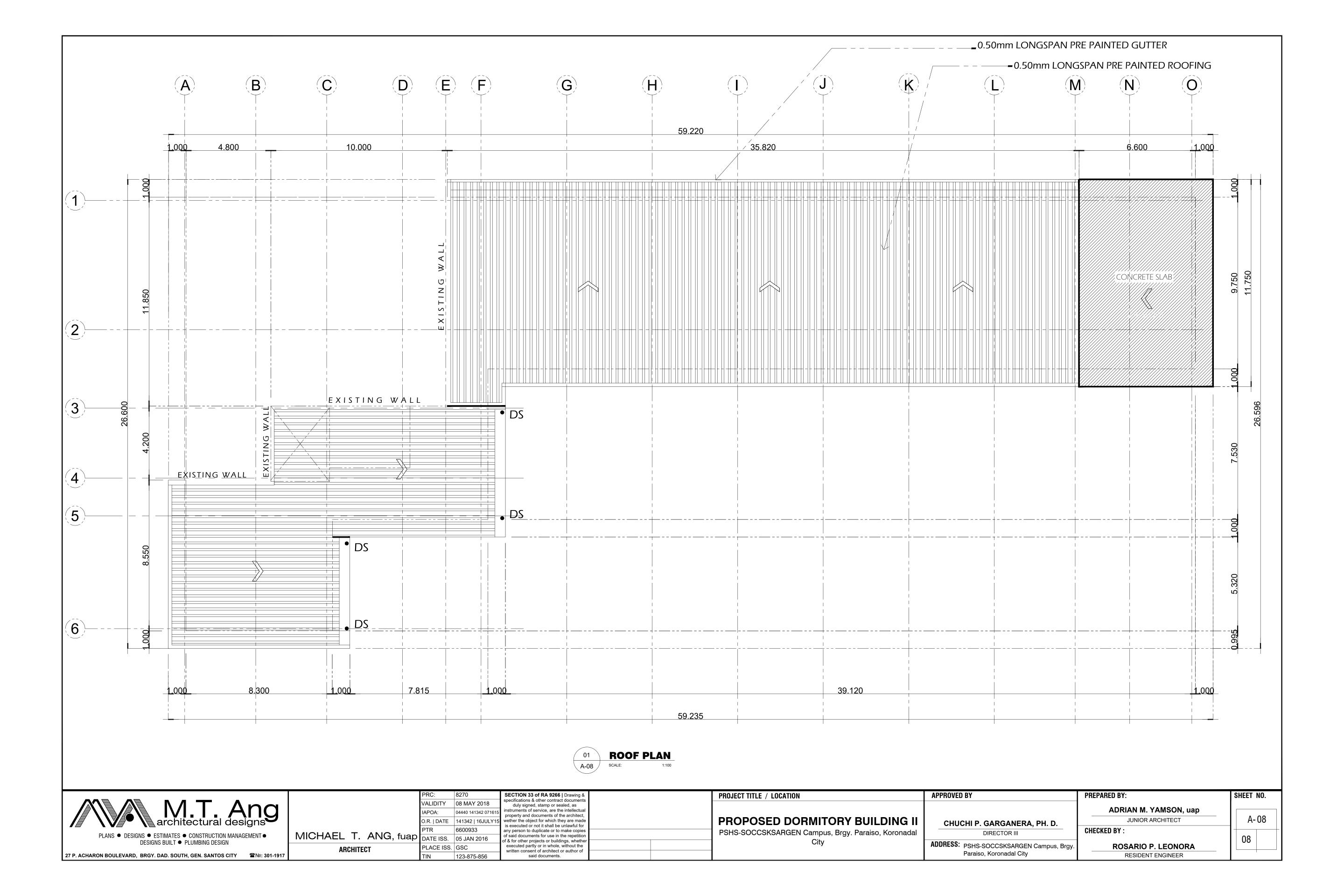
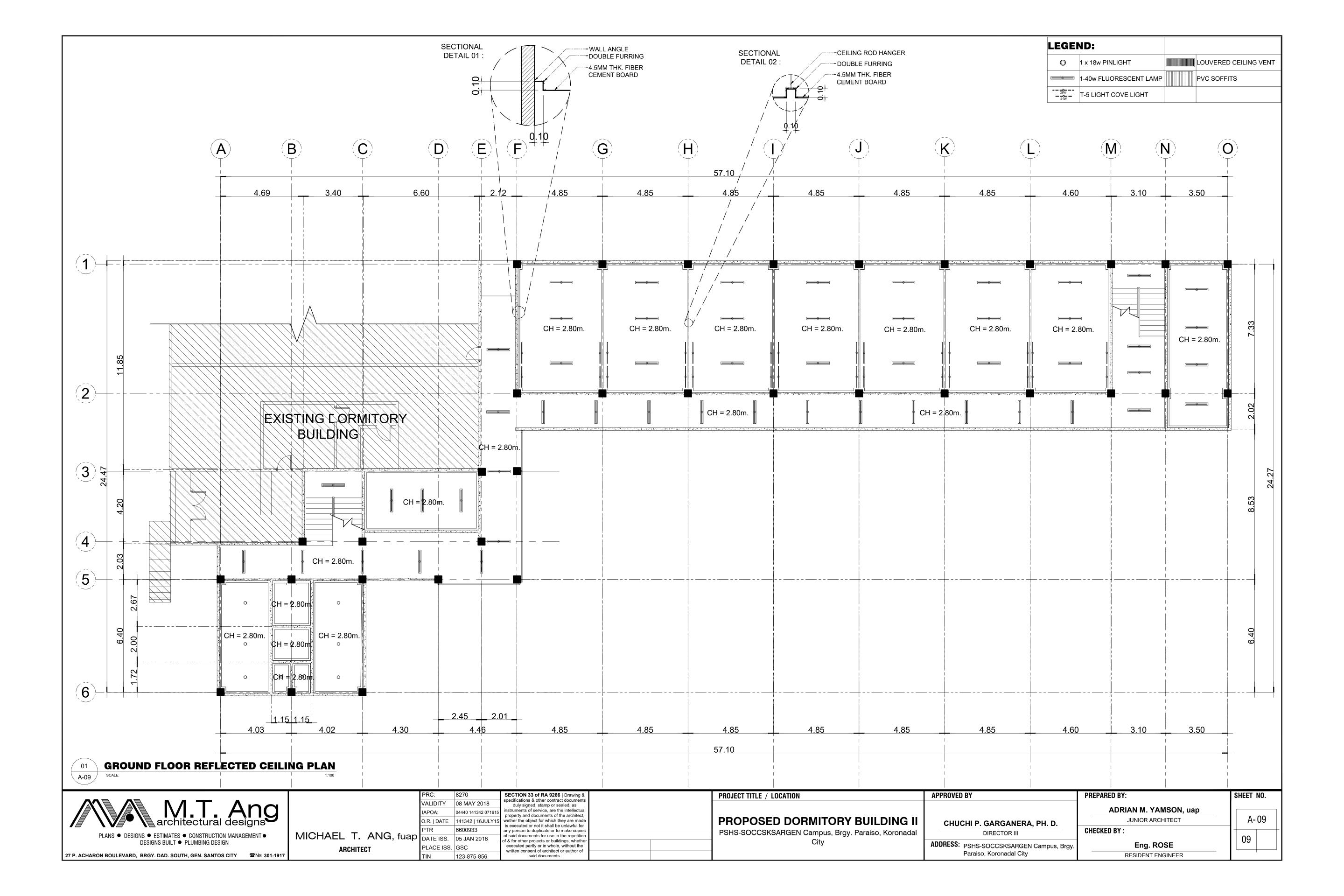
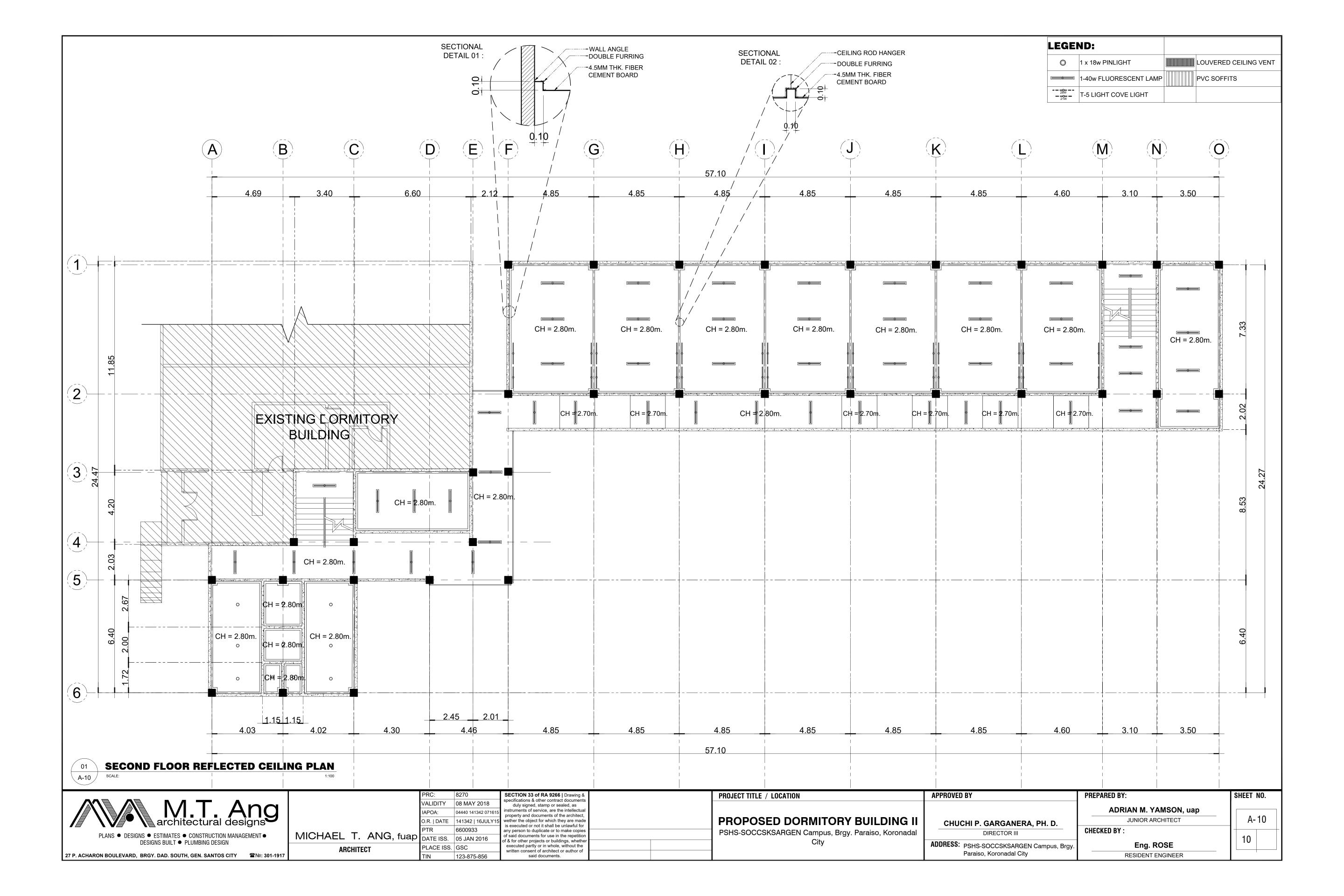
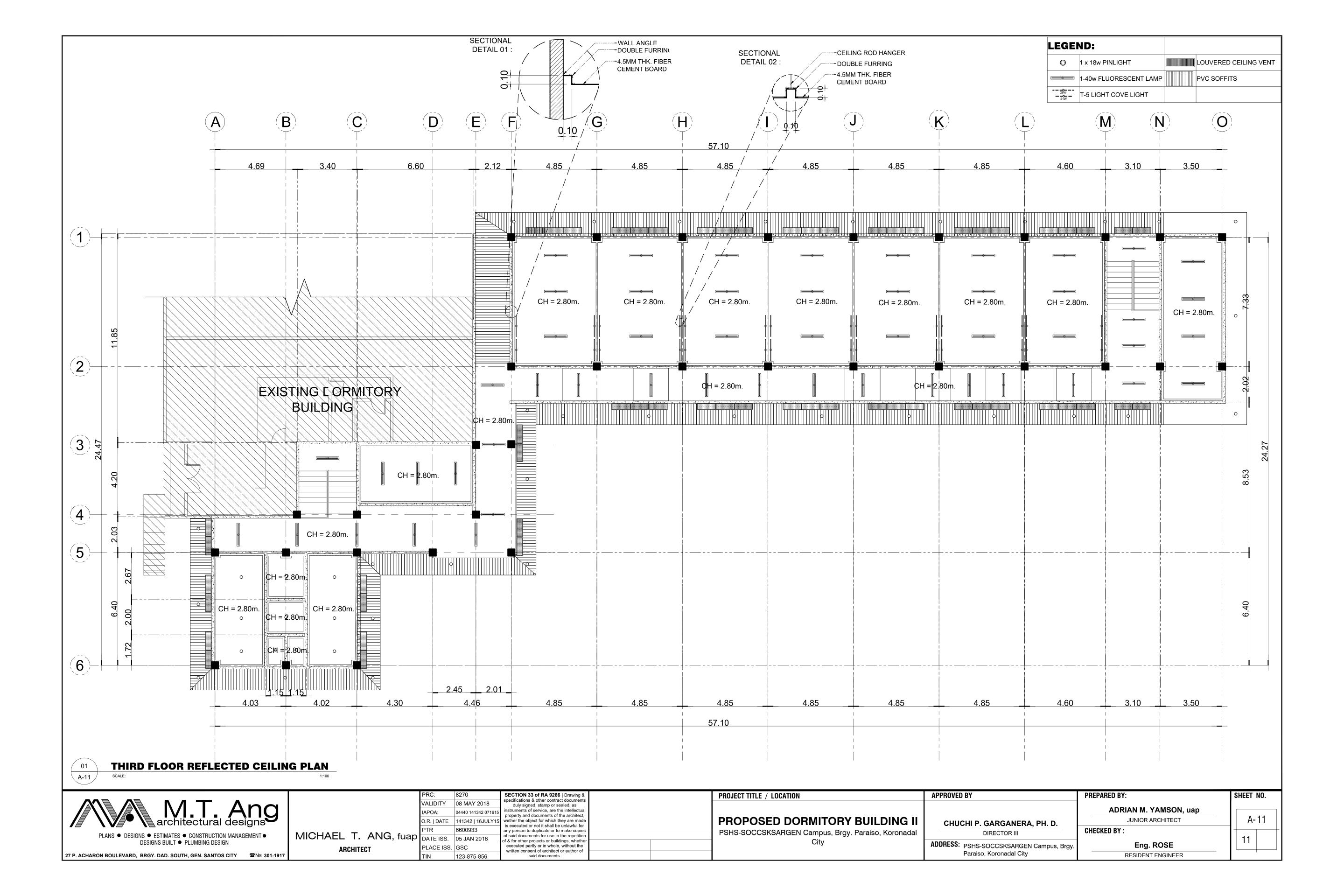


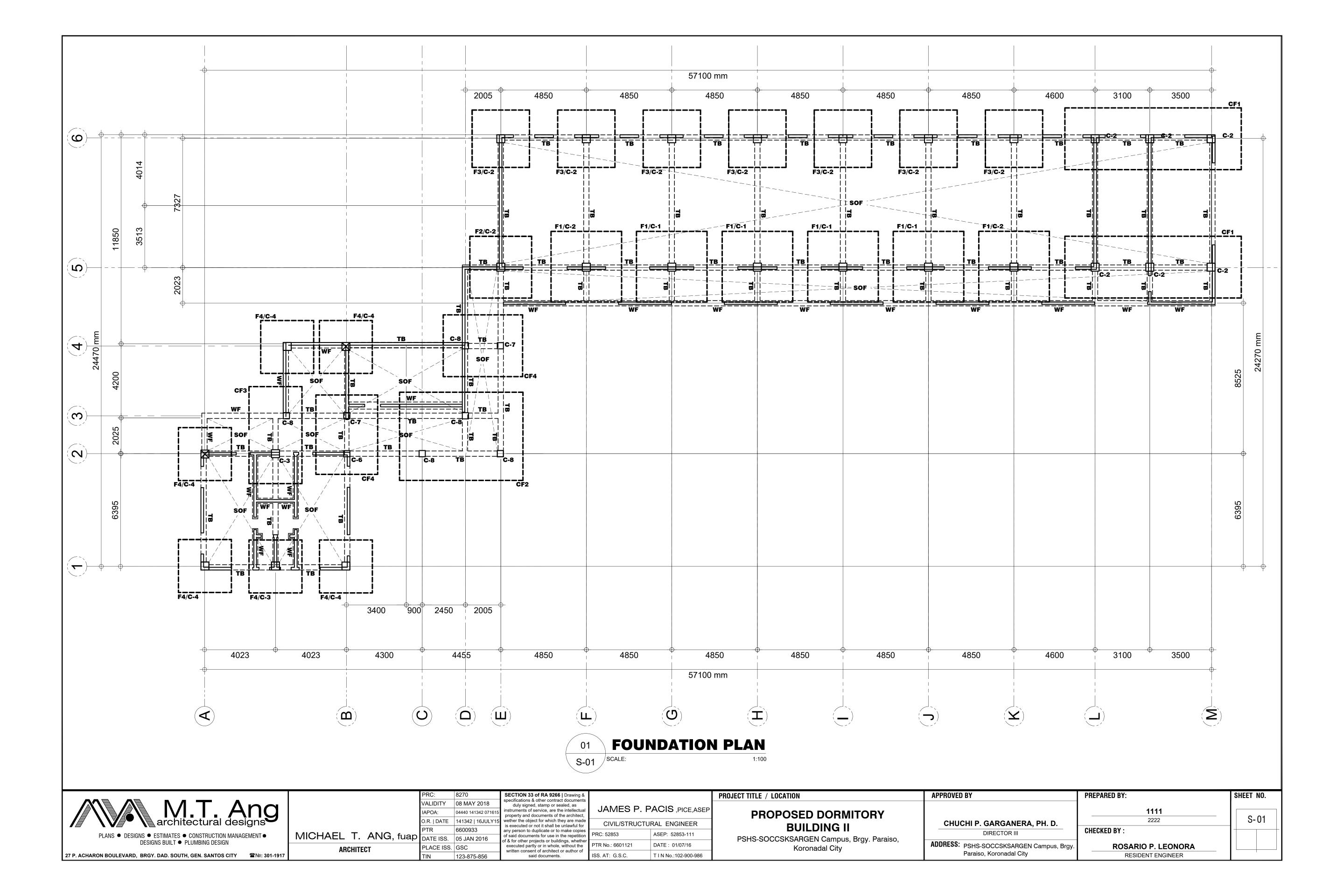
| | | PRC: | 8270 | SECTION 33 of RA 9266 Drawing & specifications & other contract documents | PROJECT TITLE / LOCATION | APPROVED BY | PREPARED BY: | SHEET NO. |
|---|----------------------|--------------------|------------------------------------|--|---|--|-----------------------|-----------|
| M.T. Ang | | VALIDITY IAPOA: | 08 MAY 2018 04440 141342 071615 | duly signed, stamp or sealed, as instruments of service, are the intellectual | | | ADRIAN M. YAMSON, uap | |
| architectural designs | | O.R. DATE | 141342 16JULY1 | property and documents of the architect, wether the object for which they are made is executed or not it shall be unlawful for | PROPOSED DORMITORY BUILDING I | CHUCHI P. GARGANERA, PH. D. | JUNIOR ARCHITECT | A- 07 |
| | MICHAEL T. ANG, fuap | PTR DATE ISS | 6600933 | any person to duplicate or to make copies of said documents for use in the repetition | PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronada | DIRECTOR III | CHECKED BY : | 07 |
| DESIGNS BUILT ● PLUMBING DESIGN | ARCHITECT | PLACE ISS | | of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of | City | ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. | ROSARIO P. LEONORA | 07 |
| 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY | | TIN | 123-875-856 | said documents. | | Paraiso, Koronadal City | RESIDENT ENGINEER | <u>'</u> |

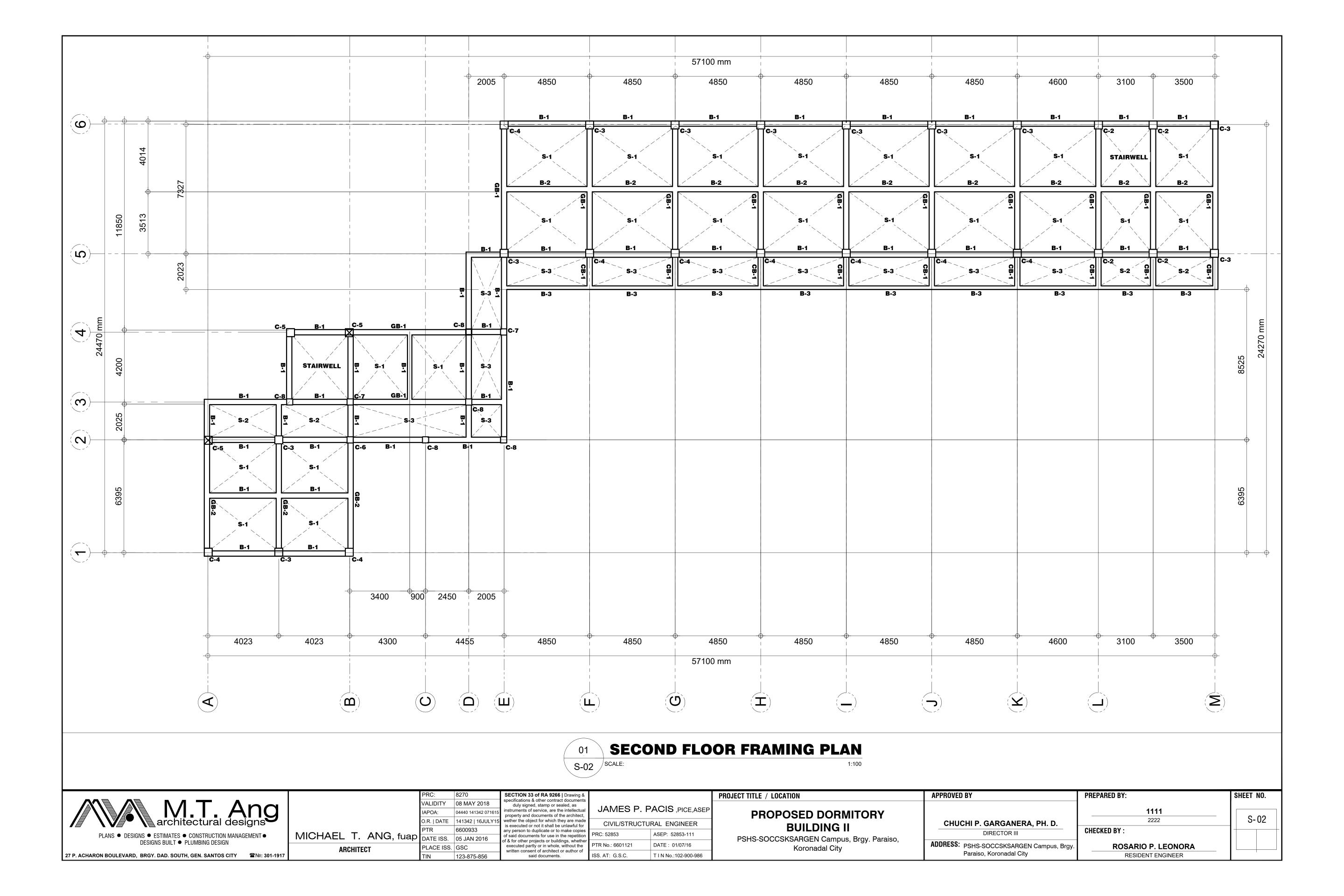


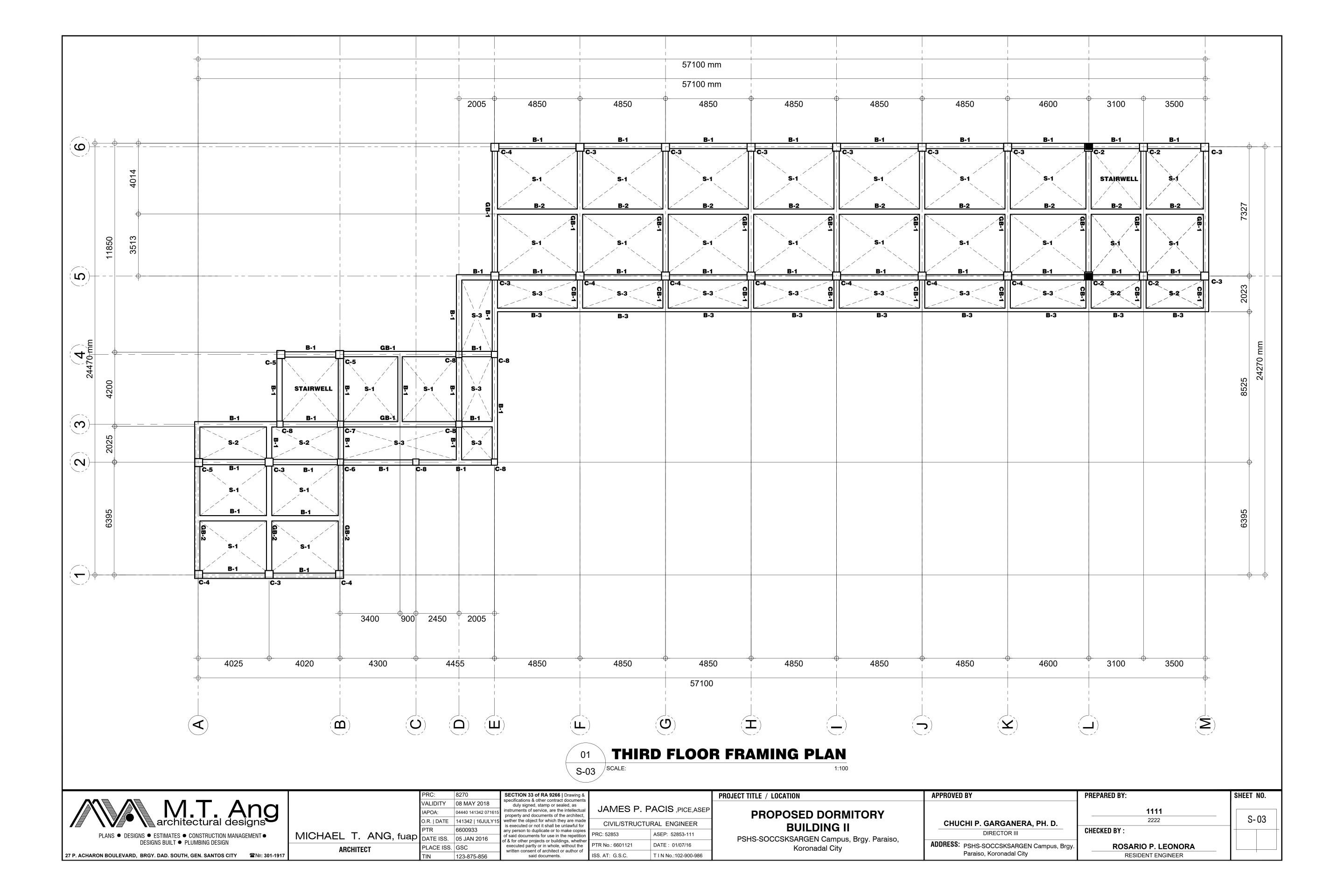


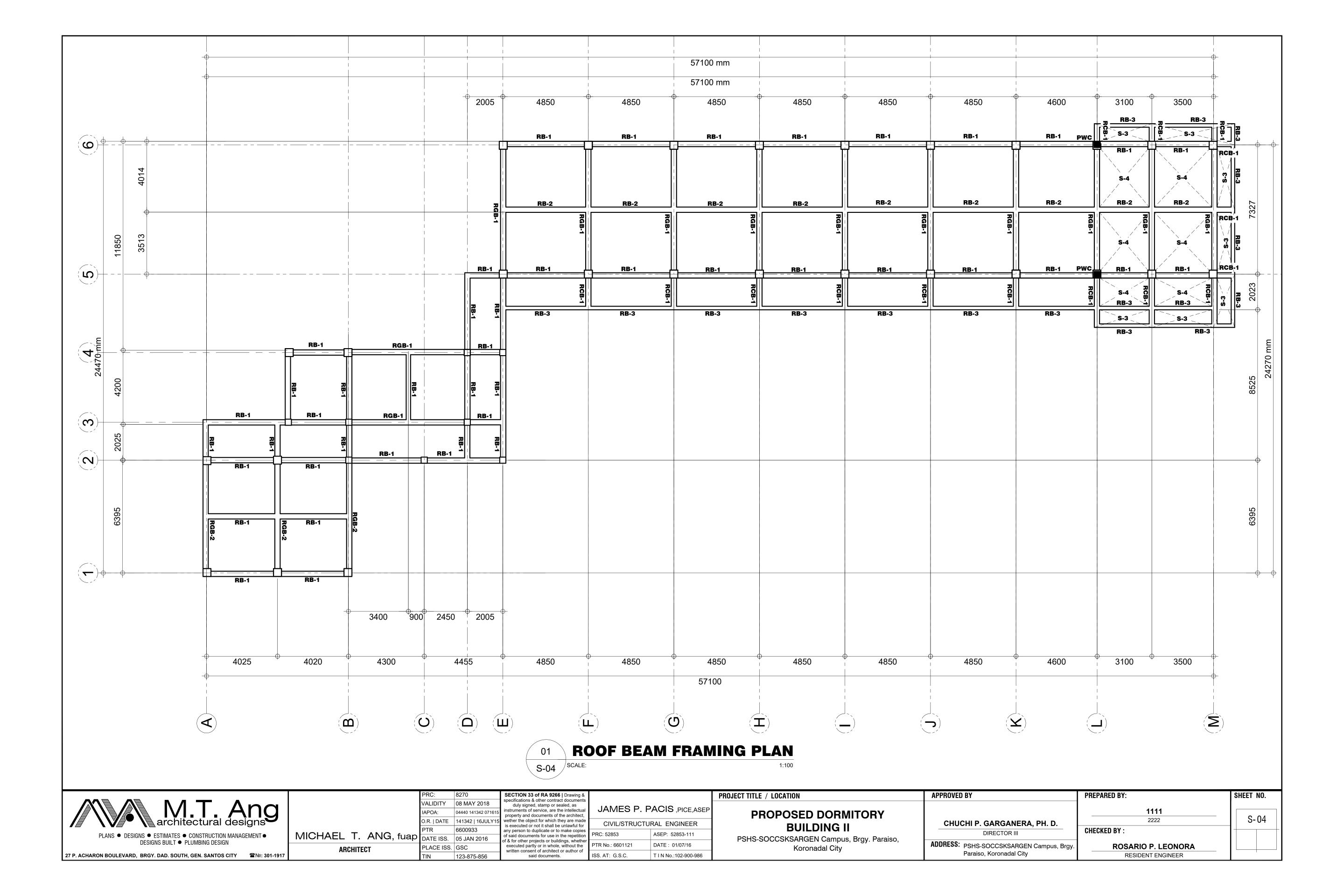


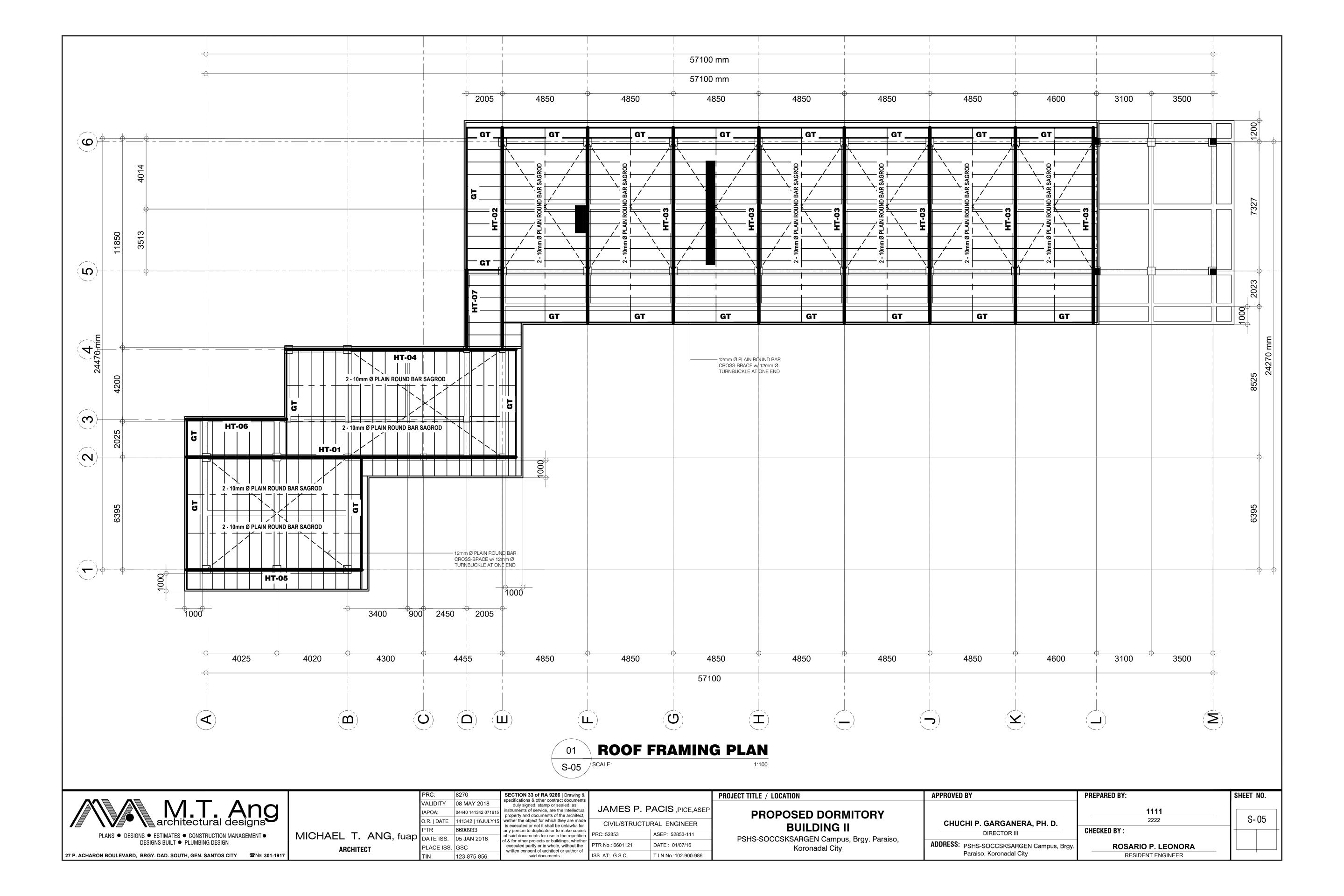










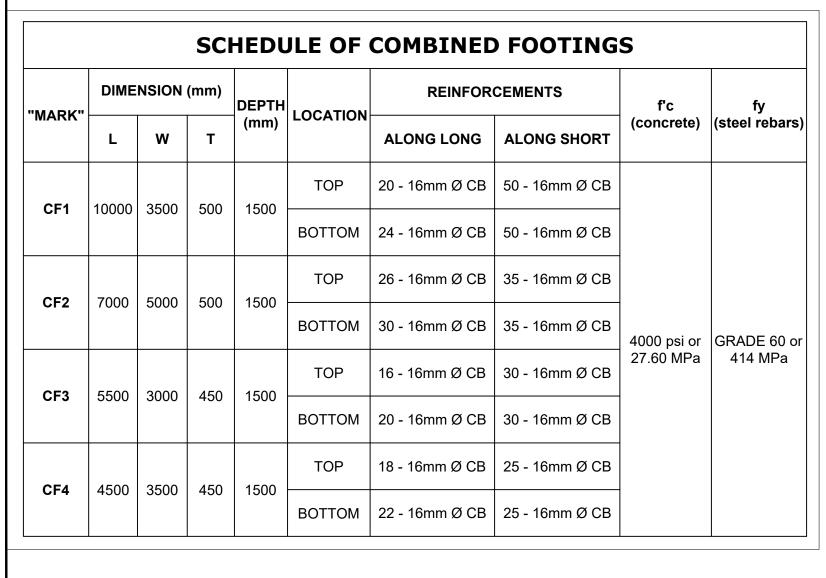


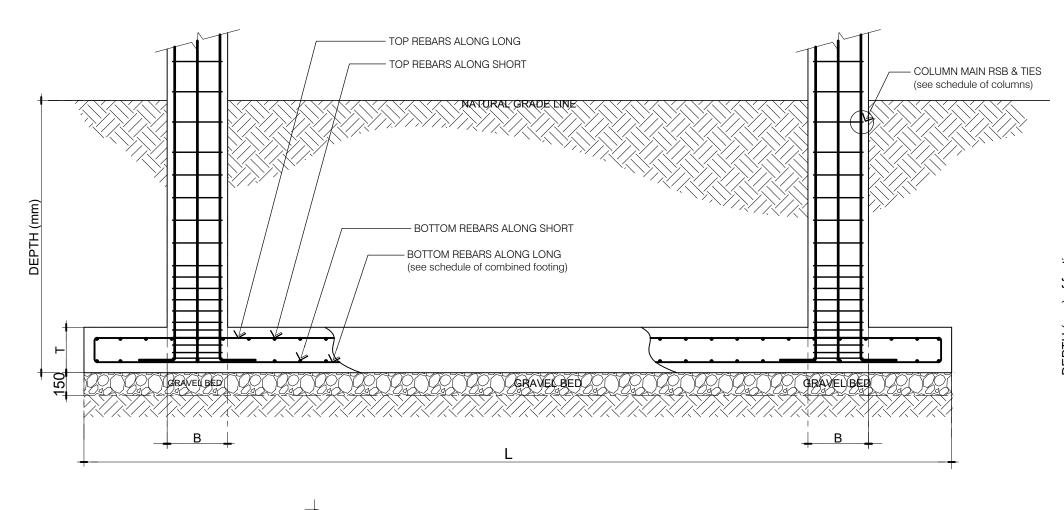
| 'MARK" | DIMENSIONS (mm) & | REINFORCEMENTS | | f'c (concrete) | fy (stee | el bars) | |
|--------|--|-------------------------------|--|--|----------------|---------------------------|--|
| IVIARK | BAR ARRANGEMENT | KEINFO | REINFORGEMENTS | | | stirrups | |
| | 450 mm | VERTICAL REBARS | : 24 - 25MM Ø | | | | |
| | | MAIN LATERAL TIES | : IOMM Ø | | | CDADE 77 | |
| C-1 | 450 mm | TIAIN LATERAL TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | 4000 PSI OR | GRADE 60 or | GRADE 33 or | |
| | 450 | SECONDARY TIES | : IOMM Ø ALTERNATE | 27.60 MPA | 414 MPA | 227 MPA | |
| | — | SECONDARY TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | | | | |
| | 450 mm | VERTICAL REBARS | : 20 - 25mm Ø | | | | |
| | 450 mm | | MAIN LATERAL TIES | : 10mm Ø | | | |
| C-2 | | TIAIT EA ENAC TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | 4000 PSI OR 27.60 MPA | GRADE 60 or | GRADE 33 OR 227 MPA | |
| | | | : IOMM Ø ALTERNATE | | 414 MPA | | |
| | | Ψ | SECONDARY TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | | | |
| | | VERTICAL REBARS : 16 - 20mm Ø | | | | | |
| | 450 mm | MAIN LATERAL TIES | : IOMM Ø | 1 | | GRADE 33 or | |
| C-3 | 450 mm | TIAIN LATEINAL TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | 4000 PSI OR | GRADE 60 or | | |
| | 450 | SECONDARY TIES | : IOMM Ø ALTERNATE | 27.60 MPA | 414 MPA | 227 MPA | |
| | | SECONDARY TIES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | | | | |
| | 450 mm | VERTICAL REBARS | : 12 - 20MM Ø | | | | |
| | | MAIN LATERAL TIES | : I0MM Ø | | | | |
| C-4 | 450 mm | TAIN LAILINAL TILS | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | 4000 PSI OR | GRADE 60 or | GRADE 33 or | |
| | 45 | SECONDARY TIES | : IOMM Ø ALTERNATE | 27.60 MPA | 414 MPA | 227 MPA | |
| | — ——————————————————————————————————— | SECONDART HES | . 5 @ 50MM, 10 @ 100MM, 5 @ 120MM, REST @ 150MM | | | | |

| | | SCHEDUL | E OF COLUMNS |) | | | |
|------------|-------------------|-------------------------------|--|--------------------|---------------------------|---------------------------|----------|
| "MARK" | DIMENSIONS (mm) & | REINFORCEMENTS | | f'c | fy (stee | el bars) | |
| | BAR ARRANGEMENT | , | (concrete) | main bars | stirrups | | |
| | 450 mm | VERTICAL REBARS | : 8 - 20MM Ø | | | | |
| | | MAIN LATERAL TIES | : 10mm Ø | | | | |
| C-5 | 450 mm | TAIN EATERAL TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | 4000 PSI OR | GRADE 60 or | GRADE 33 or | |
| | 450 | SECONDARY TIES | : 10mm Ø | 27.60 MPA | 414 MPA | 227 MPA | |
| | | SECUNDARY HES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | | | | |
| | | VERTICAL REBARS | : 16 - 20MM Ø | | | | |
| | 350 mm | 350 mm | MAIN LATERAL TIES | : IOMM Ø ALTERNATE | | | CDADE 33 |
| C-6 | 350 mm | TIAIN EATENAL TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | 4000 PSI OR | GRADE 60 OR 414 MPA | GRADE 33 OR 227 MPA | |
| | | SECONDARY TIES | : 10mm Ø | 27.60 MPA | | | |
| | Ψ | SECONDARY HES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | | | | |
| | | VERTICAL REBARS : 12 - 20mm Ø | | | | | |
| | 350 mm | MAIN LATERAL TIES | : 10mm Ø | | | | |
| C-7 | 350 mm | MAIN LATERAL TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | 4000 PSI OR | GRADE 60 OR | GRADE 33 OR | |
| | 320 | CECONDARY TIES | : IOMM Ø ALTERNATE | 27.60 MPA | 414 MPA | 227 MPA | |
| | Ψ | SECONDARY TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | | | | |
| | 050 | VERTICAL REBARS | : 8 - 20MM Ø | | | | |
| | 350 mm | MAIN LATERAL TIES | : 10mm Ø | | | | |
| C-8 PWC | 350 mm | MAIN LATERAL TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | | GRADE 60 OR | GRADE 33 OR | |
| 1 000 | 8 | CECONDARY TIES | : 10mm Ø | 27.60 MPA | 414 MPA | 227 MPA | |
| | · | SECONDARY TIES | . 5 @ 50mm, IO @ I00mm, 5 @ I20mm, REST @ I50mm | | | | |

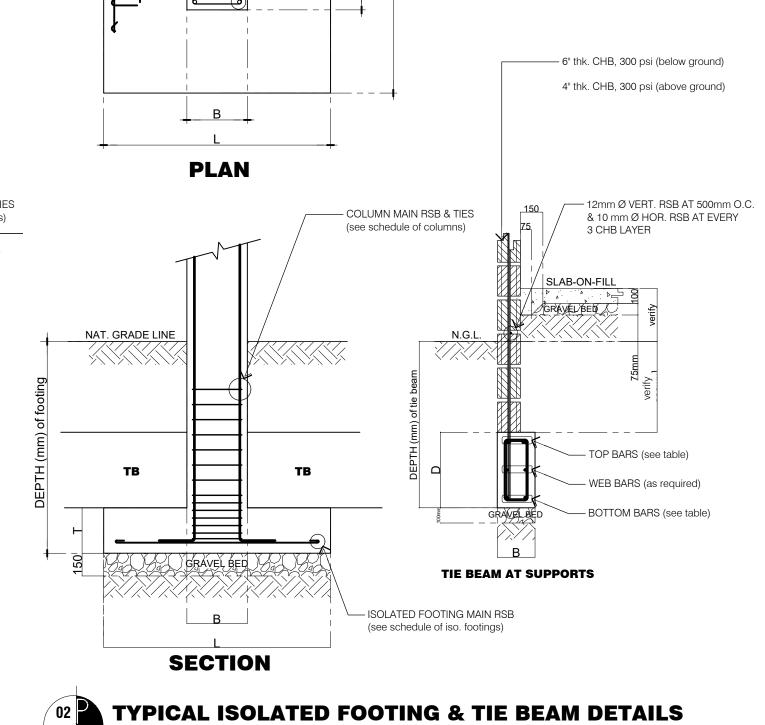
| | | | | | SCHEDUL | E OF TIE BEAM | | | | | | | | |
|--------|------|-----|----------|-------------|------------------------------|----------------------------------|----------------------|----------------|-------------|------------|------------|-----|-------------------|--|
| | (mm) | | (mm) | | , , , | | LOCATION | REINFORCEMENTS | | | DEPTH | f'c | fy (steel rebars) | |
| "MARK" | В | D | LOCATION | SUPPORTS | MID-SPAN | STIRRUPS | DEPIH | (concrete) | main rebars | stirrups | | | | |
| тв | 250 | F00 | ТОР | 2-16mm Ø CB | 2-16mm Ø CB + 4-16mm Ø EB | 10mm Ø: 5 @ 50mm, 10 @ 125mm, | (1000 mm) SEE TIE | 4000 psi or | GRADE 60 | GRADE 33 | | | | |
| IB | 350 | 500 | 500 BO | воттом | 2-16mm Ø CB + 4-16mm Ø EB | 2-16mm Ø CB | REST @ 150mm O.C. | BEAM DETAIL | 27.60MPa | or 414 MPa | or 227 MPa | | | |

| | SCHEDULE OF ISOLATED FOOTINGS | | | | | | | | | | |
|--------|-------------------------------|------|-----|-------|---------------------------|-------------|----------------|--|--|--|--|
| | DIMENSION (mm) | | | DEPTH | DEPTH DEWLODGENENTS | | fy | | | | |
| "MARK" | L | w | Т | (mm) | REINFORCEMENTS | (concrete) | (steel rebars) | | | | |
| F1 | 4000 | 4000 | 500 | 1500 | 20 - 16mm Ø BED BARS B.W. | | | | | | |
| F2 | 3500 | 3500 | 450 | 1500 | 18 - 16mm Ø BED BARS B.W. | 4000 psi or | GRADE 60 or | | | | |
| F3 | 3250 | 3250 | 450 | 1500 | 15 - 16mm Ø BED BARS B.W. | 27.60 MPa | 414 MPa | | | | |
| F4 | 3000 | 3000 | 400 | 1500 | 15 - 16mm Ø BED BARS B.W. | | | | | | |





TYPICAL COMBINED FOOTING DETAIL



 ISOLATED FOOTING MAIN RSB (see schedule of iso. footings)

- COLUMN MAIN RSB & TIES (see schedule of columns)



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, stamp or sealed, as instruments of service, are the intellectual property and documents of the architect, wether 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

T I N No.:102-900-986

ISS. AT: G.S.C.

PROPOSED DORMITORY
BUILDING II
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,

Koronadal City

PROJECT TITLE / LOCATION

CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

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

S-06 SCALE:

APPROVED BY

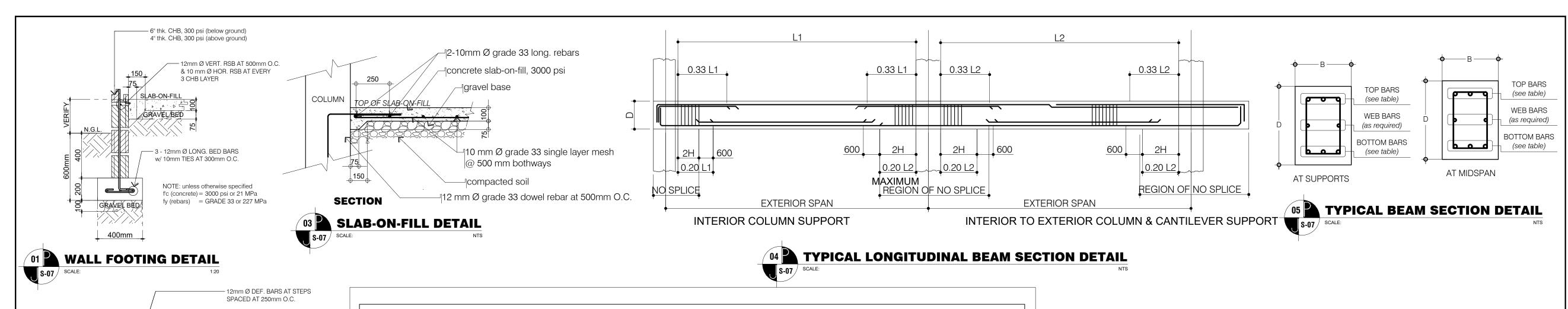
PREPARED BY:

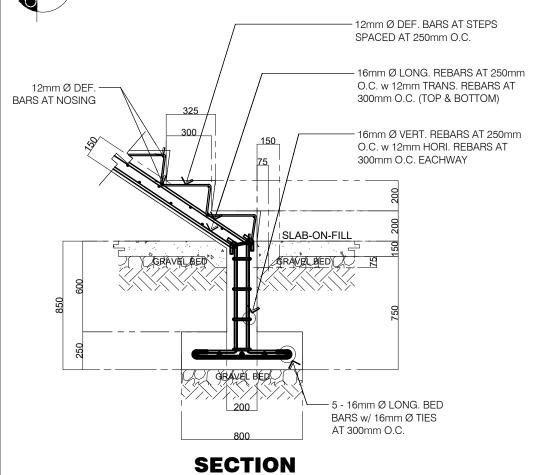
1111
2222

CHECKED BY:

ROSARIO P. LEONORA

RESIDENT ENGINEER



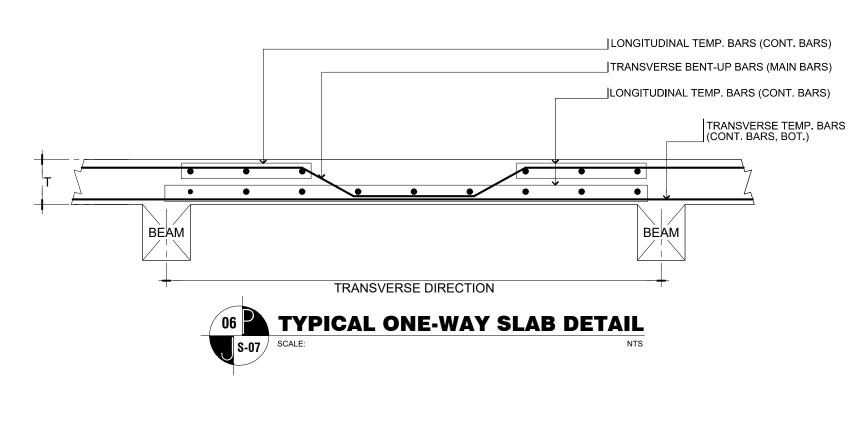


NOTE: unless otherwise specified
f'c (concrete) = 4000 psi or 27.60 MPa
fy (rebars) = GRADE 40 or 275 MPa

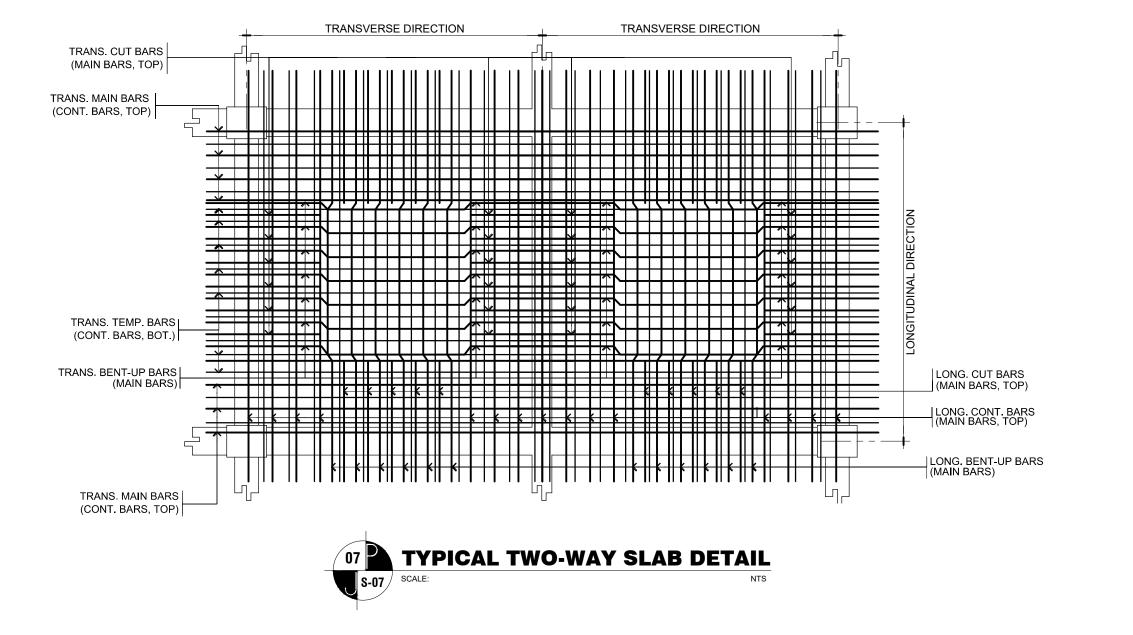
TYPICAL STAIR FOOTING DETAIL

S-07 SCALE:

| | | | | SCHE | DULE OF BEAMS & GIRDER | RS | | | | | | |
|--------------------|-----------|-----------|---------|------------------------------------|---------------------------|---------------------------|---------------------------|-------------|-------------|-----------|---------|---------|
| BEAM (mm) | | \\ \\ | | | f'c (concrete) | fy (steel bars) | | | | | | |
| Wirth | В | D | | SUPPORTS MID-SPAN STIRRUPS | | STIRRUPS | | main bars | stirrups | | | |
| GB-1 / | 200 | 450 | ТОР | 4-25mm Ø CB + 4-25mm Ø EB | 4-25mm Ø CB | | | | | | | |
| RGB-1 | 300 | 300 | 450 | воттом | 4-25mm Ø CB | 4-25mm Ø CB + 4-25mm Ø EB | | | | | | |
| GB-2 / | 000 | 400 | ТОР | 2-25mm Ø CB + 3-25mm Ø EB | 2-25mm Ø CB | | | | | | | |
| RGB-2 | 300 | 400 | воттом | 2-25mm Ø CB | 2-25mm Ø CB + 3-25mm Ø EB | | | | | | | |
| CB-1 / | CB-1 / | 250 350 | ТОР | 5-25mm Ø CB | CANTH EVED BEAM | | 10mm Ø STIRRUPS: | JPS: | | I | | |
| RCB-1 | 250 | | воттом | BOTTOM 2-25mm Ø CB CANTILEVER BEAM | 5 @ 50mm, 5 @ 75mm, | | GRADE 60 or | | | | | |
| B-1 / | 050 050 | 050 050 | 050 050 | 250 | 250 | ТОР | 2-20mm Ø CB + 4-20mm Ø EB | 2-20mm Ø CB | 10 @ 100mm, | 27.60 MPa | 414 MPa | 227 MPa |
| RB-1 | 250 | 350 | воттом | 2-20mm Ø CB | 2-20mm Ø CB + 4-20mm Ø EB | REST @ 150mm O.C. | | | | | | |
| B-2 / | 250 | 250 | ТОР | 2-16mm Ø CB + 1-16mm Ø EB | 2-16mm Ø CB | | | | | | | |
| RB-2 | 1 250 1 3 | 350 | воттом | 2-16mm Ø CB | 2-16mm Ø CB + 1-16mm Ø EB | | | | | | | |
| B-3 / | 160 | 250 | ТОР | 2-16mm Ø CB + 1-16mm Ø EB | 2-16mm Ø CB | | | | | | | |
| RB-3 160 35 | | 350 | воттом | 2-16mm Ø CB | 2-16mm Ø CB + 1-16mm Ø EB | | | | | | | |



| | | | SCHEDULE OI | SUSPENDED SLABS | | | |
|----------------|--------|----------------|--|--|----------------|------------|------------------------|
| | T (mm) | REINFORCEMENTS | | CEMENTS | DEMARKO | f'c | fy |
| "MARK" T | | LOCATION | ALONG TRANSVERSE DIRECTION | ALONG LONGITUDINAL DIRECTION | REMARKS | (concrete) | (steel rebars) |
| S-1 120 | 400 | MAIN BARS | 10mm Ø BENT-UP BARS AT 300mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN | 10mm Ø BENT-UP BARS AT 400mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN | TWO WAY OF A D | | |
| | 120 | TEMP. BARS | 10mm Ø CONT. BARS AT 300mm O.C. (BOTTOM) | 10mm Ø CONT. BARS AT 400mm O.C. (BOTTOM) | TWO-WAY SLAB | | GRADE 60 or 414 MPa |
| S-2 | 400 | MAIN BARS | 10mm Ø BENT-UP BARS AT 400mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN | 10mm Ø BENT-UP BARS AT 400mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN | TWO-WAY SLAB | | |
| | 120 | TEMP. BARS | 10mm Ø CONT. BARS AT 400mm O.C. (BOTTOM) | 10mm Ø CONT. BARS AT 400mm O.C. (BOTTOM) | | | |
| 6.2 | 475 | MAIN BARS | 10mm Ø BENT-UP BARS AT 200mm O.C. w/ 10mm Ø CUT BARS IN BETWEEN | | ONE WAY OLAR | 27.60 MPa | |
| S-3 | 175 | TEMP. BARS | 10mm Ø CONT. BARS AT 200mm O.C. (BOTTOM) | 10mm Ø CONT. BARS AT 200mm O.C. (TOP & BOTTOM) | ONE-WAY SLAB | | |
| S-4 | 120 | MAIN BARS | 12mm Ø BENT-UP BARS AT 300mm 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 | TWO WAY OF AD | | |
| | 130 | TEMP. BARS | 10mm Ø CONT. BARS AT 300mm O.C. (BOTTOM) | 10mm Ø CONT. BARS AT 400mm O.C. (BOTTOM) | TWO-WAY SLAB | | |



| M.T. Ang architectural designs |
|---|
| PLANS ● DESIGNS ● ESTIMATES ● CONSTRUCTION MANAGEMENT ● DESIGNS BUILT ● PLUMBING DESIGN |
| 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY SIN: 301-1917 |

| | VALIDITY | 08 MAY 2018 | duly signed, stamp or sealed, as |
|----------------------|-------------|---------------------|--|
| | IAPOA: | 04440 141342 071615 | instruments of service, are the intellec property and documents of the archite |
| | O.R. DATE | 141342 16JULY15 | |
| NAIGHAEL E ANIO (| PTR | 6600933 | any person to duplicate or to make cop |
| MICHAEL T. ANG, fuap | DATE ISS. | 05 JAN 2016 | of said documents for use in the repeti of & for other projects or buildings, whe |
| ARCHITECT | PLACE ISS. | GSC | executed partly or in whole, without the written consent of architect or author |
| | TIN | 123-875-856 | said documents. |
| | | | |

| SECTION 33 of RA 9266 Drawing & specifications & other contract documents duly signed, stamp or sealed, as nstruments of service, are the intelectual property and documents of the architect, wether the object for which they are made | JAMES P. P | PACIS ,PICE,ASEP |
|--|---------------|------------------|
| is executed or not it shall be unlawful for | CIVIL/STRUCTU | RAL ENGINEER |
| any person to duplicate or to make copies of said documents for use in the repetition | PRC: 52853 | ASEP: 52853-111 |
| of & for other projects or buildings, whether | | |

PTR No.: 6601121

ISS. AT: G.S.C.

DATE: 01/07/16

T I N No.:102-900-986

PROPOSED DORMITORY
BUILDING II
PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso,

Koronadal City

PROJECT TITLE / LOCATION

| APPROVED BY | PREPARE |
|--|---------|
| | |
| CHUCHI P. GARGANERA, PH. D. | |
| DIRECTOR III | CHECKED |
| ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. | |

Paraiso, Koronadal City

| ED BY: | SHEET NO. |
|--------------------|-----------|
| 1111 | |
| 2222 | S-07 |
| D BY : | |
| ROSARIO P. LEONORA | |
| RESIDENT ENGINEER | |

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 DIAGRAMS 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 STEPS | 4000 psi (27.60 MPa) |
| CONCRETE GUTTER | 3500 psi (24.00 MPa) |
| SLABS-ON-GRADE/FILL, WALL FOOTINGs & CURBS | 3000 psi (21.00 MPa) |

3. ALL REINFORCING BARS SHALL CONFORM TO THE ASTM A615 (PNS 49) AS FOLLOW:

| FOUNDATION | GRADE 60 (414 MPa) |
|---------------------------------------|--------------------|
| COLUMNS & SHEARWALLA. COLUMN STIRRUPS | |
| BEAMS, CORBEL & SLABS | |
| STAIR STEPS | GRADE 40 (275 MPa) |
| CONCRETE GUTTER | GRADE 40 (275 MPa) |
| | |

...GRADE 33 (227 MPa)

..14 DAYS

4. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL BARS AS FOLLOWS:

SLABS-ON-GRADE/FILL, WALL FOOTINGS & CURBS .

| SUSPENDED SLABS | 3" (20mm) |
|---|------------|
| SLAB-ON- FILL | 1½" (40mm) |
| WALLS ABOVE GRADE & SHEARWALL | 1" (25mm) |
| COLUMN & BEAMS STIRRUPS | 1½" (40mm) |
| WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS | 2" (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.

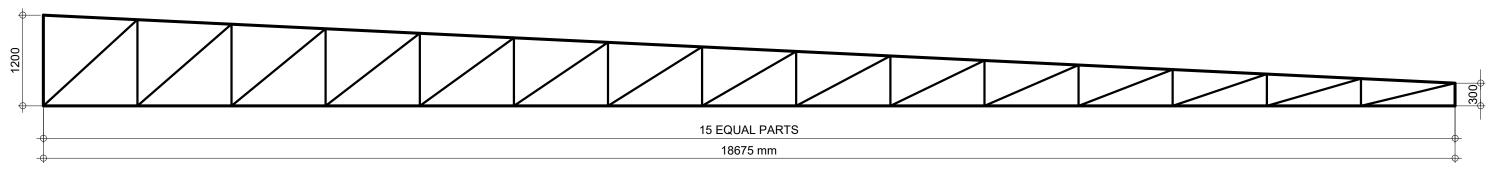
7. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP FAG SPRAYING, CURING COMPOUND OR OTHER ANY APPROVED METHODS.

C. FOUNDATION

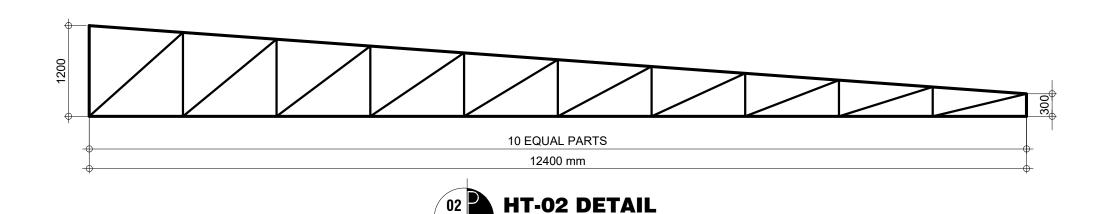
1. FOUNDATION IS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 110.0 kPa.

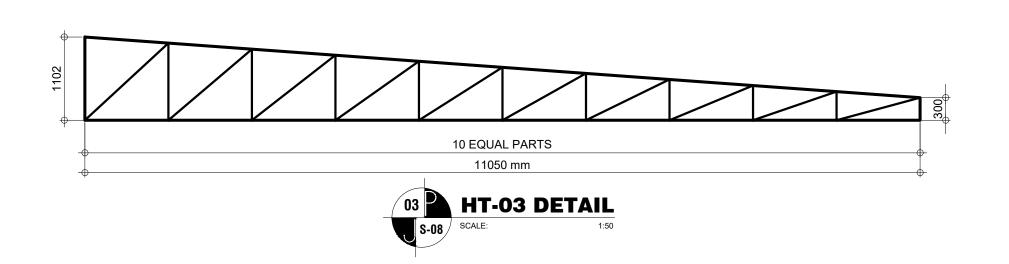
2. FOUNDATION SHALL REST ON NATURAL SOIL, UNLESS OTHERWISE NOTED BY THE STRUCTURAL ENGINEER. NO PART OF THE FOUNDATION SHALL REST ON FILL.

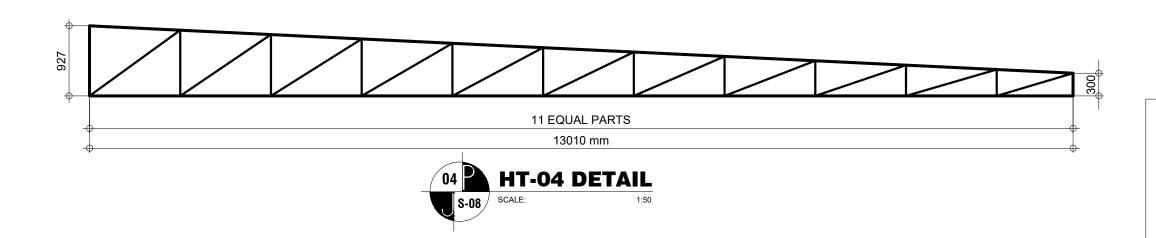
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER FOOTING EXCAVATION HAVE BEEN COMPLETED AND PRIOR TO CONCRETING TO CONFIRM THE DESIGN SOIL BEARING CAPACITY.

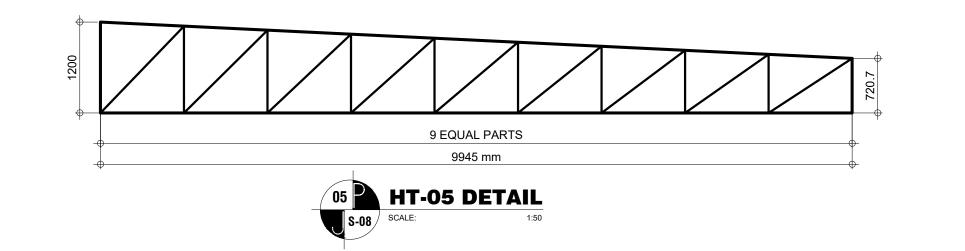


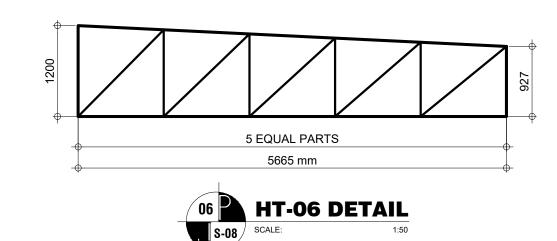


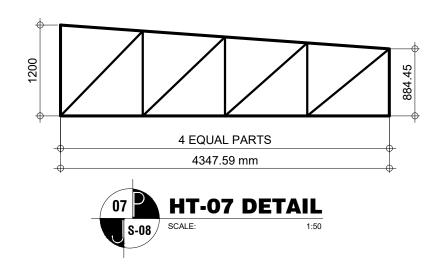


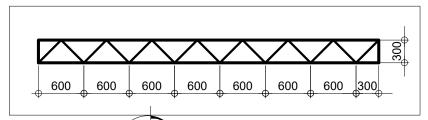














| SCHEDULE OF TRUSSES & ROOF FRAMING | | | | |
|--|----------------------|---|--|--|
| DESIGNATION LOCATION SPECIFICATIONS | | | | |
| = ================================ | TOP/BOTTOM CHORDS | 2 L - 6 mm THK. x 2" x 2" ANGLE BAR | | |
| HALF-TRUSSES | WEB MEMBERS | 1 | | |
| CIPT (CT) | TOP/BOTTOM CHORDS | 1 L - 6 mm THK. x 1 1/2" x 1 1/2" ANGLE BAR | | |
| GIRT (GT) | WEB MEMBERS | 1 L - 6 mm THK. x 1" x 1" ANGLE BAR | | |
| CLEATS | | 4.5mm THK. x 2" x 2" ANGLE BAR | | |
| PURLINS 1.5mm THK. x 2" x 6" CEE-PURLINS AT 700mm O.C. | | | | |
| SAGROD | | 2 - 10mm PLAIN ROUND BAR AT MIDSPAN | | |
| CROSS-BRACE | | 12mm Ø PLAIN ROUND BAR w/ 12mm Ø TURNBUCKLE AT ONE END | | |



BEAMS & COLUMNS .

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

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

28 №: 301-1917

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

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, wether 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

T I N No.:102-900-986

ISS. AT: G.S.C.

PROPOSED DORMITORY BUILDING II

PROJECT TITLE / LOCATION

PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City CHUCHI P. GARGANERA, PH. D.

DIRECTOR III

ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.

Paraiso, Koronadal City

APPROVED BY

PREPARED BY:

SHEET NO.

S-08

CHECKED BY:

ROSARIO P. LEONORA

RESIDENT ENGINEER

CONSTRUCTION NOTES

A. GENERAL NOTES

- 1. IN THE INTERPRETATION OF THESE DRAWINGS INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION
- 2. 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.
- 3. 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.
- 4. 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

1. UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN THE SPECIFICATIONS THE MINIMUM 28-DAYS CYLINDER COMPRESSIVE STRENGTH OF CONCRETE FC SHALL BE AS

| JEEC V V J . | |
|----------------------------------|----------------------|
| 1.1 FOUNDATIONS & TIE BEAMS | 27.60 MPa (4000 psi) |
| 1.2 COLUMNS & RC WALLS | 27.60 MPa (4000 psi) |
| 1.3.1 FOUNDATION TO ROOF BEAM | 27.60 MPa (4000 psi) |
| 1.3 FLOOR SLABS, BEAMS & GIRDERS | 27.60 MPa (4000 psi) |
| 1.4 CONCRETE GUTTER & STAIRS | 24 MPa (3500 psi) |
| 1.5 SLAB-ON-GRADE & WALL FOOTING | 21 MPa (3000 psi) |

- 2. 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.
- 3. 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

1. 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 | | | | | | |
|-------------------------|---|---------|--|--|--|--|
| GRADE | BAR DIAMETER | REMARKS | | | | |
| GRADE 414 (fy = 60 ksi) | | | | | | |
| GRADE 275 (fy = 40 ksi) | PLEASE REFER TO TABULATIONS & DETAILED DRAWINGS OF EACH | | | | | |
| GRADE 227 (fv = 33 ksi) | STRUCTURAL ME | MBERS. | | | | |

- 2. THE SUPPLEMENTARY REQUIREMENTS OF WELDABLE DEFORMED REINFORCING BARS SHALL BE
 - 2.1 THE MAXIMUM YIELD STRENGTH OF WELDABLE BARS = 540 MPa (FOR GRADE 40). 2.2 THE TENSILE STRENGTH SHALL NOT BE LESS THAN 1.25 TIMES THE ACTUAL YIELD
- 3. 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.
- 4. ALL REINFORCING BARS SHALL BE CLEANED THOROUGHLY OF ALL LOOSE RUST. SOIL OR OTHER MATERIAL IMMEDIATELY PRIOR TO PLACING CONCRETE.
- 5. THE REQUIRED LENGTH OF LAP FOR TENSION SPLICES IS BASED ON THE DEVELOPMENT LENGTH, Ld, SHOWN IN THE TABLE 2 AND TABLE 3 FOR RC BEAMS AND GIRDERS, RESPECTIVELY AND ON THE FOLLOWING CLASSIFICATIONS:

| | TABLE - 2 DEVELOPMENT LENGTH, Ld, | , in TENSION |
|----|-----------------------------------|---------------|
| | CLASS B | 1.3 Ld |
| | CLASS A | 1.0 Ld |
| TE | Ension splices classification | splice length |

| BAR SIZE | | MPa (4000 psi) | fc = 24 MPa | • | fc = 21 MPa (3000 psi) | | |
|----------|----------|----------------|-------------|------------|------------------------|------------|--|
| (11111) | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS | |
| 16 Ø | 390 | 300 | 390 | 300 | 360 | 275 | |
| 20 Ø | 650 | 500 | 580 | 450 | 540 | 425 | |
| 25 Ø | 1010 | 780 | 910 | 700 | 800 | 650 | |

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

| | TABLE - 3 DEVELOPMENT LENGTH, Ld, in TENSION FOR R.C. GIRDERS (PRISMATIC & NON-PRISMATIC) | | | | | |
|---|--|-------------|----------|------------|----------|-------------|
| BAR SIZE fc = 27.60 MPa fc = 24 MPa fc = 21 MPa | | | | | | |
| (mm) | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS |
| | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 Ø | 390 | 390 | 390 | 390 | 360 | 275 |
| 20 Ø | 580 | 580 | 580 | 580 | 540 | 425 |
| 25 Ø | 1010 | 1010 | 910 | 910 | 800 | 650 |
| NOTE : | FOR BUNI | DLE BARS (3 | BUNDLE) | MULTIPLY | ABOVE TA | ABLE BY 1.3 |

7. 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) fc = 27.60 MPa (4000 psi) fc = 24 MPa (3500 psi) fc = 21 MPa (3000 psi) | | | | | | |
| 16 Ø | 320 | 320 | 320 | | | |
| 20 Ø | 600 | 600 | 600 | | | |
| 25 Ø | 750 | 750 | 750 | | | |

| EAR CONCRETE COVER FOR REINFORCING BARS SHALL | RE AS FOLLO |
|---|-------------|
| 1.) CONCRETE CAST AGAINST EARTH | - 75 mm |
| 2.) CONCRETE EXPOSED TO EARTH | |
| 20 mm TO 36 mm BARS | - 50 mm |
| 16 mm BARS AND SMALLER | - 40 mm |
| 3.) CONCRETE NOT EXPOSED TO EARTH OR WEATHE | R |
| slabs, walls, and joints | - 20 mm |
| BEAMS AND COLUMNS | - 40 mm |
| | |

D. NOTES ON FOUNDATION

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. PREPARE CONDITIONS OF CONCRETE SUPPLY AND PLACEMENT OF THE COMPLETE FOUNDATION FOR THE FULL THICKNESS AS A CONTINUOUS MONOLITHIC CASTING.
- 6. DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL GROUND FLOOR SLABS HAVE BEEN PLACED AND THE CONCRETE HAS ATTAINED THE REQUIRED STRENGTH.
- 7. 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. 8. SEE TYPICAL DETAIL OF LIMITING SLOPE OF ADJACENT FOOTING AT DIFFERENT ELEVATION.

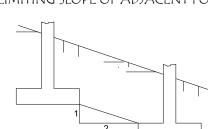


FIGURE 2. DETAIL OF LIMITING SLOPE OF ADJACENT FOOTINGS

E. NOTES ON SLAB - ON - GRADE

(REFER TO FIGURE 2)

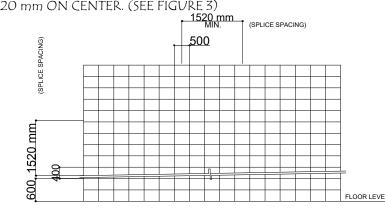
- 1. THE SOIL SUBGRADE AND FILL LAYERS BELOW ALL SLABS ON GRADE, PAVING AND PIT SLABS SHALL BE MECHANICALLY COMPACTED IN LAYERS TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR DENSITY, PER ASTM D1557.
- 2. ALL SLABS-ON-GRADE SHALL BE PROVIDED WITH A MINIMUM OF 150 mm THK. COMPACTED CLEAN COARSE SAND BED.
- 3. UNLESS OTHERWISE NOTED, ALL BEDDED SLABS SHALL BE REINFORCED WITH 10 mm BARS AT 400 mm O.C. BOTHWAYS.
- 4. 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

1. 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 | REINFORG | CEMENT | REMARKS | VERTICAL SECTION | | |
| (mm) | HORIZONTAL | VERTICAL | | | | |
| 100 | 10 mm at 250 O.C. | 10 mm at 300 O.C. | HORIZONTAL BAR AT CENTER VERTICAL BARS STAGGERED OUTSIDE | M | | |
| 125 | 10 mm at 200 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 | | | |

- 2. 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.
- 3. 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)



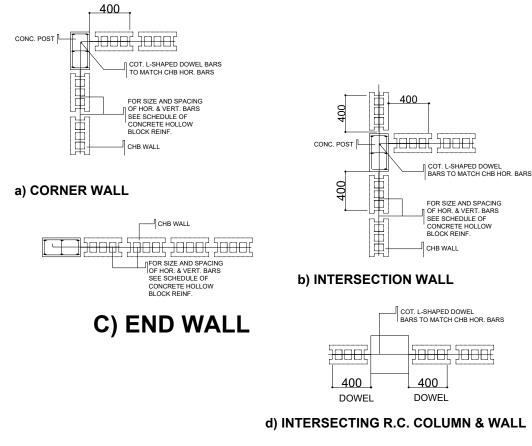
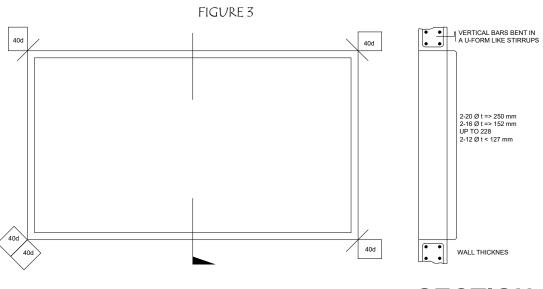


FIGURE 5. TYPICAL CONNECTION DETAILS OF

COLUMN AND / OR WALLS

CONCRETE MASONRY UNITS AT



SECTION

G. NOTES ON MASONRY WALLS 1. ALL MATTERS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE NATIONAL CONCRETE MASONRY ASSOCIATION

2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 GRADE N.

AND UNIFORM BUILDING CODE.

BLOCK

100

150

PROJECT TITLE / LOCATION

HICKNESS

- 3. 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
- 4. ALL MASONRY WALLS SHALL BE REINFORCED ACCORDING TO THE FOLLOWING SCHEDULE
- OF CONCRETE HOLLOW BLOCK REINFORCEMENT UNLESS OTHERWISE INDICATED IN THE PLANS 5. ALL CELLS CONTAINING REINFORCING BARS OR INSERTS SHALL BE SOLIDLY FILLED WITH
- 6. FOR TYPICAL CONNECTION DETAILS ON MASONRY UNITS. REFER TO FIGURES 5, 6 & 7 RESPECTIVELY.

12 mm at 600 O.C.

12 mm at 600 O.C.

TABLE - 6

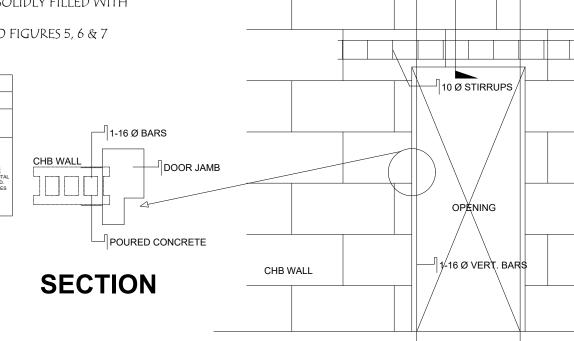
REINFORCEMENT

HORIZONTAL

10 Ø at 400 O.C.

10 Ø at 400 O.C.

SCHEDULE OF CONCRETE HOLLOW BLOCK REINFORCEMENT



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

ELEVATION



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

☑ №: 30

| | MICHAEL | т. | ANG |
|--------|---------|-------|-----|
| 1-1917 | AR | CHITE | СТ |

| | PRC: | 8270 | SE |
|------------|-------------|---------------------|------------|
| | VALIDITY | 08 MAY 2018 | spe |
| | IAPOA: | 04440 141342 071615 | ins pro |
| | O.R. DATE | 141342 16JULY15 | |
| O (| PTR | 6600933 | any |
| G, fuap | DATE ISS. | 05 JAN 2016 | of 8 |
| | PLACE ISS. | GSC | e: w |
| | 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, wether the object for which they are made is executed or not it shall be unlawful for | | | | | | | | |
|--|-----|--|--|--|--|--|--|--|
| | | | | | | | | |
| f & for other projects or buildings, whether executed partly or in whole, without the | РТ | | | | | | | |
| written consent of architect or author of said documents. | ISS | | | | | | | |
| | | | | | | | | |

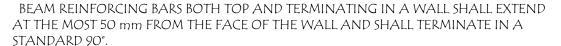
| JAMES P. PACIS ,PICE,ASEF | | | | | | | | | |
|---------------------------|-----------------------|--|--|--|--|--|--|--|--|
| CIVIL/STRUCTURAL ENGINEER | | | | | | | | | |
| PRC: 52853 | ASEP: 52853-111 | | | | | | | | |
| PTR No.: 6601121 | DATE: 01/07/16 | | | | | | | | |
| ISS. AT: G.S.C. | T I N No.:102-900-986 | | | | | | | | |

PROPOSED ADMIN. BUILDING PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

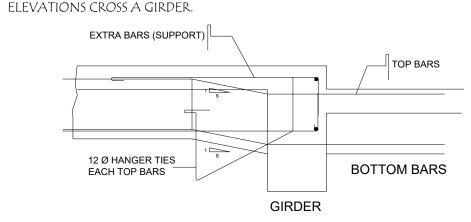
| APPROVED | ВҮ | PR |
|----------|--------------------|----------|
| | | |
| | | |
| CH | IUCHI P. GARGANERA | <u> </u> |
| CH | DIRECTOR III | СН |

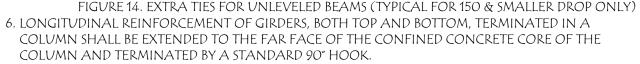
| | | | 4 |
|--------------------|-------|-----|---|
| PREPARED BY: | SHEET | NO. | |
| <u>-</u> | S- | 09 | |
| ROSARIO P. LEONORA | XX | XX | |
| RESIDENT ENGINEER | | | |

CONSTRUCTION NOTES

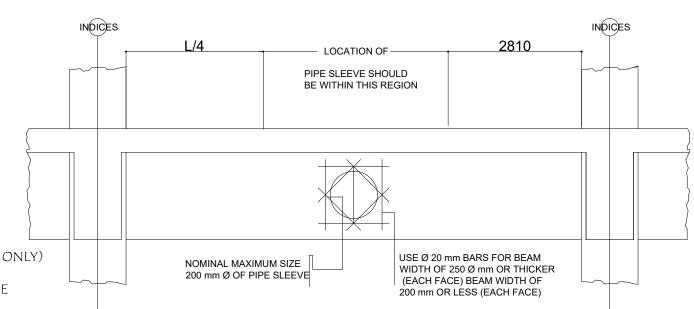


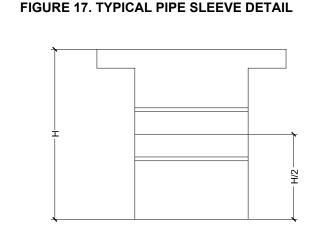
5. WHEN A BEAM CROSSES A GIRDERS REST BEAM BARS ON TOP OF THE GIRDER BARS-PROVIDE ADDITIONAL TIES AS SHOWN IN FIGURE 14 WHEN BEAMS OF DIFFERENT TOP





- 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. PIPE SLEEVE





SECTION

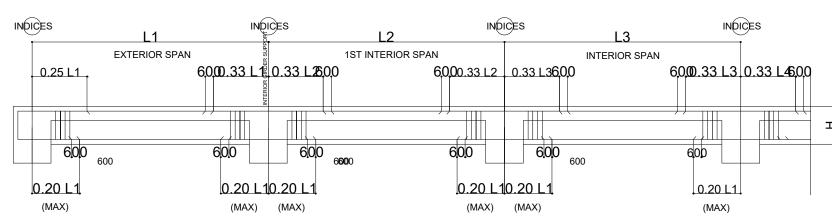


FIGURE 15. TYPICAL BAR DETAILS FOR BEAMS

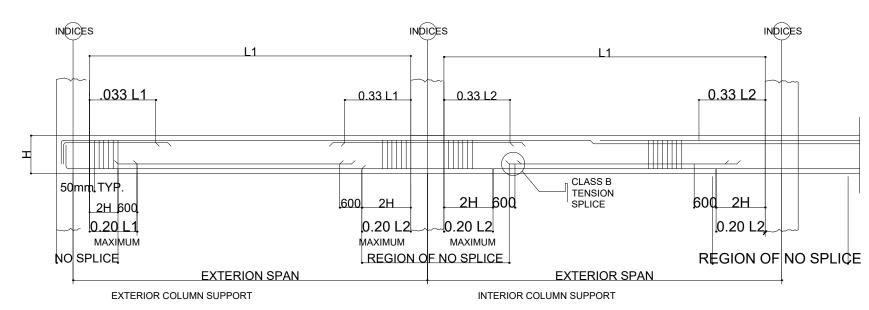
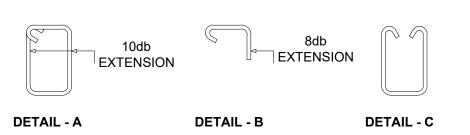


FIGURE 16. TYPICAL BAR DETAILS FOR PRISMATIC GIRDERS



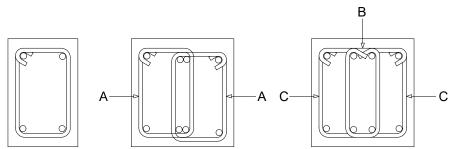
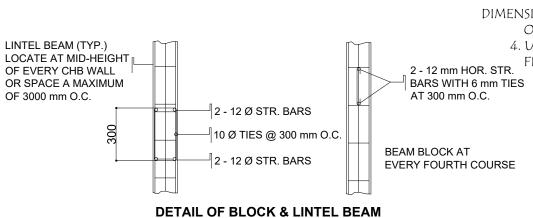
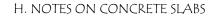
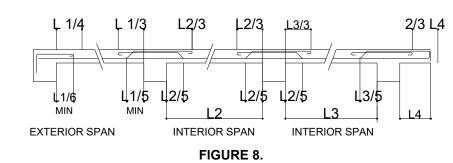


FIGURE 18. SINGLE AND TWO-PIECE HOOPS





- 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



- 3. IF SLABS ARE REINFORCED BOTHHNAY, 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 $(1\frac{1}{2})$ TIMES THAT IN THE MIDDLE STRIPS BUT IN NO CASE GREATER THAN TWO AND ONE-HALF $(2\frac{1}{2})$ 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 OTHERWISENOTED, 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

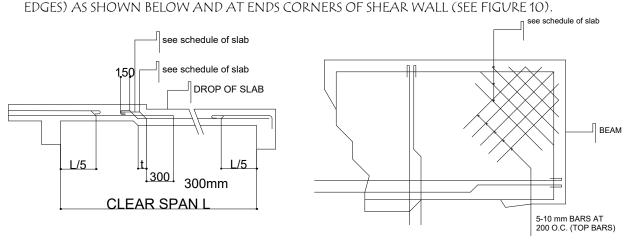


FIGURE 9. DROP SLAB

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 $\frac{1}{4}$ OF THE SLAB THICKNESS AND SHALL BE LOCATED AT MID THICKNESS OF

FIGURE 10. CORNER SLAB

I. NOTES ON COLUMNS

THE SLAB.

- 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 E BELOW FOR JOINTS WITH BAR OFFSET (AS SHOWN IN FIGURE 11.)
- 2. LAP SPLICES, WHEN REQUIRED, ARE PERMITTED ONLY WIHTIN THE CENTER OF TEH 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 m, OVER A DISTANCE FROM EACH JOINT FACE OF NOT LESS THAN THE LARGER OF THE MAXIMUM COLUMN SECTION

DIMENSION,

- OR ONE-SXITH OF THE CLEAR HEIGHT OF THE COLUMN OR 450 mm.
- 4. UNLESSS OTHERWISE DETAILED, TYPICAL BAR DETAILS FOR TIED COLUMNS ARE AS SHOWN IN

PROJECT TITLE / LOCATION

see schedule of beams see schedule of beams 38 mm CLEAR MIN. FOR BEAM OR 19 mm 25 mm CLEAR MIN [∐]see schedule of beam [⊥] CLEAR MIN. FOR JOIST 25 mm SEPARATORS _ 50 mm CLEAR (MIN. FOR STEEL SHAPE BEAMS) EACH AT 900 mm O.C.

AS SHOWN IN FIGURE 13.

a. REINFORCED CONCRETE

b. STRUCTURAL SHAPE

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 DATE ISS. 05 JAN 2016 **ARCHITECT**

SECTION 33 of RA 9266 | Drawing & ifications & other contract documer duly signed, stamp or sealed, as struments of service, are the intellectua property and documents of the architect wether the object for which they are mad is executed or not it shall be unlawful fo any person to duplicate or to make copie of & for other projects or buildings, whether executed partly or in whole, without the written consent of architect or author of

said documents

8270

O.R. | DATE | 141342 | 16JULY

PLACE ISS. GSC

08 MAY 2018

6600933

04440 141342 07

123-875-856

VALIDITY

IAPOA.

JAMES P. PACIS PICE, ASER CIVIL/STRUCTURAL ENGINEER ASEP: 52853-111 DATE: 01/07/16

ISS. AT: G.S.C.

T I N No.:102-900-986

PROPOSED ADMIN. BUILDING PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY CHUCHI P. GARGANERA DIRECTOR III ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.

Paraiso, Koronadal City

MINIMUM STAGGERED SPACING WHEN WELDED

SPLICES OR MECHANICAL

WHEN USED LOCATE LAP

SPLICE NEAR MID HEIGHT |

OF COLUMN BUT NOT

CLOSER THAN MAX COL

DIMENSION FROM FACE

MINIMUM STAGGERED

SPACING WHEN WELDED

SPLICES OR MECHANICAL

Sw = SPACING INDICATED X

BUNDLED COLUMN REINF.

CONSISTING OF PLANTED

FINISH FLOOR LEVEL

1 in 6 OFFSET

J. NOTES ON BEAMS AND GIRDERS

SEPARATORS BETWEEN LAYER OF BARS.

REINF. CUT-OFF BUNDLED

BAR REINF. AS SHOWN

Sh = ONE-FOURTH OF THE

MINIMUM COLUMN DIMENSION

BUT NOT MORE THAN 100 mm

CONNECTOR ARE USED

TO JOINT

CONNECTOR ARE USED

n PROVIDE 12 Ø EXTRA TIES @ 100 O.C.

 ☐ TENSION SPLICE

+ CLASS B

(REFER TO ITEM F)

FIGURE 12. TYPICAL SLICE & OFFSET DETAIL OF COLUMN BARS

in 6 OFFSET

FIGURE 11. TYPICAL SLICE & OFFSET DETAIL OF COLUMN BARS

1. UNLESS OTHERWISE NOTED IN PLANS OR SPECIFICATIOPNS, CAMBER ALL BEAMS AT

LEAST 8mm 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.

BEAM OR GIRDER, USE SEPARATORS OF A SIZE NOT LESS THAN 25 mm BARS SPACED

3. LONGITIDUNAL REINFORCING BARS SHALL BE PLACED SYMMETRICALLY ABOUT THE

VERTICAL CENTER LINE OF THE BEAM OR GIRDER SECTION WHERE POSSIBLE WITH

4. MINIMUM CONCRETE PROJECTION OR REINFORCEMENT BARS OR SHAPES SHALL BE

UPPER LAYER BARS PLACED DIRECTLY ABOVE THOSE IN THE BOTTOM LAYER.

2. IF THERE ARE TWO OR MORE LAYERS OF LONGITIDUNAL REINFORCING BARS IN A

ABOUT 900 mm ON CENTER IN NO CASE SHALL THERE BE LESS THAN TWO (2)

STAGGERED SPLICES

TYPICAL TIED COLUMN

BARS DETAIL

Sb = 100 mm O.0

H = 150 mm O.C.

(USE 12 mm Ø TIES)

Lo = CONFINEMENT REGION

= MAXIMUM COLUMN

DIMENSION BUT

NOT LESS THAN

OR 450

ONE-SIXTH CLEAR HEIGHT OF COLUMN

90 DEG HOOK

DETAIL OF REINFORCEMENTS

OF TIED COLUMN AT TOP

∏ 40 mm COVER TO

COL.TIES TYPICAL

□ COLUMN VERTICAL

REINFORCEMENT

STAGGERED SPLICES FOR COLUMN BARS

FINISH FLOOR LEVEL

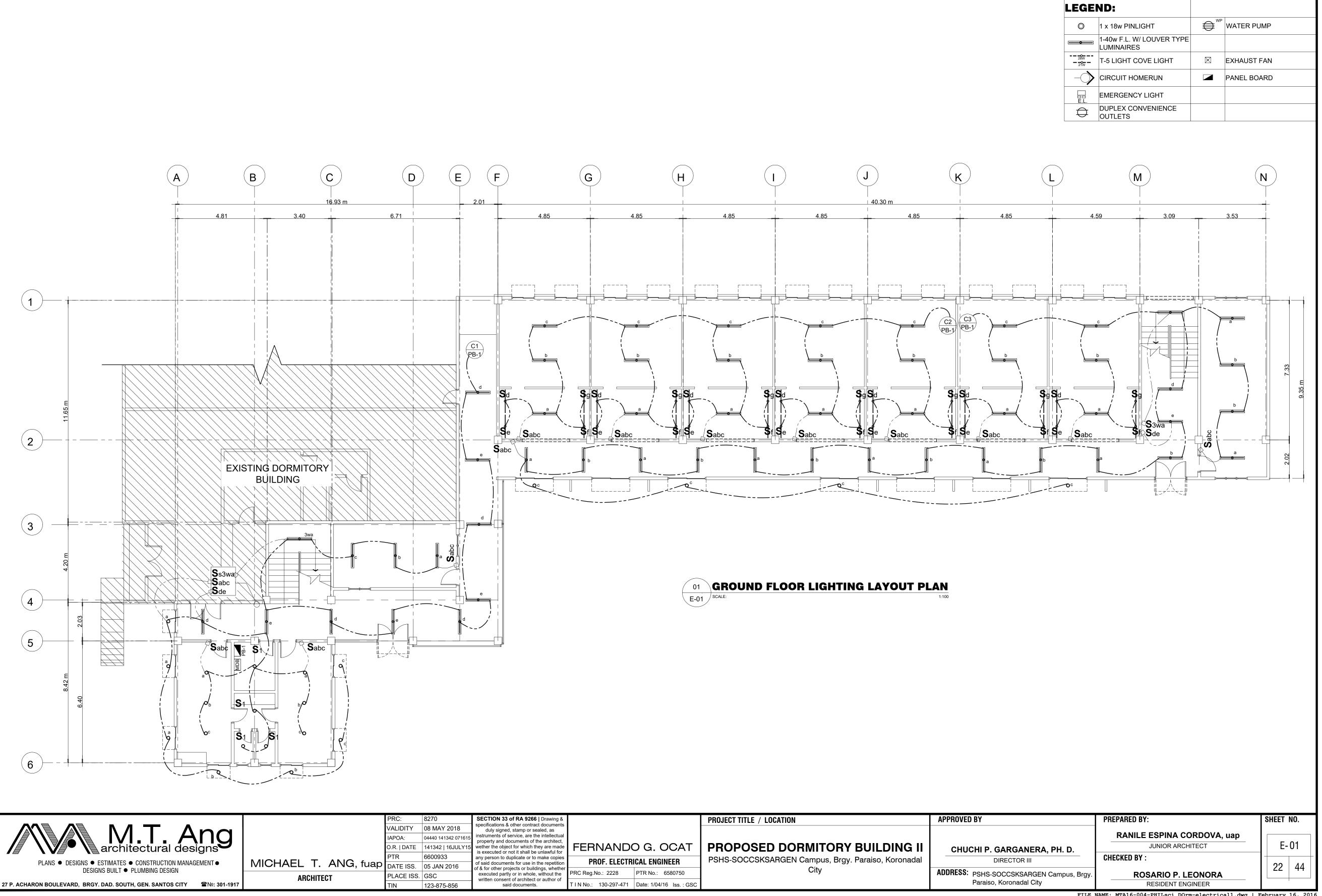
Lv = PART OF COLUMN BETYOND

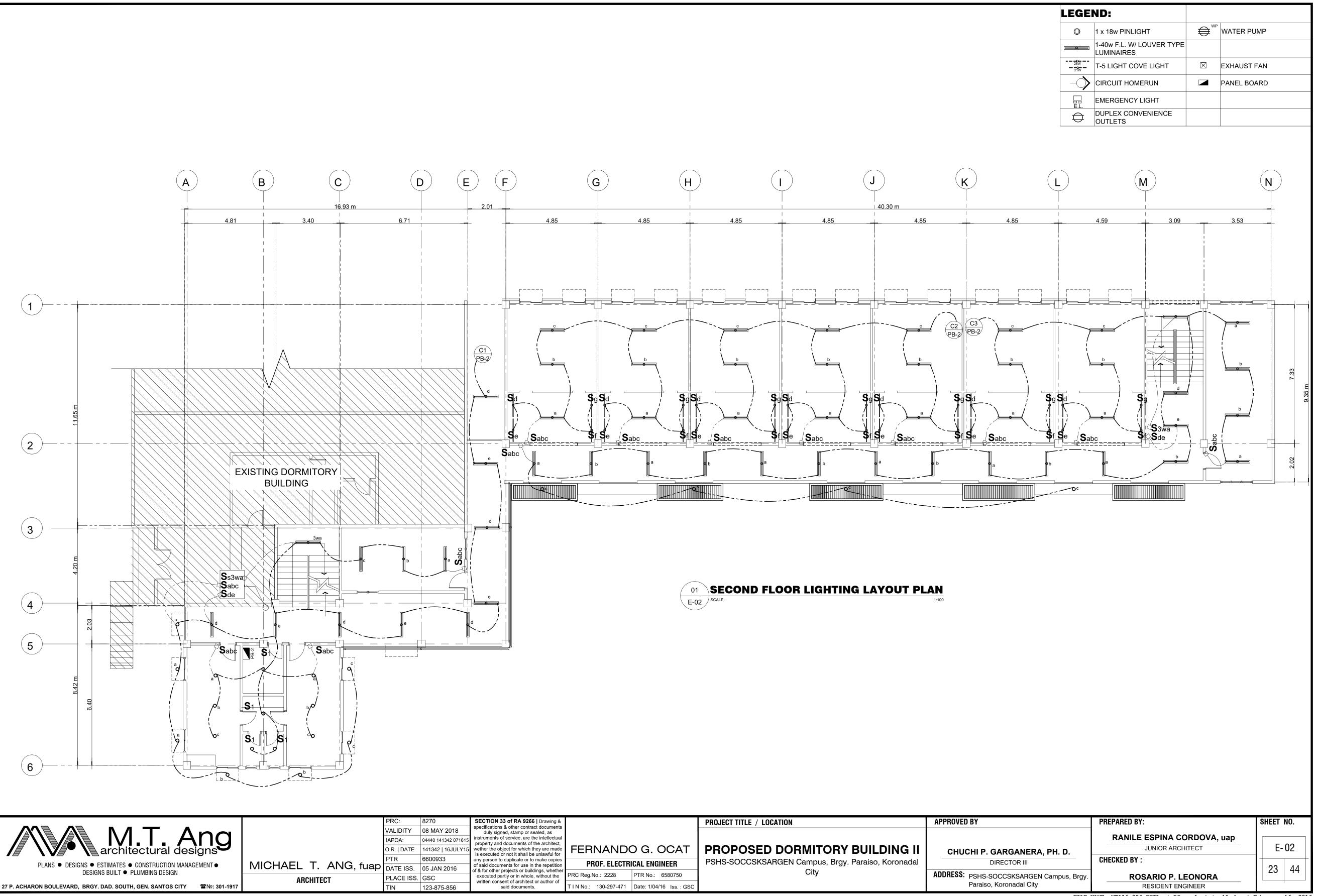
CONFINEMENT REGION

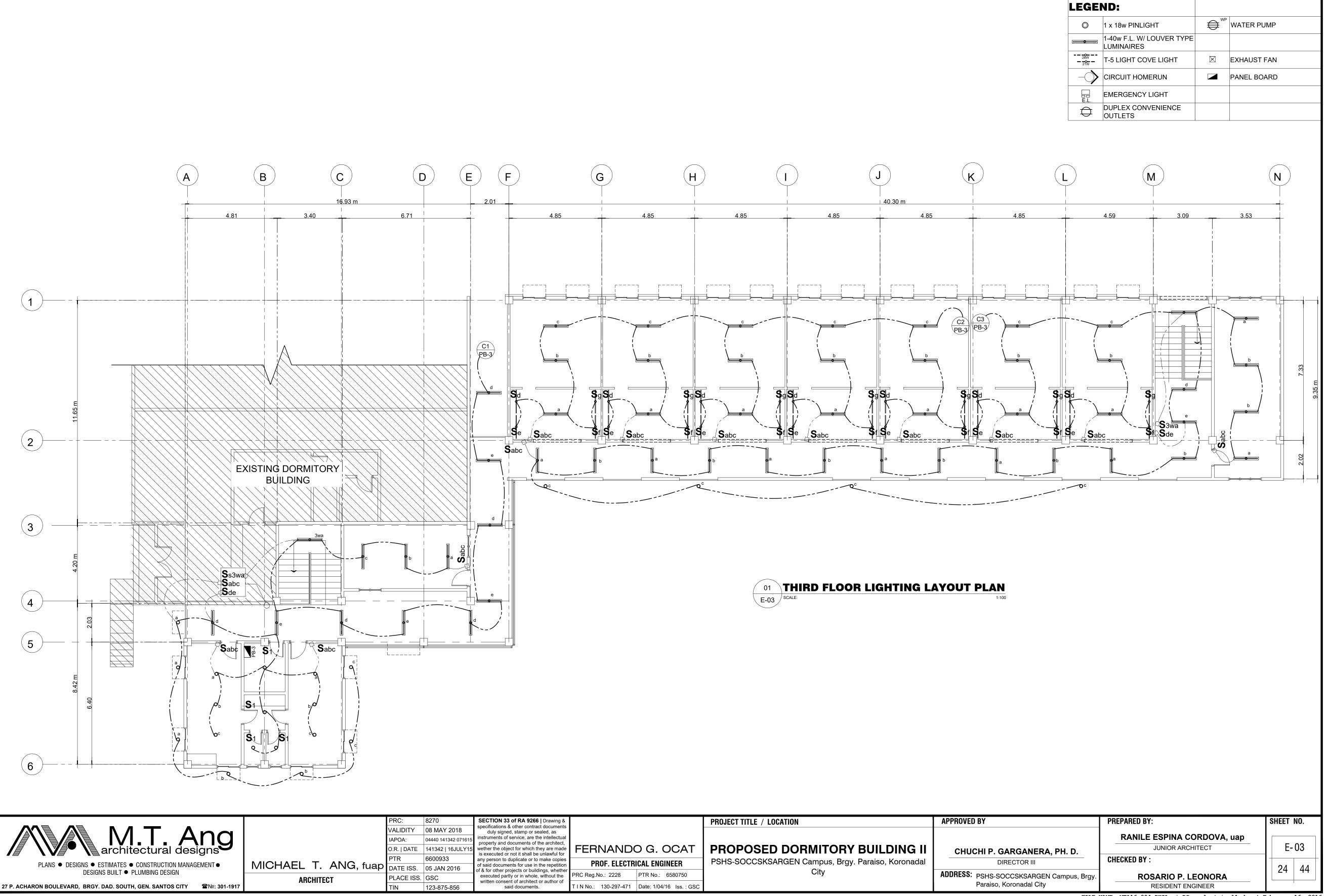
(SEE COLUMN SCHEDULE FOR TIES)

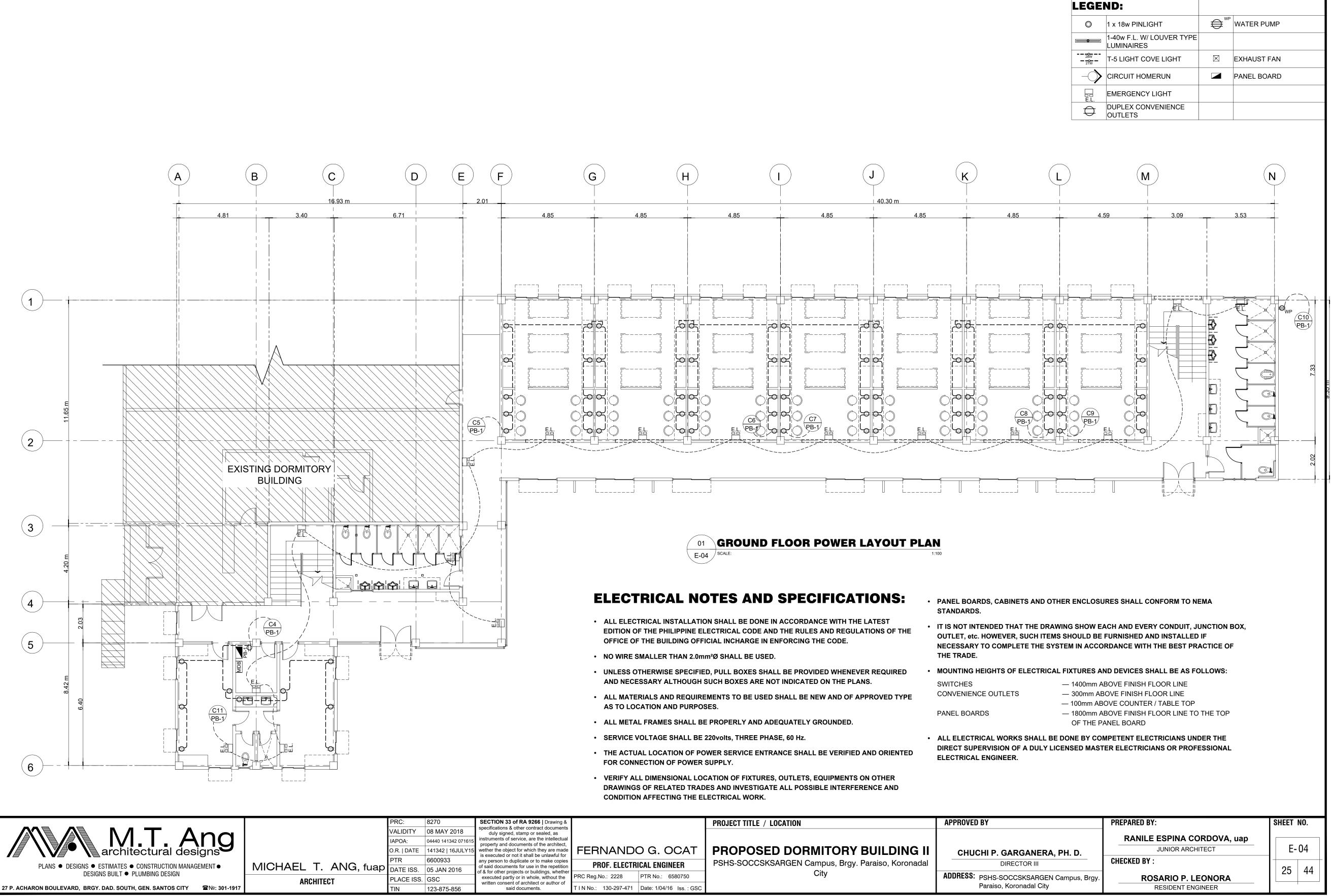
(APPLICABLE ONLY FOR S₁ AND Sh)

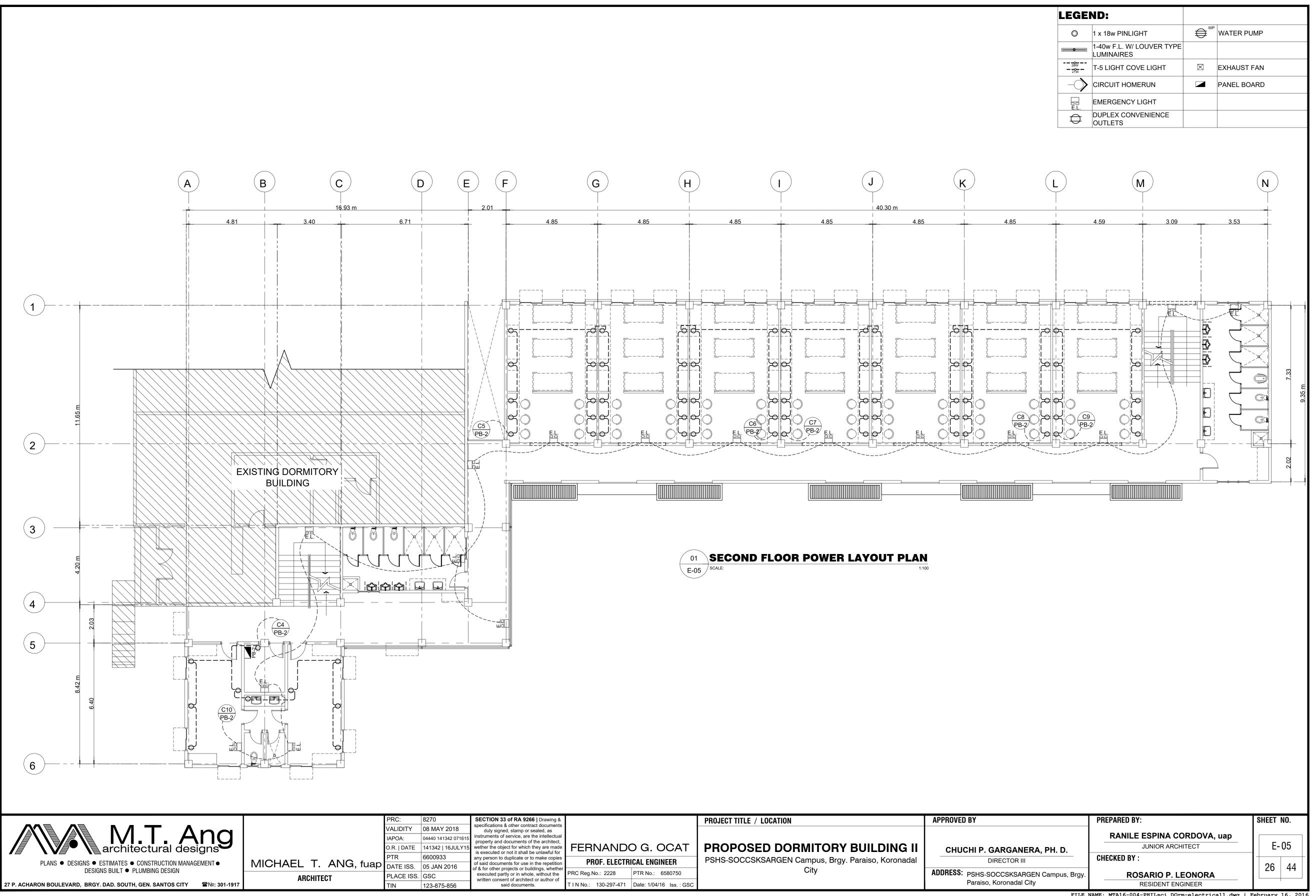
PREPARED BY: SHEET NO. **CHECKED BY: ROSARIO P. LEONORA** RESIDENT ENGINEER

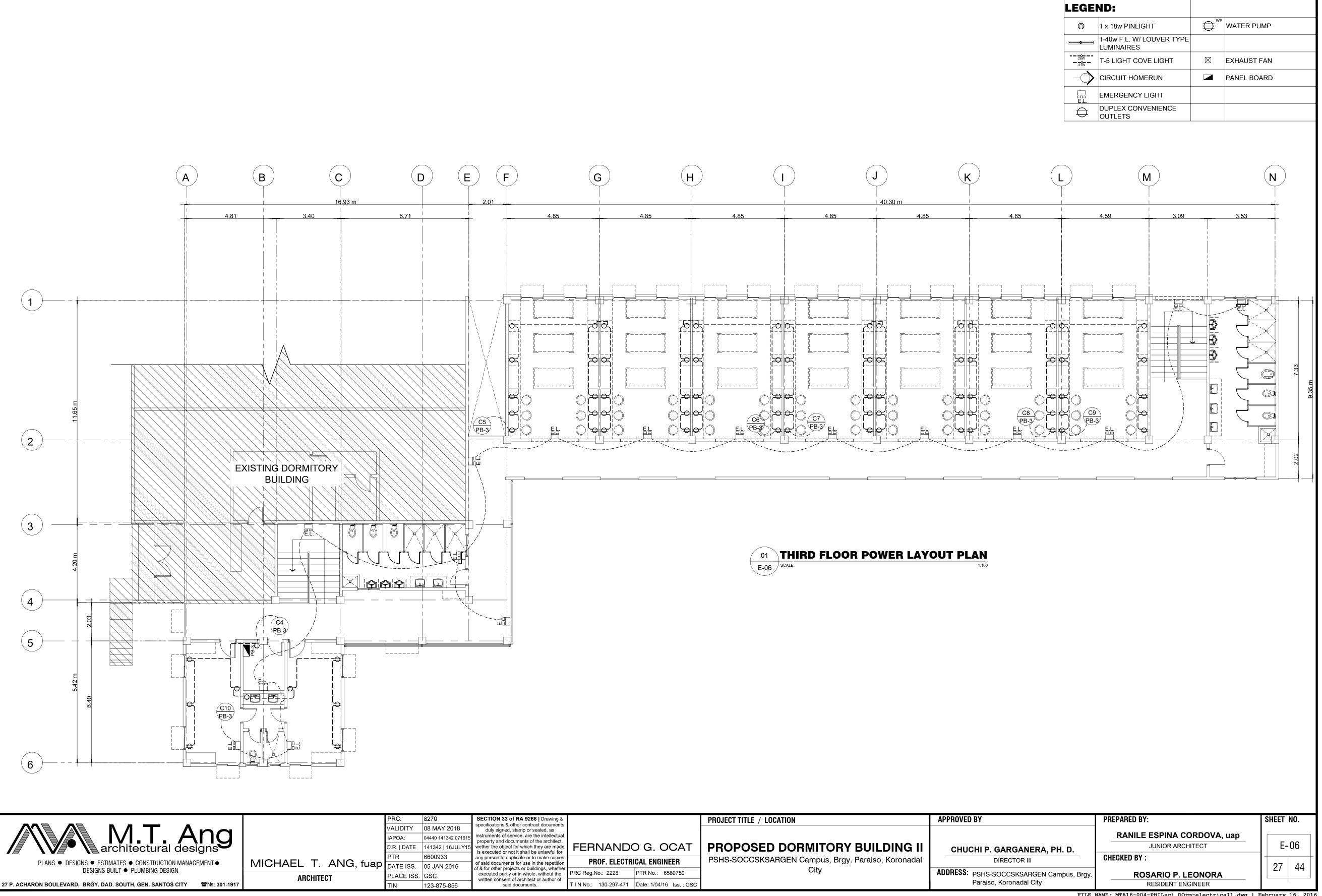












LOAD COMPUTATION FOR PB-01 NO. OF OUTLETS RATING DESCRIPTION SIZES OF WIRES AND CONDUITS AT AF POLE L.O C.O OTHERS W/VA/HP AB BC AC S1 S2 S3 3W 220 LIGHTING OUTLET 3000 W 4 1 4 2 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 30 2 LIGHTING OUTLET 2-3.5 MM² THHN WIRES 1/2" Ø RSC 3500 W 3 LIGHTING OUTLET 3700 W 16.8 8 1 2 2 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 220 220 4 CONVENIENCE OUTLET 1850 W 8.4 2-3.5 MM² THHN WIRES 1/2" Ø RSC 5 CONVENIENCE OUTLET 15 12.6 220 2775 W 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 15 220 6 | CONVENIENCE OUTLET 2775 W 12.6 2-3.5 MM² THHN WIRES 1/2" Ø RSC | 20 CONVENIENCE OUTLET 15 2775 W 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 8 CONVENIENCE OUTLET 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 15 2775 W 12.6 9 CONVENIENCE OUTLET 1850 W 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 30 220 10 WATER PUMP 1.5 HP 2-3.5 MM² THHN WIRES 1/2" Ø RSC 20 2-5.5 MM² THHN WIRES 1/2" Ø RSC 30 40 2 11 EMERGENCY LIGHTS 1600 W 1000 W 2-5.5 MM² THHN WIRES 1/2" Ø RSC | 30 | 40 | 2 12 SPARE 44.7 | 48.4 | 42.4 | 32 | 7 | 6 | 4 | 3-30mm² THHN WIRE IN 1½" Ø RSC | 100 | 125 | 3 TOTAL 102 80 17

SIZE OF FEEDER

≥ 48.4 x 1.732 ≥ 83.892 AMPS

USE: 3-30mm² THHN WIRE IN 1½" Ø RSC

LOAD COMPUTATION FOR PB-02

| CKT NO. | DESCRIPTION | NO | . OF OUTI | LETS | RATING | | AMPERE: | S | | SWIT | CHES | | CIZEC OF WIDES AND CONDUITS | CIRCUI | T PROT | ECTION | VOLTACE |
|---------|--------------------|-----|-----------|--------|---------|------|---------|------|----|------|-------------|----|---|--------|--------|--------|---------|
| CKI NO. | | L.O | C.O | OTHERS | W/VA/HP | AB | ВС | AC | S1 | S2 | S3 | 3W | SIZES OF WIRES AND CONDUITS | AT | AF | POLE | VOLTAGE |
| 1 | LIGHTING OUTLET | 30 | | | 3000 W | 13.6 | | | 4 | 1 | 4 | 2 | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 2 | LIGHTING OUTLET | 35 | | | 3500 W | | 15.9 | | 20 | 5 | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 3 | LIGHTING OUTLET | 37 | | | 3700 W | | | 16.8 | 8 | 1 | 2 | 2 | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 4 | CONVENIENCE OUTLET | | 10 | | 1850 W | 8.4 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 5 | CONVENIENCE OUTLET | | 15 | | 2775 W | | 12.6 | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 6 | CONVENIENCE OUTLET | | 15 | | 2775 W | | | 12.6 | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 7 | CONVENIENCE OUTLET | | 15 | | 2775 W | 12.6 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 8 | CONVENIENCE OUTLET | | 15 | | 2775 W | | 12.6 | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 9 | CONVENIENCE OUTLET | | 10 | | 1850 W | | | 8.4 | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 10 | EMERGENCY LIGHTS | | | 16 | 1600 W | 7.3 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 11 | SPARE | | | | 1000 W | | 4.5 | | | | | | 2-5.5 MM ² THHN WIRES 1/2" Ø RSC | 30 | 40 | 2 | 220 |
| 12 | SPARE | | | | 1000 W | | | 4.5 | | | | | 2-5.5 MM ² THHN WIRES 1/2" Ø RSC | 30 | 40 | 2 | 220 |
| | TOTAL | 102 | 80 | 16 | | 41.9 | 45.7 | 42.4 | 32 | 7 | 6 | 4 | 3-30mm ² THHN WIRE IN 1½" Ø RSC | 100 | 125 | 3 | 220 |
| | | | | | | | | | | | | | | | | | |

SIZE OF FEEDER

≥ 45.7 x 1.732 ≥ 79.121 AMPS

USE: 3-30mm² THHN WIRE IN 1½" Ø RSC

01 RISER DIAGRAM (PB-1)

✓ 3-30mm² THHN WIRE

✓ 1½ "Ø RIGID STEEL CONDUIT

20A 2-3.5mm² THHN C-6 CONVENIENCE OUTLETS

2-5.5mm² THHN C-12 SPARE

20A 20A 2-3.5mm² THHN - C-10 WATER PUMP

2-3.5mm² THHN C-8 CONVENIENCE OUTLETS

LIGHTING OUTLETS C-1 - 2-3.5mm² THHN 20A 2-3.5mm² THHN - C-2 LIGHTING OUTLETS

LIGHTING OUTLETS C-3 = 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN C-4 CONVENIENCE OUTLETS

GROUND

FROM WIRE GUTTER

CONVENIENCE OUTLETS C-5 - 2-3.5mm² THHN

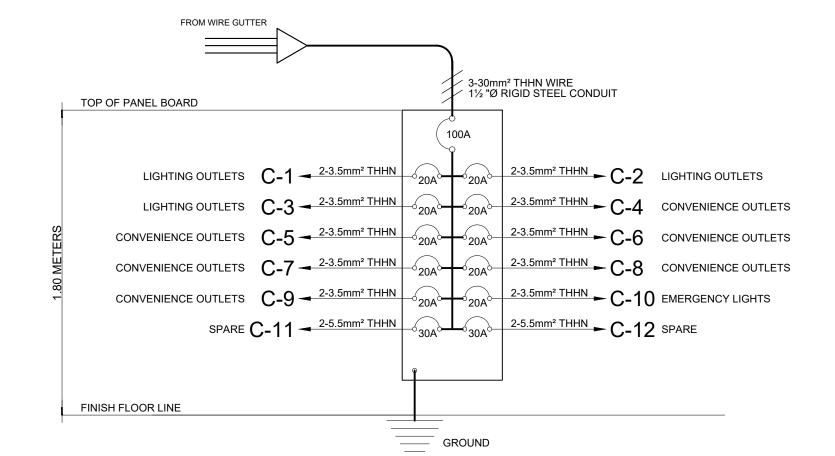
CONVENIENCE OUTLETS C-7 - 2-3.5mm² THHN

CONVENIENCE OUTLETS C-9 - 2-3.5mm² THHN

EMERGENCY LIGHTS C-11 - 2-5.5mm² THHN 30A 30A

TOP OF PANEL BOARD

FINISH FLOOR LINE



01 RISER DIAGRAM (PB-2)

| ۸. | SIZE OF FEEDER |
|----|----------------|

≥ 45.7 x 1.732 ≥79.121 AMPS

USE: 3-30mm² THHN WIRE IN 1½" Ø RSC

LOAD COMPUTATION FOR PB-03

| | COIVII O I / (I I O I V I | <u> </u> | 00 | | | | | | | | | | | | | | |
|---------|----------------------------|--|-----|-----------------------------|--------------------|------|---------|------|----|----|----|----|---|----|----|------|---------|
| CKT NO. | DESCRIPTION | NO. OF OUTLETS RATING AMPERES SWITCHES | | CIZEC OF WIDES AND CONDUITS | CIRCUIT PROTECTION | | VOLTACE | | | | | | | | | | |
| CKI NO. | DESCRIPTION | L.O | C.O | OTHERS | W/VA/HP | AB | ВС | AC | S1 | S2 | S3 | 3W | SIZES OF WIRES AND CONDUITS | AT | AF | POLE | VOLTAGE |
| 1 | LIGHTING OUTLET | 30 | | | 3000 W | 13.6 | | | 4 | 1 | 4 | 2 | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 2 | LIGHTING OUTLET | 35 | | | 3500 W | | 15.9 | | 20 | 5 | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 3 | LIGHTING OUTLET | 37 | | | 3700 W | | | 16.8 | 8 | 1 | 2 | 2 | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 4 | CONVENIENCE OUTLET | | 10 | | 1850 W | 8.4 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 5 | CONVENIENCE OUTLET | | 15 | | 2775 W | | 12.6 | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 6 | CONVENIENCE OUTLET | | 15 | | 2775 W | | | 12.6 | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 7 | CONVENIENCE OUTLET | | 15 | | 2775 W | 12.6 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 8 | CONVENIENCE OUTLET | | 15 | | 2775 W | | 12.6 | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 9 | CONVENIENCE OUTLET | | 10 | | 1850 W | | | 8.4 | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 10 | EMERGENCY LIGHTS | | | 16 | 1600 W | 7.3 | | | | | | | 2-3.5 MM ² THHN WIRES 1/2" Ø RSC | 20 | 30 | 2 | 220 |
| 11 | SPARE | | | | 1000 W | | 4.5 | | | | | | 2-5.5 MM ² THHN WIRES 1/2" Ø RSC | 30 | 40 | 2 | 220 |
| 12 | SPARE | | | | 1000 W | | | 4.5 | | | | | 2-5.5 MM ² THHN WIRES 1/2" Ø RSC | 30 | 40 | 2 | 220 |
| | | | | | | | | | | | | | | | | | |

SCHEDULE OF LOADS AND COMPUTATIONS FOR MDP

| PANEL DESCRIPTION | AMPERE | CIRC | VOLTAGE | | |
|-----------------------|--------|------|---------|------|---------|
| PAINEL DESCRIPTION | S | AT | AF | POLE | VOLTAGE |
| PB-01 | 83.89 | 100 | 125 | 3 | 220 |
| PB-02 | 79.12 | 100 | 125 | 3 | 220 |
| PB-03 | 79.12 | 100 | 125 | 3 | 220 |
| | | | | | |
| TOTAL | 242.13 | 250 | 300 | 3 | 220 |

101AL 242.13 250 300 3 220

TOTAL

SIZE OF SERVICE ENTRANCE I = [PB-01 + PB-02 + PB-03 + PB-04]

102 80 16

- = 83.89 + 79.12 + 79.12
- = 242.13 AMPERES

USE: 3- 125 mm² THHN WIRE IN 3" Ø RSC

VOLTAGE DROP

@ PANELS PB-01 & PB-02

DISTANCE FROM TAPPING POLE TO PANELS: ±28 m

MAIN = 242.13

 $R(175 \text{mm}^2) = 0.14 \text{ / Km}$

@ 25m = 0.0035 Ohms

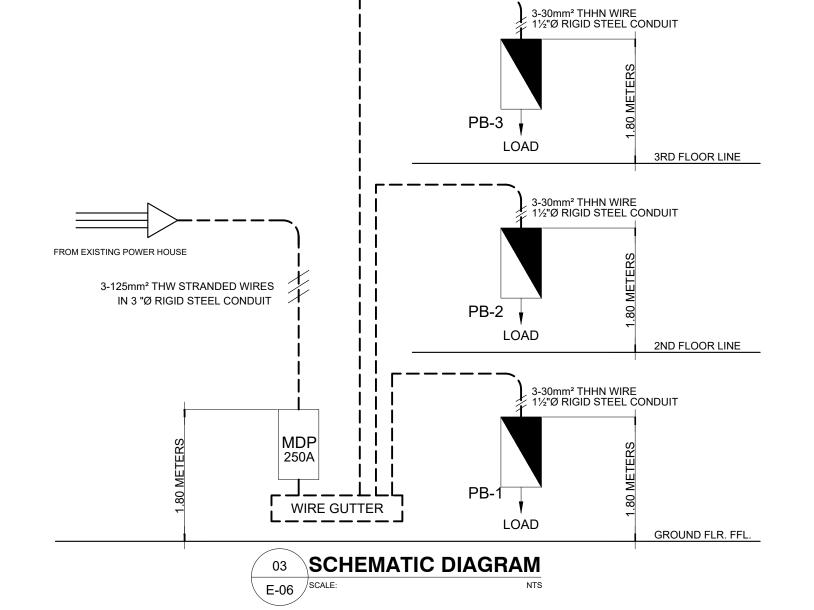
VOLTAGE DROP = 242.13 x 0.0035

= 0.8474676 V

VOLTAGE DROP @ MDP

VOLTS = 220 - 0.847468

= 219.152532 V



41.9 | 45.7 | 42.4 | 32 | 7 | 6 | 4 | 3-30mm² THHN WIRE IN 1½" Ø RSC | 100 | 125 | 3 | 220

FROM WIRE GUTTER 11/2 "Ø RIGID STEEL CONDUIT TOP OF PANEL BOARD LIGHTING OUTLETS C-1 - 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN - C-2 LIGHTING OUTLETS LIGHTING OUTLETS C-3 - 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN - C-4 CONVENIENCE OUTLETS CONVENIENCE OUTLETS C-5 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN C-6 CONVENIENCE OUTLETS CONVENIENCE OUTLETS C-7 - 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN C-8 CONVENIENCE OUTLETS CONVENIENCE OUTLETS C-9 - 2-3.5mm² THHN 20A 20A 2-3.5mm² THHN C-10 EMERGENCY LIGHTS SPARE C-11 - 2-5.5mm² THHN 30A 2-5.5mm² THHN - C-12 SPARE FINISH FLOOR LINE ____ GROUND

01 RISER DIAGRAM (PB-3)



| | | IAPOA: | 04440 141342 0716 |
|--|----------------------|-------------|-------------------|
| architectural designs | | O.R. DATE | 141342 16JULY |
| | | PTR | 6600933 |
| PLANS ● DESIGNS ● ESTIMATES ● CONSTRUCTION MANAGEMENT ● DESIGNS BUILT ● PLUMBING DESIGN | MICHAEL T. ANG, fuap | DATE ISS. | 05 JAN 2016 |
| DESIGNO BOILT • 1 EUNIDING DESIGN | ARCHITECT | PLACE ISS. | GSC |
| 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎№: 301-1917 | | TIN | 123-875-856 |

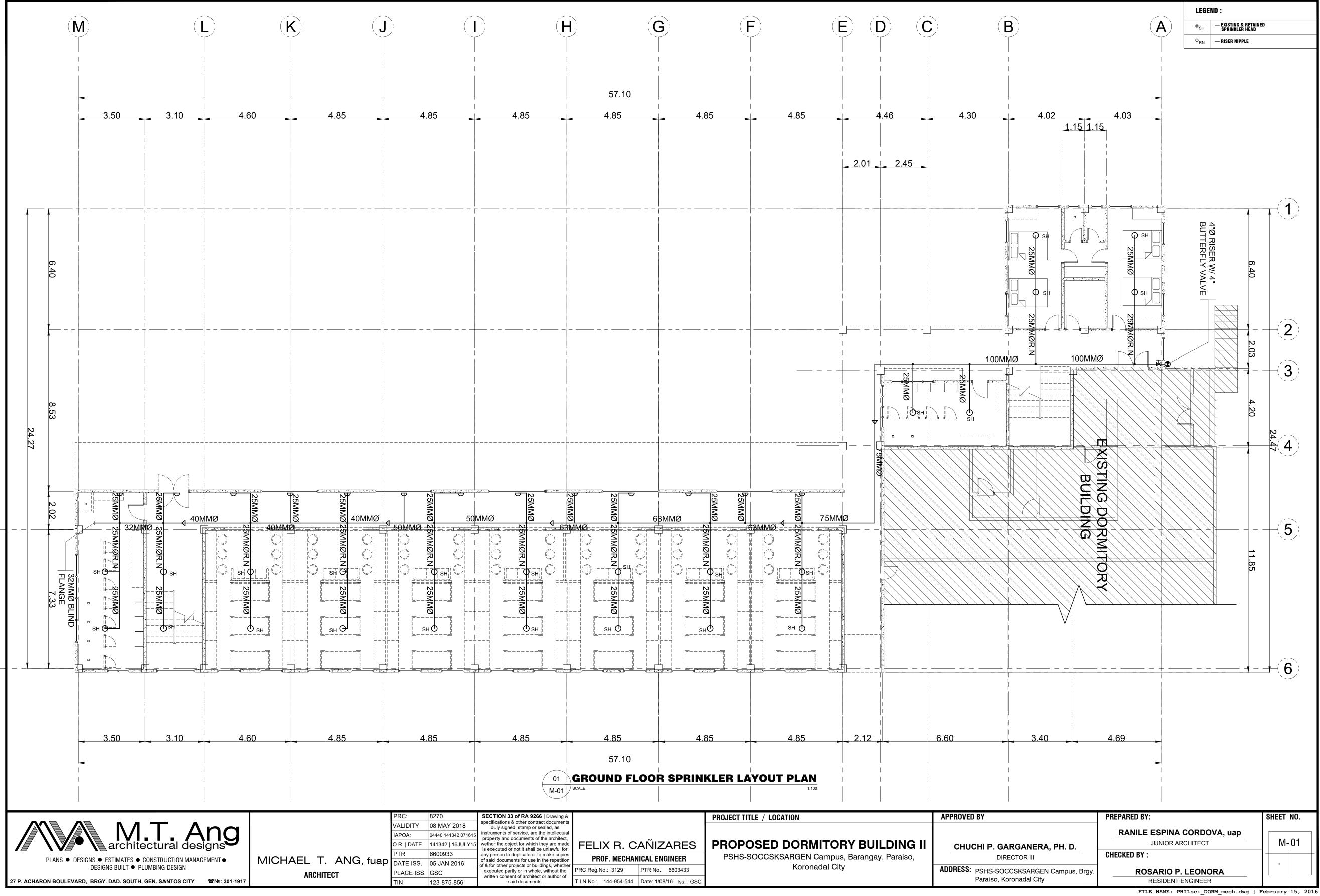
| PRC: | 8270 | SECTION 33 of RA 9266 Drawing 8 |
|-------------|---------------------|--|
| VALIDITY | 08 MAY 2018 | specifications & other contract document duly signed, stamp or sealed, as |
| IAPOA: | 04440 141342 071615 | instruments of service, are the intellectual property and documents of the architect |
| O.R. DATE | 141342 16JULY15 | |
| PTR | 6600933 | any person to duplicate or to make copie |
| DATE ISS. | 05 JAN 2016 | of said documents for use in the repetitio of & for other projects or buildings, whether |
| PLACE ISS. | GSC | executed partly or in whole, without the written consent of architect or author of |
| TINI | 123 875 856 | said documents |

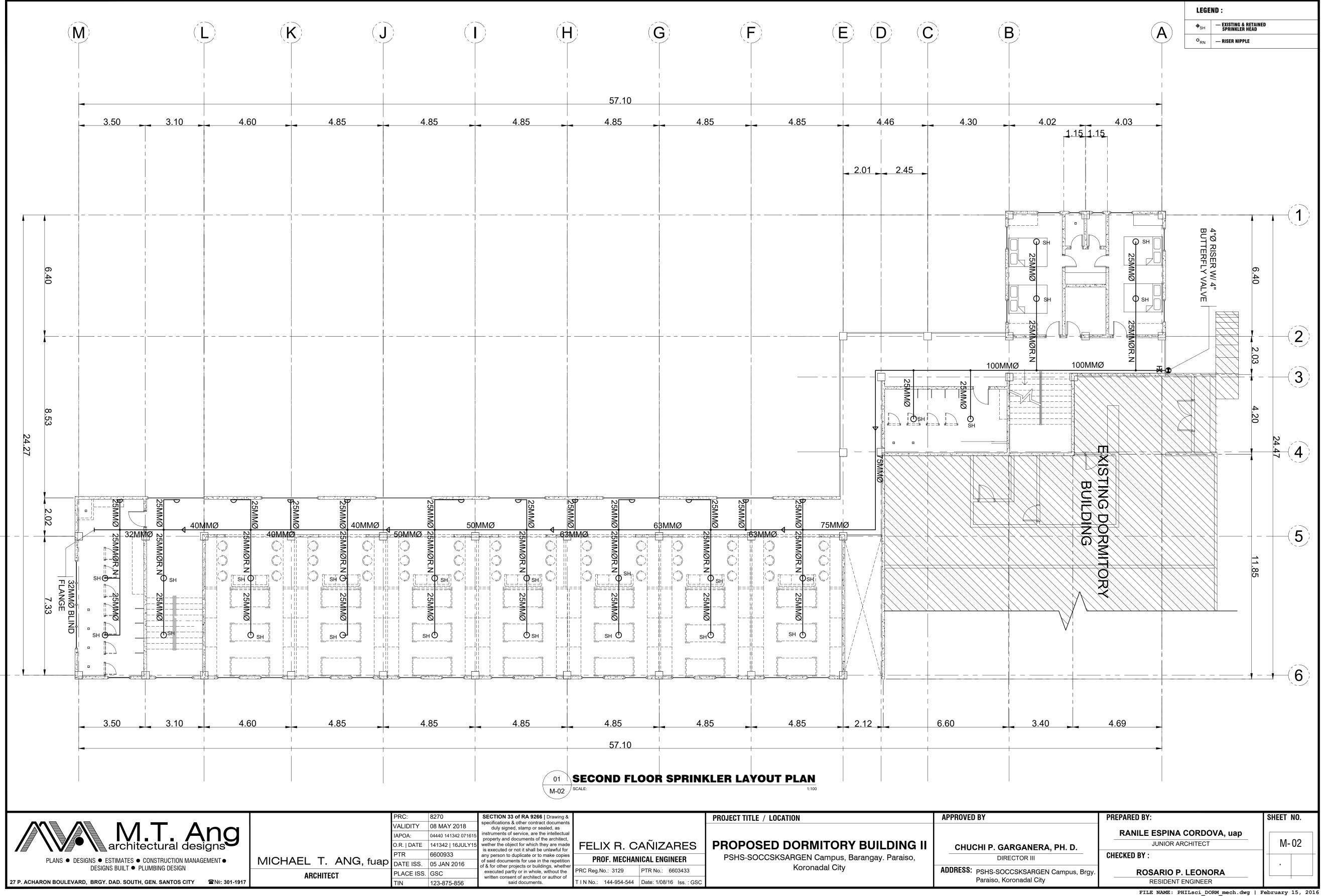
123-875-856

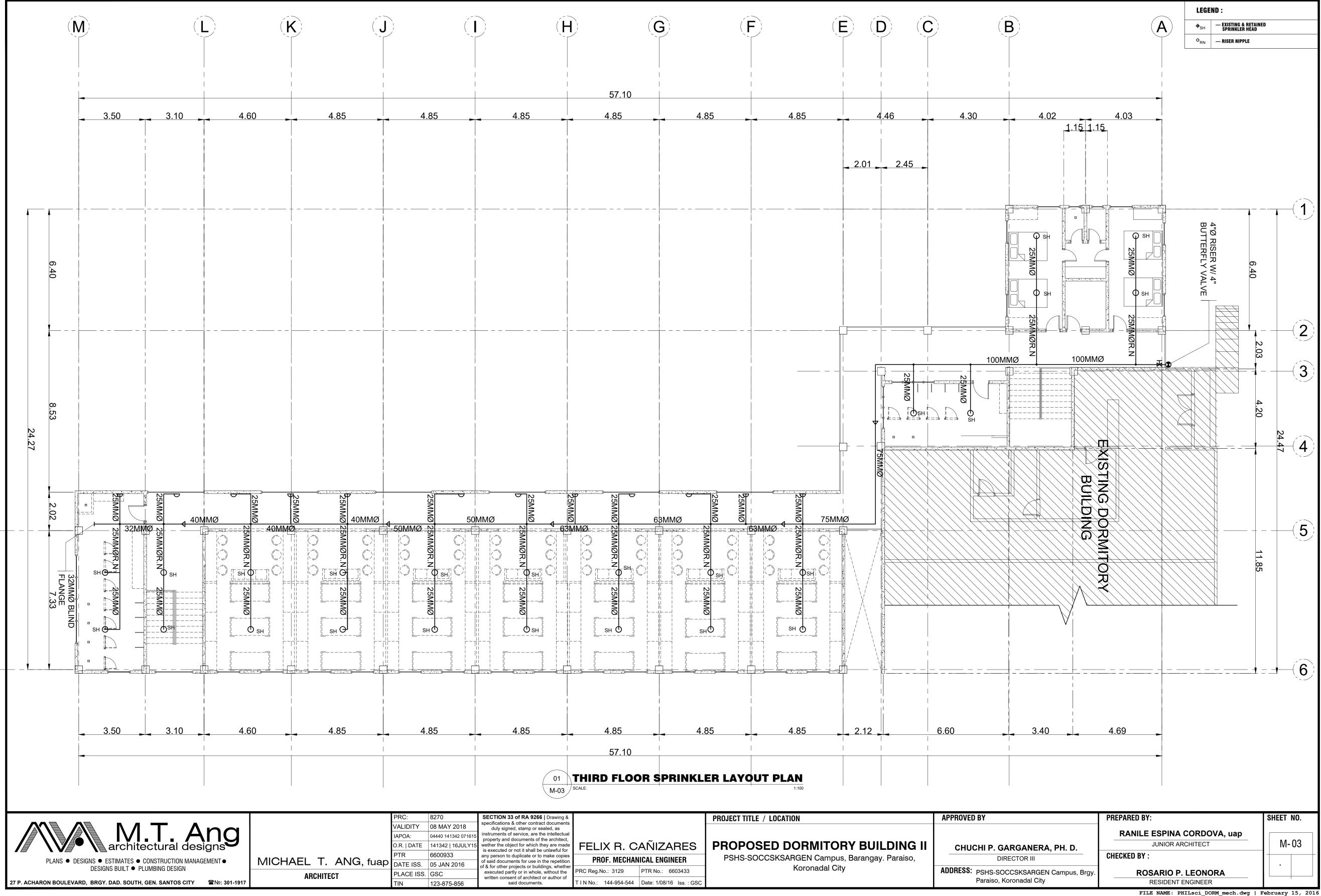
| al t, de r | FERNANDO G. OCAT | | | | | |
|---------------------------|---------------------------|-------------------------|--|--|--|--|
| es on ier e f | PROF. ELECTRICAL ENGINEER | | | | | |
| | PRC Reg.No.: 2228 | PTR No.: 6580750 | | | | |
| | T I N No.: 130-297-471 | Date: 1/04/16 Iss.: GSC | | | | |

PROJECT TITLE / LOCATION

| AP | PROVED BY | PREPARED BY: |
|--|-------------------------|--------------------------|
| CHUCHI P. GARGANERA, PH. D. | | RANILE ESPINA CORDOVA, u |
| | | JUNIOR ARCHITECT |
| | | CHECKED BY : |
| | DIRECTOR III | CHECKED DT. |
| ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. | | ROSARIO P. LEONORA |
| | Paraiso, Koronadal City | RESIDENT ENGINEER |
| | | |







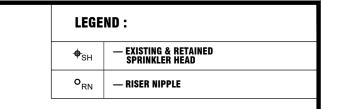


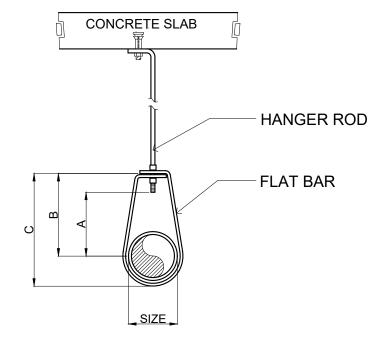
GENERAL NOTES:

- 1. ALL INSTALLATION SHALL FOLLOW THE PERTINENT NFPA-13 STANDARDS.
- 2. FOR AREAS WITH EXISTING FIRE PROTECTION SYSTEM LAYOUT, ANY DESIGN MODIFICATIONS SHALL BE SUBJECT TO MALL ADMIN APPROVAL.

01 LOCATION PLAN

- 3. IN AREAS WHERE NON-COMBUSTIBLE (ACOUSTIC TYPE OR THE LIKE) DROP CEILING WILL BE INSTALLED, INSTANT PENDANT TYPE SPRINKLER HEADS WITH THE SAME TYPE OR BRAND AS WHAT HAVE BEEN.
- 4. IN AREAS WHERE NON-COMBUSTIBLE (PLYWOOD) DROP CEILING WILL BE PENDANT TYPE SPRINKLER HEAD AND UPRIGHT TYPE SPRINKLER HEADS CONCEALED INSIDE CEILING.
- 5. ALL AREAS OR ROOM WITH FLOOR TO CEILING PARTITIONS SHALL HAVE PENDANT TYPE SPRINKLER HEADS.
- 6. INSTALL SPRINKLER RATED AT 74°C (165°F) FOR ORDINARY ROOMS. FOR KITCHEN OR OTHER AREAS WHICH HAS HEAT EMITTING EQUIPMENTS / APPLIANCES THAT WILL MAKE THE ROOM TEMPERATURE HIGHER, INSTALL SPRINKLER HEADS RATED AT LEAST 100°C (212°F).
- 7. DISTANCE OF SPRINKLER HEADS (PENDANT OF UPRIGHT) TO A WALL OF HIGH PARTITION MUST NOT EXCEED 2.50m.
- 8. MAXIMUM DISTANCE OF A SPRINKLER UNIT FROM THE SLAB SHOULD BE 300mm.
- 9. MAXIMUM COVERAGE OF ONE SPRINKLER HEAD (PENDANT OR UPRIGHT TYPE) IS EQUIVALENT TO A ROOM WITH DIMENSIONS OF 3.00 x 3.00 m (AREA). IRREGULAR CEILING OR CEILING WITH OBSTRUCTION (NOT FLAT) SHALL BE SUBJECT TO THE FIRE PROTECTION CONSULTANT APPROVAL.
- 10.MAXIMUM DISTANCE OF A SPRINKLER HEAD TO WALL OR PARTITION SHALL BE 1.50m.
- 11.FIRE PIPE LINES SHALL BE BLACK IRON (B.I.) PIPES, SCHEDULE 40 WITH FIRST AND FINAL COATING OF SAFETY RED PAINT. FITTINGS SHALL CONFORM WITH ASTM, A 53/A153.

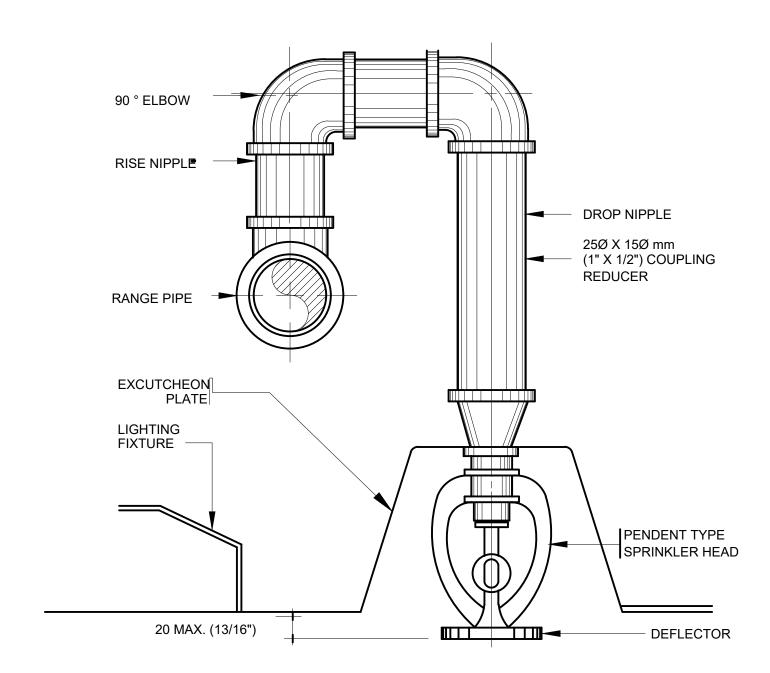




PIPE HANGER DIMENSION IN MM

| PIPE | ROD | | F | LAT BAR | AR | | |
|------|------|----|-----|---------|-------|-------|--|
| SIZE | DÍA. | Α | В | С | WIDTH | THICK | |
| 25 | 10 | 36 | 55 | 75 | 22 | 1.8 | |
| 32 | 10 | 46 | 65 | 87 | 22 | 1.8 | |
| 40 | 10 | 49 | 67 | 95 | 22 | 1.8 | |
| 50 | 10 | 56 | 76 | 106 | 22 | 1.8 | |
| 65 | 15 | 76 | 98 | 135 | 38 | 2.5 | |
| 75 | 15 | 84 | 108 | 152 | 38 | 2.5 | |







APPROVED BY



| MICH | PLANS ● DESIGNS ● ESTIMATES ● CONSTRUCTION MANAGEMENT ● DESIGNS BUILT ● PLUMBING DESIGN |
|------|---|
| | 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY SNº: 301-1917 |

| | PRC: | 8270 | SECTION 33 of RA 9266 Drawing & |
|-------------------|-------------|---------------------|---|
| | VALIDITY | 08 MAY 2018 | specifications & other contract documents duly signed, stamp or sealed, as |
| | IAPOA: | 04440 141342 071615 | instruments of service, are the intellectual property and documents of the architect, |
| | O.R. DATE | 141342 16JULY15 | |
| LIATI T AND C | PTR | 6600933 | any person to duplicate or to make copies |
| HAEL T. ANG, fuap | DATE ISS. | 05 JAN 2016 | of said documents for use in the repetition of & for other projects or buildings, whether |
| ARCHITECT | PLACE ISS. | GSC | executed partly or in whole, without the written consent of architect or author of |
| | TIN | 123-875-856 | said documents. |

| he intellectual the architect, they are made e unlawful for | FELIX R. C | AÑIZARES | | | | | |
|--|---------------------------|--------------------------|--|--|--|--|--|
| make copies the repetition | PROF. MECHANICAL ENGINEER | | | | | | |
| , | PRC Reg.No.: 3129 | PTR No.: 6603433 | | | | | |
| t or author of S. | T I N No.: 144-954-544 | Date: 1/08/16 Iss. : GSC | | | | | |

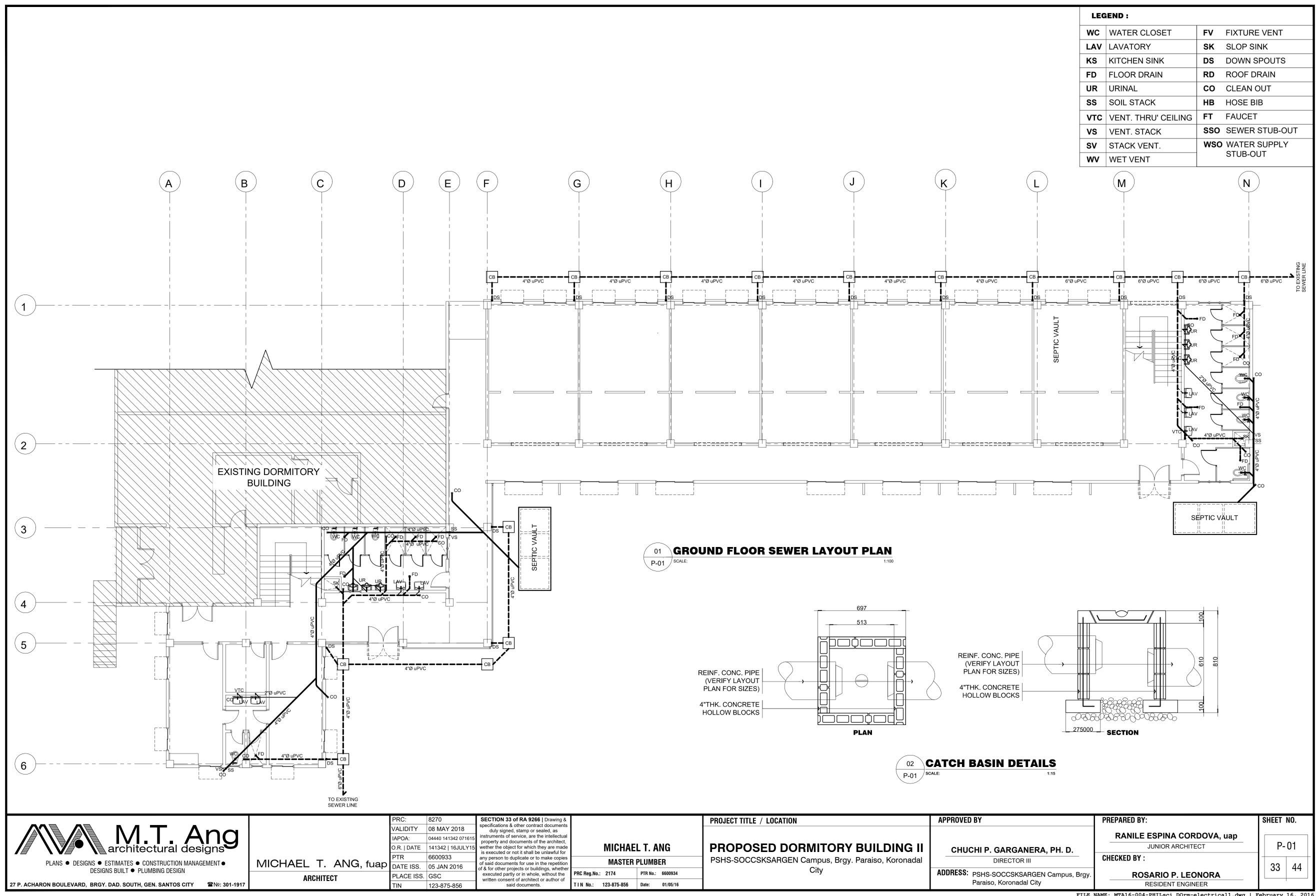
| PROPOSED DORMITORY BUILDING I |
|--|
| PSHS-SOCCSKSARGEN Campus, Barangay. Paraiso, |
| Koronadal City |

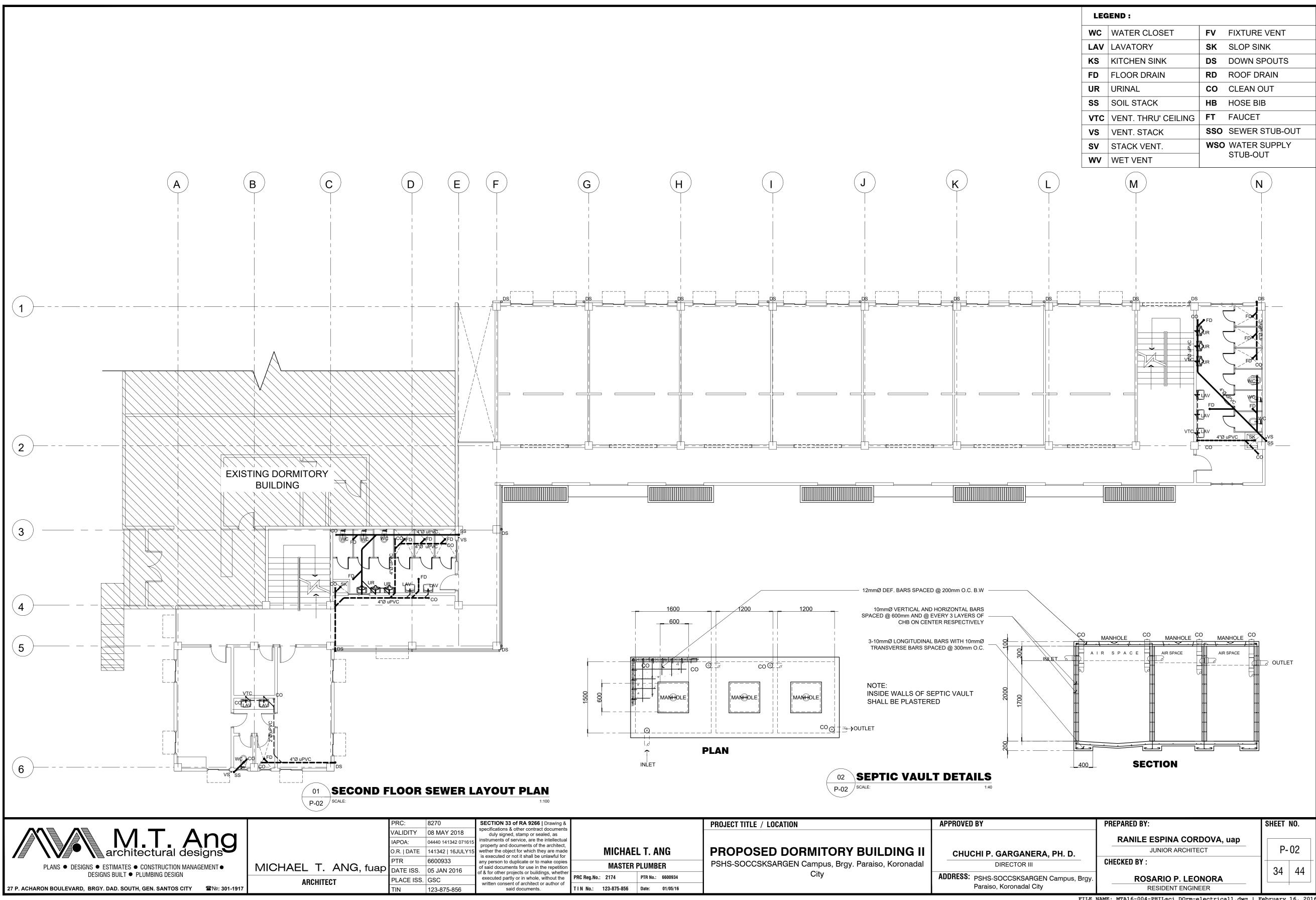
PROJECT TITLE / LOCATION

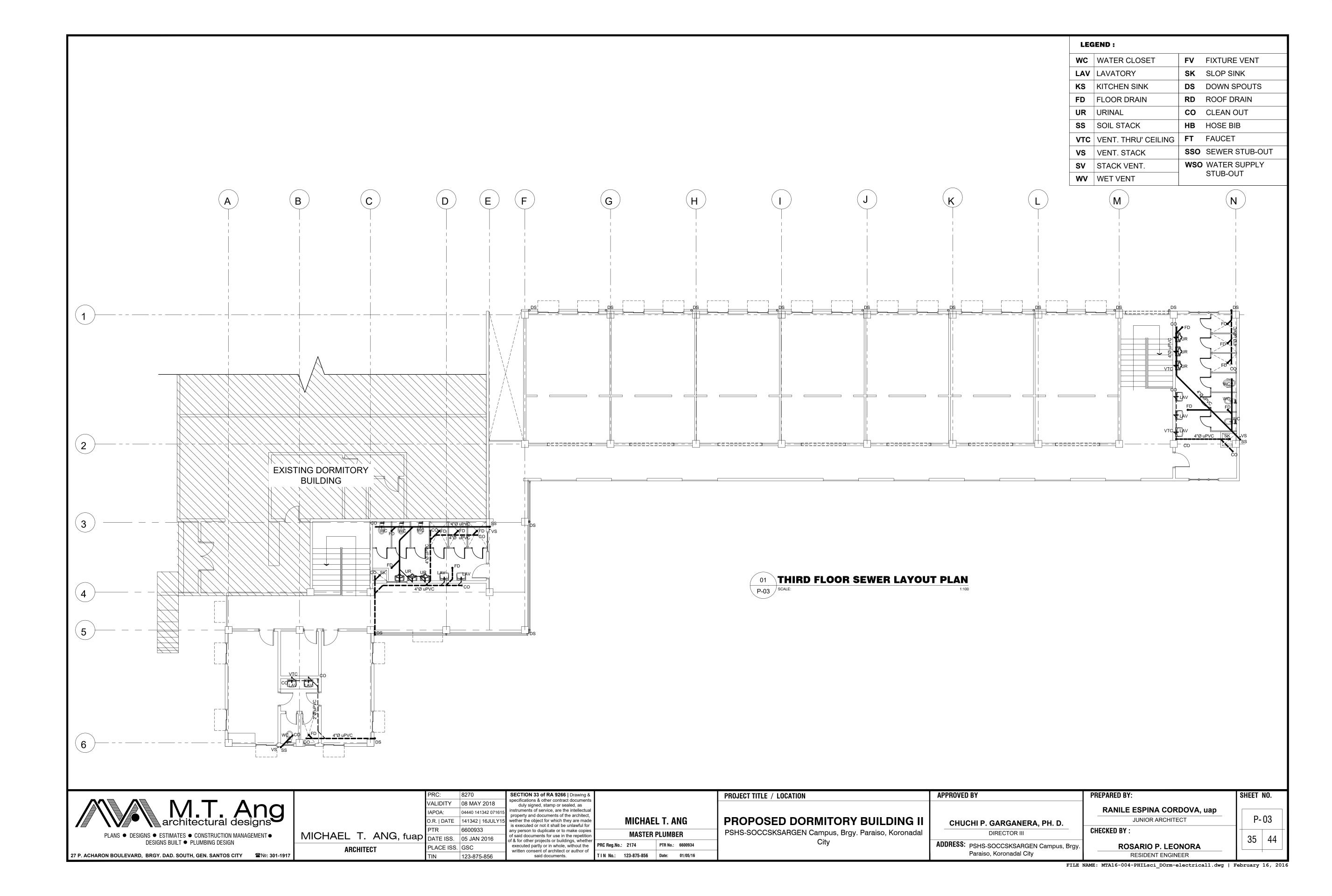
| | CHUCHI P. GARGANERA, PH. D. | |
|---|--|---|
| | DIRECTOR III | C |
| D | DRESS: PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City | |

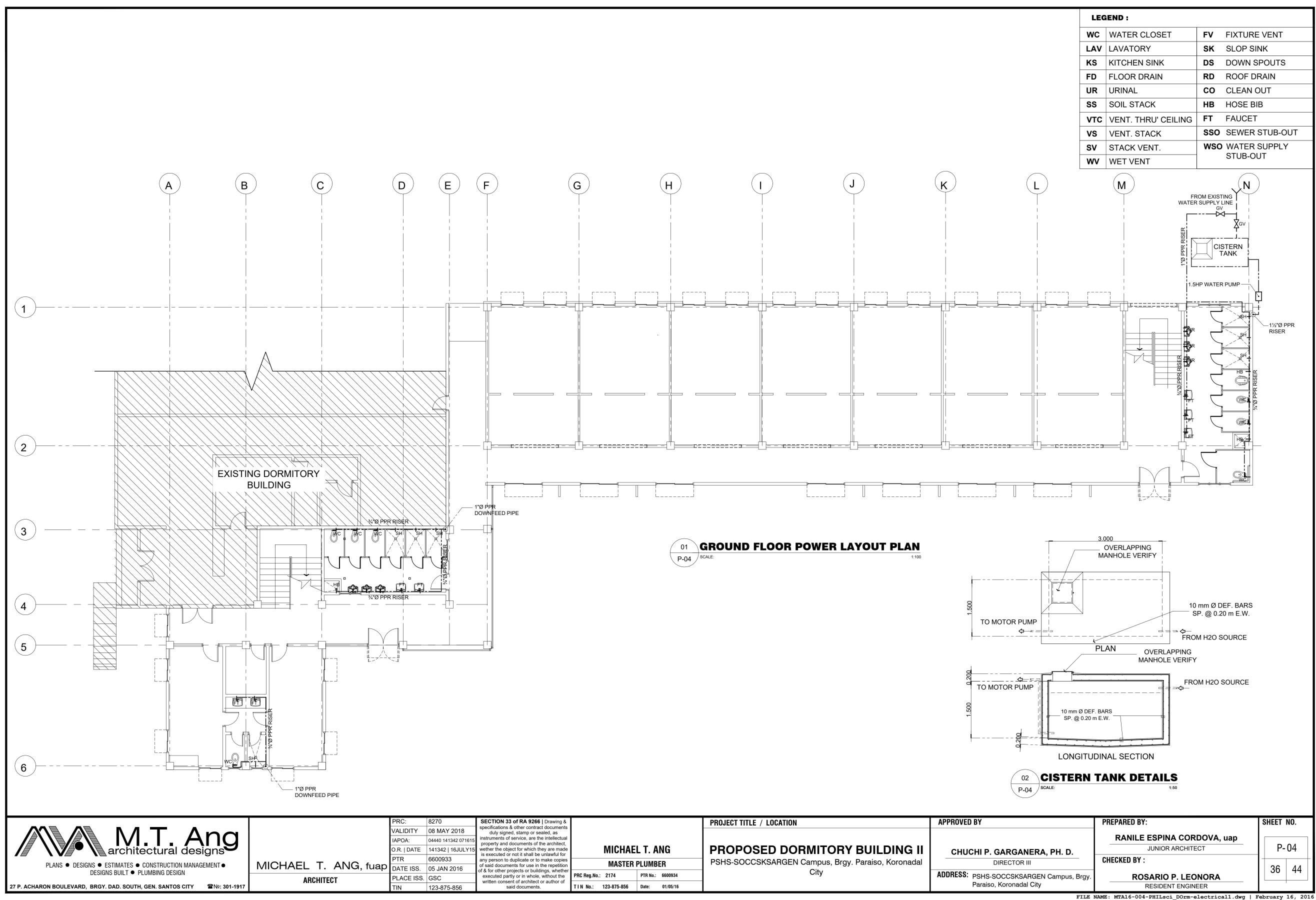
| PREPARED BY: | SHEET NO. | | |
|----------------------------|-----------|--|--|
| RANILE ESPINA CORDOVA, uap | | | |
| JUNIOR ARCHITECT | M- 04 | | |
| CHECKED BY: | | | |
| ROSARIO P. LEONORA | | | |

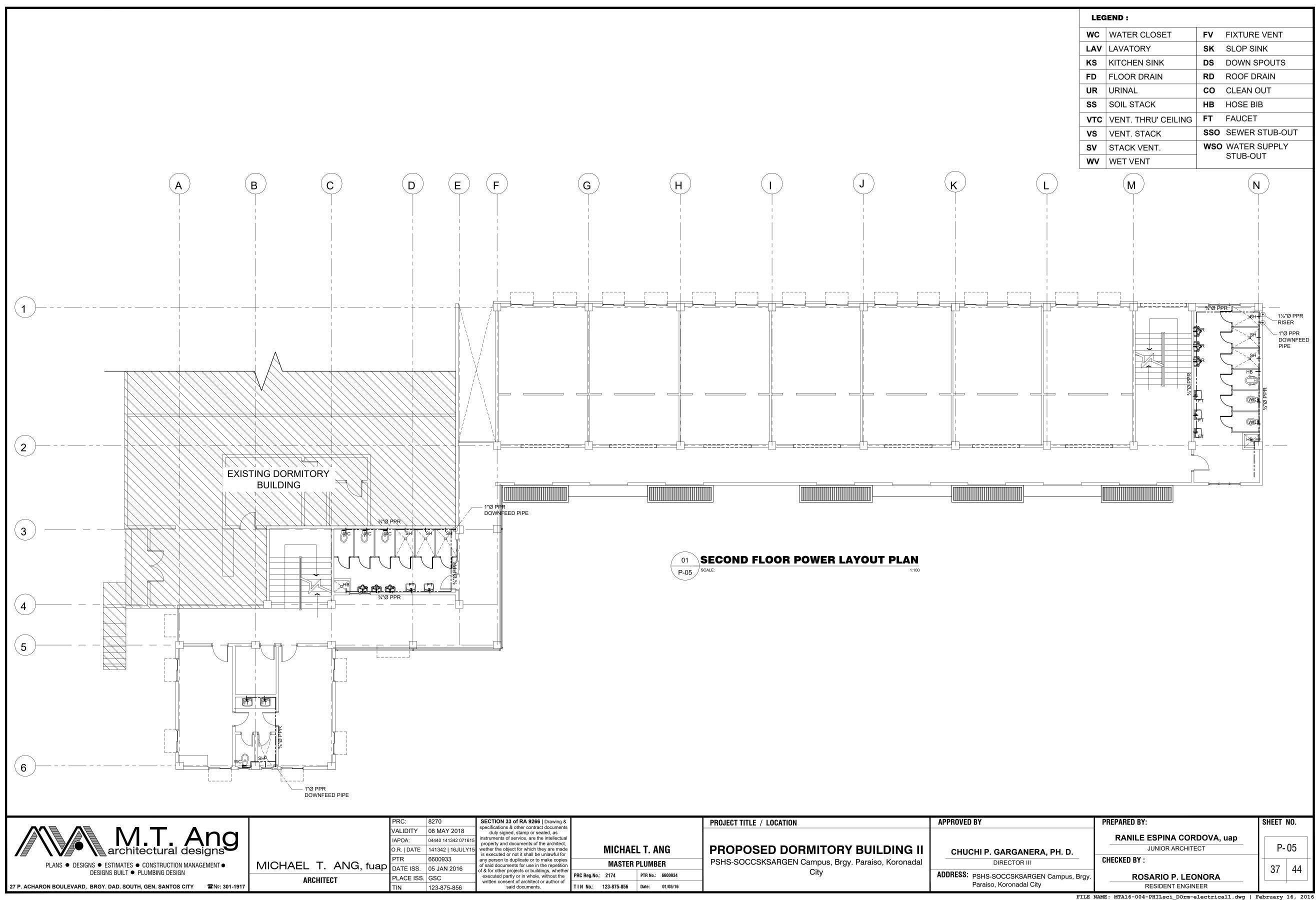
RESIDENT ENGINEER

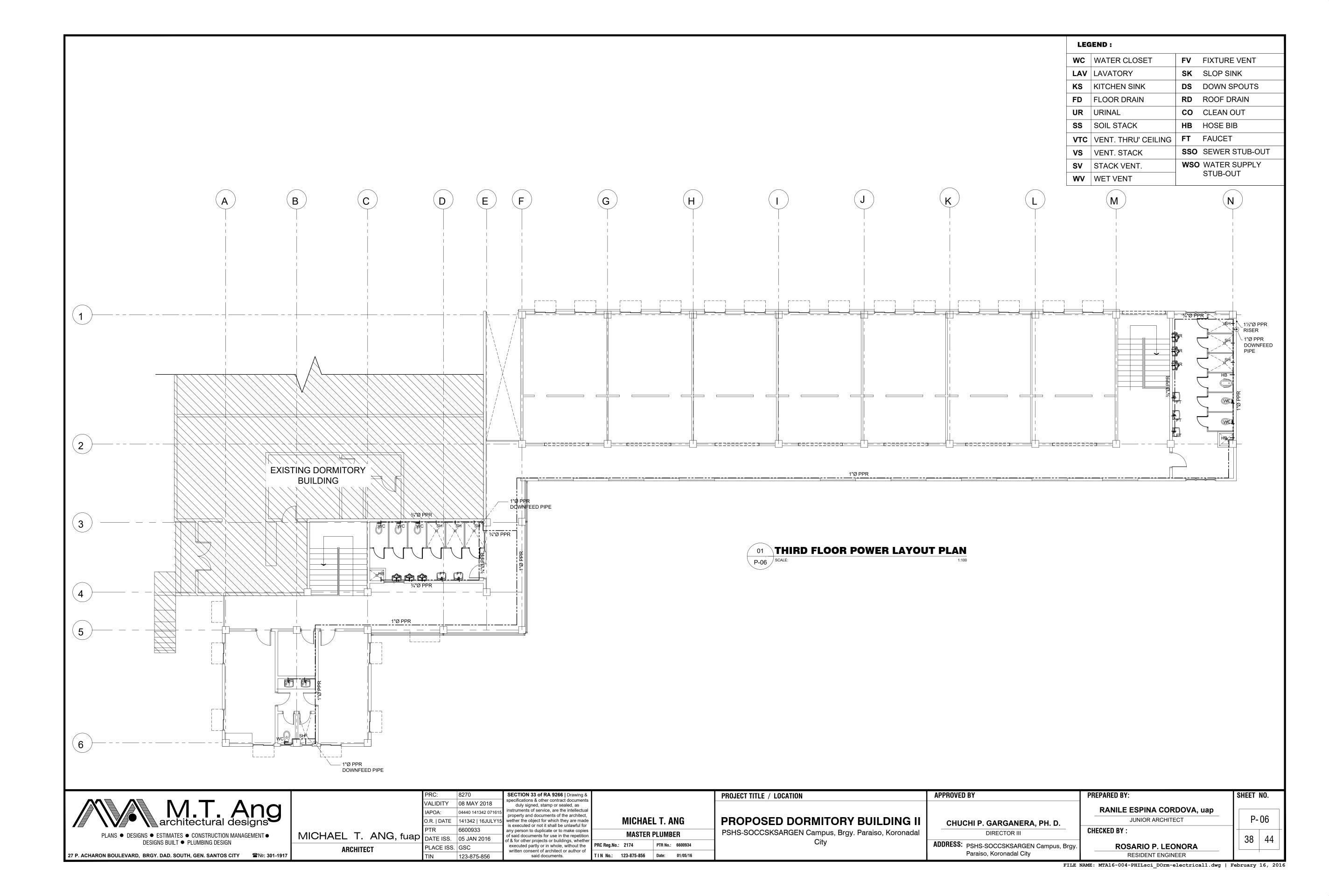


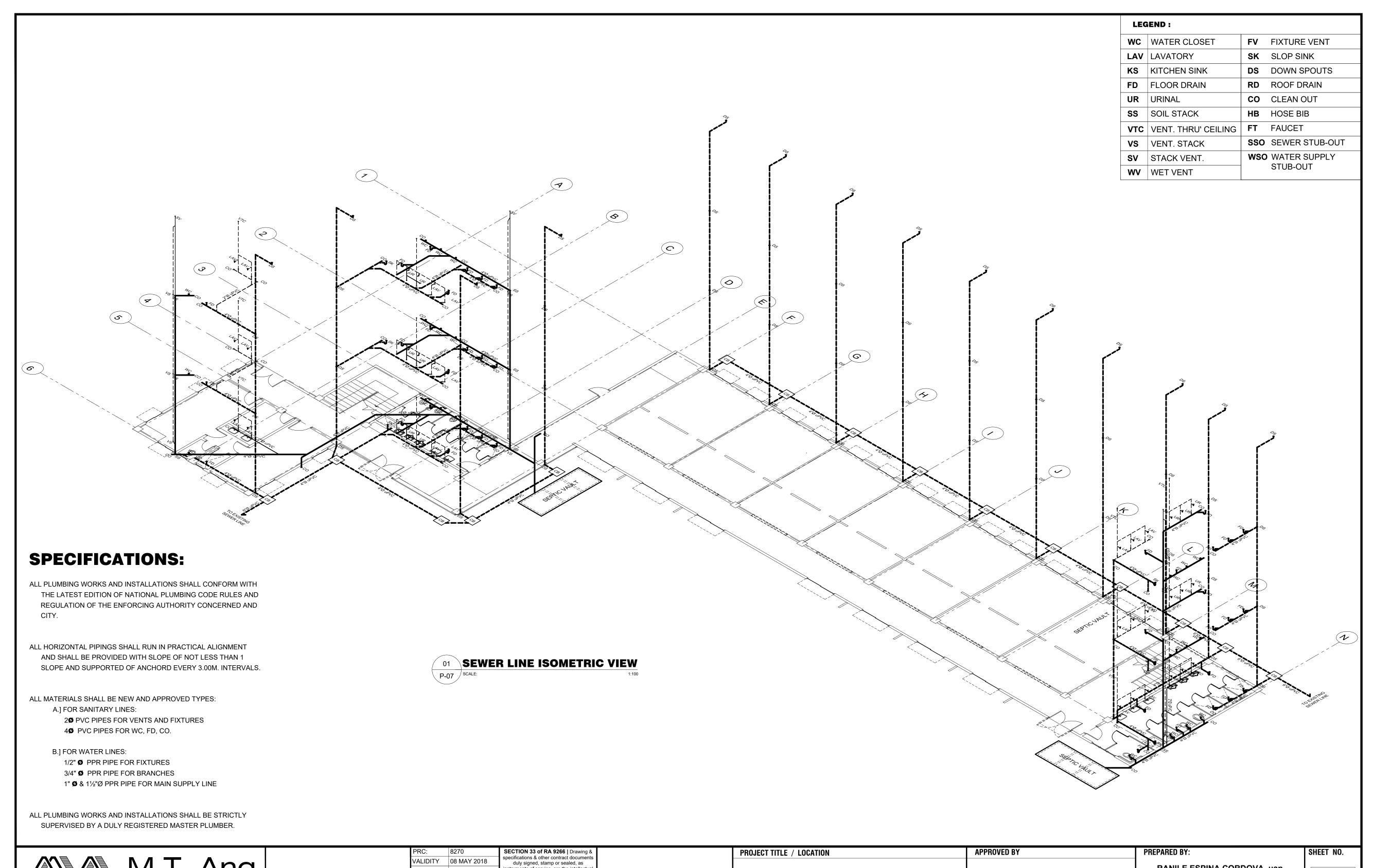




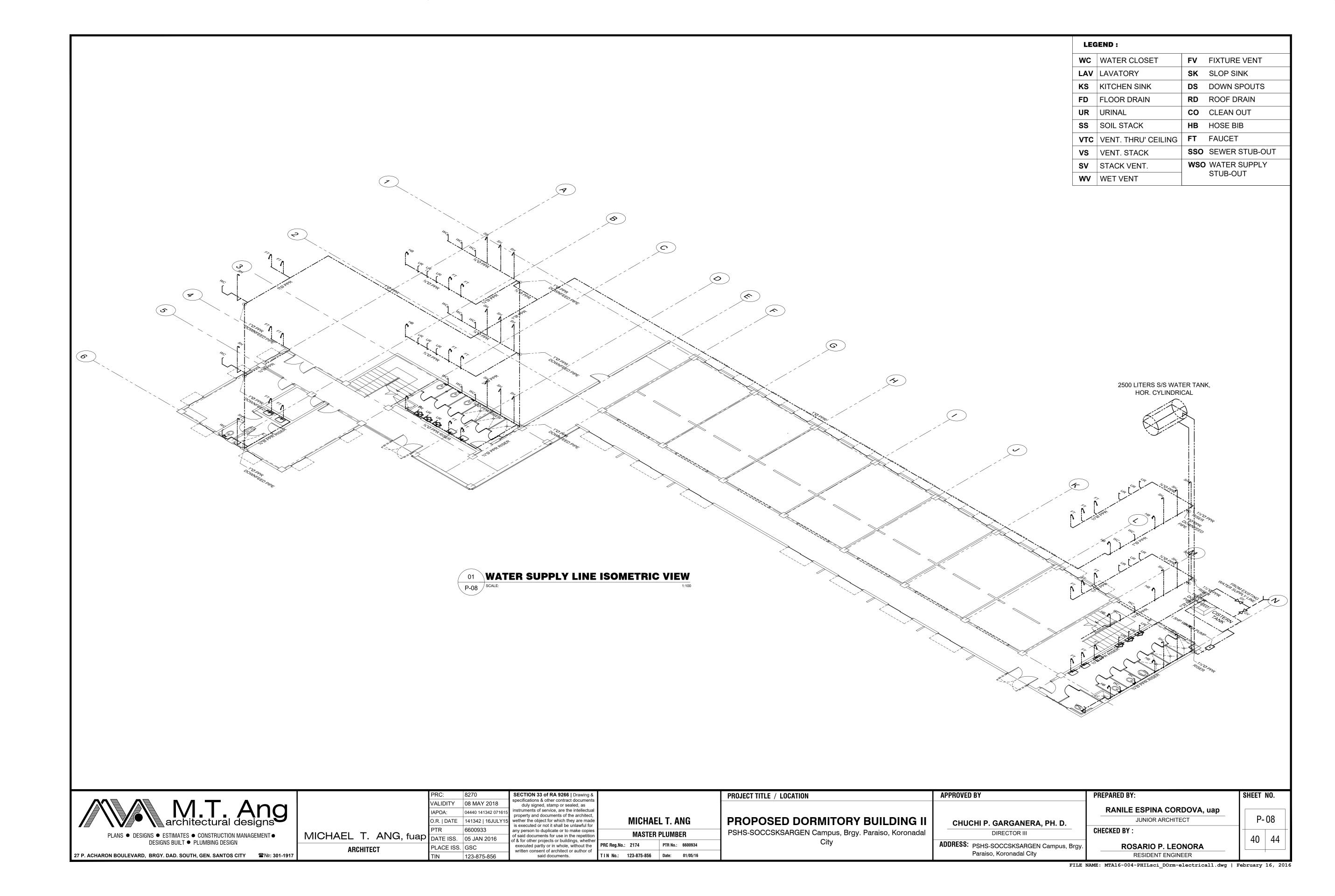


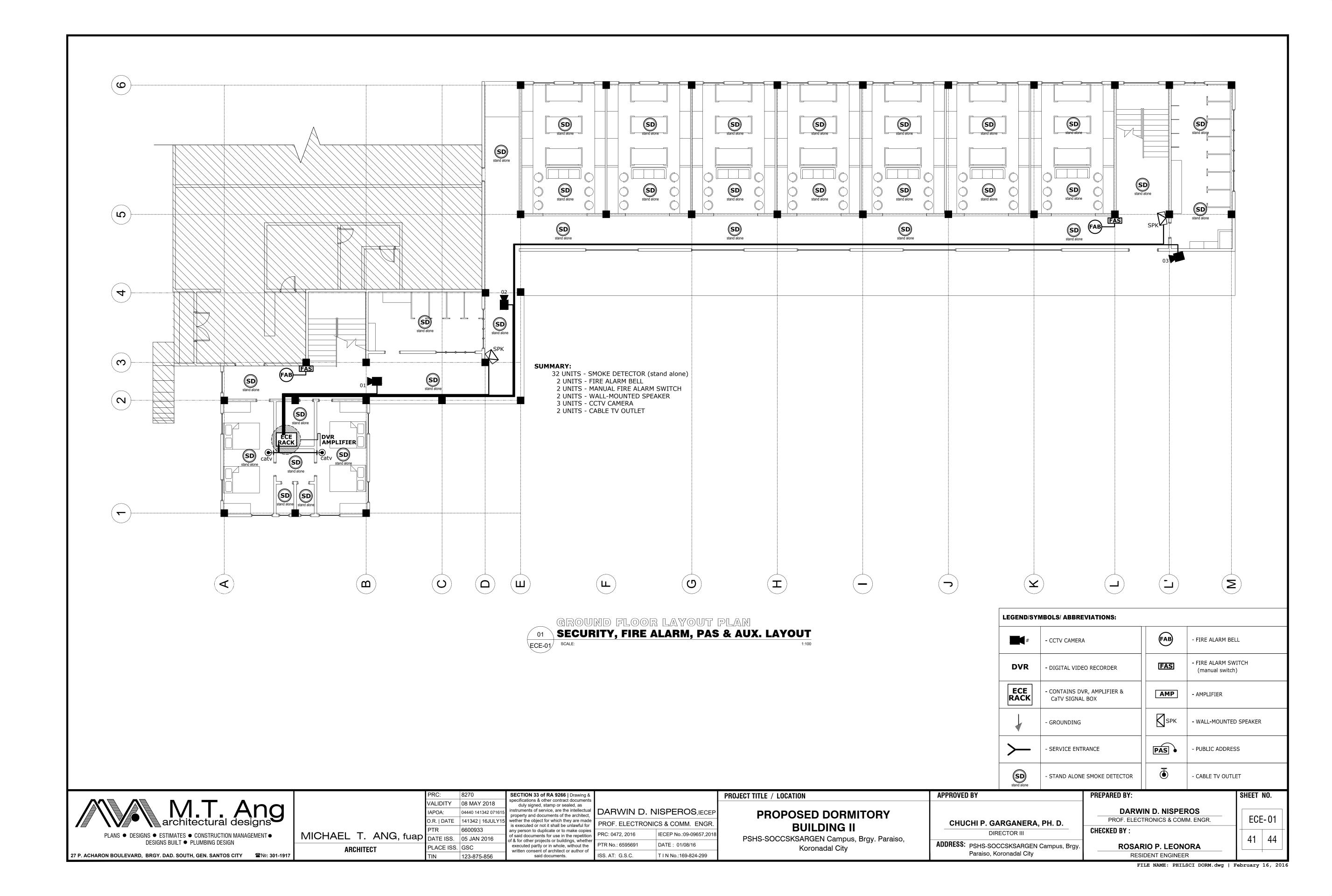


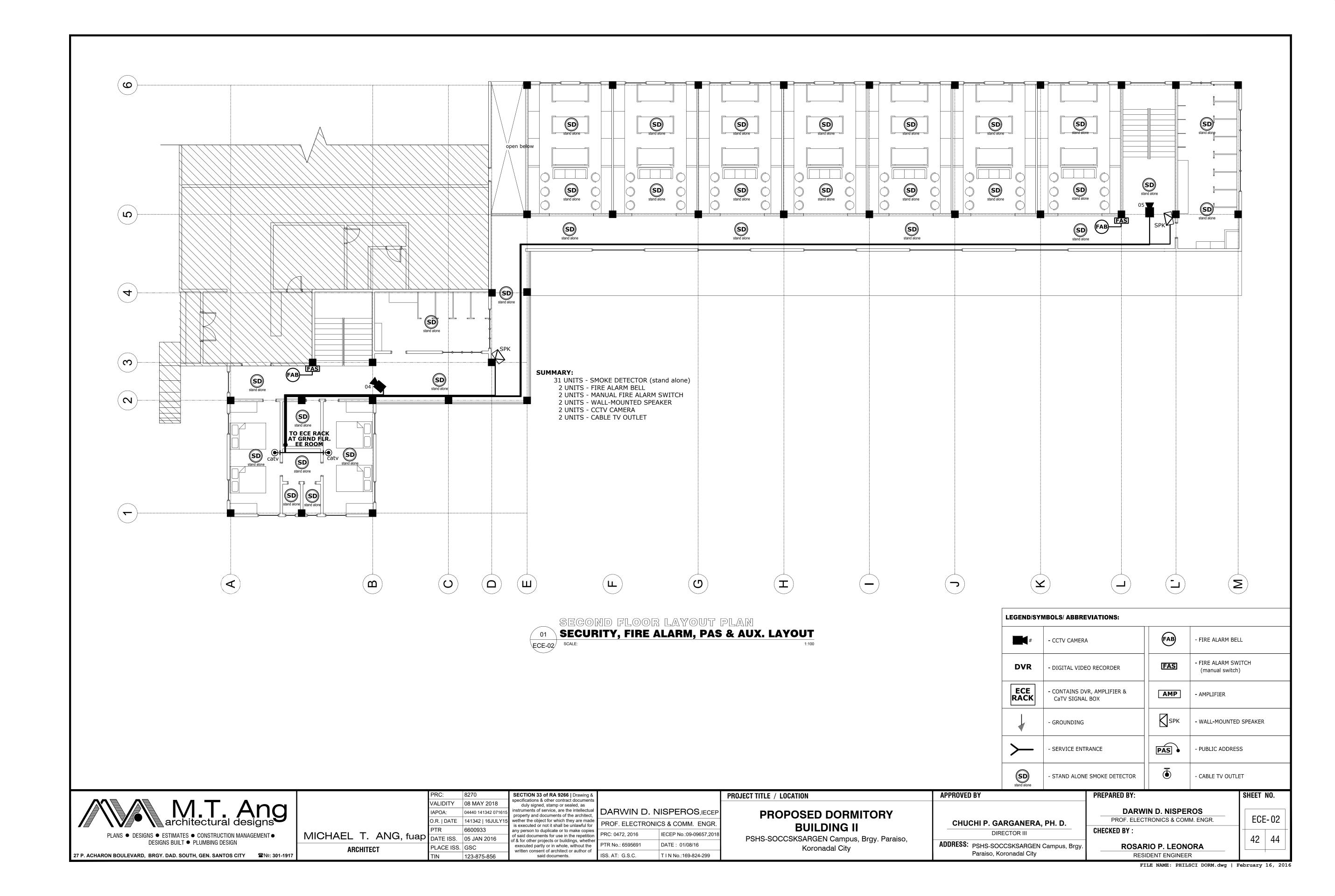


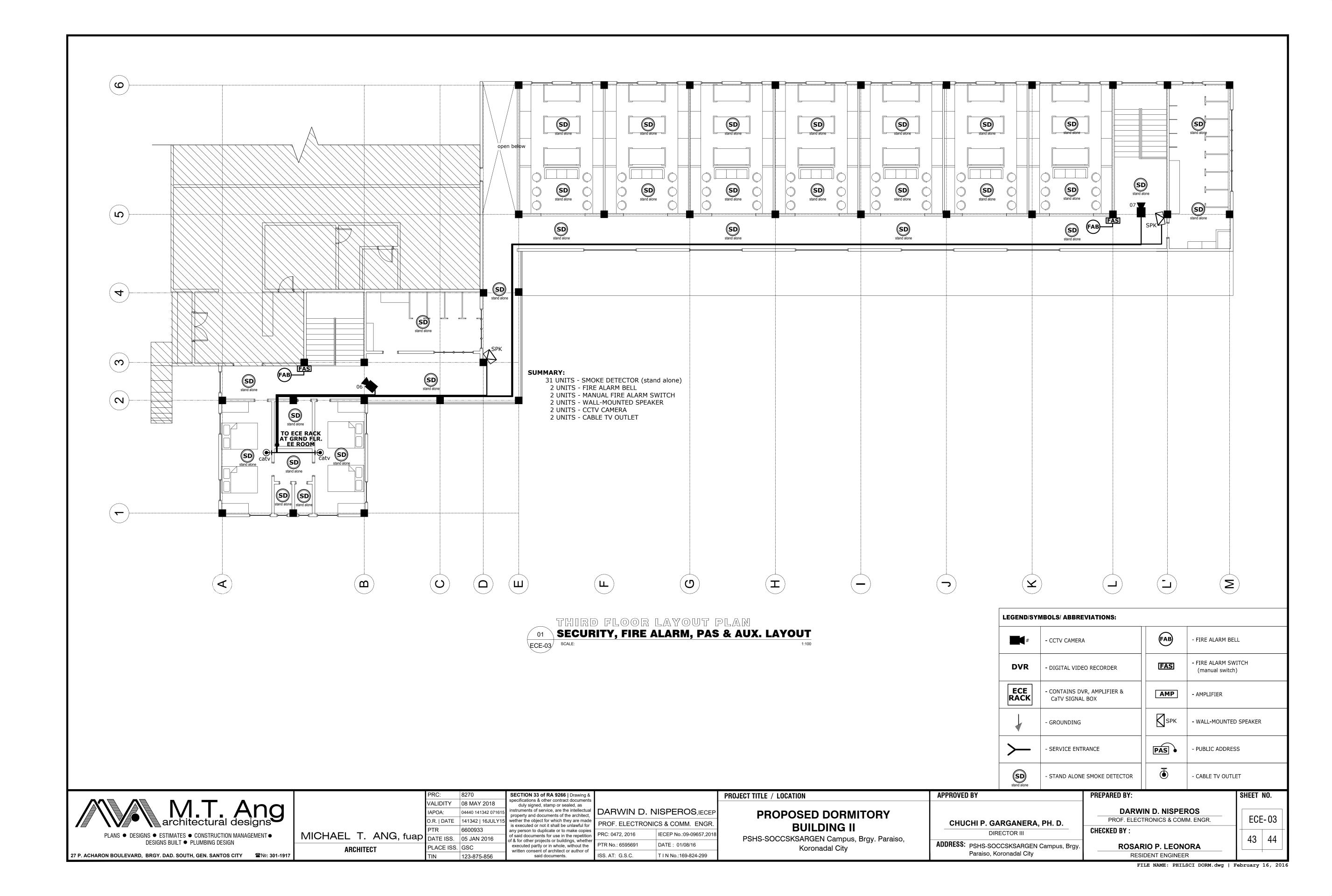


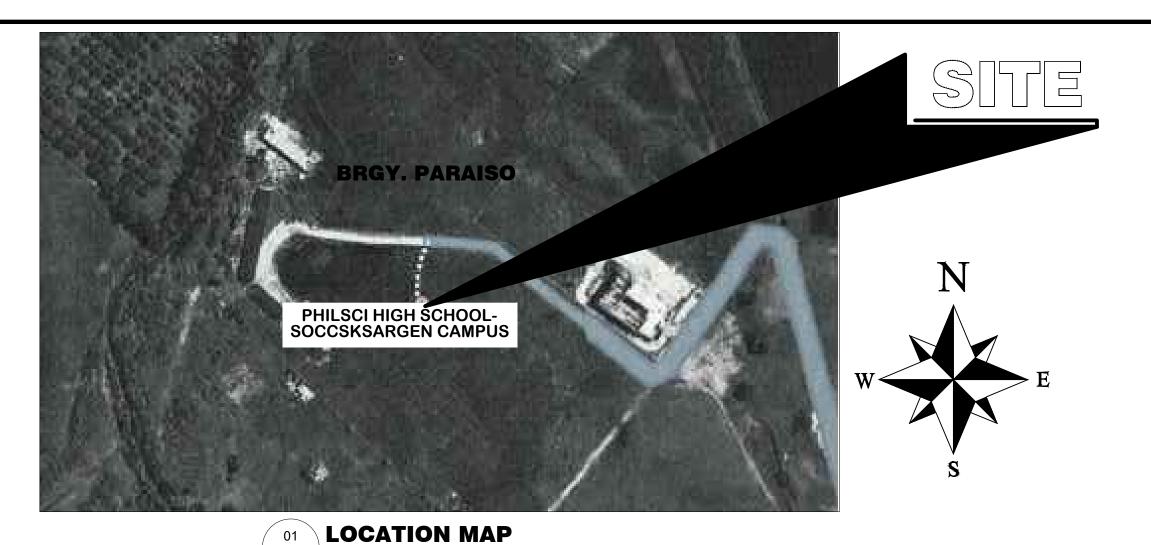
| | | IAPOA: 04440 141342 071615 | instruments of service, are the intellectual | | | 1 | RANILE ESPINA CORDOVA, uap | | |
|--|---------------------|---------------------------------|--|-------------------------------------|--|--|----------------------------|--------|------------|
| architectural designs | | O.R. DATE 141342 16JULY15 | property and documents of the architect, wether the object for which they are made | MICHAEL T. ANG | PROPOSED DORMITORY BUILDING II | CHUCHI P. GARGANERA, PH. D. | JUNIOR ARCHITECT | P-07 | <i>i</i> 7 |
| | MICHAEL T. ANG, fua | PTR 6600933 | any person to duplicate or to make copies of said documents for use in the repetition | MASTER PLUMBER | PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal | , | CHECKED BY : | | |
| DESIGNS BUILT ● PLUMBING DESIGN | | PLACE ISS. 05 JAN 2016 | of & for other projects or buildings, whether executed partly or in whole, without the | PRC Reg.No.: 2174 PTR No.: 6600934 | City | ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy. | ROSARIO P. LEONORA | 39 4 | 44 |
| 27 P. ACHARON BOULEVARD, BRGY. DAD. SOUTH, GEN. SANTOS CITY ☎№: 301-1917 | ARCHITECT | TIN 123-875-856 | written consent of architect or author of said documents. | TIN No.: 123-875-856 Date: 01/05/16 | | Paraiso, Koronadal City | RESIDENT ENGINEER | | |











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.

ECE-04 SCALE:

- 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 NO 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:

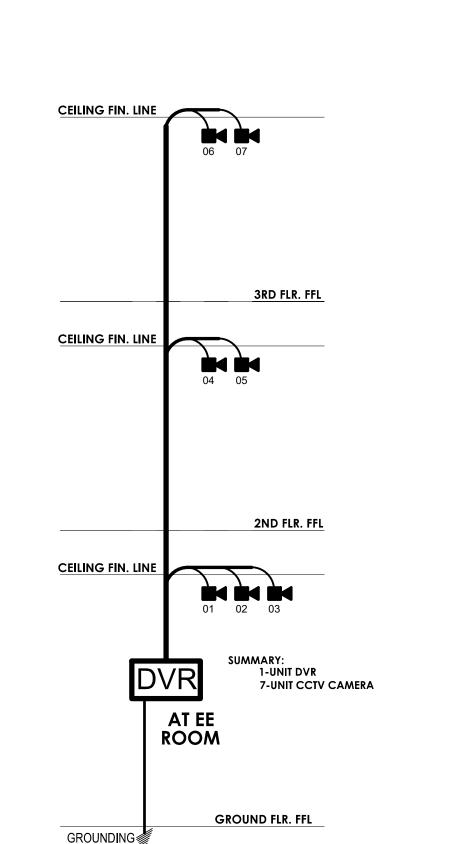
- 1. THIS DRAWING IS SCHEMATIC REPRESENTATION OF SYSTEM ONLY. TENDERS TO DETAIL COMPLIANT OFFER BASED ON MANUFACTURER'S SYSTEM AND WIRING METHODS RECOMMENDATION.
- 2. SMOKE DETECTOR SHALL BE MANUALLY-OPERATED OR STAND ALONE.
- 3. WIRING INSTALLATION (CEILING CONCEALED, EMBEDDED, EXPOSED OR SURFACED)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

- #24 AWG 4 PAIRS UTP A. LAN/TEL CABLE CABLE/CAT5-E/CAT6 B. CCTV/CaTV CABLE - RG-59/6 COAX CABLE

5. CONDUIT SHALL BE PERMANENTLY AND

EFFECTIVELY GROUNDED.

- 6. THIS ARRANGEMENT IS LIMITED TO DROP WIRE ATTACHMENT OF UP TO 5 LINES.
- 7. SPAN TO FIXTURE SHALL BE NOT EXCEED 45.7m.
- 8. SERVICE SHALL BE SUFFICIENTLY HIGH TO PROVIDE PROPER DROP WIRE CLEARANCE OVER SIDE, STREETS OR ROADWAYS IN COMPLIANCE WITH THE CODES AND REGULATIONS.



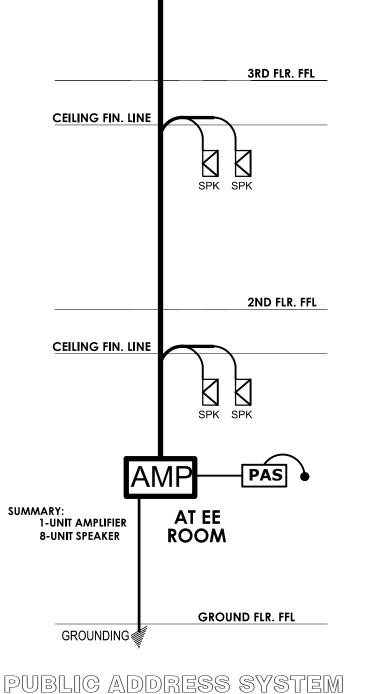
SEGURITY

IAPOA:

SCALE:

ECE-04/

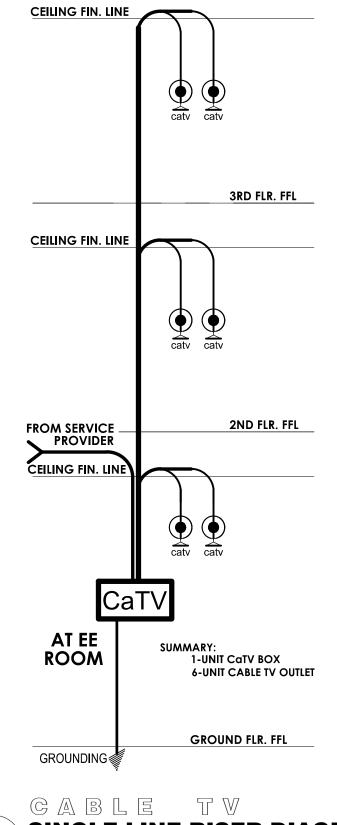
SINGLE LINE RISER DIAGRAM

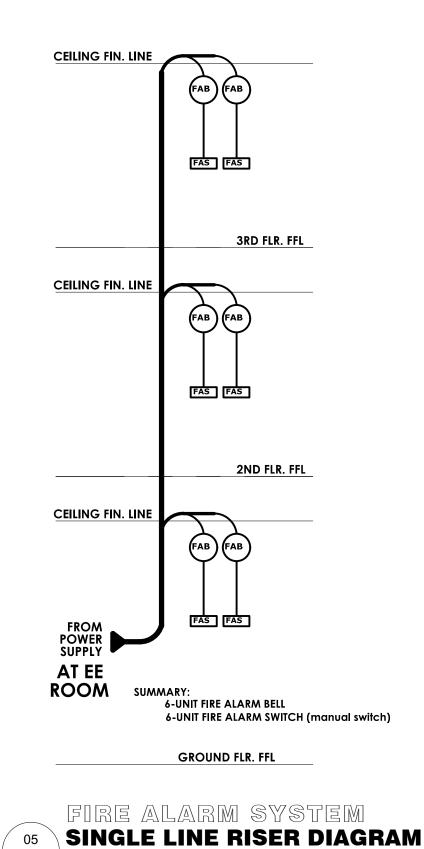


SINGLE LINE RISER DIAGRAM

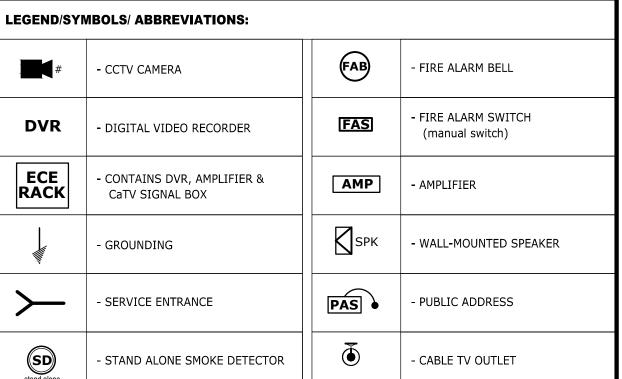
ECE-04

CEILING FIN. LINE









ECE-04 SCALE:



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

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

MICHAEL T. ANG, fuap DATE ISS. 05 JAN 2016 **ARCHITECT**

8270 SECTION 33 of RA 9266 | Drawing 8 ecifications & other contract docume /ALIDITY 08 MAY 2018 duly signed, stamp or sealed, as instruments of service, are the intellectua 04440 141342 0716 property and documents of the architect O.R. | DATE | 141342 | 16JULY1 wether the object for which they are made is executed or not it shall be unlawful for 6600933 any person to duplicate or to make copies said documents for use in the repetition of & for other projects or buildings, whethe executed partly or in whole, without the PLACE ISS. GSC written consent of architect or author of 123-875-856 said documents.

DARWIN D. NISPEROS, IECEF PROF. ELECTRONICS & COMM. ENGR. IECEP No.:09-09657,201 DATE: 01/08/16 PTR No.: 6595691 ISS. AT: G.S.C. T I N No.:169-824-299

PROPOSED DORMITORY **BUILDING II**

PROJECT TITLE / LOCATION

DIRECTOR III PSHS-SOCCSKSARGEN Campus, Brgy. Paraiso, Koronadal City

APPROVED BY CHUCHI P. GARGANERA, PH. D. ADDRESS: PSHS-SOCCSKSARGEN Campus, Brgy.

Paraiso, Koronadal City

PREPARED BY: SHEET NO. DARWIN D. NISPEROS ECE-04 PROF. ELECTRONICS & COMM. ENGR. **CHECKED BY:** 44 | 44 **ROSARIO P. LEONORA** RESIDENT ENGINEER