANS OR SPECIFICATIONS, CAMBER ALL BEAMS AT LEAST 8 mm FOR EVERY 450 mm OF SPAN EXCEPT FOR CANTILEVERS FOR WHICH THE CAMBER SHALL BE AS NOTED IN THE PLANS OR AS ORDERED BY THE STRUCTURAL ENGINEERS BUT IN NO CASE LESS THAN 19 mm FOR EVERY 300 mm OF FREE SPAN.
2. IF THERE ARE TWO OR MORE LAYERS OF LONGITUDINAL REINFORCING BARS IN A BEAM OR GIRDER, USE SEPARATORS OF A SIZE NOT LESS THAN 25 mm BARS SPACED ABOUT 900 mm ON CENTER IN NO CASE SHALL THERE BE LESS THAN TWO (2) SEPARATORS BETWEEN LAYER OF BARS.
3. LONGITUDINAL REINFORCING BARS SHALL BE PLACED SYMMETRICALLY ABOUT THE VERTICAL CENTER LINE OF THE BEAM OR GIRDER SECTION WHERE POSSIBLE WITH UPPER LAYER BARS PLACED DIRECTLY ABOVE THOSE IN THE BOTTOM LAYER.
4. MINIMUM CONCRETE PROJECTION OR REINFORCEMENT BARS OR SHAPES SHALL BE AS SHOWN IN FIGURE 13.



a. REINFORCED CONCRETE

b. STRUCTURAL SHAPE



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamped or sealed, as instruments of service, are the intellectual property and documents of the architect, neither the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

JAMES P. PACIS, PCE, ASE
CIVIL/STRUCTURAL ENGINEER











PRC: 52853
PTR No.: 6601121
ISS. AT: G.S.C.
ASEP: 52853-111
DATE: 01/07/16
TIN No.: 102-900-986

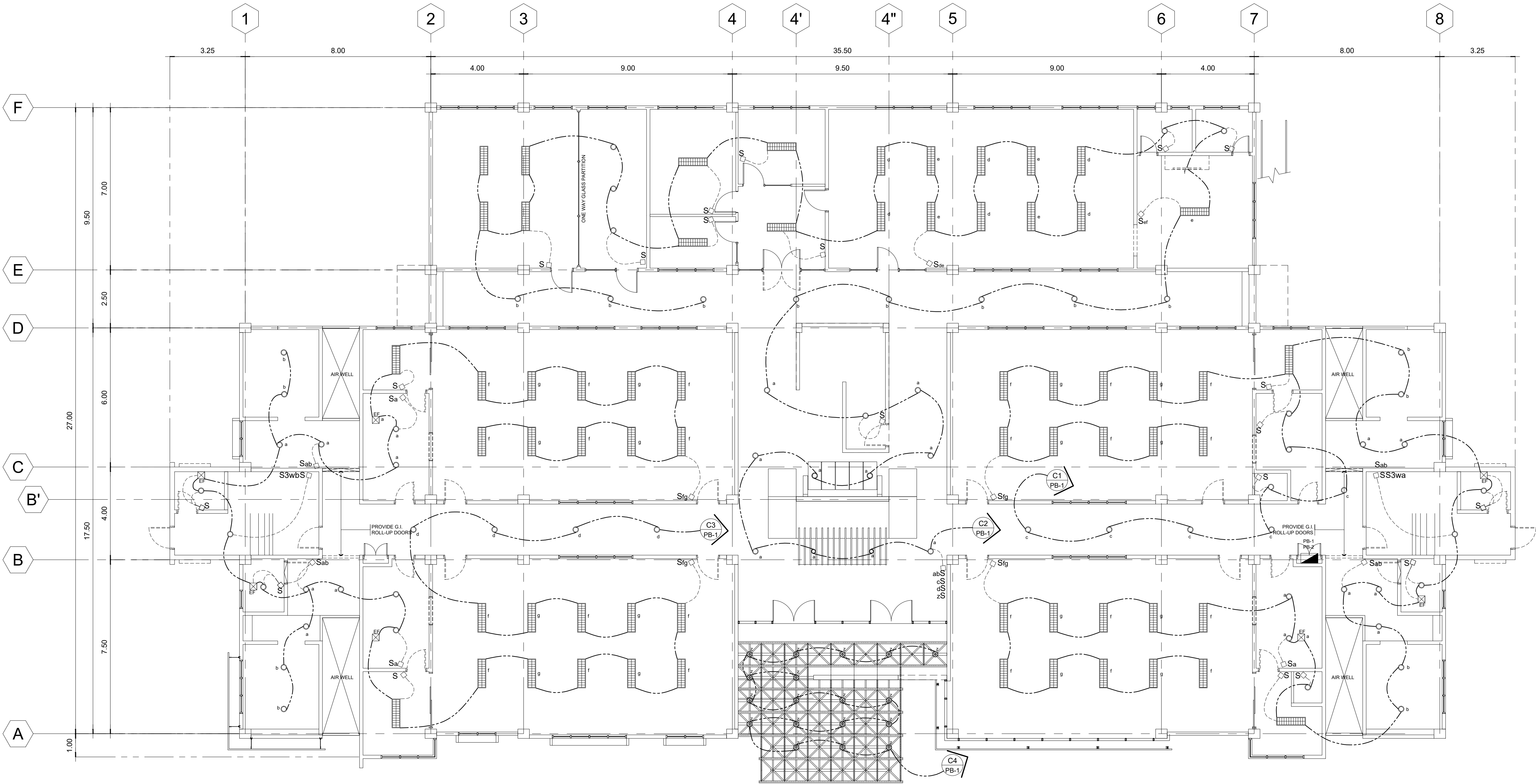
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
S-10
28 51

LEGEND:		
	1 x 18w PINLIGHT	 ^{FO} DUPLEX CONVENIENCE OUTLETS FLOOR POP-UP
	2-40w FLUORESCENT LAMP	 ^{REF} REF. OUTLETS
	CIRCUIT HOMERUN	 ^{ACU} AIRCON OUTLET
	EMERGENCY LIGHT	 ^{EF} EXHAUST FAN
	DUPLEX CONVENIENCE OUTLETS	 PANEL BOARD



01
E-01

GROUND FLOOR LIGHTING LAYOUT PLAN

SCALE: 1:100



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER











PRC Reg.No.: 2228 PTR No.: 6580750
TIN No.: 130-297-471 Date: 1/04/16 Iss.: GSC

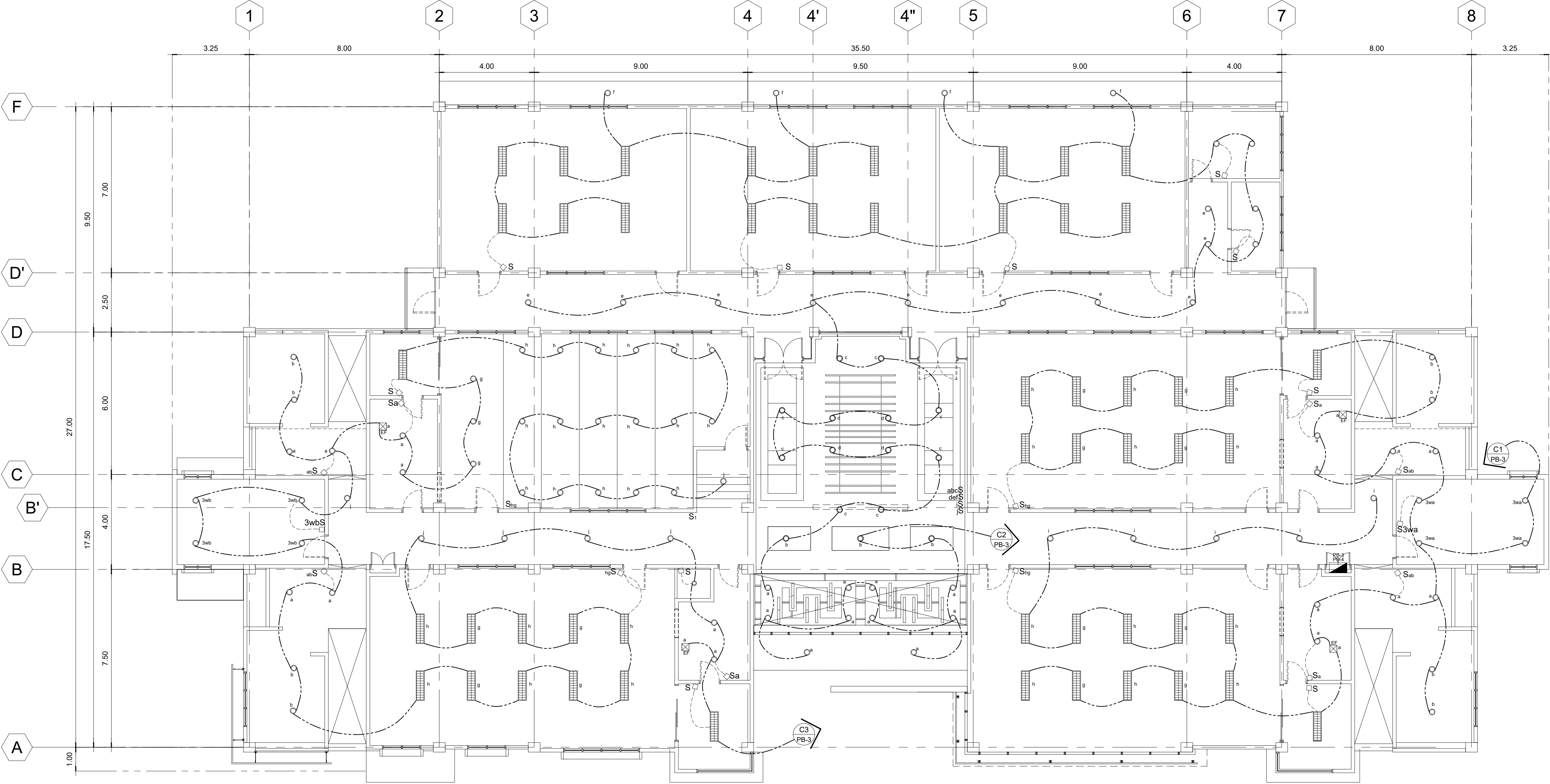
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

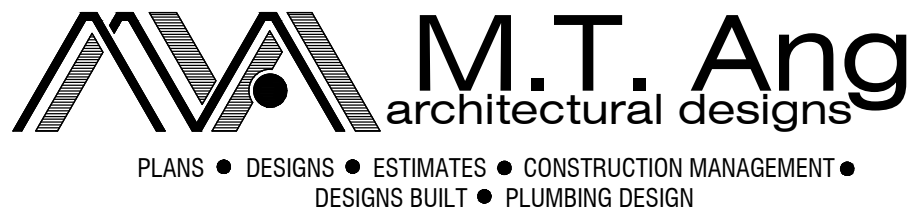
SHEET NO.
E-01
29 51

LEGEND:		
	1 x 18w PINLIGHT	 ^{FO} DUPLEX CONVENIENCE OUTLETS FLOOR POP-UP
	2-40w FLUORESCENT LAMP	 ^{REF} REF. OUTLETS
	CIRCUIT HOMERUN	 ^{ACU} AIRCON OUTLET
	EMERGENCY LIGHT	 ^{EF} EXHAUST FAN
	DUPLEX CONVENIENCE OUTLETS	 PANEL BOARD



01
E-02
SCALE: 1:100

SECOND FLOOR LIGHTING LAYOUT PLAN



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER
PRC Reg.No.: 2228 PTR No.: 6580750
TIN No.: 130-297-471 Date: 1/04/16 Iss.: GSC











PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

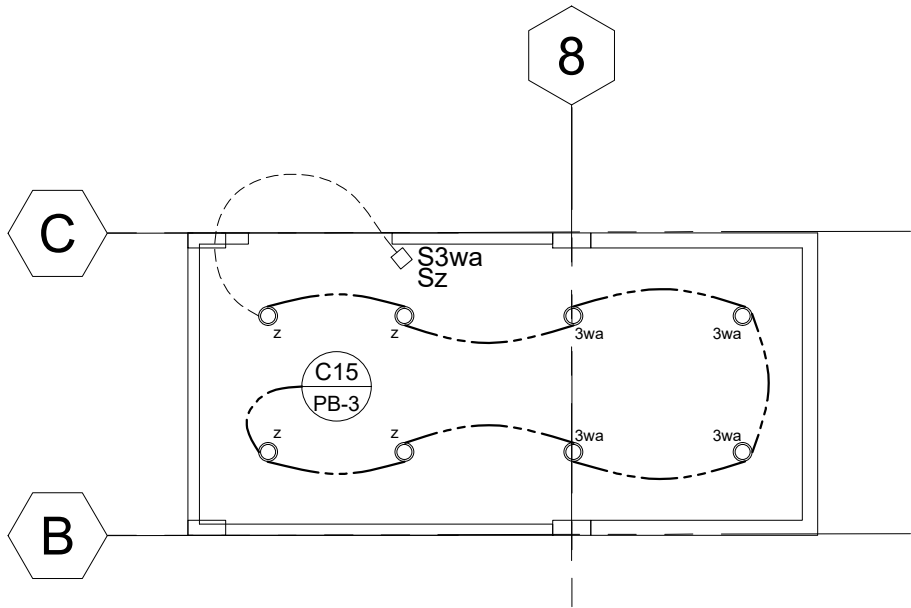
APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
E-02
30 51

LEGEND:

	1 x 18w PINLIGHT		FO DUPLX CONVENIENCE OUTLETS FLOOR POP-UP
	2-40w FLUORESCENT LAMP		REF. OUTLETS
	CIRCUIT HOMERUN		AIRCON OUTLET
	EMERGENCY LIGHT		EXHAUST FAN
	DUPLX CONVENIENCE OUTLETS		PANEL BOARD

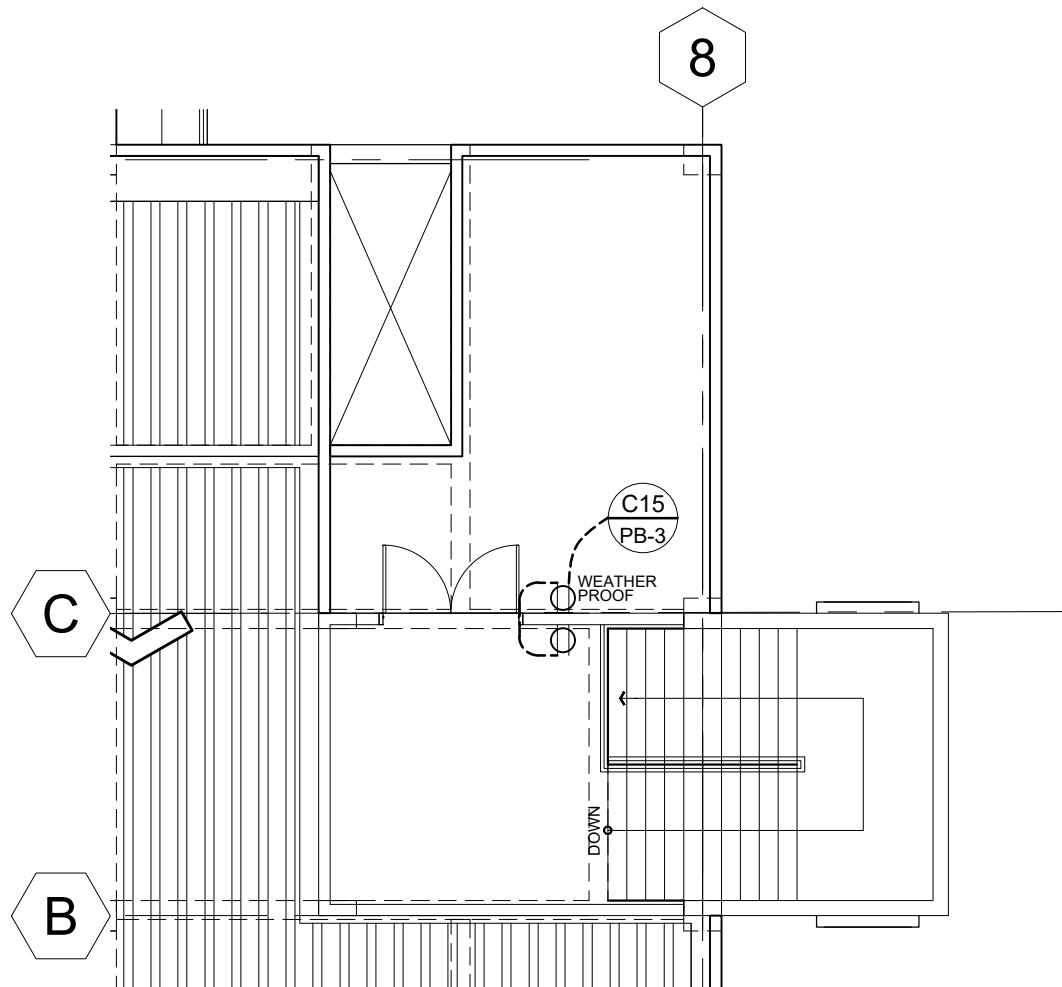


01

PENTHOUSE LIGHTING LAYOUT PLAN

SCALE: 1:100

E-05

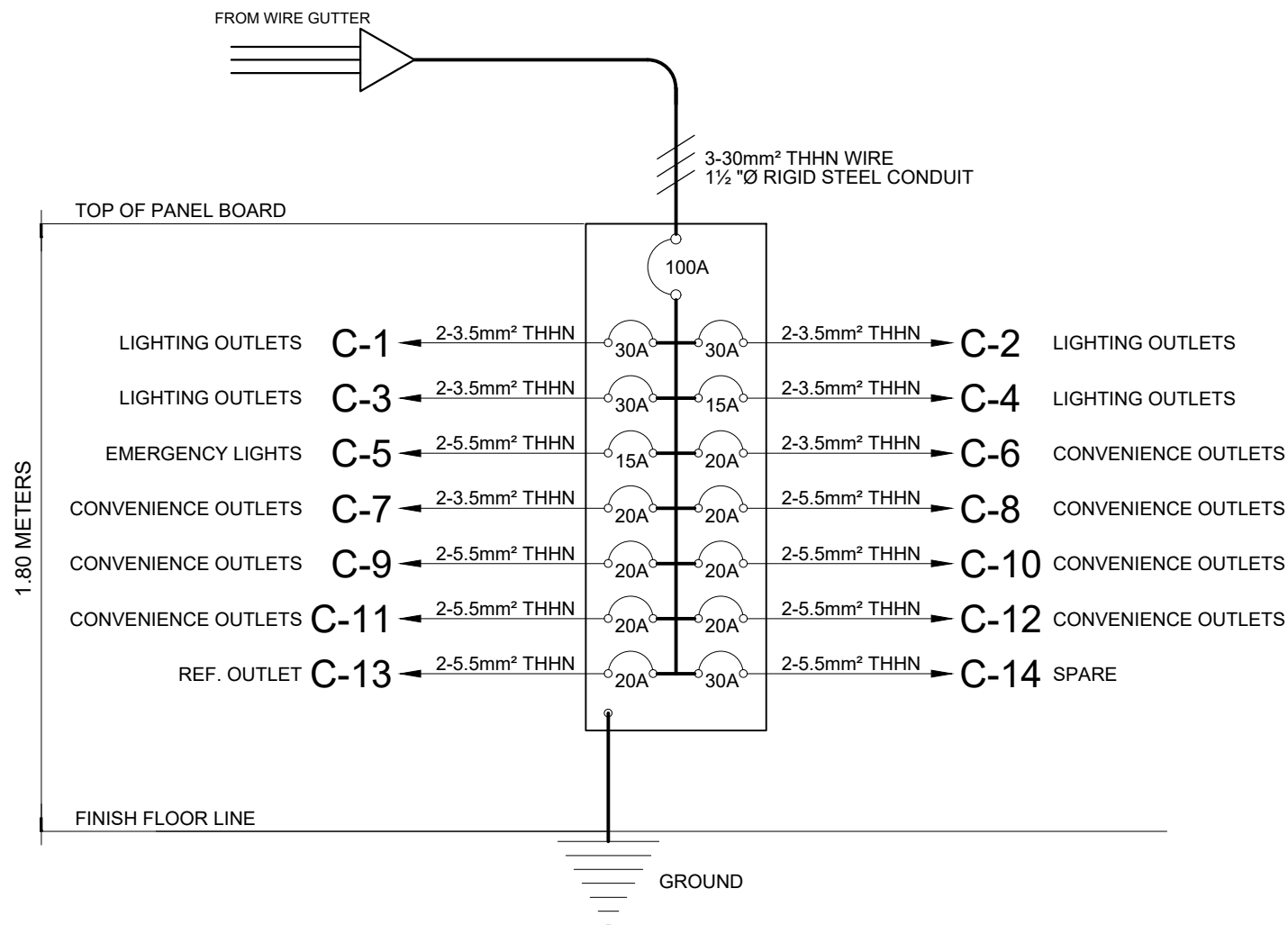


02

PENTHOUSE POWER SUPPLY LAYOUT PLAN

SCALE: 1:100

E-05

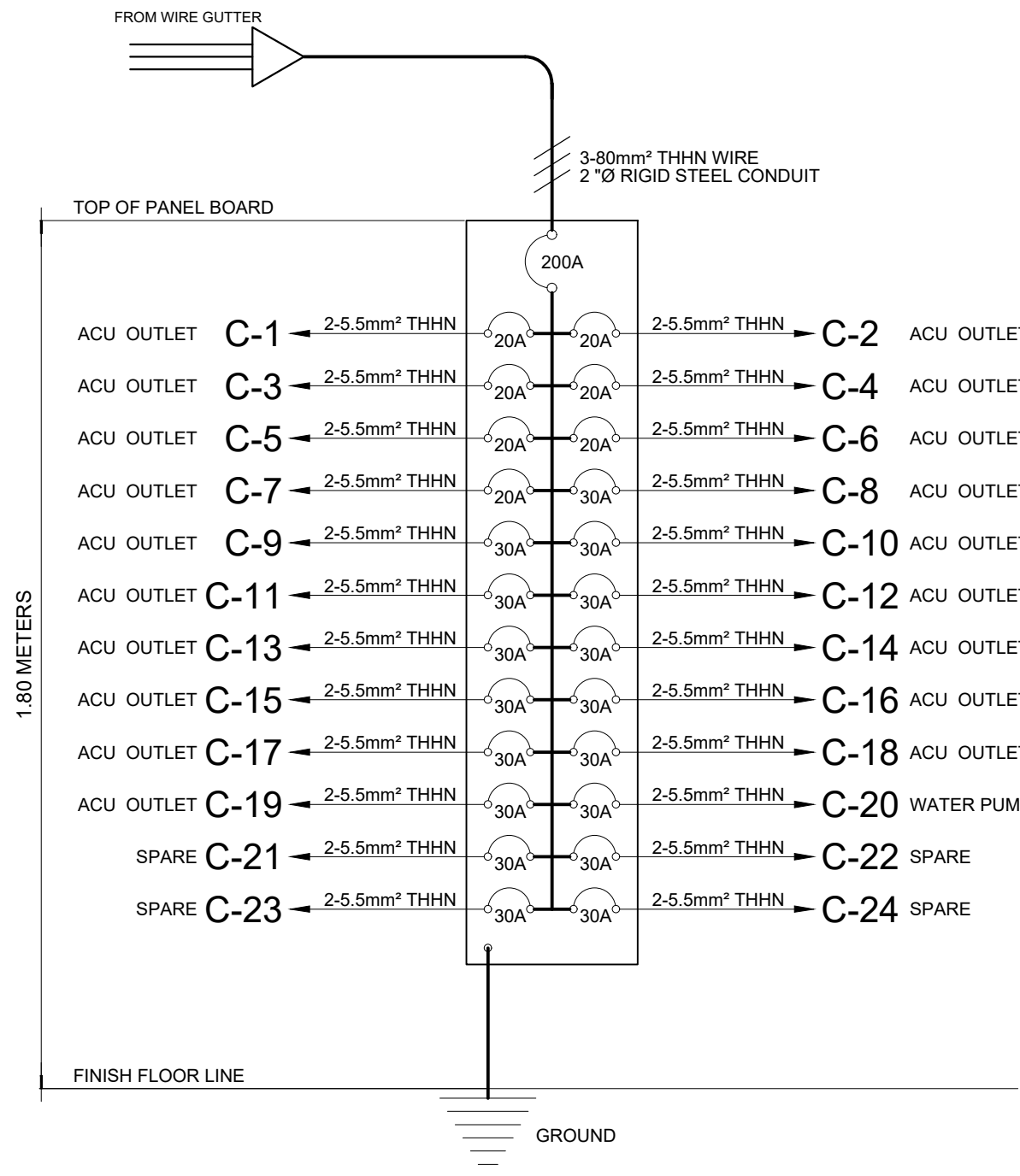


03

RISER DIAGRAM (PB-1)

NTS

E-05



04

RISER DIAGRAM (PB-2)

NTS

E-05

LOAD COMPUTATION FOR PB-01																	
CKT NO.	DESCRIPTION	NO. OF OUTLETS			RATING W/VA/HP	AMPERES			SWITCHES				SIZES OF WIRES AND CONDUITS	CIRCUIT PROTECTION			VOLTAGE
		L.O	C.O	OTHERS		AB	BC	AC	S1	S2	S3	3W		AT	AF	POLE	
1	LIGHTING OUTLET	48			4800W	21.8			9	4		1	2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
2	LIGHTING OUTLET	44			4400W		20.0		9	3			2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
3	LIGHTING OUTLET	46			4600W			20.9	6	4		1	2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
4	LIGHTING OUTLET	18			1800W	8.2			1				2-3.5 MM² THHN WIRES 1/2" Ø RSC	15	20	2	220
5	EMERGENCY LIGHTS	28			2800W		12.7						2-3.5 MM² THHN WIRES 1/2" Ø RSC	15	20	2	220
6	CONVENIENCE OUTLET		11		2035W			9.3					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
7	CONVENIENCE OUTLET		12		2220W	10.1							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
8	CONVENIENCE OUTLET		16		2960W		13.5						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
9	CONVENIENCE OUTLET		16		2960W			13.5					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
10	CONVENIENCE OUTLET		12		2220W	10.1							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
11	CONVENIENCE OUTLET		12		2160W		9.8						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
12	CONVENIENCE OUTLET		10		1800W			8.2					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
13	REF. OUTLET		2	1	1110W	5.0							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
14	SPARE			1	1000W			4.5					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
	TOTAL					55.2	56.0	56.3	25	11	0	2	3-30mm² THHN WIRE IN 1½" Ø RSC	100	125	3	220

LOAD COMPUTATION FOR PB-02																	
CKT NO.	DESCRIPTION	NO. OF OUTLETS			RATING W/VA/HP	AMPERES			SWITCHES				SIZES OF WIRES AND CONDUITS	CIRCUIT PROTECTION			VOLTAGE
		L.O	C.O	OTHERS		AB	BC	AC	S1	S2	S3	3W		AT	AF	POLE	
1	ACU			1	0.8HP	6.9							2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
2	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
3	ACU			1	3T			22					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
4	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
5	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
6	ACU			1	3T			22					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
7	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
8	ACU			1	1HP		8						2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
9	ACU			1	1HP			8					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
10	ACU			1	1HP	8							2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
11	ACU			1	1.5HP		10						2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
12	ACU			1	2.5HP			14					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
13	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
14	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
15	ACU			1	0.8HP			6.9					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
16	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
17	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
18	ACU			1	0.8HP			6.9					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
19	ACU			1	0.8HP			6.9					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220
20	WATER PUMP			1	1.5HP			10					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
21	SPARE			1	1000W			4.55					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
22	SPARE			1	1000W	4.55							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
23	SPARE			1	1000W		4.55						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
24	SPARE			1	1000W			4.55					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220
	TOTAL					107.4	110.5	105.8					3-80mm² THHN WIRE IN 2½" Ø RSC	200	225	3	220

SIZE OF FEEDER
≥ 56.3 x 1.732
≥ 97.58245 AMPS
USE: 3-30mm² THHN WIRE IN 1½" Ø RSC

SIZE OF FEEDER
≥ 110.5 x 1.732
≥ 191.4647 AMPS
USE: 3-80mm² THHN WIRE IN 2½" Ø RSC

ELECTRICAL NOTES AND SPECIFICATIONS:

- ALL ELECTRICAL INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE AND THE RULES AND REGULATIONS OF THE OFFICE OF THE BUILDING OFFICIAL INCHARGE IN ENFORCING THE CODE.
- NO WIRE SMALLER THAN 2.0mm²Ø SHALL BE USED.
- UNLESS OTHERWISE SPECIFIED, PULL BOXES SHALL BE PROVIDED WHENEVER REQUIRED AND NECESSARY ALTHOUGH SUCH BOXES ARE NOT INDICATED ON THE PLANS.
- ALL MATERIALS AND REQUIREMENTS TO BE USED SHALL BE NEW AND OF APPROVED TYPE AS TO LOCATION AND PURPOSES.
- ALL METAL FRAMES SHALL BE PROPERLY AND ADEQUATELY GROUNDED.
- SERVICE VOLTAGE SHALL BE 220volts, THREE PHASE, 60 Hz.
- THE ACTUAL LOCATION OF POWER SERVICE ENTRANCE SHALL BE VERIFIED AND ORIENTED FOR CONNECTION OF POWER SUPPLY.
- VERIFY ALL DIMENSIONAL LOCATION OF FIXTURES, OUTLETS, EQUIPMENTS ON OTHER DRAWINGS OF RELATED TRADES AND INVESTIGATE ALL POSSIBLE INTERFERENCE AND CONDITION AFFECTING THE ELECTRICAL WORK.
- PANEL BOARDS, CABINETS AND OTHER ENCLOSURES SHALL CONFORM TO NEMA STANDARDS.
- IT IS NOT INTENDED THAT THE DRAWING SHOW EACH AND EVERY CONDUIT, JUNCTION BOX, OUTLET, etc. HOWEVER, SUCH ITEMS SHOULD BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADE.
- MOUNTING HEIGHTS OF ELECTRICAL FIXTURES AND DEVICES SHALL BE AS FOLLOWS:
 - SWITCHES — 1400mm ABOVE FINISH FLOOR LINE
 - CONVENIENCE OUTLETS — 300mm ABOVE FINISH FLOOR LINE
 - 100mm ABOVE COUNTER / TABLE TOP
 - PANEL BOARDS — 1800mm ABOVE FINISH FLOOR LINE TO THE TOP OF THE PANEL BOARD
- ALL ELECTRICAL WORKS SHALL BE DONE BY COMPETENT ELECTRICIANS UNDER THE DIRECT SUPERVISION OF A DULY LICENSED MASTER ELECTRICIANS OR PROFESSIONAL ELECTRICAL ENGINEER.



MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER

PRC Reg.No.: 2228 PTR No.: 6580750
T I N No.: 130-297-471 Date: 1/04/16 Iss.: GSC

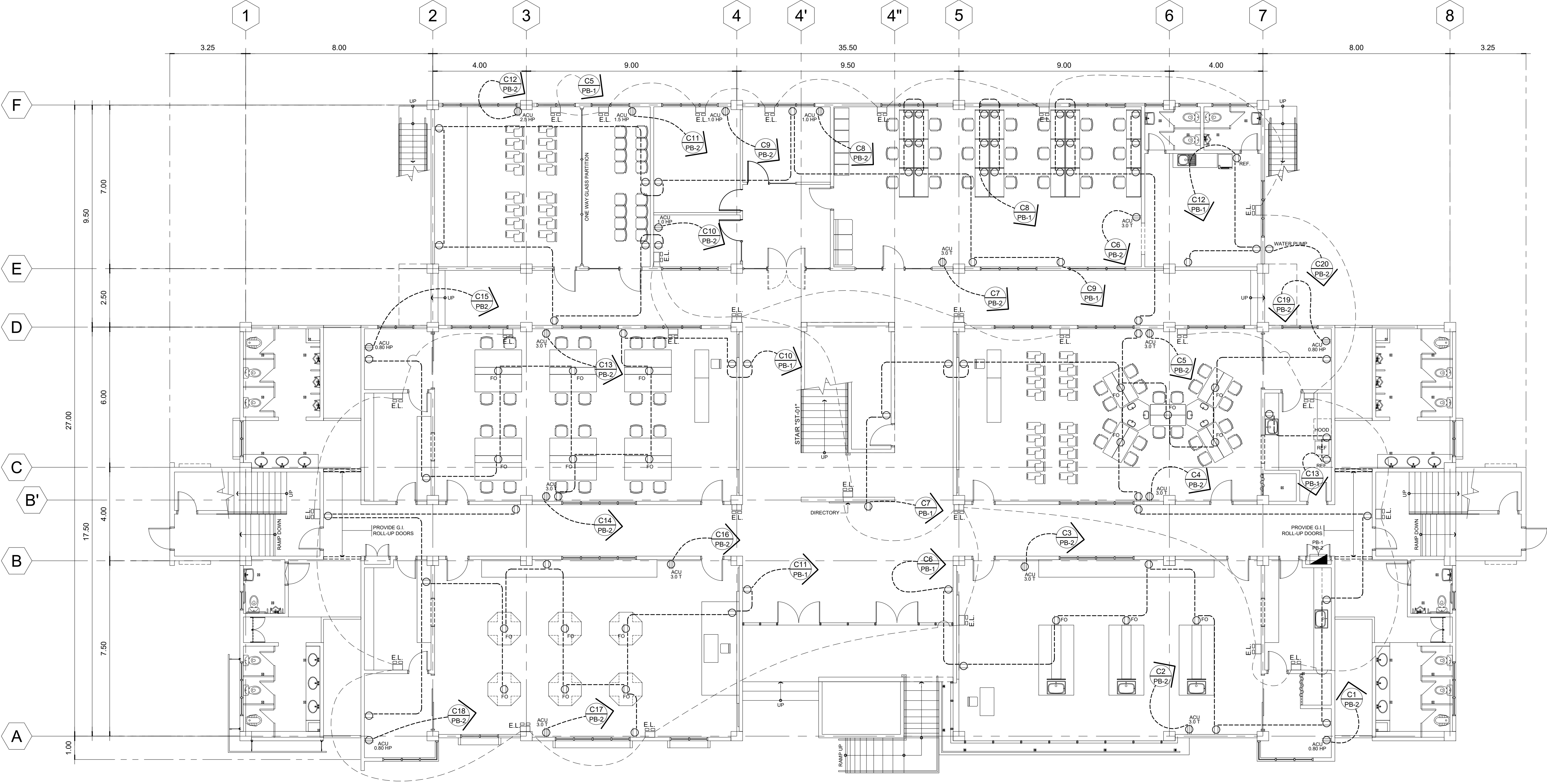
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
E-05
31 51

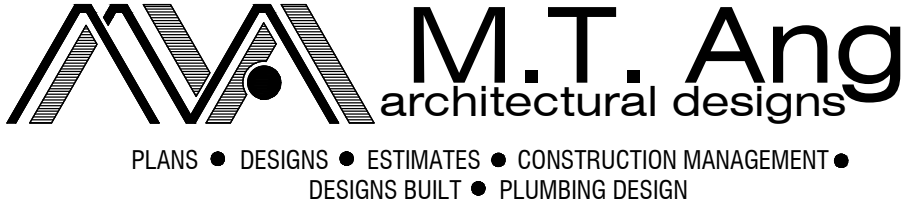
LEGEND:			
	1 x 18w PINLIGHT		DUPLEX CONVENIENCE OUTLETS FLOOR POP-UP
	2-40w FLUORESCENT LAMP		REF. OUTLETS
	CIRCUIT HOMERUN		AIRCON OUTLET
	EMERGENCY LIGHT		EXHAUST FAN
	DUPLEX CONVENIENCE OUTLETS		PANEL BOARD



01
E-03

GROUND FLOOR POWER SUPPLY LAYOUT PLAN

SCALE: 1:100



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER

PRC Reg.No.: 2228	PTR No.: 6580750
TIN No.: 130-297-471	Date: 1/04/16 Iss.: GSC

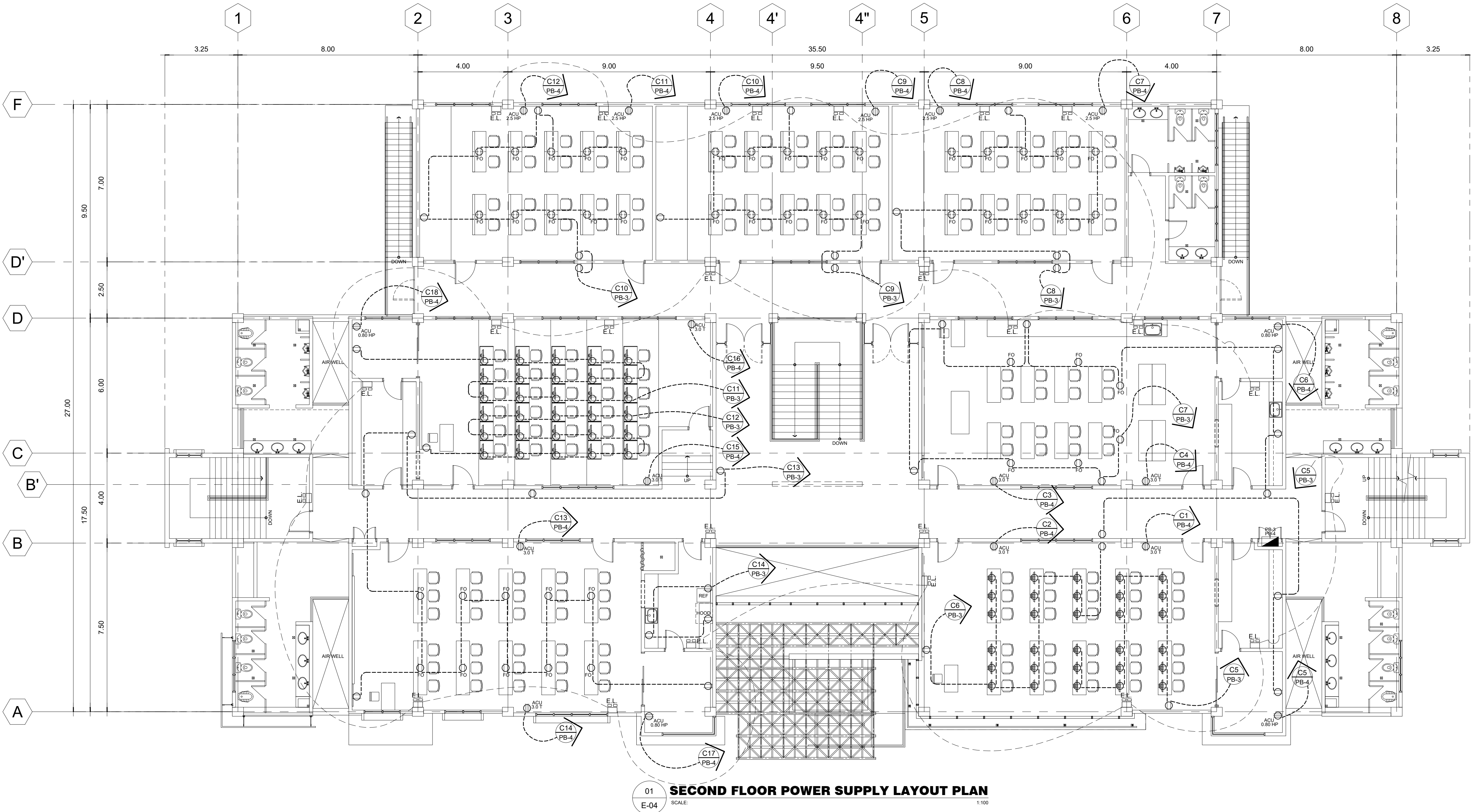
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

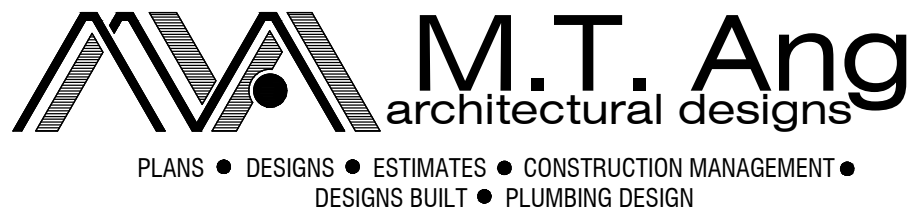
PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.	
E-03	
32	51

LEGEND:			
	1 x 18w PINLIGHT		DUPLEX CONVENIENCE OUTLETS FLOOR POP-UP
	2-40w FLUORESCENT LAMP		REF. OUTLETS
	CIRCUIT HOMERUN		AIRCON OUTLET
	EMERGENCY LIGHT		EXHAUST FAN
	DUPLEX CONVENIENCE OUTLETS		PANEL BOARD



01
E-04
SCALE: 1:100
01 SECOND FLOOR POWER SUPPLY LAYOUT PLAN



MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER
PRC Reg.No.: 2228 PTR No.: 6580750
TIN No.: 130-297-471 Date: 1/04/16 Iss.: GSC

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

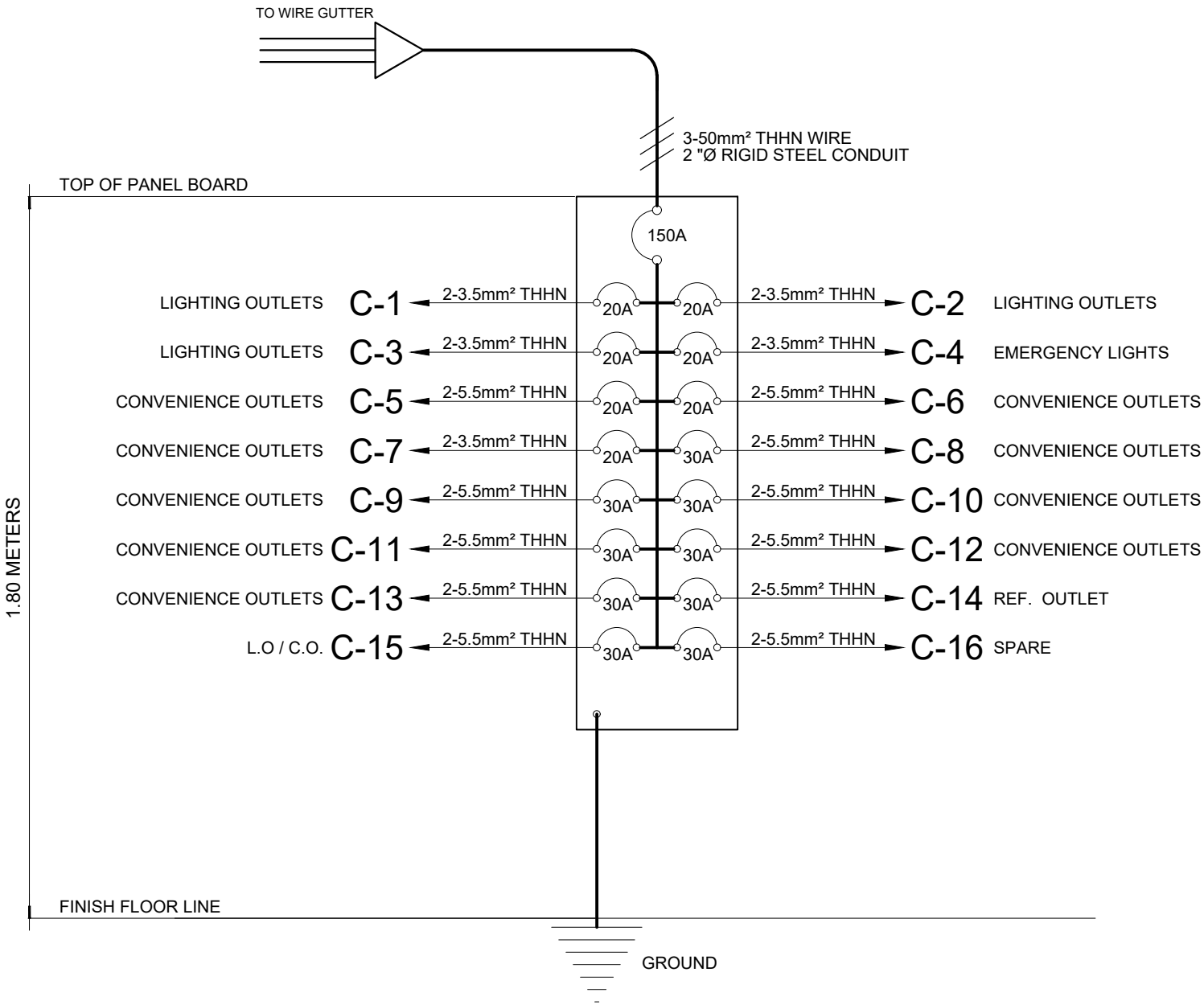
PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY:
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
E-04
33 51

LOAD COMPUTATION FOR PB-03																		
CKT NO.	DESCRIPTION	NO. OF OUTLETS			RATING W/VA/HP	AMPERES			SWITCHES				SIZES OF WIRES AND CONDUITS	CIRCUIT PROTECTION			VOLTAGE	
		L.O	C.O	OTHERS		AB	BC	AC	S1	S2	S3	3W		AT	AF	POLE		
1	LIGHTING OUTLET	45			4500W	20.45			5	4		1	2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
2	LIGHTING OUTLET	61			6100W		27.73		5		2		2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
3	LIGHTING OUTLET	58			5800W			26.36	5	4		1	2-3.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
4	EMERGENCY LIGHTS	24			2400W	10.909							2-3.5 MM² THHN WIRES 1/2" Ø RSC	15	30	2	220	
5	CONVENIENCE OUTLET		16		2960W		13.45						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	20	2	220	
6	CONVENIENCE OUTLET		16		2960W			13.45					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
7	CONVENIENCE OUTLET		16		2960W	13.45							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
8	CONVENIENCE OUTLET		14		2590W		11.77						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
9	CONVENIENCE OUTLET		14		2590W			11.77					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	20	2	220	
10	CONVENIENCE OUTLET		14		2590W	13.45							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
11	CONVENIENCE OUTLET		16		2960W		13.45						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
12	CONVENIENCE OUTLET		16		2960W			13.45					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	20	2	220	
13	CONVENIENCE OUTLET		16		2960W	13.45							2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	40	2	220	
14	REF. OUTLET		2	1	1110W		5.05						2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	40	2	220	
15	L.O./ C.O	8	2		1170W			5.32					2-3.5 MM² THHN WIRES 1/2" Ø RSC	20	40	2	220	
16	SPARE			1	1000W	4.55							2-5.5 MM² THHN WIRES 3/4" Ø RSC	30	40	2	220	
	TOTAL					76.27	71.45	70.36	15	8	2	2	3-50mm² THHN WIRE IN 2" Ø RSC	150	175	3	220	

SIZE OF FEEDER
≥ 76.27 x 1.732
≥ 132.1044 AMPS

USE: 3-50mm² THHN WIRE IN 2" Ø RSC



01
E-06 /NTS
RISER DIAGRAM (PB-3)

LOAD COMPUTATION FOR PB-04																		
CKT NO.	DESCRIPTION	NO. OF OUTLETS			RATING W/VA/HP	AMPERES			SWITCHES				SIZES OF WIRES AND CONDUITS	CIRCUIT PROTECTION			VOLTAGE	
		L.O	C.O	OTHERS		AB	BC	AC	S1	S2	S3	3W		AT	AF	POLE		
1	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
2	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
3	ACU			1	3T			22					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
4	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
5	ACU			1	0.8HP		6.9						2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
6	ACU			1	0.8HP			6.9					2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
7	ACU			1	2.5HP	14							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
8	ACU			1	2.5HP		14						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
9	ACU			1	2.5HP			14					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
10	ACU			1	2.5HP	14							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
11	ACU			1	2.5HP		14						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
12	ACU			1	2.5HP			14					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
13	ACU			1	3T	22							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
14	ACU			1	3T		22						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
15	ACU			1	3T			22					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
16	ACU			1	3T			22					2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
17	ACU			1	0.8HP		6.9						2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
18	ACU			1	0.8HP		6.9						2-5.5 MM² THHN WIRES 1/2" Ø RSC	20	30	2	220	
19	SPARE			1	1000W	4.55							2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
20	SPARE			1	1000W		4.55						2-5.5 MM² THHN WIRES 1/2" Ø RSC	30	40	2	220	
	TOTAL					98.5	97.2	100.9					3-80mm² THHN WIRE IN 2½" Ø RSC	200	225	3	220	

SCHEDULE OF LOADS AND COMPUTATIONS FOR MDP					
PANEL DESCRIPTION	AMPERES	CIRCUIT PROTECTION			VOLTAGE
		AT	AF	POLE	
PB-01	97.58	100	125	3	220
PB-02	191.46	175	200	3	220
PB-03	132.10	125	150	3	220
PB-04	174.76	150	175	3	220
TOTAL	595.91	500	550	3	220

SIZE OF SERVICE ENTRANCE
I = [PB-01 + PB-02 + PB-03 + PB-04]
= 97.58 + 192.41 + 132.10 + 208.67
= 595.91 AMPERES
USE: 2 SETS; 3- 175 mm² THHN WIRE IN 2 1/2" Ø RSC

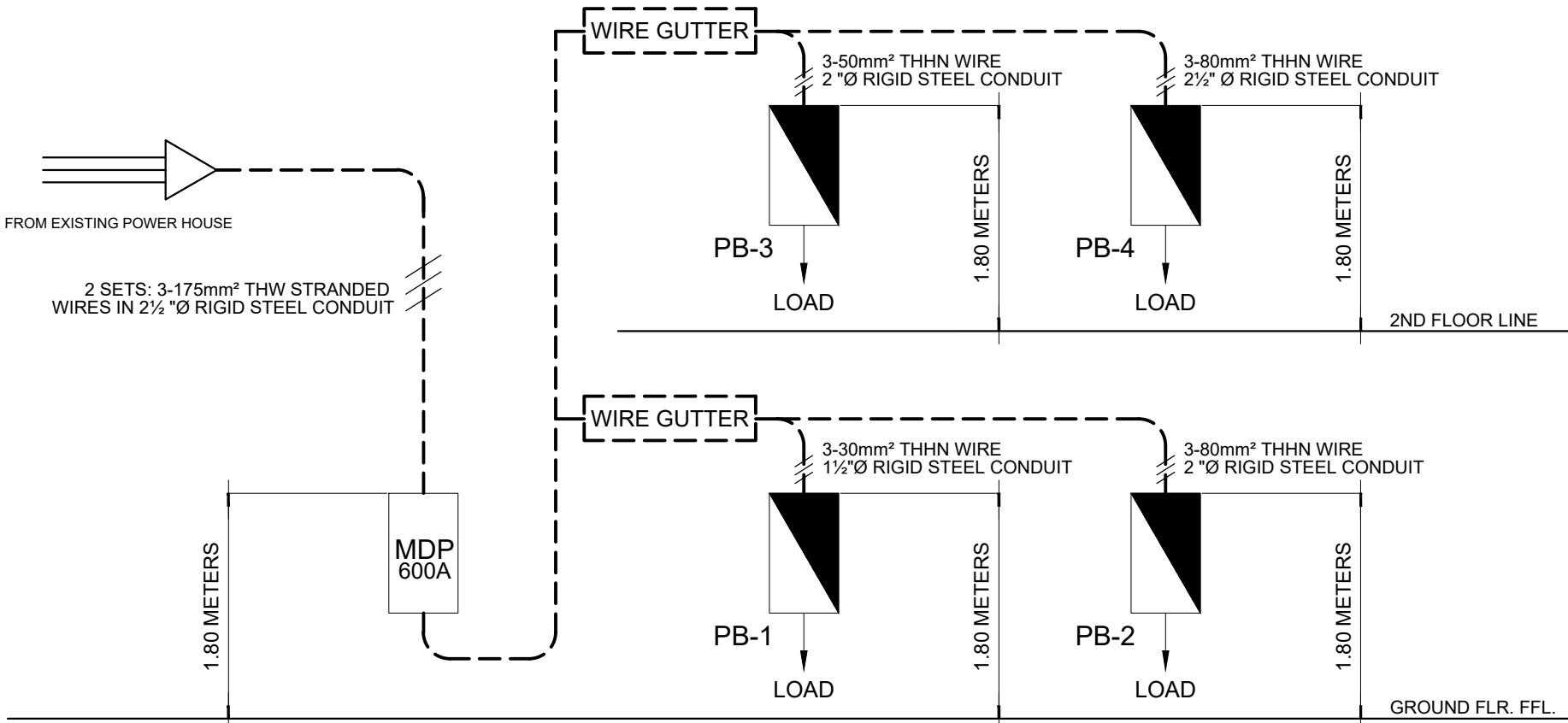
VOLTAGE DROP
@ PANELS PB-01 & PB-02

DISTANCE FROM TAPPING POLE TO PANELS: ±28 m
MAIN = 595.91

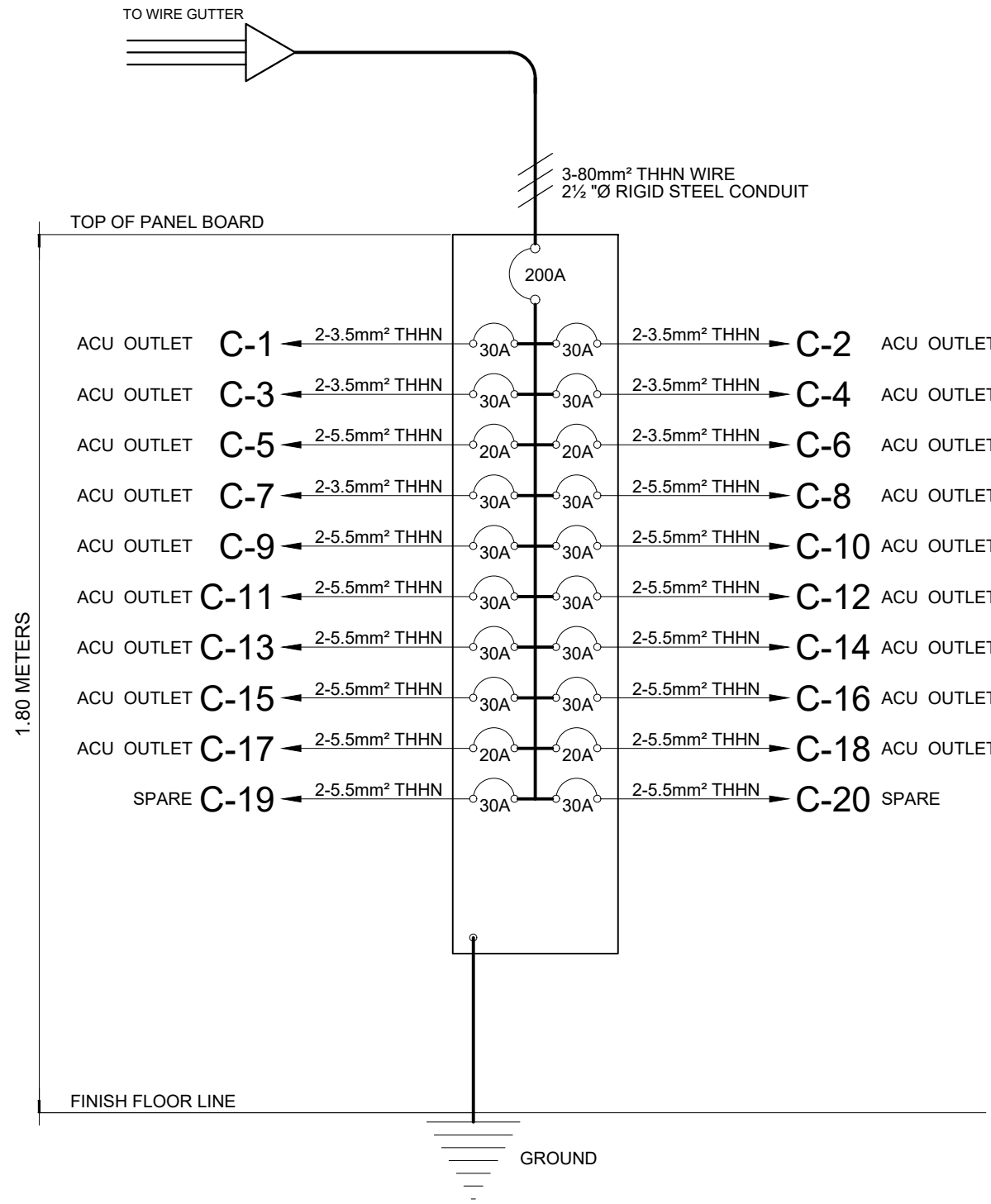
R(175mm²) = 0.1026 / Km
@ 28m = 0.0028728 Ohms

VOLTAGE DROP = 595.91 x 0.002873
= 1.71193124V

VOLTAGE DROP @ MDP
VOLTS = 220 - 1.711931
= 218.288069V



03
E-06 /SCALE: NTS
SCHEMATIC DIAGRAM



02
E-06 /NTS
RISER DIAGRAM (PB-4)



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FERNANDO G. OCAT
PROF. ELECTRICAL ENGINEER




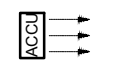
PRC Reg.No.: 2228 PTR No.: 6580750
T I N No.: 130-297-471 Date: 1/04/16 Iss.: GSC

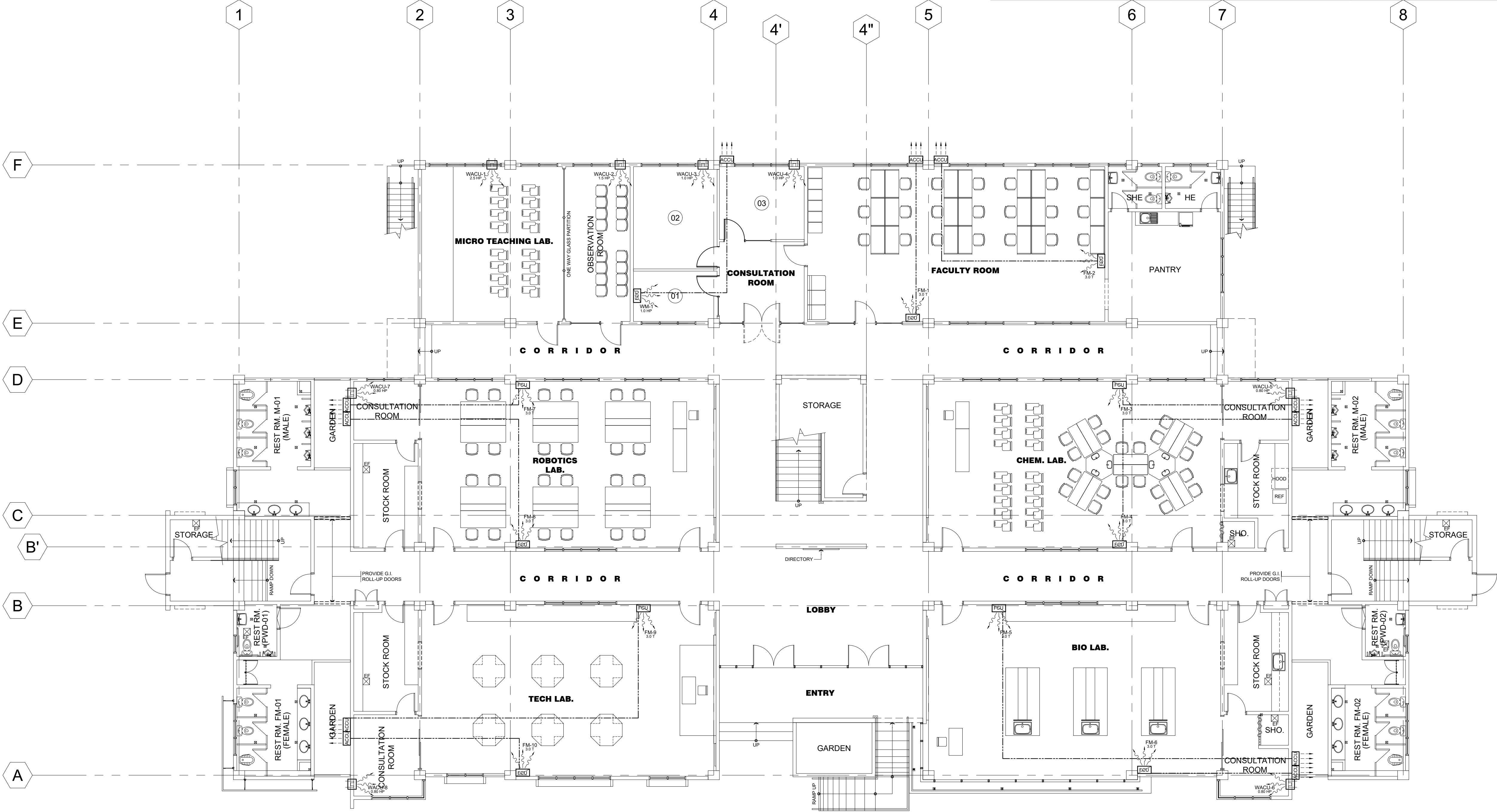
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
E-06
34 51

LEGEND :			
	- WINDOW TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)		- FLOOR MOUNTED SPLIT TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)
	- WALL MOUNTED SPLIT TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)		- AIRCON. CONDENSING UNIT (OUTDOOR UNIT)
			- INSULATED REFRIGERANT PIPE LINE



01 ACU LAYOUT @ GROUND FLOOR
M-01 SCALE: 1:100



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, without the written consent of architect or author of said documents.

FELIX R. CAÑIZARES
PROF. MECHANICAL ENGINEER





PRC Reg.No.: 3129 PTR No.: 6603433
TIN No.: 144-954-544 Date: 1/08/16 Iss.: GSC

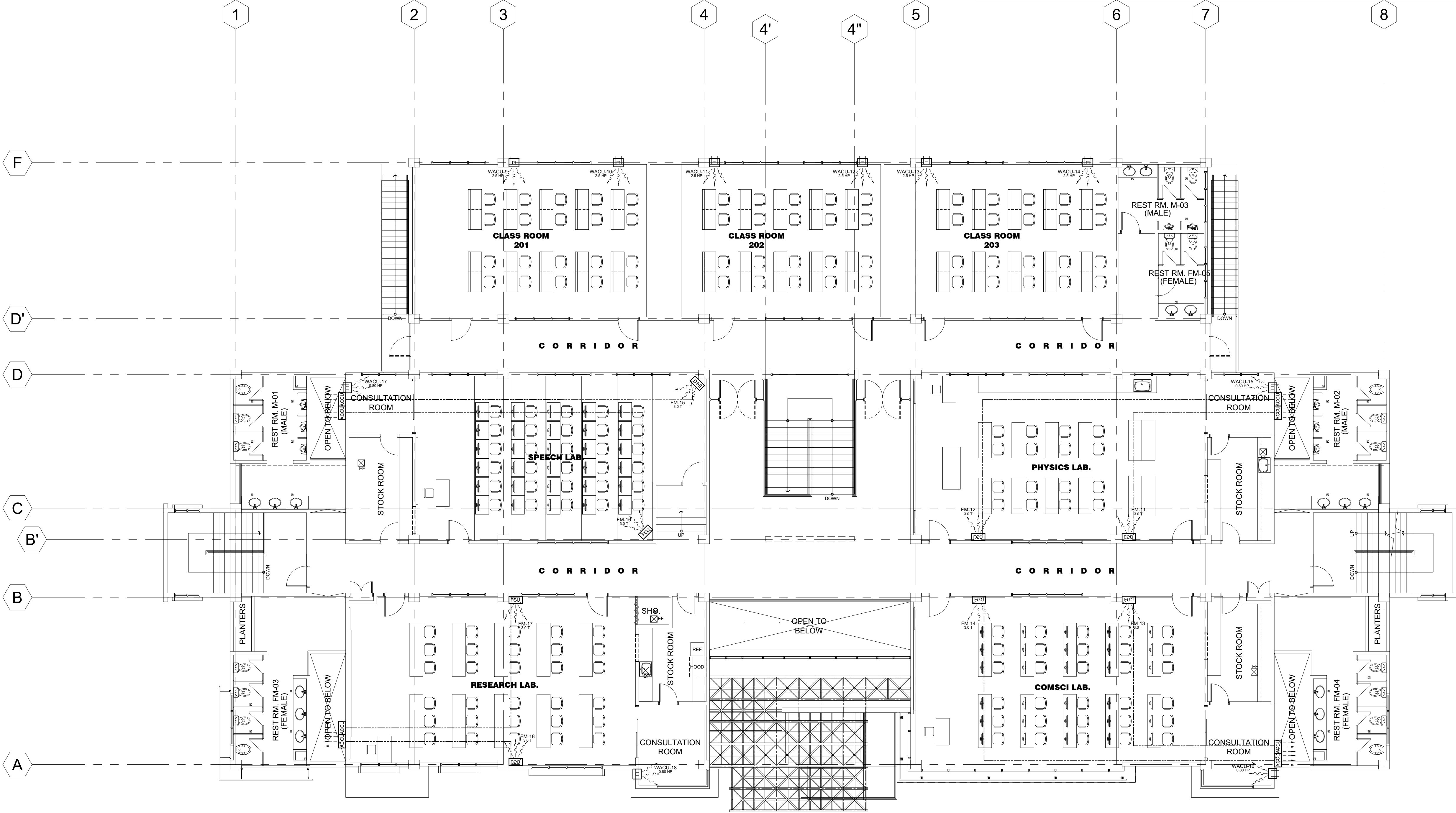
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
M-01
35 51

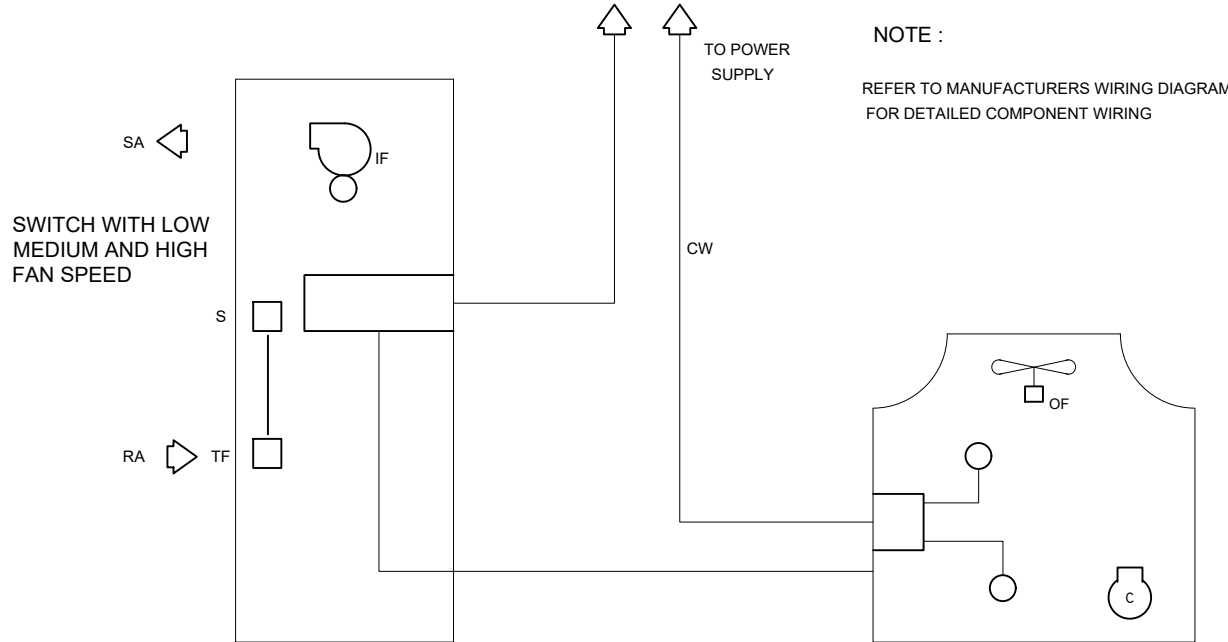
LEGEND :				
	- WINDOW TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)		- FLOOR MOUNTED SPLIT TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)	- INSULATED REFRIGERANT PIPE LINE
	- WALL MOUNTED SPLIT TYPE (NUMBER INDICATES CAPACITY) (HP - HORSE POWER, T = TONS)		- AIRCON. CONDENSING UNIT (OUTDOOR UNIT)	- EXHAUST FAN



01
M-02
SCALE: 1:100
ACU LAYOUT @ SECOND FLOOR

SEQUENCE OF OPERATION

- * WHEN SELECTOR SWITCH IS IN ON POSITION, POWER TO FCU, ACCU AND CONTROL SYSTEM SHALL BE MADE ENERGIZED.
- * WHEN SELECTOR SWITCH IS IN FAN POSITION. FAN SHALL START TO OPERATE.
- * WHEN SELECTOR SWITCH IS IN 'COOL' POSITION, FCU AND ACCU CONTROL SYSTEM SHALL BE MADE ENERGIZED.
- * THERMOSTAT SHALL MAINTAIN THE DESIRED ROOM AIR CONDITION BY CONTROLLING THE OPERATION OF THE COMPRESSOR.



01 **SCHEMATIC CONTROL DIAGRAM**
SCALE: M-03 NTS

NOTES :

- * ADHESIVE AND LATEX PAINT SHOULD BE COMPATIBLE WITH THE INSULATION.
- * LIQUID LINE EXPOSED TO DIRECT SUNLIGHT SHALL BE PROVIDED WITH INSULATION.
- * PROVIDE # 24 INSULATION SHIELD AT THE POINT OF SUPPORT.

APPLY ACRYLIC LATEX EMULSION PAINT FOR INSULATION INSTALLED OUTDOOR

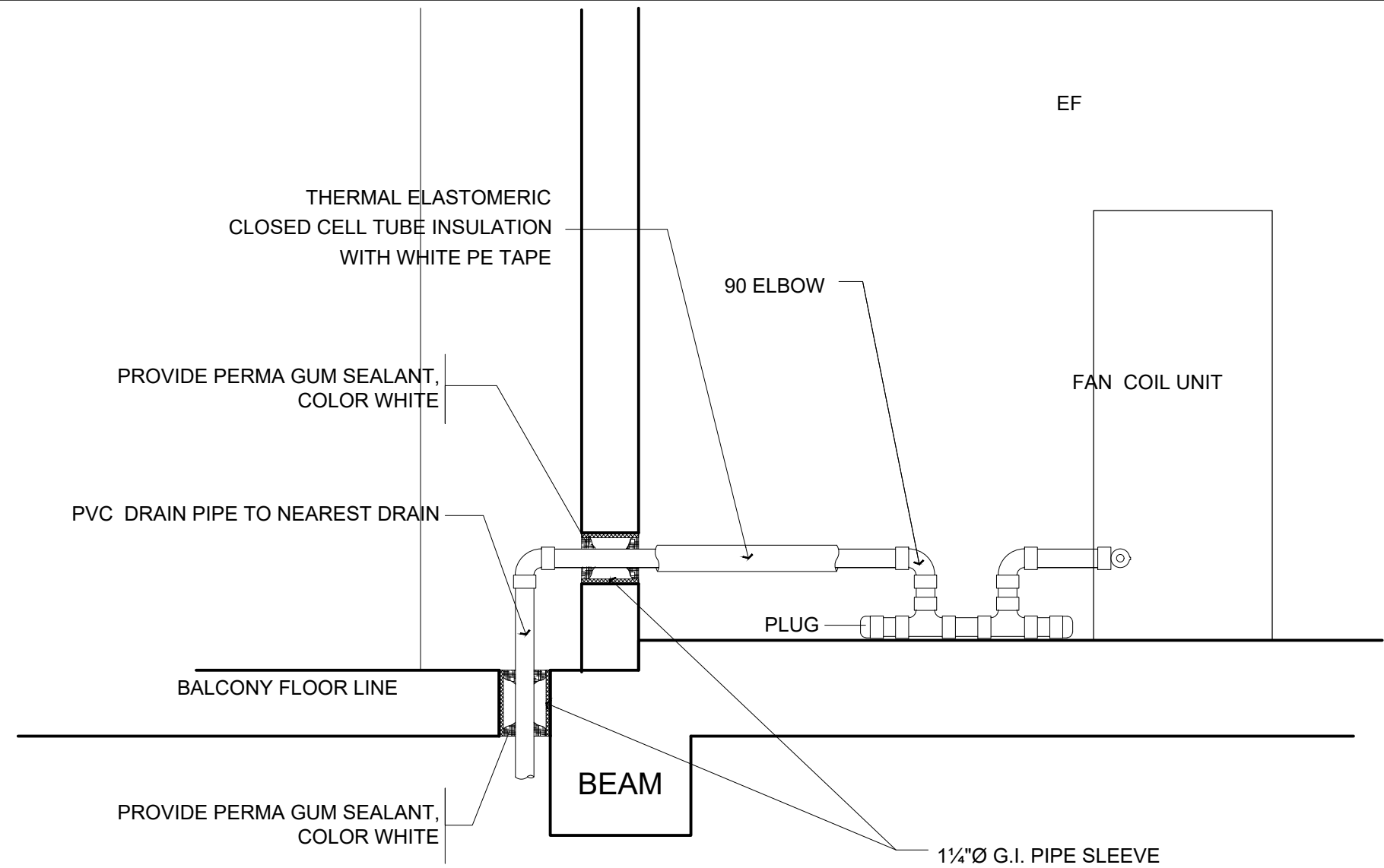
BRASS COAT INSULATION ADHESIVE AT JOINTS

13 MM THK. THERMAL ELASTOMERIC INSULATION

SUCTION LINE

LIQUID LINE

02 **PIPE INSULATION DETAIL**
SCALE: M-03 NTS



03 **FAN COIL DRAIN PIPE DETAIL**
SCALE: M-03 NTS

MECHANICAL GENERAL NOTES

* ALL AIR-CONDITIONING AND VENTILATING UNITS SHALL BE NEW AND THE APPROVED PRODUCTS OF REPUTABLE MANUFACTURERS.

* FAN COIL UNITS SHALL BE MOUNTED AND MUST BE PROVIDED WITH BLUE PVC DRAIN PIPE.

* REFRIGERANT SUCTION LINES SHALL BE INSULATED WITH 13 MM THK. ELASTOMERIC PRE - MOLDED RUBBER INSULATION.

* IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE OTHER TRADES CONCERNED AND WITH THE PROJECT ENGINEER.

* THE WORKS THROUGHOUT SHALL BE EXECUTED IN THE MOST THROUGH MANNER KNOWN TO THE TRADE AND TO THE SATISFACTION OF THE ARCHITECT / ENGINEER.

* PROVIDE PROPER FOUNDATION FOR THE MOUNTING OF EQUIPMENT FOUNDATION FOR THE FCU SHALL BE AT LEAST 100 MM FROM FINISHED FLOOR LINE.

* ALL AIR - CONDITIONING UNITS SHALL BE PROVIDED WITH AUTOMATIC MOTOR PROTECTOR TO BE INSTALLED BESIDE THE ACCU.

* REFRIGERANT PIPES FOR SPLIT TYPE AIR - CON SHALL BE CLAD WITH A 4"Ø PVC PIPE PRIOR TO BEING EMBEDDED.

* ALL REFRIGERANT PIPES SHALL BE LOCATED AT THE REAR OF THE FCU'S AND NOT ON THE USUAL SIDE LOCATION.

* INSTALL REFRIGERANT LINES SO THAT THE GAS VELOCITY IN THE EVAPORATOR SUCTION LINE IS SUFFICIENT TO MOVE THE OIL ALONG WITH THE GAS TO THE COMPRESSOR.

* HANGER / SUPPORT MUST BE PAINTED WITH DOUBLE COAT OF RUST PROTECTIVE PAINT.

* VERIFY ALL DIMENSIONAL LOCATION OF EQUIPMENT ON THE DRAWINGS OF RELATED TRADES AND INVESTIGATE ALL POSSIBLE INTERFERENCE AND CONDITION AFFECTING THE MECHANICAL WORK.

* UPON THE COMPLETION OF THE A/C EQUIPMENT INSTALLATION, TEST ALL FACTORY AND FIELD INSTALLED REFRIGERANT PIPING WITH A LEAKS DETECTOR TO ACQUIRE A LEAK - TIGHT CORRECT AND RE - TEST THE SYSTEM FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS.

* THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S WARRANTY CERTIFICATE UPON THE COMPLETION OF THE PROJECT.

TABULATION OF ACU

TYPE OF AIRCON	COOLING CAP.		EER	ELECTRICAL SUPPLY				LENGTH OF PIPE	LOCATION	AREA (SQ.M.)
	HP	KJ/hr		WATTAGE	VOLTAGE	PHASE	CYCLE			
GROUND FLOOR										
WACU-1	2.50	25,500	9.60	2,660	220	1	60	-	MICRO TEACHING LAB	44.625
WACU-2	1.50	13,000	10.70	1,210	220	1	60	-	OBSERVATION ROOM	21.12
WACU-3	1.00	11,000	11.70	940	220	1	60	-	CONSULTATION RM. 2	17.8
WACU-4	1.00	11,000	11.70	940	220	1	60	-	CONSULTATION RM. 3	12.98
WACU-5	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ CHEM LAB.	8.25
WACU-6	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ BIO. LAB.	9.41
WACU-7	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ ROBOTICS	8.25
WACU-8	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ TECH. LAB.	11.425
FM-1	3T	37,980	9.60	3,950	220	1	60	6.68	FACULTY ROOM	93.1
FM-2	3T	37,980	9.60	3,950	220	1	60	13.55		
FM-3	3T	37,980	9.60	3,950	220	1	60	8.2	CHEM. LABORATORY	99
FM-4	3T	37,980	9.60	3,950	220	1	60	12.85		
FM-5	3T	37,980	9.60	3,950	220	1	60	19.28	BIO. LABORATORY	103.14
FM-6	3T	37,980	9.60	3,950	220	1	60	6.22		
FM-7	3T	37,980	9.60	3,950	220	1	60	8.16	ROBOTICS LABORATORY	99.14
FM-8	3T	37,980	9.60	3,950	220	1	60	12.82		
FM-9	3T	37,980	9.60	3,950	220	1	60	29.93	ROBOTICS LABORATORY	99.14
FM-10	3T	37,980	9.60	3,950	220	1	60	8.83		
WM-1	1.00	9,540	11.10	860	220	1	60	8.98	CONSULTATION RM. 1	8.98
SECOND FLOOR										
WACU-9	2.50	25,500	9.60	2,660	220	1	60	-	CLASSROOM 201	73.5
WACU-10	2.50	25,500	9.60	2,660	220	1	60	-		
WACU-11	2.50	25,500	9.60	2,660	220	1	60	-	CLASSROOM 202	73.5
WACU-12	2.50	25,500	9.60	2,660	220	1	60	-		
WACU-13	2.50	25,500	9.60	2,660	220	1	60	-	CLASSROOM 203	73.5
WACU-14	2.50	25,500	9.60	2,660	220	1	60	-		
WACU-15	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ PHYSICS LAB.	8.25
WACU-16	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ COMSCI. LAB.	11.44
WACU-17	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ SPEECH LAB.	8.25
WACU-18	0.80	7,240	11.50	645	220	1	60	-	CONSULTATION RM. @ RESEARCH LAB.	11.9
FM-11	3T	37,980	9.60	3,950	220	1	60	11.74	PHYSICS LABORATORY	99.14
FM-12	3T	37,980	9.60	3,950	220	1	60	19.09		
FM-13	3T	37,980	9.60	3,950	220	1	60	12.7	COMSCI. LABORATORY	103.14
FM-14	3T	37,980	9.60	3,950	220	1	60	20		
FM-15	3T	37,980	9.60	3,950	220	1	60	16.31	SPEECH LABORATORY	98.84
FM-16	3T	37,980	9.60	3,950	220	1	60	18.58		
FM-17	3T	37,980	9.60	3,950	220	1	60	13	RESEARCH LABORATORY	99.43
FM-18	3T	37,980	9.60	3,950	220	1	60	8.17		
TOTAL										

LEGEND:

- TR - TONS OF REFRIGERANTS
- KW - KILOWATTS
- HP - HORSE POWER
- BTU / HR - BRITISH THERMAL UNITS PER HOUR

TABULATION OF EQUIPMENT

NO. OF UNITS	EQUIPMENT
2	REFRIGERATOR
14	EXHAUST FAN w/ 6" Ø DUCT PIPE
2	STAINLESS STEEL HOOD



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY: 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE: 141342 | 16JULY15
PTR: 6600933
DATE ISS: 05 JAN 2016
PLACE ISS: GSC
TIN: 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

FELIX R. CAÑIZARES
PROF. MECHANICAL ENGINEER

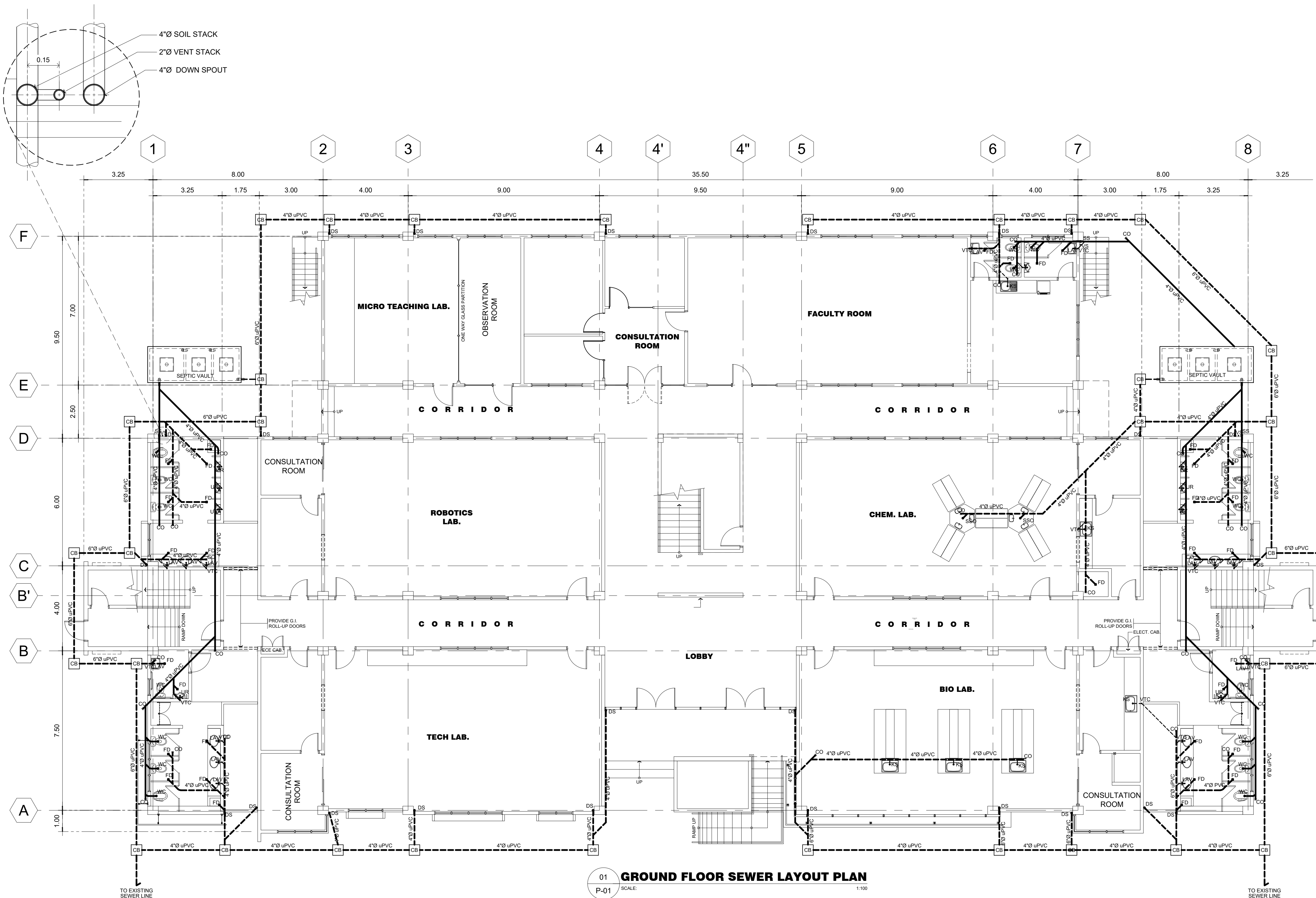
PRC Reg.No.: 3129 PTR No.: 6603433
T I N No.: 144-954-544 Date: 1/08/16 Iss.: GSC

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
NELSON LEANDRO R. BRETAÑA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
M-03
37 51



LEGEND :	
WC	WATER CLOSET
LAV	LAVATORY
KS	KITCHEN SINK
FD	FLOOR DRAIN
UR	URINAL
SS	SOIL STACK
VTC	VENT. THRU' CEILING
VS	VENT. STACK
SV	STACK VENT.
WV	WET VENT
FV	FIXTURE VENT
SK	SLOP SINK
DS	DOWN SPOUTS
RD	ROOF DRAIN
CO	CLEAN OUT
HB	HOSE BIB
FT	FAUCET
SSO	SEWER STUB-OUT
WSO	WATER SUPPLY STUB-OUT

01
P-01
SCALE: 1:100
GROUND FLOOR SEWER LAYOUT PLAN



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC: 8270
VALIDITY 08 MAY 2018
IAPOA: 04440 141342 071615
O.R. | DATE 141342 | 16JULY15
PTR 6600933
DATE ISS. 05 JAN 2016
PLACE ISS. GSC
TIN 123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

MICHAEL T. ANG
MASTER PLUMBER

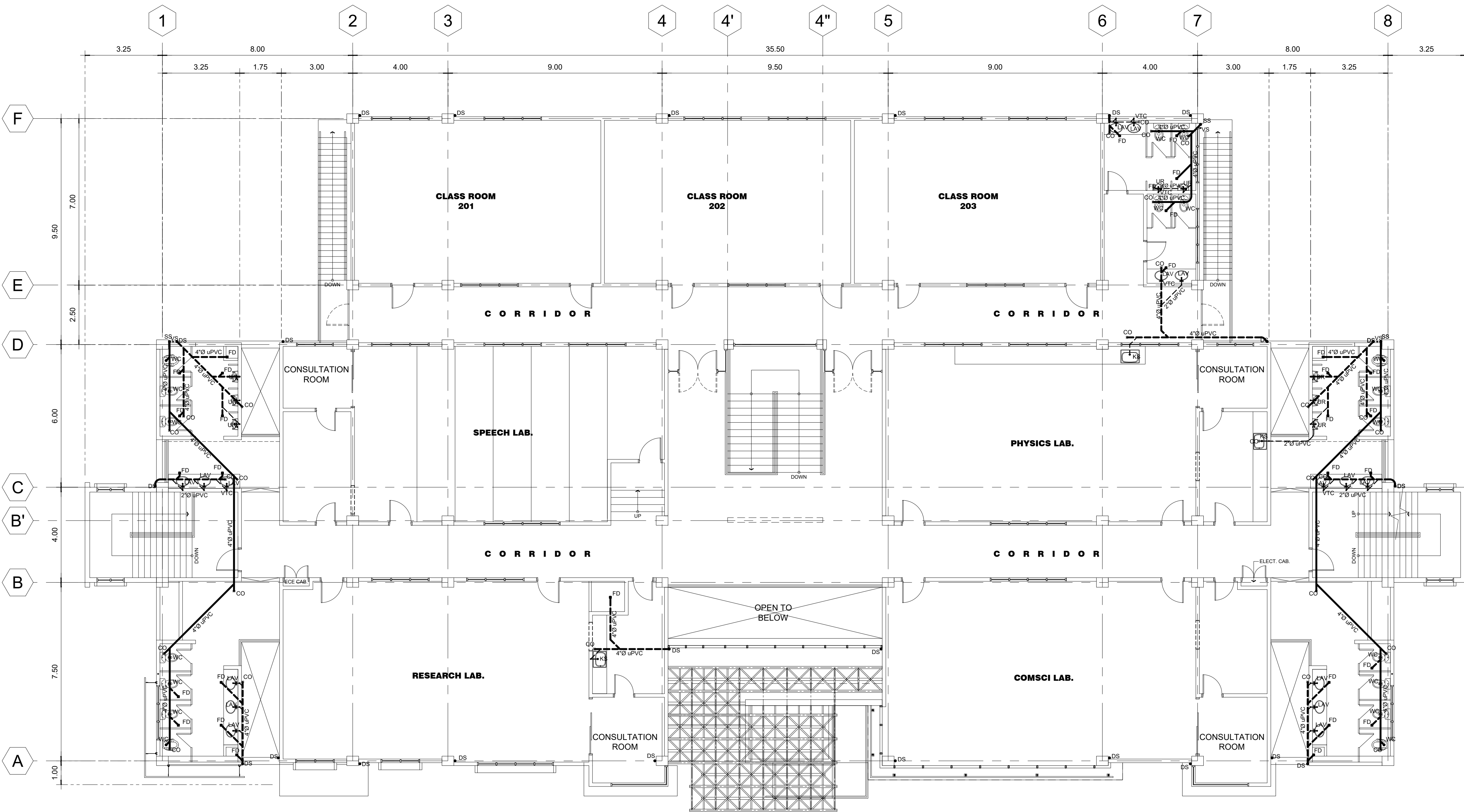
PRC Reg.No.: 2174 PTR No.: 6600934
TIN No.: 123-875-856 Date: 01/05/16

PROJECT TITLE / LOCATION
**PROPOSED ADVANCE SCIENCE
& TECHNOLOGY BLDG.
(ACADEMIC BUILDING III)**
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,
Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.
Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.
P-01
38 51



LEGEND :	
WC	WATER CLOSET
LAV	LAVATORY
KS	KITCHEN SINK
FD	FLOOR DRAIN
UR	URINAL
SS	SOIL STACK
VTC	VENT. THRU' CEILING
VS	VENT. STACK
SV	STACK VENT.
WV	WET VENT
FV	FIXTURE VENT
SK	SLOP SINK
DS	DOWN SPOUTS
RD	ROOF DRAIN
CO	CLEAN OUT
HB	HOSE BIB
FT	FAUCET
SSO	SEWER STUB-OUT
WSO	WATER SUPPLY STUB-OUT

01
P-02
SCALE: 1:100
SECOND FLOOR SEWER LAYOUT PLAN



MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

MICHAEL T. ANG
MASTER PLUMBER

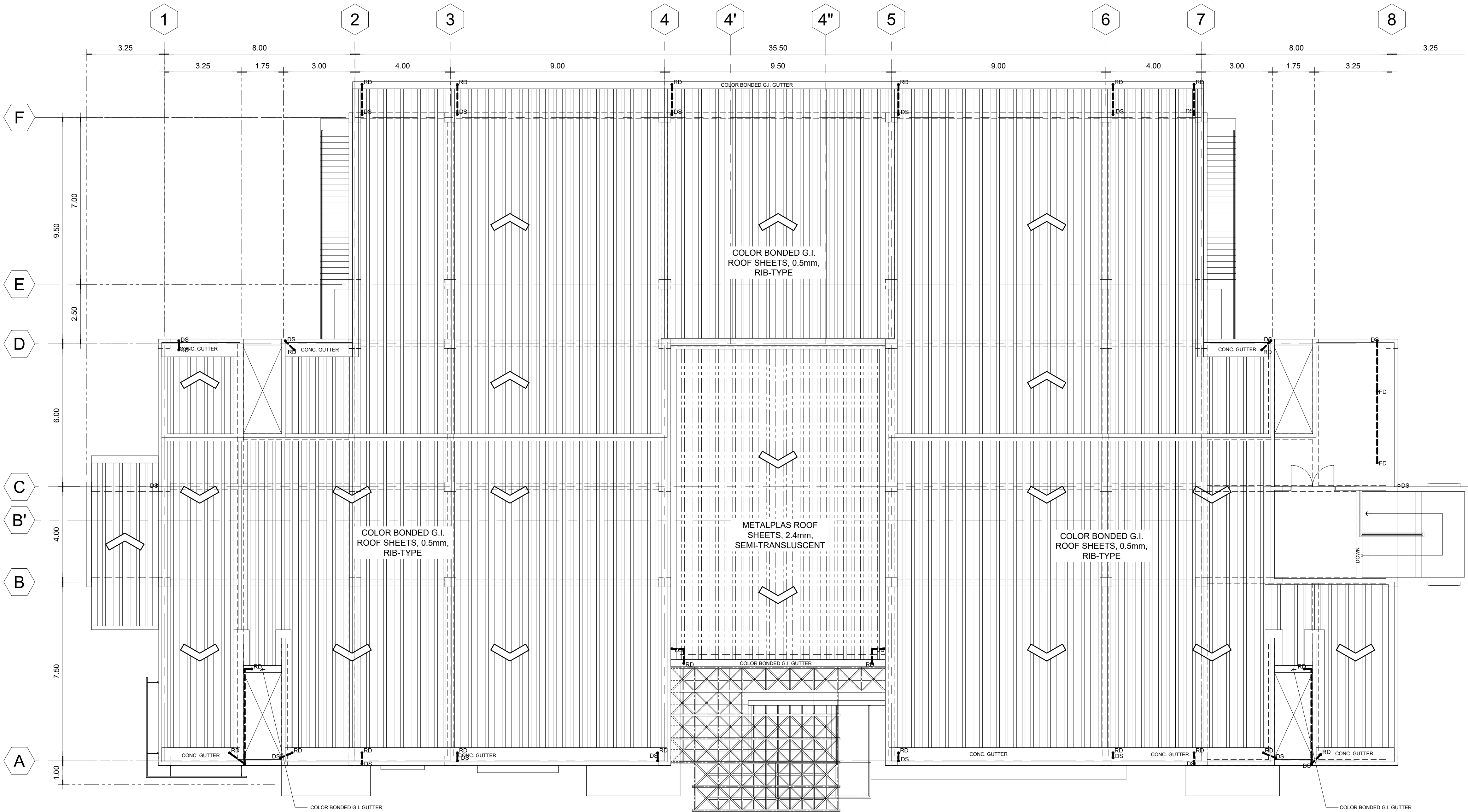
PRC Reg.No.:	2174	PTR No.:	6600934
TIN No.:	123-875-856	Date:	01/05/16

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.	
P-02	
39	51

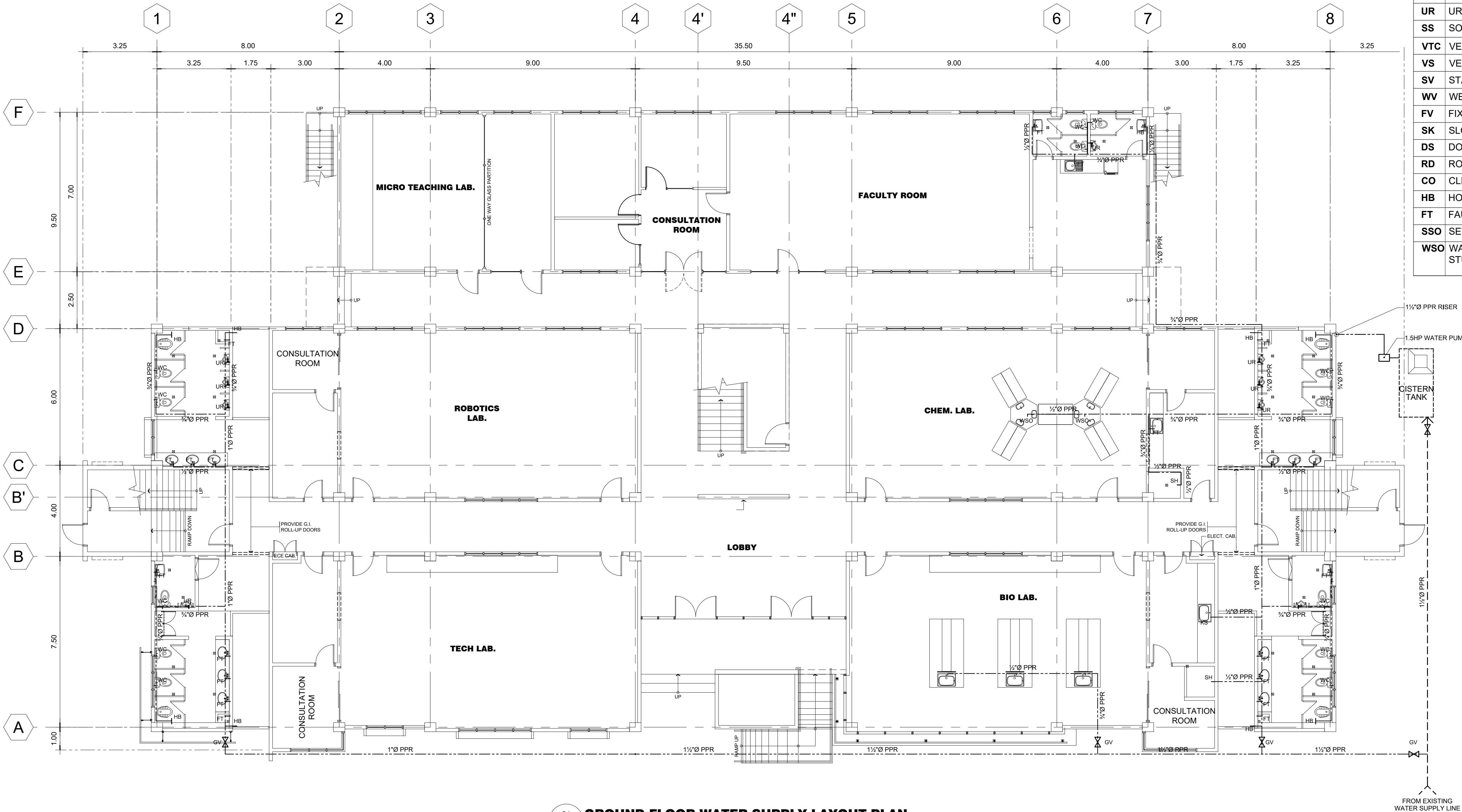


01
P-03

ROOF DRAIN LAYOUT PLAN

SCALE: 1:100

LEGEND :	
WC	WATER CLOSET
LAV	LAVATORY
KS	KITCHEN SINK
FD	FLOOR DRAIN
UR	URINAL
SS	SOIL STACK
VTC	VENT. THRU' CEILING
VS	VENT. STACK
SV	STACK VENT.
WV	WET VENT
FV	FIXTURE VENT
SK	SLOP SINK
DS	DOWN SPOUTS
RD	ROOF DRAIN
CO	CLEAN OUT
HB	HOSE BIB
FT	FAUCET
SSO	SEWER STUB-OUT
WSO	WATER SUPPLY STUB-OUT



LEGEND :	
WC	WATER CLOSET
LAV	LAVATORY
KS	KITCHEN SINK
FD	FLOOR DRAIN
UR	URINAL
SS	SOIL STACK
VTC	VENT. THRU' CEILING
VS	VENT. STACK
SV	STACK VENT.
WV	WET VENT
FV	FIXTURE VENT
SK	SLOP SINK
DS	DOWN SPOUTS
RD	ROOF DRAIN
CO	CLEAN OUT
HB	HOSE BIB
FT	FAUCET
SSO	SEWER STUB-OUT
WSO	WATER SUPPLY STUB-OUT

01
P-04
GROUND FLOOR WATER SUPPLY LAYOUT PLAN
SCALE: 1:100



PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

MICHAEL T. ANG
MASTER PLUMBER

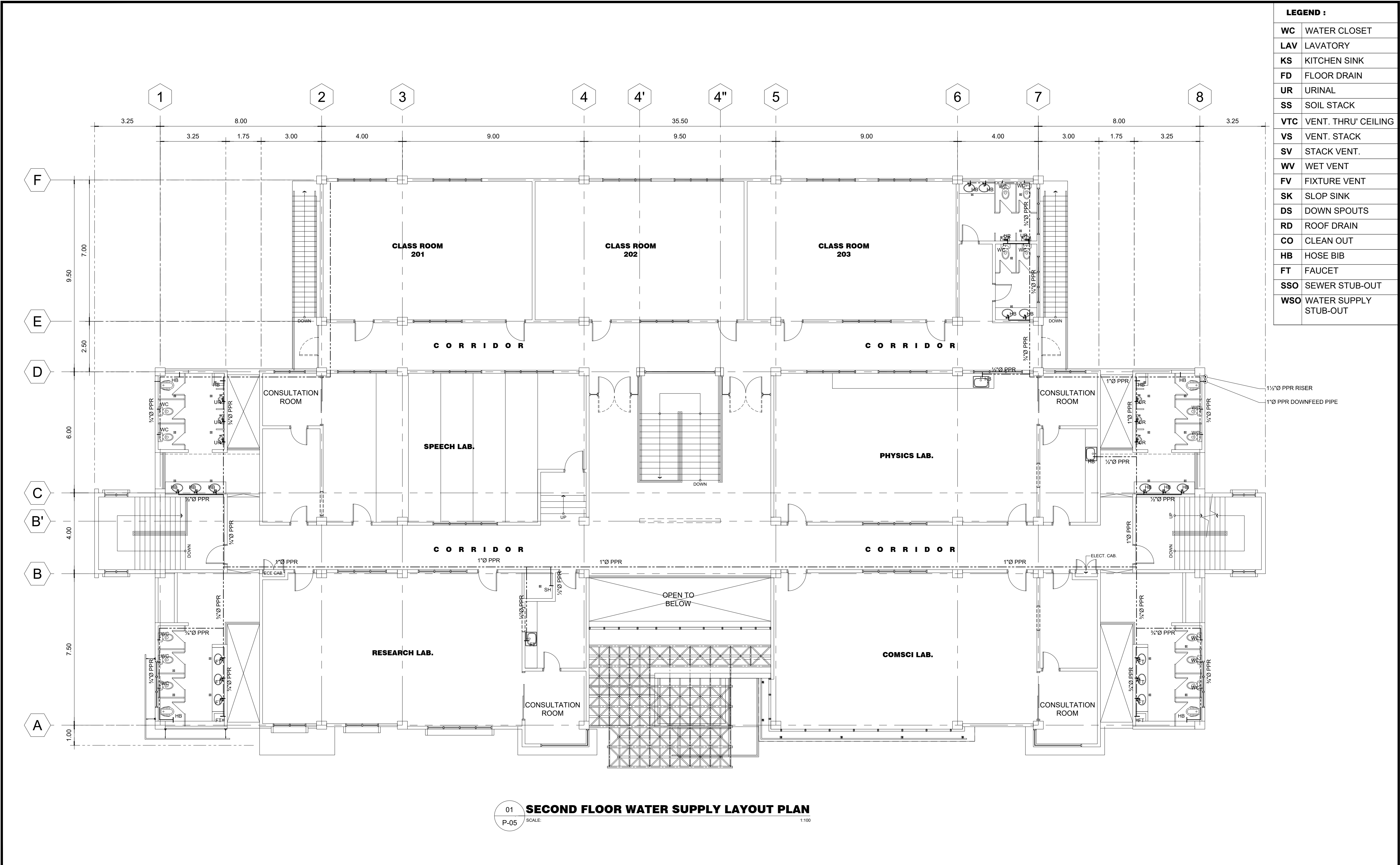
PRC Reg.No.:	2174	PTR No.:	6600934
TIN No.:	123-875-856	Date:	01/05/16

PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

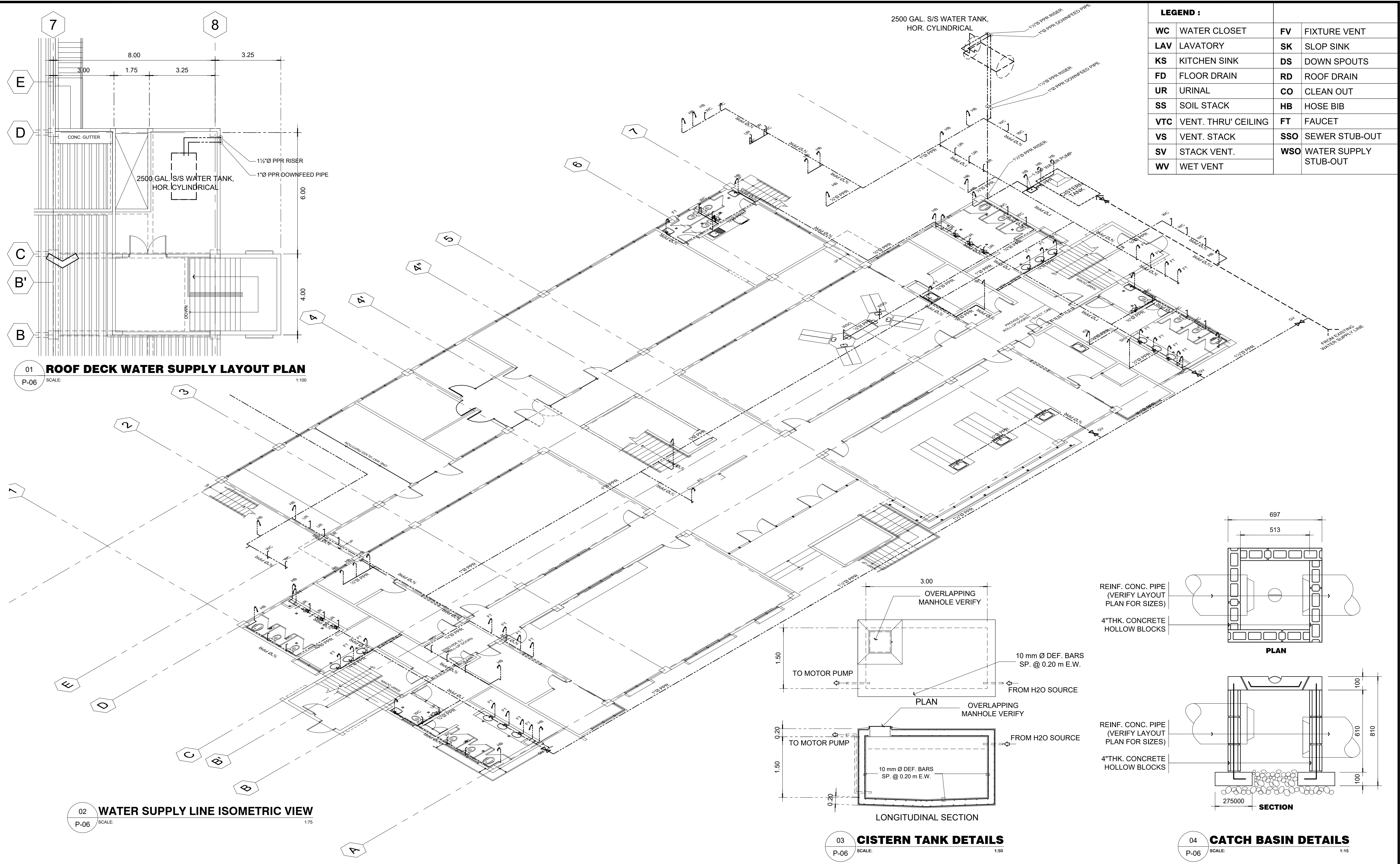
PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER


SHEET NO.
P-04
41 51



 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.	MICHAEL T. ANG MASTER PLUMBER PRC Reg.No.: 2174 PTR No.: 6600934 TIN No.: 123-875-856 Date: 01/05/16	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: RANILE ESPINA CORDOVA, uap JUNIOR ARCHITECT CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. P-05 42 51

FILE NAME: MTA16-001-PHILsci_ASTB.dwg | February 13, 2016





PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT •
DESIGNS BUILT • PLUMBING DESIGN

27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap

ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

MICHAEL T. ANG

MASTER PLUMBER

PRC Reg.No.:	2174
PTR No.:	6600934
TIN No.:	123-875-856
Date:	01/05/16

PROJECT TITLE / LOCATION

PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)

PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:

RANILE ESPINA CORDOVA, uap

JUNIOR ARCHITECT

CHECKED BY:

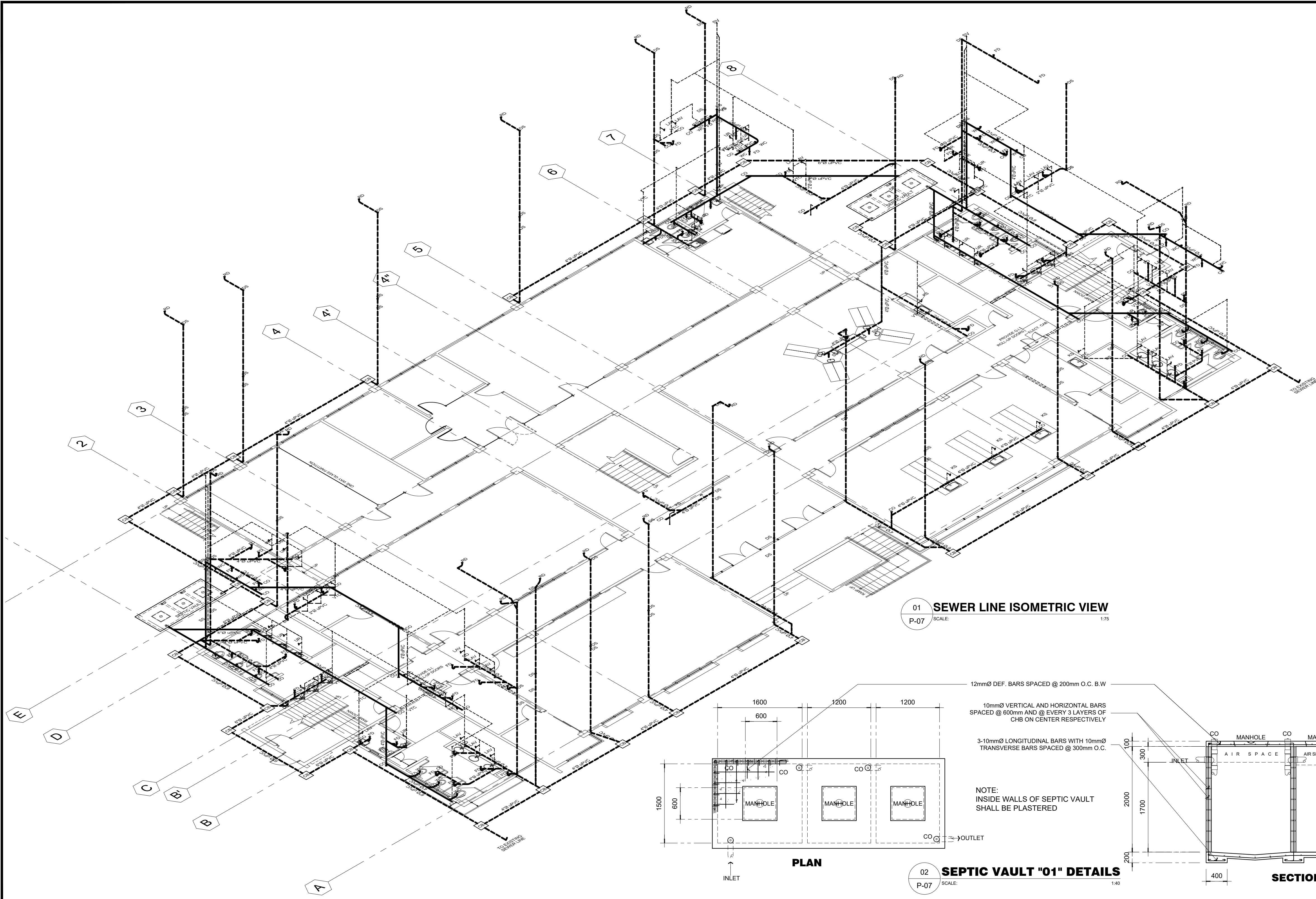
ROSARIO P. LEONORA

RESIDENT ENGINEER

SHEET NO.

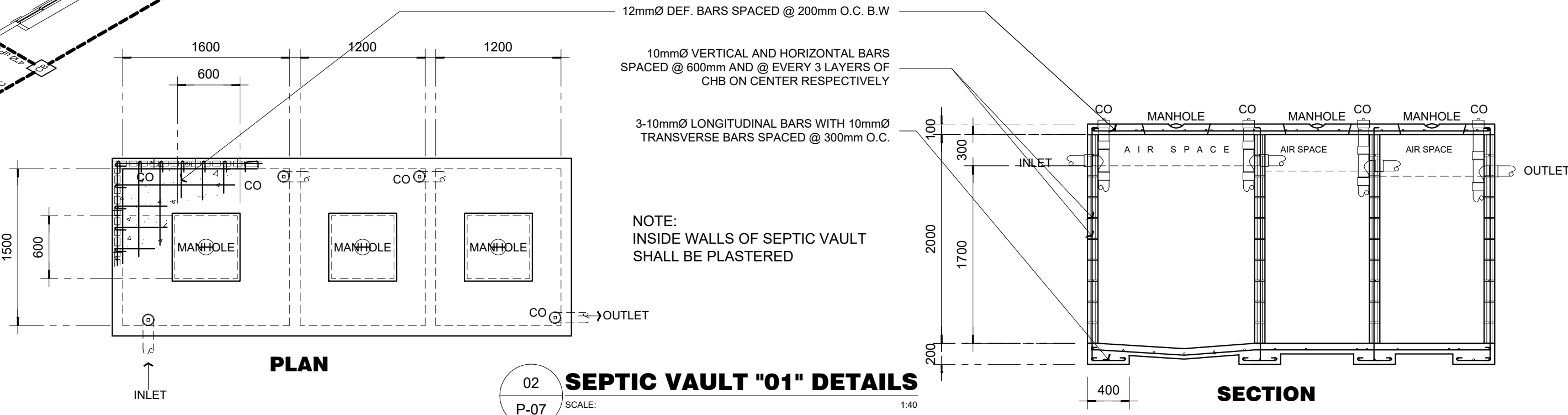
P-06

43 51



LEGEND :	
WC	WATER CLOSET
LAV	LAVATORY
KS	KITCHEN SINK
FD	FLOOR DRAIN
UR	URINAL
SS	SOIL STACK
VTC	VENT. THRU' CEILING
VS	VENT. STACK
SV	STACK VENT.
WV	WET VENT
FV	FIXTURE VENT
SK	SLOP SINK
DS	DOWN SPOUTS
RD	ROOF DRAIN
CO	CLEAN OUT
HB	HOSE BIB
FT	FAUCET
SSO	SEWER STUB-OUT
WSO	WATER SUPPLY STUB-OUT

01 SEWER LINE ISOMETRIC VIEW
P-07 SCALE: 1:75



02 SEPTIC VAULT "01" DETAILS
P-07 SCALE: 1:40



27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917

MICHAEL T. ANG, fuap
ARCHITECT

PRC:	8270
VALIDITY	08 MAY 2018
IAPOA:	04440 141342 071615
O.R. DATE	141342 16JULY15
PTR	6600933
DATE ISS.	05 JAN 2016
PLACE ISS.	GSC
TIN	123-875-856

SECTION 33 of RA 9266 | Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.

MICHAEL T. ANG	
MASTER PLUMBER	
PRC Reg.No.: 2174	PTR No.: 6600934
TIN No.: 123-875-856	Date: 01/05/16

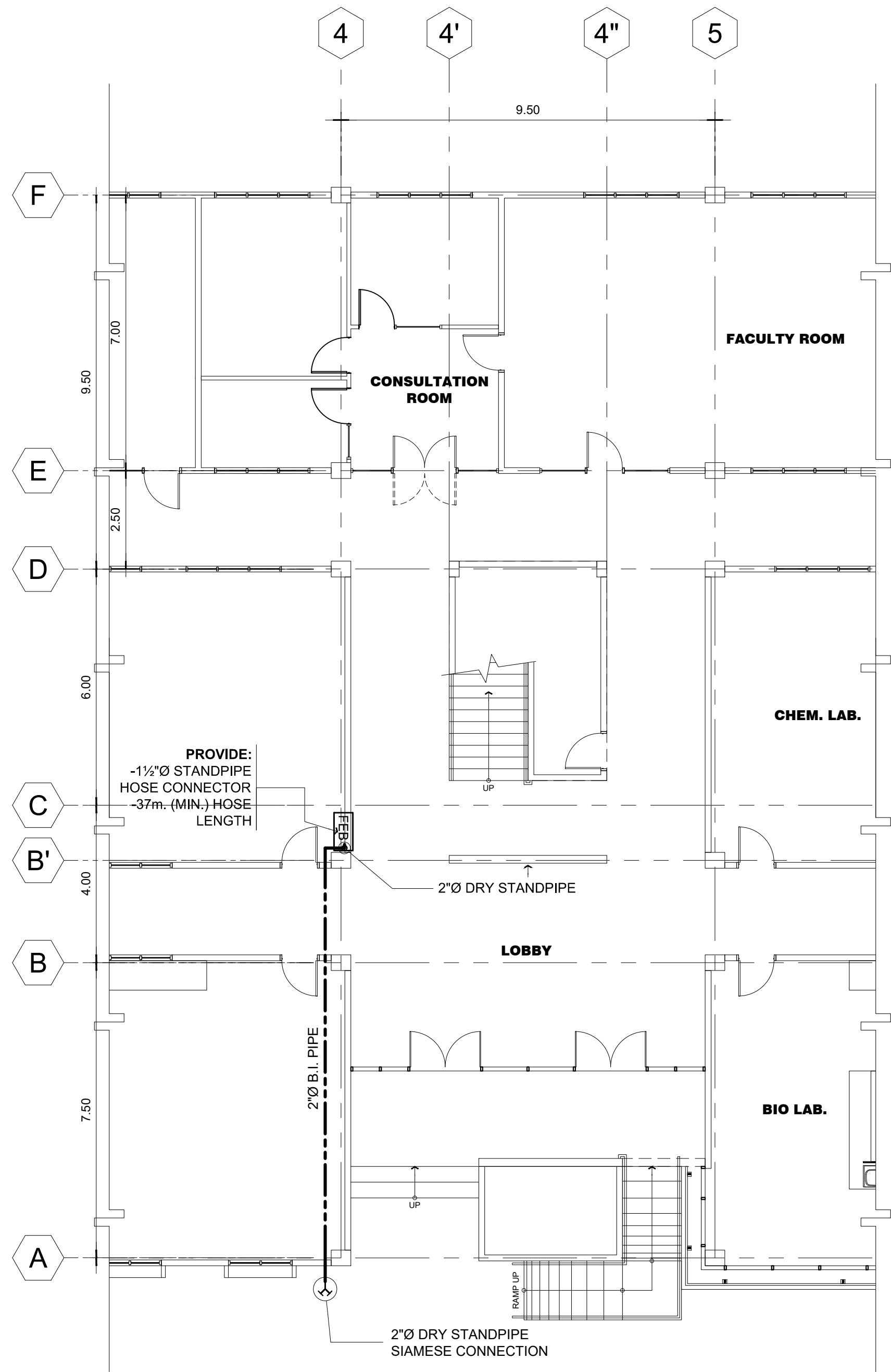
PROJECT TITLE / LOCATION
PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III)
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY
CHUCHI P. GARGANERA, PH. D.
DIRECTOR III
ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

PREPARED BY:
RANILE ESPINA CORDOVA, uap
JUNIOR ARCHITECT
CHECKED BY :
ROSARIO P. LEONORA
RESIDENT ENGINEER

SHEET NO.	
P-07	
44	51

LEGEND :	
FHC ↘	FIRE HOSE CONNECTION

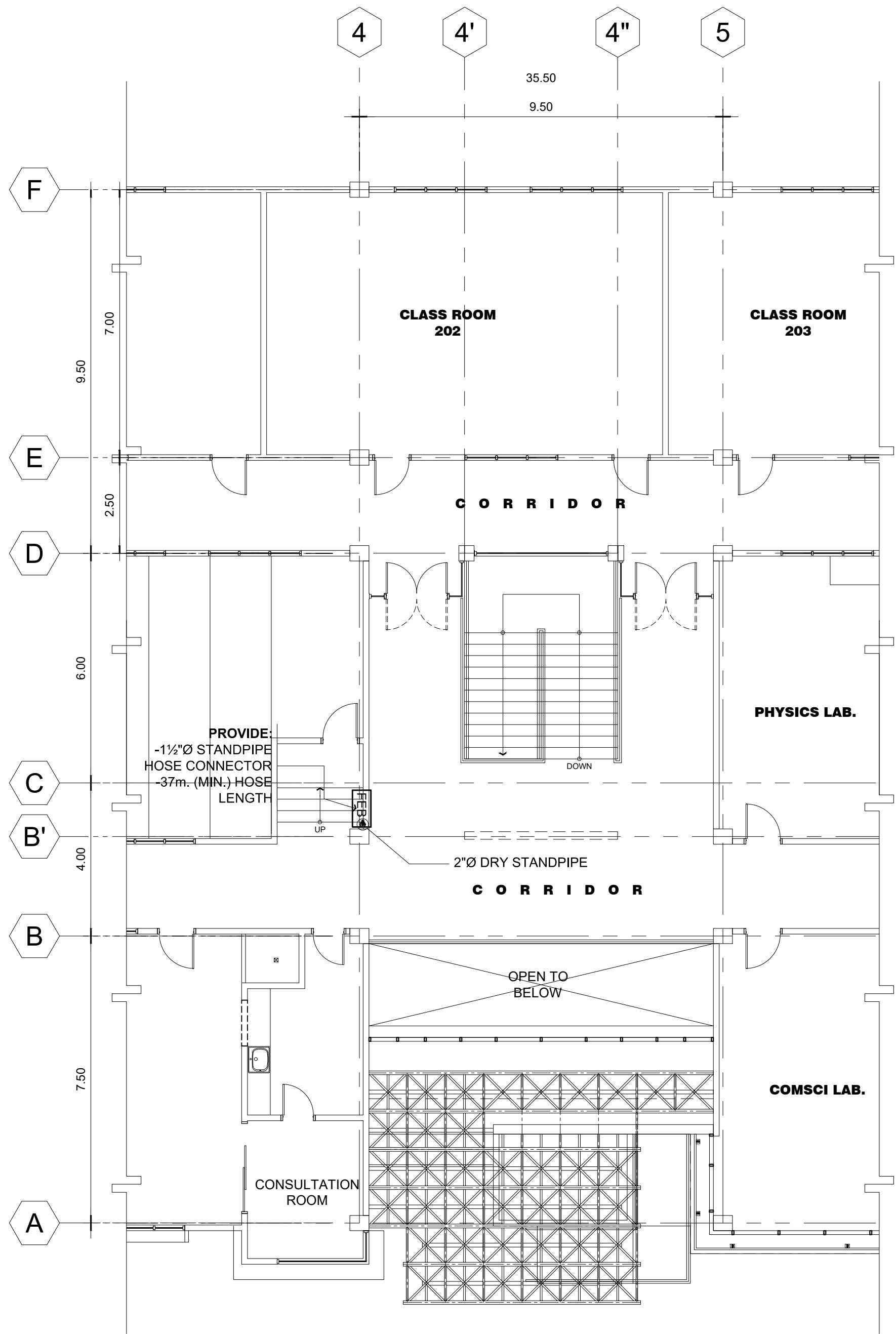


01

GROUND FLOOR DRY STANDPIPE LAYOUT PLAN

P-08

SCALE: 1:100

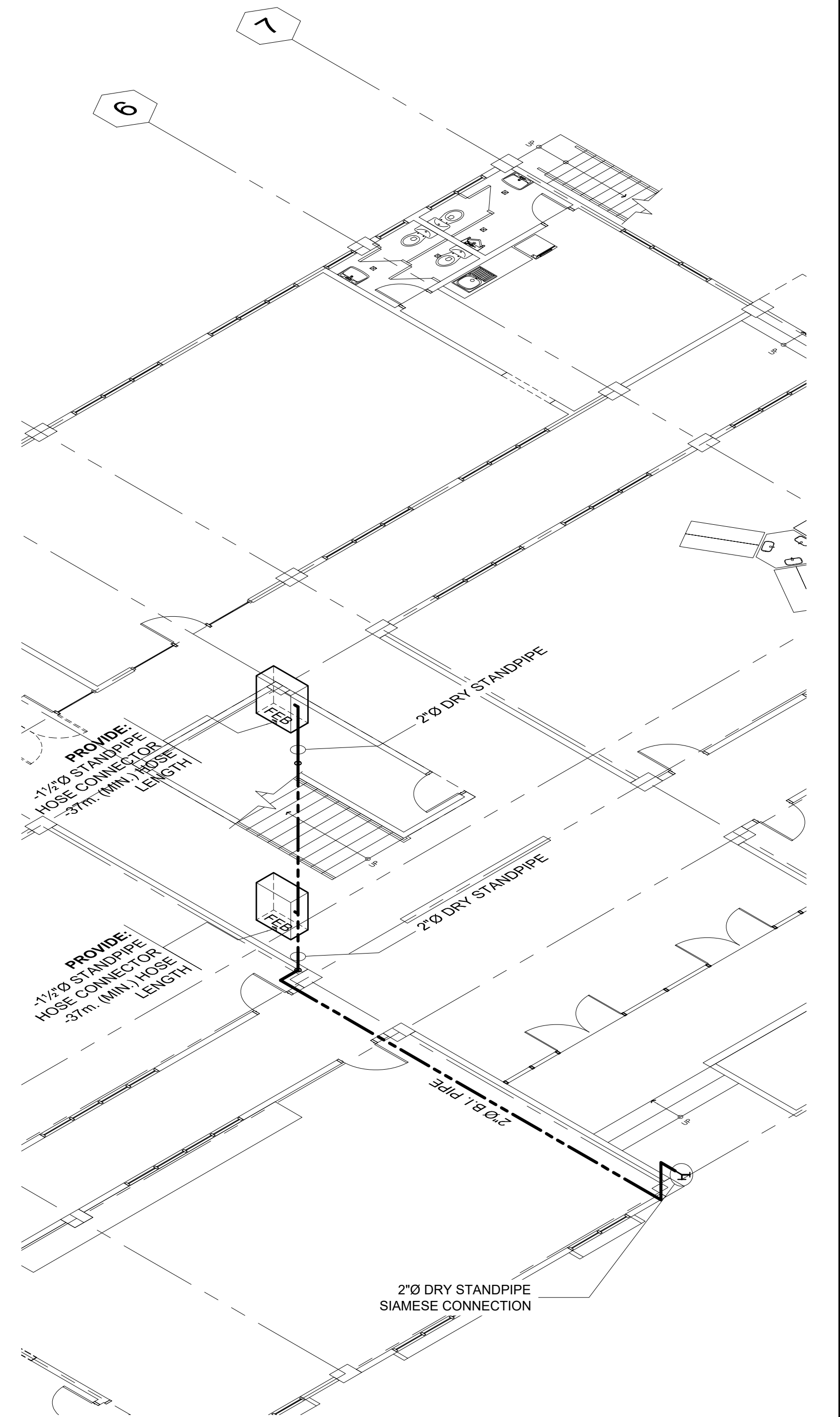


02

SECOND FLOOR DRY STANDPIPE LAYOUT PLAN

P-08

SCALE: 1:100

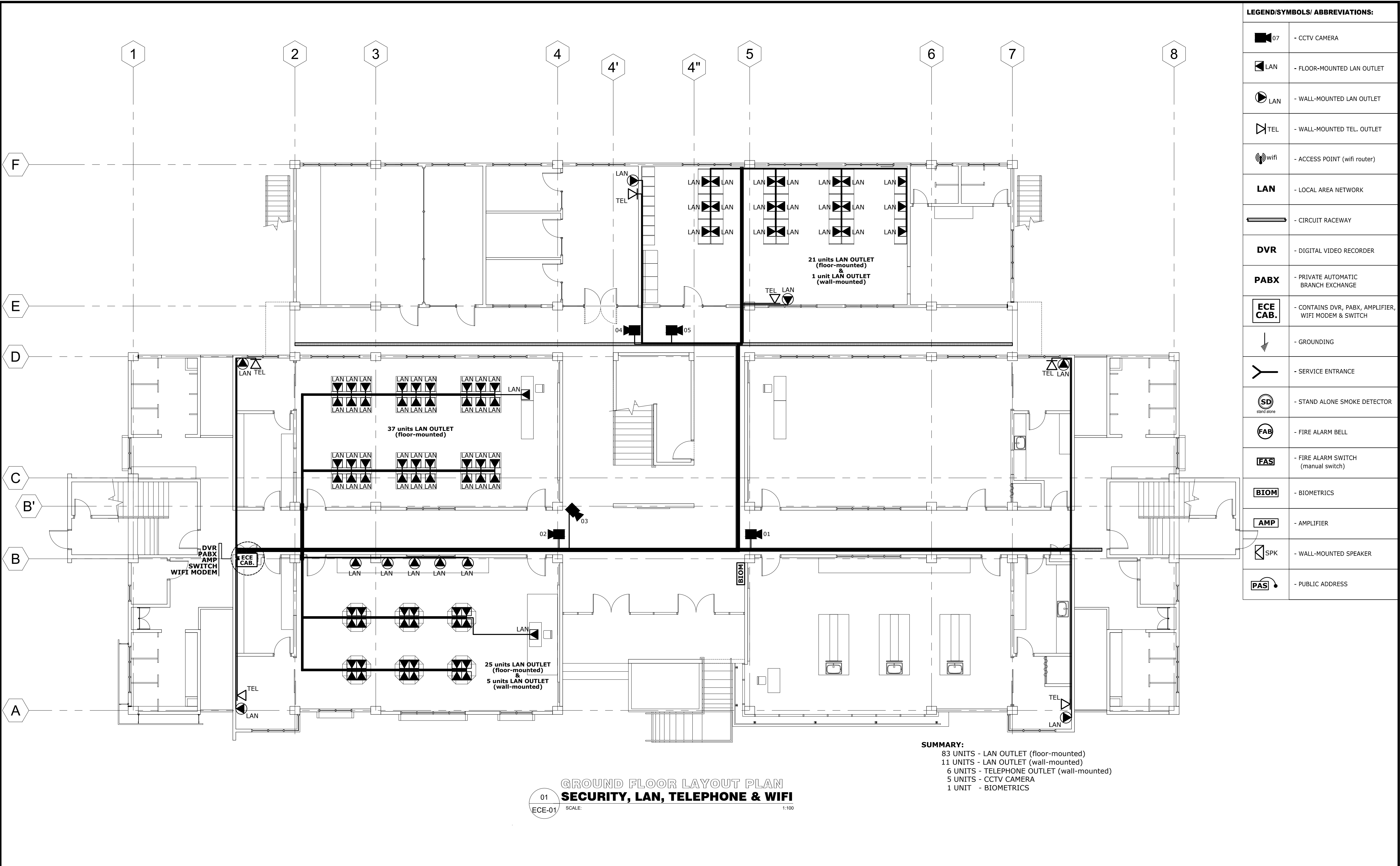


03

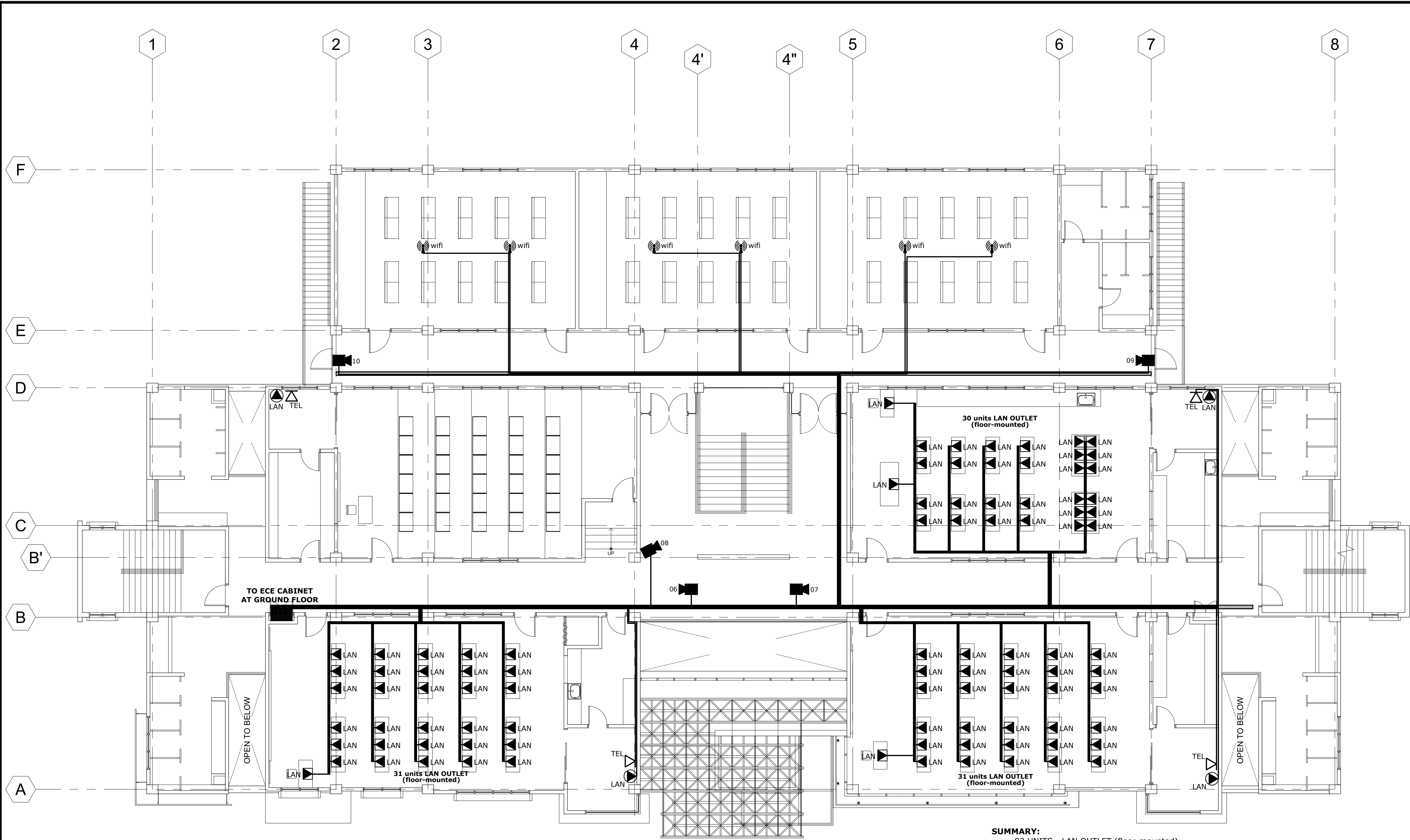
DRY STANDPIPE ISOMETRIC VIEW

P-08

SCALE: 1:75



 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, without the written consent of architect or author of said documents.	PRC: 0472, 2016 PTR No.: 6595691 ISS. AT: G.S.C.	IECEP No.:09-09657,2018 DATE: 01/08/16 T I N No.:169-824-299	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: DARWIN NISPEROS PROF. ELECTRONICS & COMM. ENGR. CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. ECE-01 47 51
		FILE NAME: PHILSCI ASTB ECE.dwg February 15, 2016							

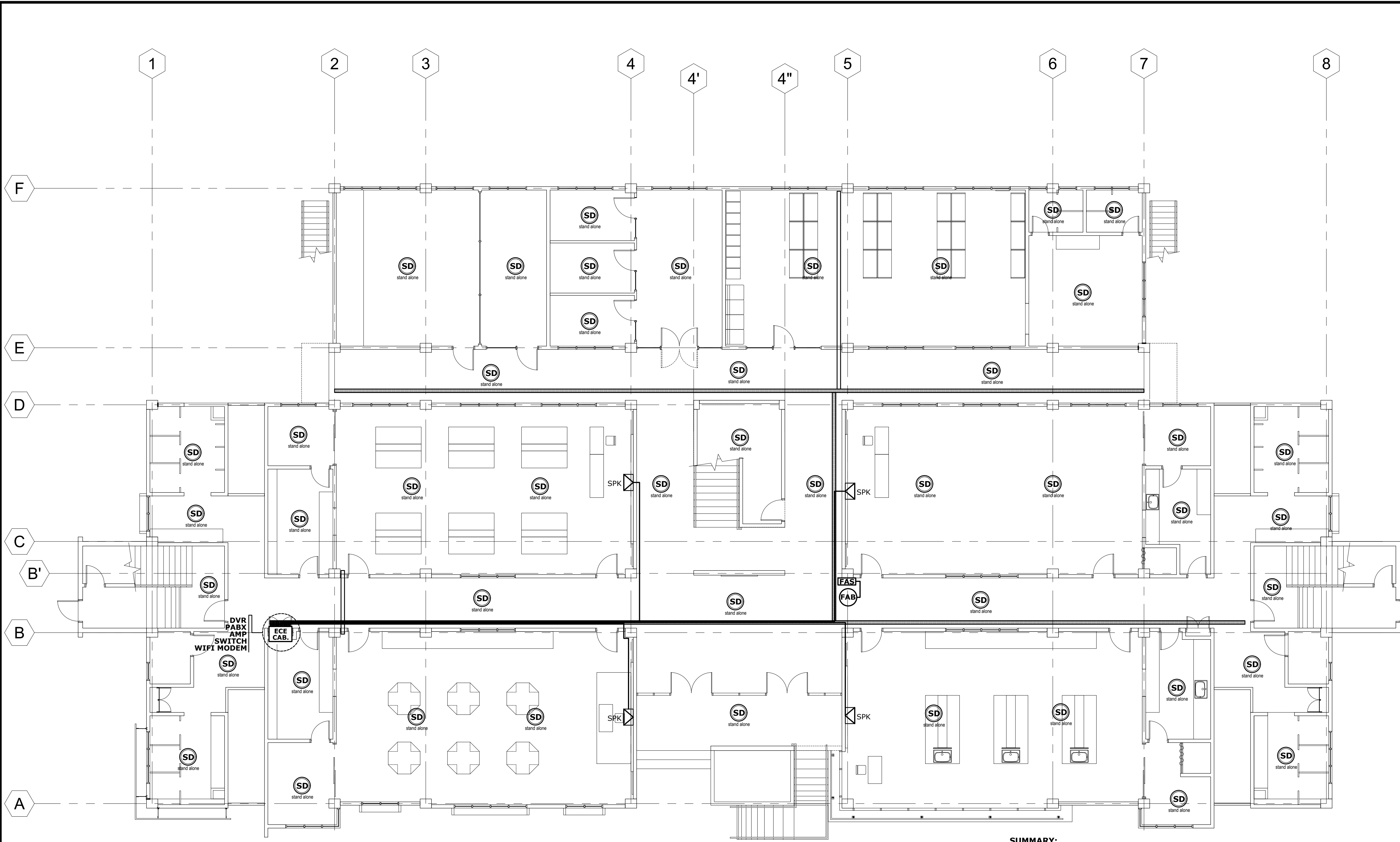


LEGEND/SYMBOLS/ ABBREVIATIONS:	
	- CCTV CAMERA
	- FLOOR-MOUNTED LAN OUTLET
	- WALL-MOUNTED LAN OUTLET
	- WALL-MOUNTED TEL. OUTLET
	- ACCESS POINT (wifi router)
LAN	- LOCAL AREA NETWORK
	- CIRCUIT RACEWAY
DVR	- DIGITAL VIDEO RECORDER
PABX	- PRIVATE AUTOMATIC BRANCH EXCHANGE
ECE CAB.	- CONTAINS DVR, PABX, AMPLIFIER, WIFI MODEM & SWITCH
	- GROUNDING
	- SERVICE ENTRANCE
	- STAND ALONE SMOKE DETECTOR
	- FIRE ALARM BELL
	- FIRE ALARM SWITCH (manual switch)
BIOM	- BIOMETRICS
AMP	- AMPLIFIER
	- WALL-MOUNTED SPEAKER
	- PUBLIC ADDRESS

SUMMARY:
92 UNITS - LAN OUTLET (floor-mounted)
4 UNITS - LAN OUTLET (wall-mounted)
4 UNITS - TELEPHONE OUTLET (wall-mounted)
5 UNITS - CCTV CAMERA
6 UNITS - ACCESS POINT (ceiling-mounted)

01
ECE-02
SCALE: 1:100
**SECOND FLOOR LAYOUT PLAN
SECURITY, LAN, TELEPHONE & WIFI**

 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, without the written consent of architect or author of said documents.	DARWIN D. NISPEROS,IECEP PROF. ELECTRONICS & COMM. ENGR. PRC: 0472, 2016 PTR No.: 6595691 ISS. AT: G.S.C.	IECEP No.:09-09657,2018 DATE: 01/08/16 T I N No.:169-824-299	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: DARWIN NISPEROS PROF. ELECTRONICS & COMM. ENGR. CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. ECE-02 48 51
		FILE NAME: PHILSCI ASTB ECE.dwg February 15, 2016							

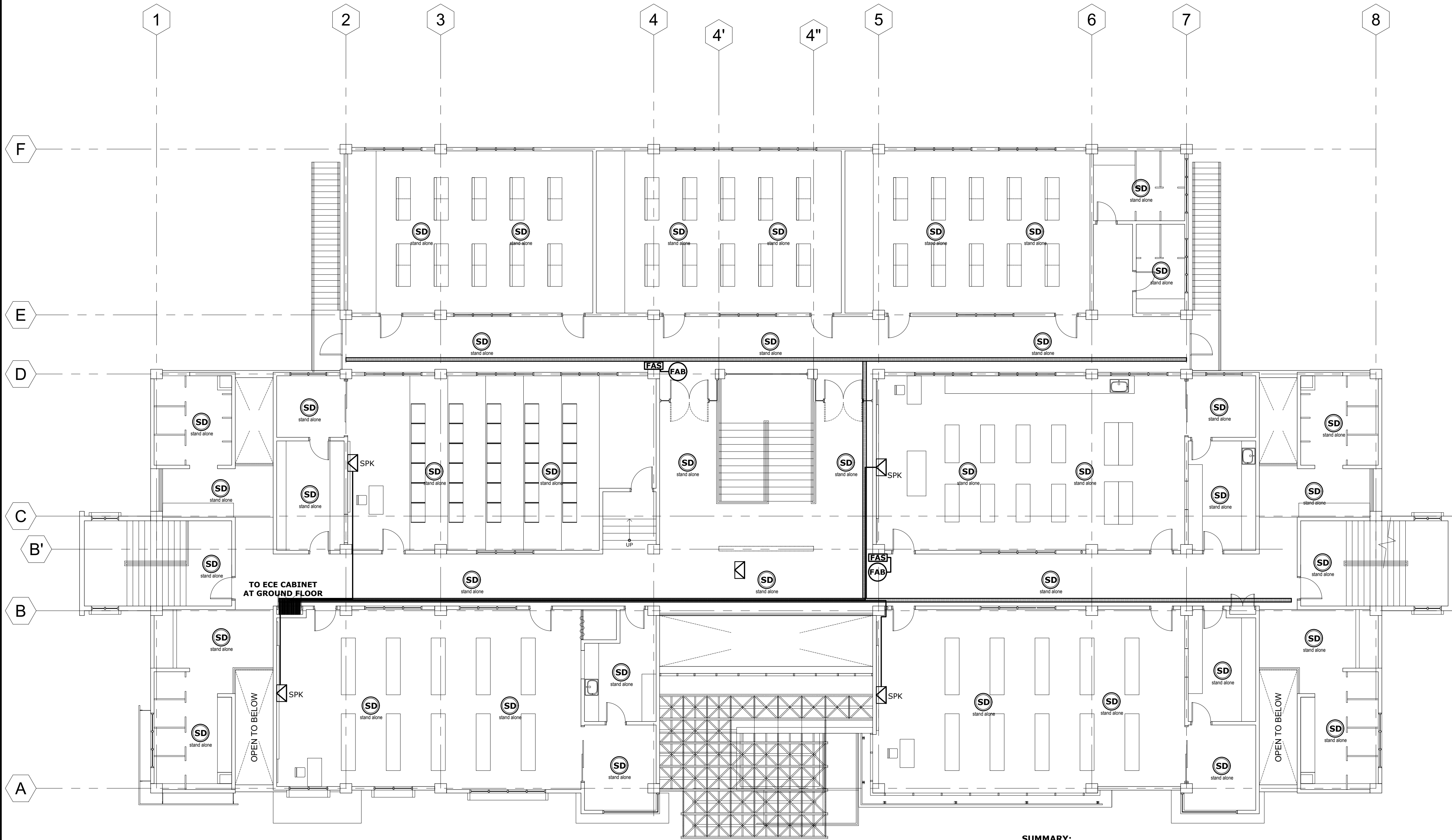


LEGEND/SYMBOLS/ ABBREVIATIONS:	
	07 - CCTV CAMERA
	LAN - FLOOR-MOUNTED LAN OUTLET
	LAN - WALL-MOUNTED LAN OUTLET
	TEL - WALL-MOUNTED TEL. OUTLET
	wifi - ACCESS POINT (wifi router)
LAN	- LOCAL AREA NETWORK
	- CIRCUIT RACEWAY
DVR	- DIGITAL VIDEO RECORDER
PABX	- PRIVATE AUTOMATIC BRANCH EXCHANGE
ECE CAB.	- CONTAINS DVR, PABX, AMPLIFIER, WIFI MODEM & SWITCH
	- GROUNDING
	- SERVICE ENTRANCE
	SD - STAND ALONE SMOKE DETECTOR
	FAB - FIRE ALARM BELL
	FAS - FIRE ALARM SWITCH (manual switch)
	BIOM - BIOMETRICS
	AMP - AMPLIFIER
	SPK - WALL-MOUNTED SPEAKER
	PAS - PUBLIC ADDRESS

SUMMARY:
47 UNITS - SMOKE DETECTOR (stand alone)
1 UNIT - FIRE ALARM BELL
1 UNIT - MANUAL FIRE ALARM SWITCH
4 UNITS - WALL-MOUNTED SPEAKER

01
ECE-03
GROUND FLOOR LAYOUT PLAN
FIRE ALARM & PUBLIC ADDRESS SYSTEMS
SCALE: 1:100

 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.	DARWIN D. NISPEROS,IECEP PROF. ELECTRONICS & COMM. ENGR. PRC: 0472, 2016 PTR No.: 6595691 ISS. AT: G.S.C.	IECEP No.:09-09657,2018 DATE: 01/08/16 T I N No.:169-824-299	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: DARWIN NISPEROS PROF. ELECTRONICS & COMM. ENGR. CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. ECE-03 49 51
		FILE NAME: PHILSCI ASTB ECE.dwg February 15, 2016							



LEGEND/SYMBOLS/ ABBREVIATIONS:	
	- CCTV CAMERA
	- FLOOR-MOUNTED LAN OUTLET
	- WALL-MOUNTED LAN OUTLET
	- WALL-MOUNTED TEL. OUTLET
	- ACCESS POINT (wifi router)
LAN	- LOCAL AREA NETWORK
	- CIRCUIT RACEWAY
DVR	- DIGITAL VIDEO RECORDER
PABX	- PRIVATE AUTOMATIC BRANCH EXCHANGE
ECE CAB.	- CONTAINS DVR, PABX, AMPLIFIER, WIFI MODEM & SWITCH
	- GROUNDING
	- SERVICE ENTRANCE
	- STAND ALONE SMOKE DETECTOR
	- FIRE ALARM BELL
	- FIRE ALARM SWITCH (manual switch)
BIOM	- BIOMETRICS
AMP	- AMPLIFIER
	- WALL-MOUNTED SPEAKER
	- PUBLIC ADDRESS

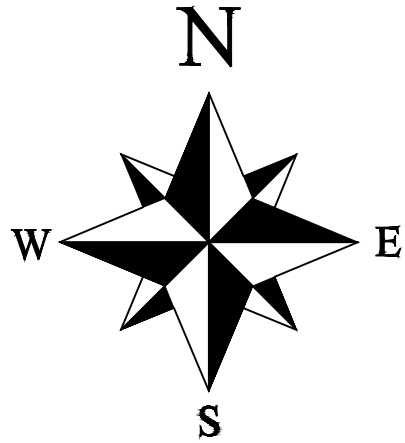
SUMMARY:
42 UNITS - SMOKE DETECTOR (stand alone)
2 UNITS - FIRE ALARM BELL
2 UNITS - MANUAL FIRE ALARM SWITCH
4 UNITS - WALL-MOUNTED SPEAKER

01
ECE-04
SCALE: 1:100
**SECOND FLOOR LAYOUT PLAN
FIRE ALARM & PUBLIC ADDRESS SYSTEMS**

 PLANS • DESIGNS • ESTIMATES • CONSTRUCTION MANAGEMENT • DESIGNS BUILT • PLUMBING DESIGN 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎ No: 301-1917	MICHAEL T. ANG, fuap ARCHITECT	PRC: 8270 VALIDITY: 08 MAY 2018 IAPOA: 04440 141342 071615 O.R. DATE: 141342 16JULY15 PTR: 6600933 DATE ISS: 05 JAN 2016 PLACE ISS: GSC TIN: 123-875-856	SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of said documents.	DARWIN D. NISPEROS,IECEP PROF. ELECTRONICS & COMM. ENGR. PRC: 0472, 2016 PTR No.: 6595691 ISS. AT: G.S.C.	IECEP No.:09-09657,2018 DATE: 01/08/16 T I N No.:169-824-299	PROJECT TITLE / LOCATION PROPOSED ADVANCE SCIENCE & TECHNOLOGY BLDG. (ACADEMIC BUILDING III) PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	APPROVED BY CHUCHI P. GARGANERA, PH. D. DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City	PREPARED BY: DARWIN NISPEROS PROF. ELECTRONICS & COMM. ENGR. CHECKED BY : ROSARIO P. LEONORA RESIDENT ENGINEER	SHEET NO. ECE-04 50 51
		FILE NAME: PHILSCI ASTB ECE.dwg February 15, 2016							



SITE



01 LOCATION MAP
ECE-05 SCALE: 1:100

ELECTRONIC NOTES:

- ALL ELECTRONIC WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHIL. ELECTRONIC CODE, THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE POWER COMPANY.
- ALL ELECTRONIC WORKS INCLUDED HEREIN SHALL BE EXECUTED BY ELECTRONIC TECHNICIAN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED/PROF. ELECTRONIC AND COMMUNICATION ENGINEER. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO COMMUNICATION SUPPLY.
- ALL MATERIALS SHALL BE BRAND NEW AND SHALL CONFORM WITH THE PROVISIONS OF THE UNDERWRITERS' LABORATORIES INC. IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN ESTABLISHED.
- ALL CONDUITS MUST BE PROTECTED AGAINST DAMAGES BY THE ENTRANCE OF WATER AND FOREIGN MATTERS DURING CONSTRUCTION. ALL ENDS OF CONDUITS SHALL BE PLUGGED TO EXCLUDE MOISTURE AND DUST IMMEDIATELY AFTER THE CONDUITS ARE PLACED.
- UNLESS OTHERWISE SPECIFIED, ALL ELECTRONIC WIRING INSTALLATION SHALL BE USED RSC PIPE. THE MINIMUM SIZE OF CONDUIT SHALL BE 15mm Ø.
- ALL OUTLET BOXES SHALL BE GALVANIZED GA. 16, DEEP-TYPE WITH FACTORY KNOCKOUTS. PULLBOXES SHALL BE USED WHEN APPLICABLE FOR EASY PULLING OF WIRES AND SHALL BE IN ACCORDANCE WITH THE PHILIPPINE ELECTRONIC CODE REQUIREMENTS. PREFERRED BRAND FOR JUNCTION, PULLBOX OR UTILITY SQUARE BOXES SHALL BE FUMACO, AMCU, TIMCO, OR APPROVED EQUAL.
- MOUNTING HEIGHTS OF DEVICES SHALL BE: (SUBJECT TO ARCHITECT'S APPROVAL PRIOR TO INSTALLATION), DATA OUTLET SHALL BE 0.30m ABOVE FINISHED FLOOR TO CENTER OF DEVICE.
- THE PLANS AS DRAWN ARE BASED UPON THE ARCHITECTURAL PLANS AND THE DETAILS AND SHOWN CONDITION AS ACCURATELY AS IT IS POSSIBLE TO INDICATE THEM IN SCALE, THE PLANS ARE DIAGRAMMATICAL AND DOES NOT NECESSARY SHOW ALL FITTINGS NECESSARY TO FIT TO THE BUILDING CONDITIONS. THE LOCATIONS OF OUTLETS, APPARATUS AND APPLIANCES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR PROPER LOCATION IN ORDER TO MAKE THEM FIT WITH THE ARCHITECTURAL DETAILS AND INSTRUCTIONS FROM THE ENGINEER'S REPRESENTATIVE AT THE SITE.

GENERAL SPECIFICATIONS:

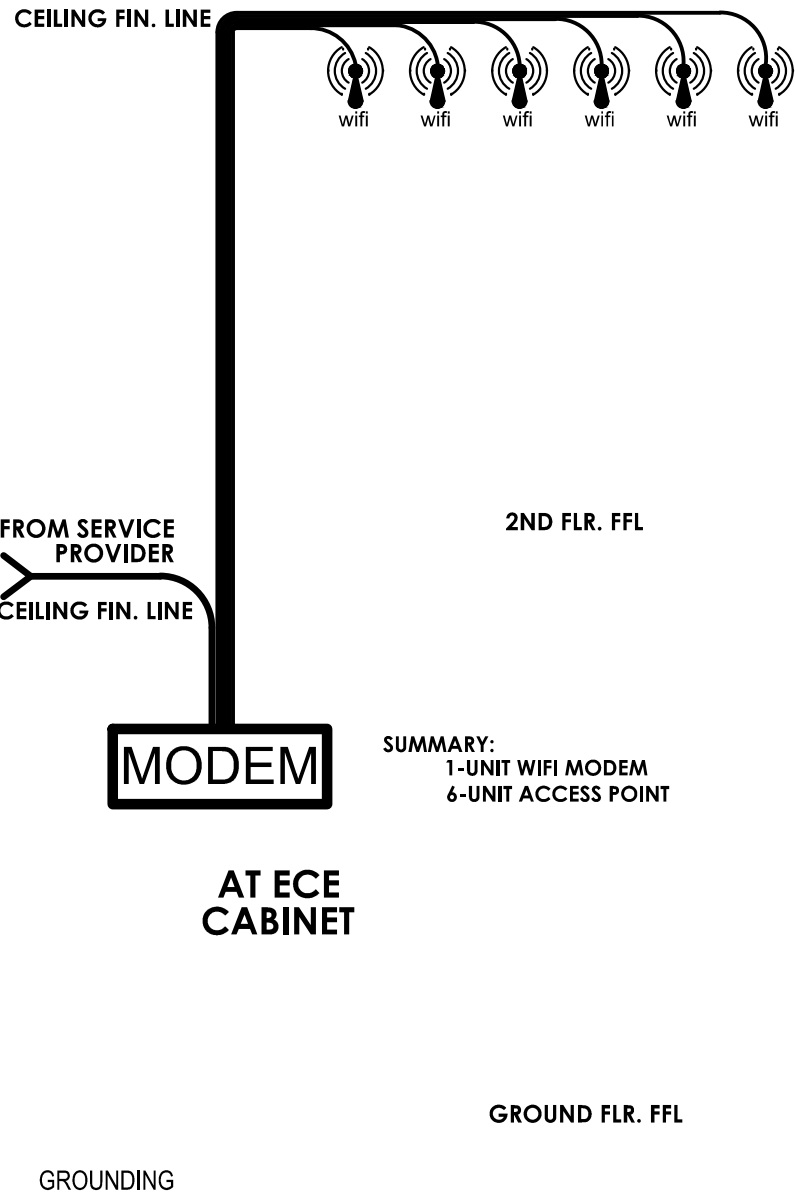
- THIS DRAWING IS SCHEMATIC REPRESENTATION OF SYSTEM ONLY. TENDERS TO DETAIL COMPLIANT OFFER BASED ON MANUFACTURER'S SYSTEM AND WIRING METHODS RECOMMENDATION.
- SMOKE DETECTOR SHALL BE MANUALLY-OPERATED OR STAND ALONE.
- WIRING INSTALLATION (CEILING CONCEALED, EMBEDDED, EXPOSED OR SURFACED) SHALL BE USED RSC OR EMT, 15mm Ø MINIMUM.
- WIRING METHODS SHALL BE AS FOLLOW:

A. LAN/TEL CABLE

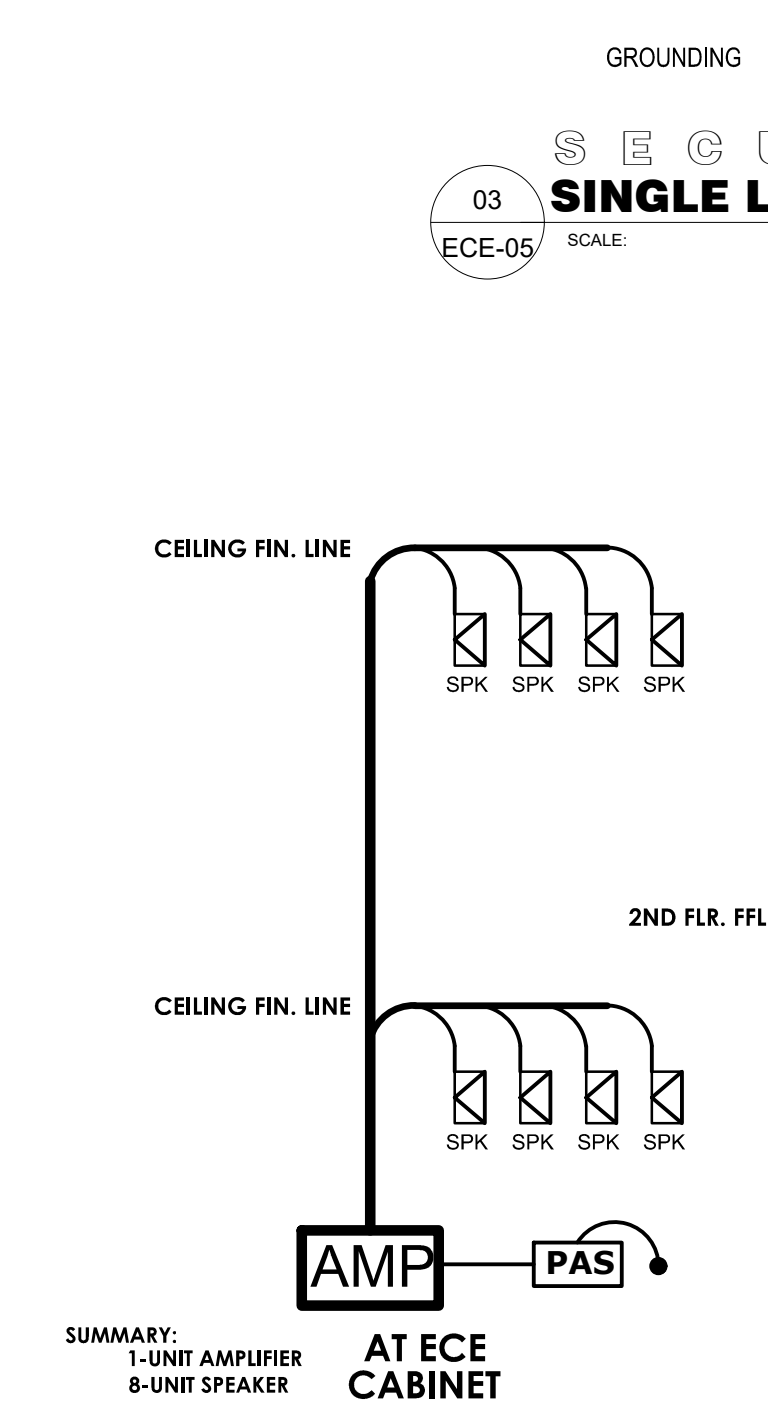
- #24 AWG 4 PAIRS UTP CABLE/CATS-E/CAT6

B. CCTV CABLE

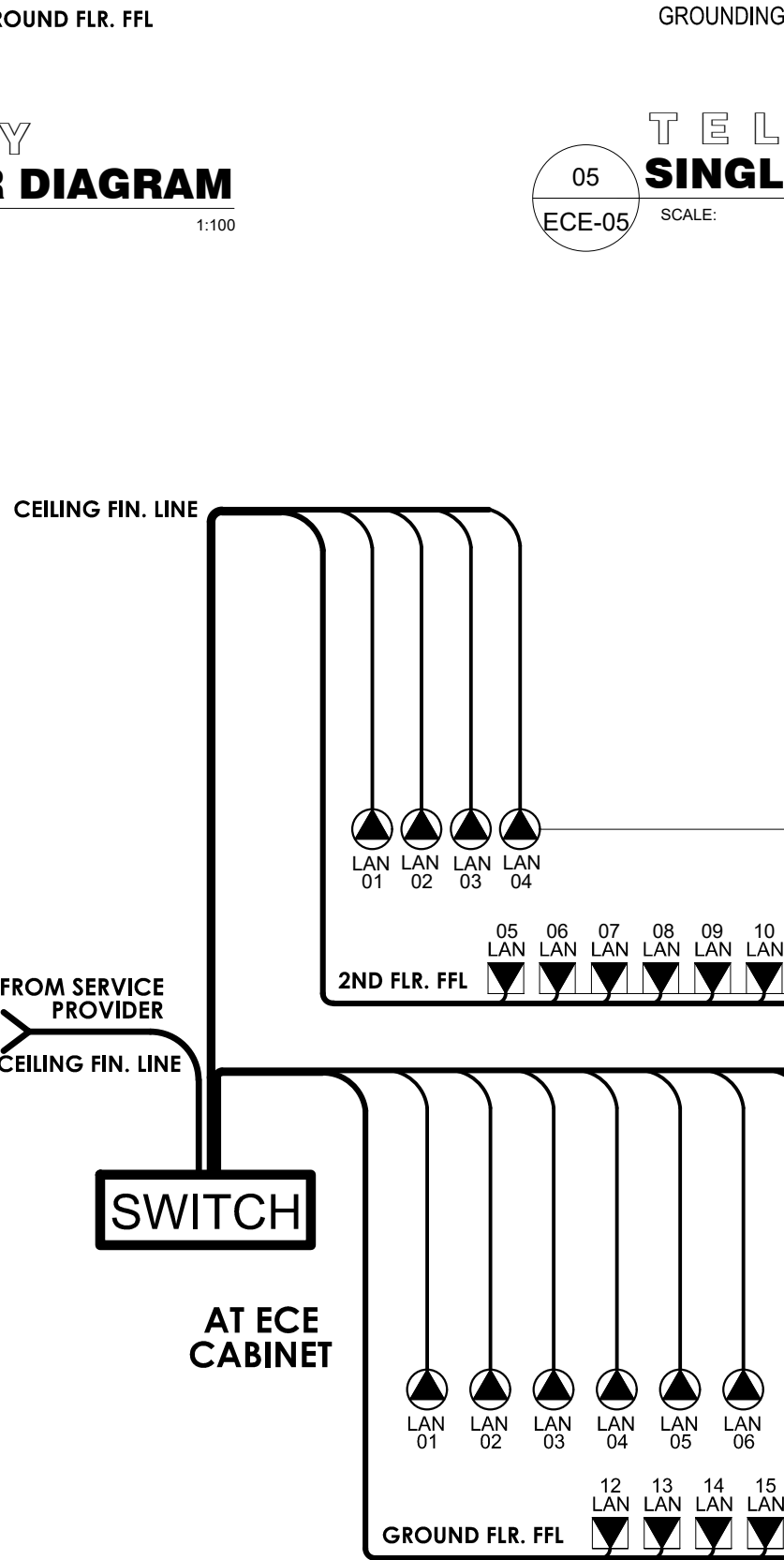
- RG-59/6 COAX CABLE
- CONDUIT SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED.
- THIS ARRANGEMENT IS LIMITED TO DROP WIRE ATTACHMENT OF UP TO 5 LINES.
- SPAN TO FIXTURE SHALL BE NOT EXCEED 45.7m.
- SERVICE SHALL BE SUFFICIENTLY HIGH TO PROVIDE PROPER DROP WIRE CLEARANCE OVER SIDE, STREETS OR ROADWAYS IN COMPLIANCE WITH THE CODES AND REGULATIONS.



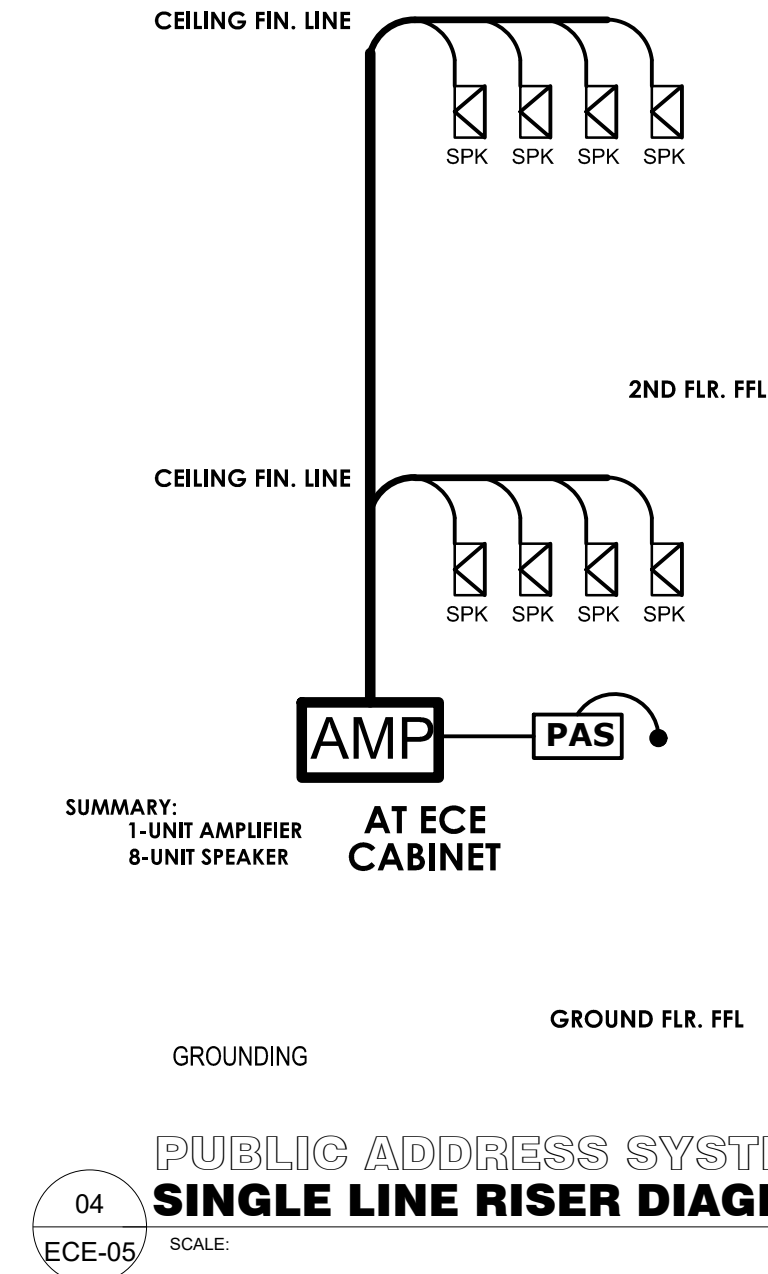
02 ACCESS POINT SINGLE LINE RISER DIAGRAM
ECE-05 SCALE: 1:100



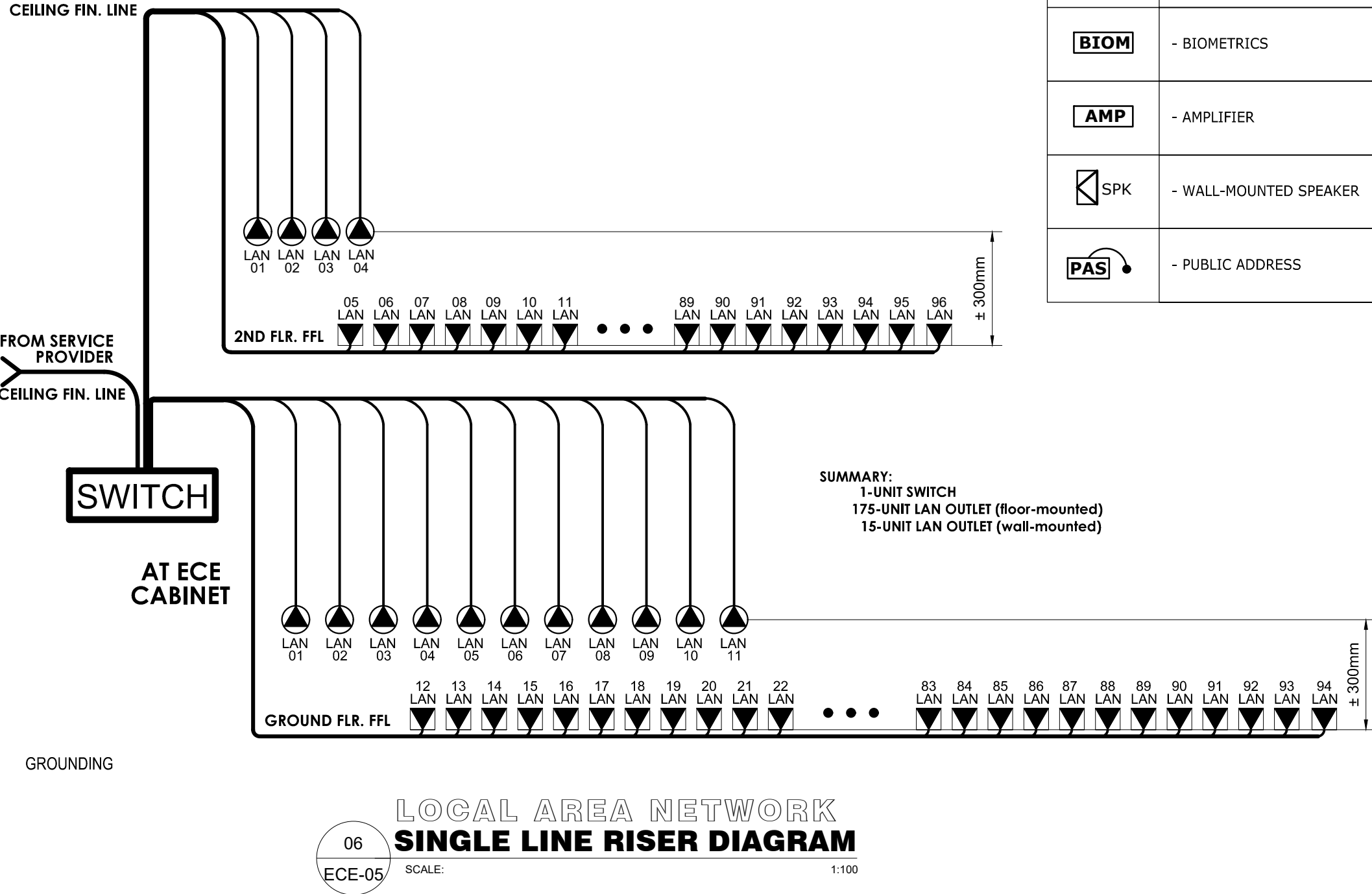
03 SECURITY SINGLE LINE RISER DIAGRAM
ECE-05 SCALE: 1:100



05 TELEPHONE SINGLE LINE RISER DIAGRAM
ECE-05 SCALE: 1:100



04 PUBLIC ADDRESS SYSTEM SINGLE LINE RISER DIAGRAM
ECE-05 SCALE: 1:100



06 LOCAL AREA NETWORK SINGLE LINE RISER DIAGRAM
ECE-05 SCALE: 1:100

LEGEND/SYMBOLS/ ABBREVIATIONS:

	07	- CCTV CAMERA
	LAN	- FLOOR-MOUNTED LAN OUTLET
	LAN	- WALL-MOUNTED LAN OUTLET
	TEL	- WALL-MOUNTED TEL. OUTLET
	wifi	- ACCESS POINT (wifi router)
LAN		- LOCAL AREA NETWORK
		- CIRCUIT RACEWAY
DVR		- DIGITAL VIDEO RECORDER
PABX		- PRIVATE AUTOMATIC BRANCH EXCHANGE
ECE CAB.		- CONTAINS DVR, PABX, AMPLIFIER, WIFI MODEM & SWITCH
		- GROUNDING
		- SERVICE ENTRANCE
	SD	- STAND ALONE SMOKE DETECTOR
	FAB	- FIRE ALARM BELL
	FAS	- FIRE ALARM SWITCH (manual switch)
	BIOM	- BIOMETRICS
	AMP	- AMPLIFIER
	SPK	- WALL-MOUNTED SPEAKER
	PAS	- PUBLIC ADDRESS