



INDEPENDENT DEVELOPMENT TRUST

ANNEXURE C 2 - MECHANICAL DRAWINGS

**TENDERING PROCEDURES, RETURNABLE DOCUMENTS,
AGREEMENT AND CONTRACT DATA, SCOPE OF WORK AND SITE
INFORMATION**

**APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF NEW
TECHNICAL WORKSHOPS TO WAGPOS TECHNICAL HIGH SCHOOL FOR THE
DEPARTMENT OF EDUCATION, NORTH WEST PROVINCE.**

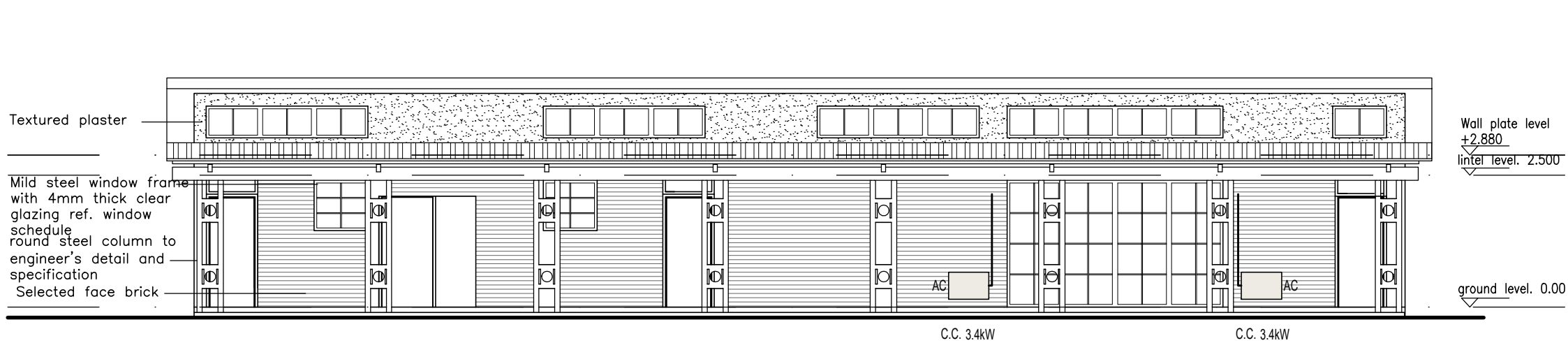
BID NO: DOE14NWER014

CLOSING DATE AND TIME: 24th JULY 2023 at 12h00

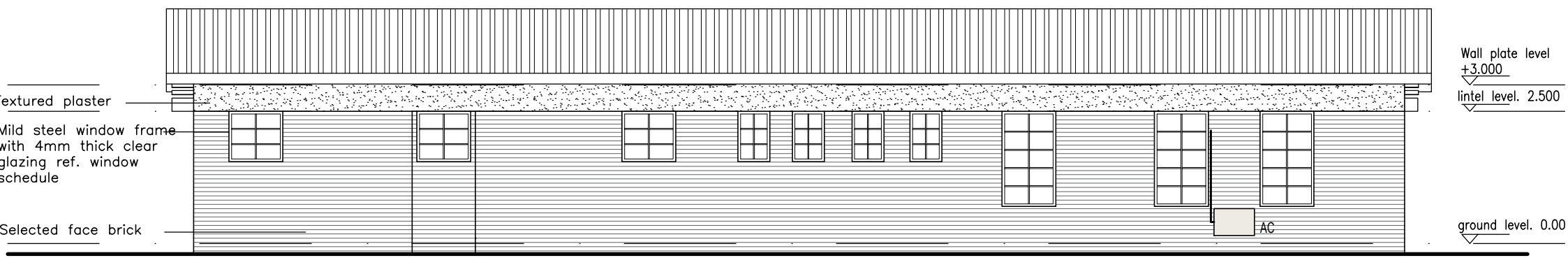
Independent Development Trust

SCM / Technical Enquiries

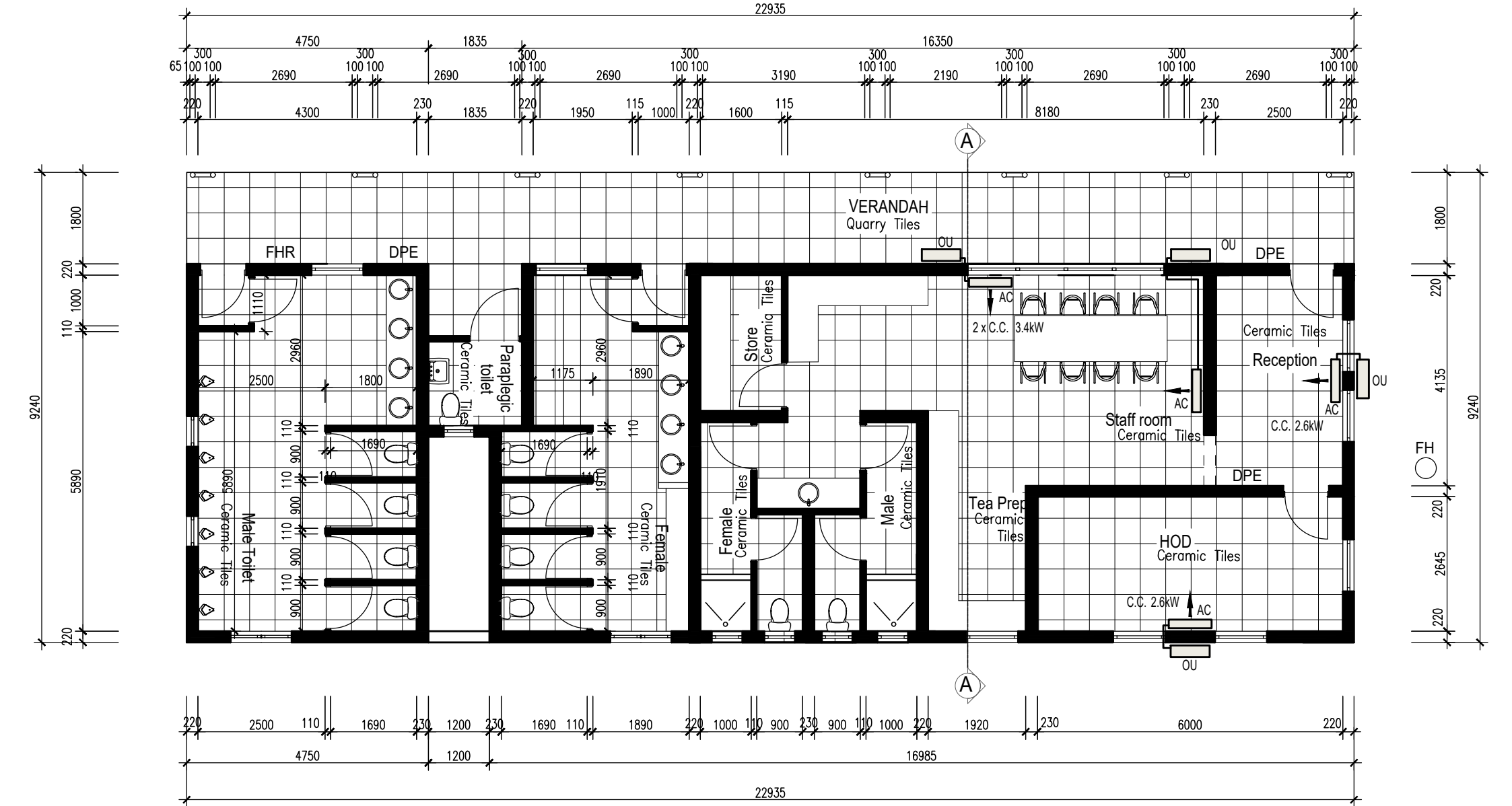
E-mail: noxolod@idt.org.za and andrewn@idt.org.za



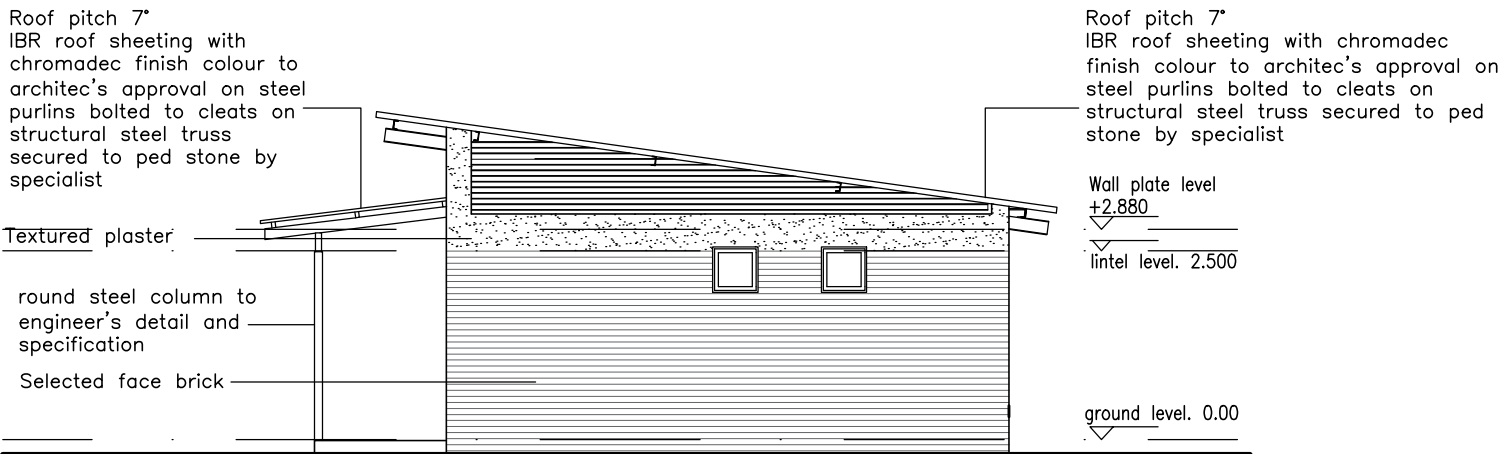
NORTH ELEVATION
SCALE 1:100



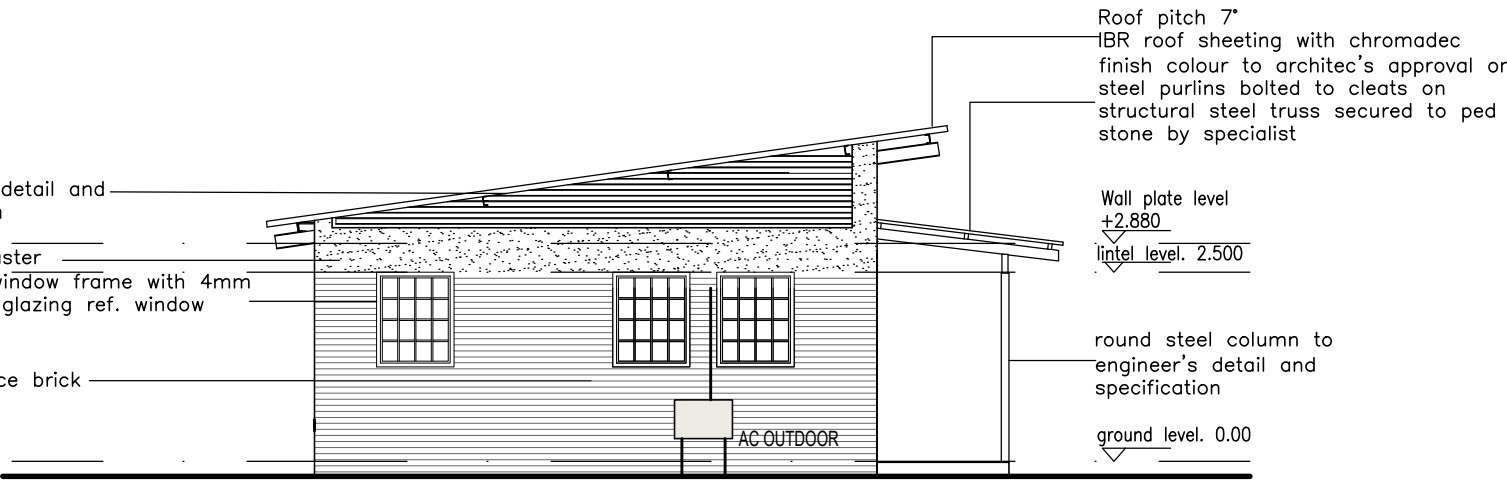
SOUTH ELEVATION
SCALE 1:100



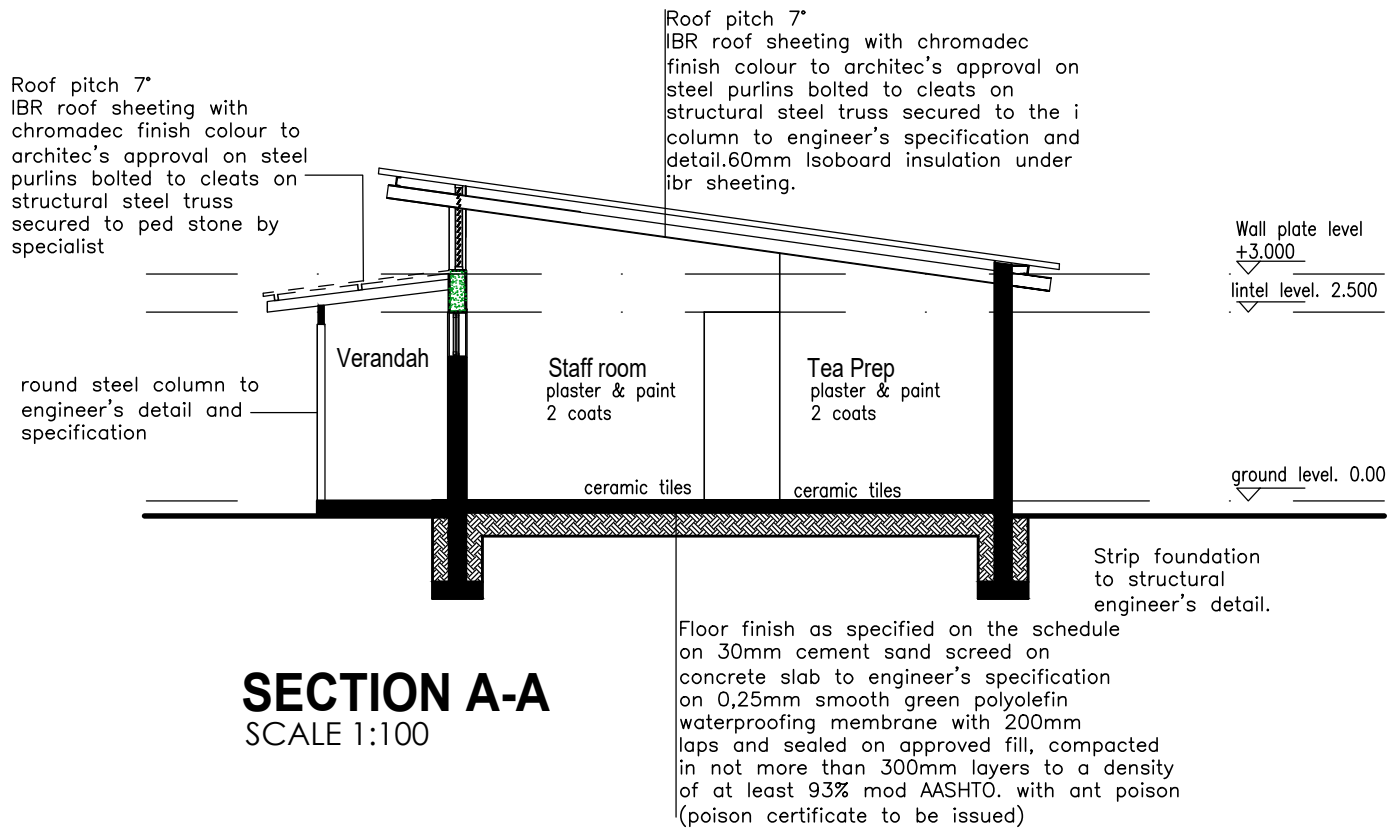
FLOOR PLAN
SCALE 1:100



WEST ELEVATION
SCALE 1:100



EAST ELEVATION
SCALE 1:100



SECTION A-A
SCALE 1:100

LEGEND:

- DPE - DRY POWDER EXTINGUISHERS
- FHR - FIRE HOSE REEL
- FH - FIRE HYDRANT
- AC - INDOOR UNIT - HIGH WALL - SIZE: L x D x H = 799 x 181 x 290mm
- AC - OUTDOOR CONDENSING UNIT - SIZE: L x D x H = 764 x 230 x 510mm
- C.C - COOLING CAPACITY

- MECHANICAL DESIGN CONDITIONS:**
- EXTERNAL TEMPERATURE - SUMMER : +32°C
 - t°C INDOOR DESIGN TEMPERATURE : 22°C
 - NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

GENERAL NOTES
DRAWINGS MUST NOT BE SCALED. FIGURED DIMENSIONS ONLY MAY BE USED. DIMENSIONS SHOULD BE VARIED IN FIELD AND ANY DISCREPANCIES REPORTED TO THE AGENT IMMEDIATELY. THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF SPACE DESIGN ARCHITECTS AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

manufacturers of prefabricated components to verify dimensions on site with contractor prior to manufacture.
all workmanship and materials shall comply with the relevant code of practice and related documents.

GENERAL SPECIFICATION OF WORKS

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termiticide treatment to all gravel fill and to 1,2m

Walls
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallplate level.

all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with one coat of sand cement plaster of min. 12mm and max. 19mm thickness 1:5 mix steel floated internally
provide at least 2no. airbricks per room.

DRAINAGE NOTES
provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.
all rodding eyes to terminate in ABC cover and tops of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves
where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.
provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

Roof externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.
all drainage works shall comply with the NBR - SA

owner's signature _____

engineer's signature _____

engineer's no. _____

architect's signature _____

architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT
IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS



Block 2 - Ntshona-Joan Square
244, Joao Avenue
Centurion 0157
email: info@mebsa.co.za
www.mebsa.co.za

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fax: +27 12 664 1039
cell: +27 71 585 6565

Engineering & Project Management

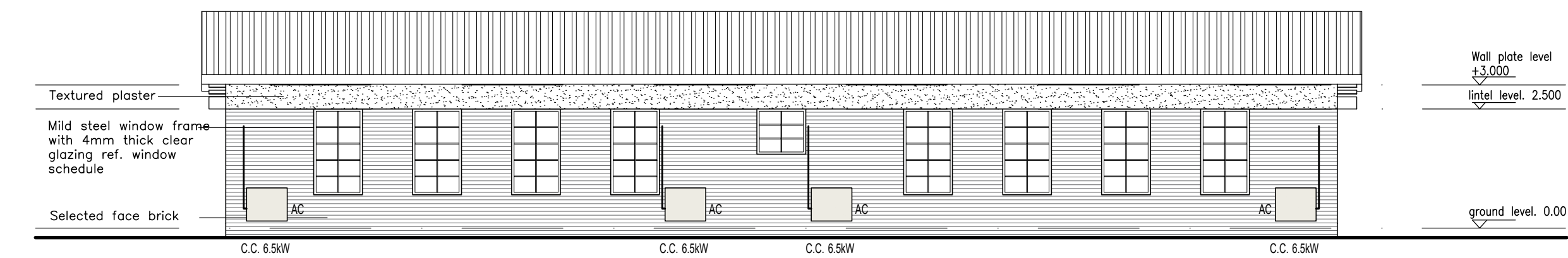
DRAWING DESCRIPTION
HVAC & FIRE PROTECTION
PROPOSED NEW ADMIN & ABLUTION BLOCK FLOOR PLANS; SECTION & ELEVATIONS

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

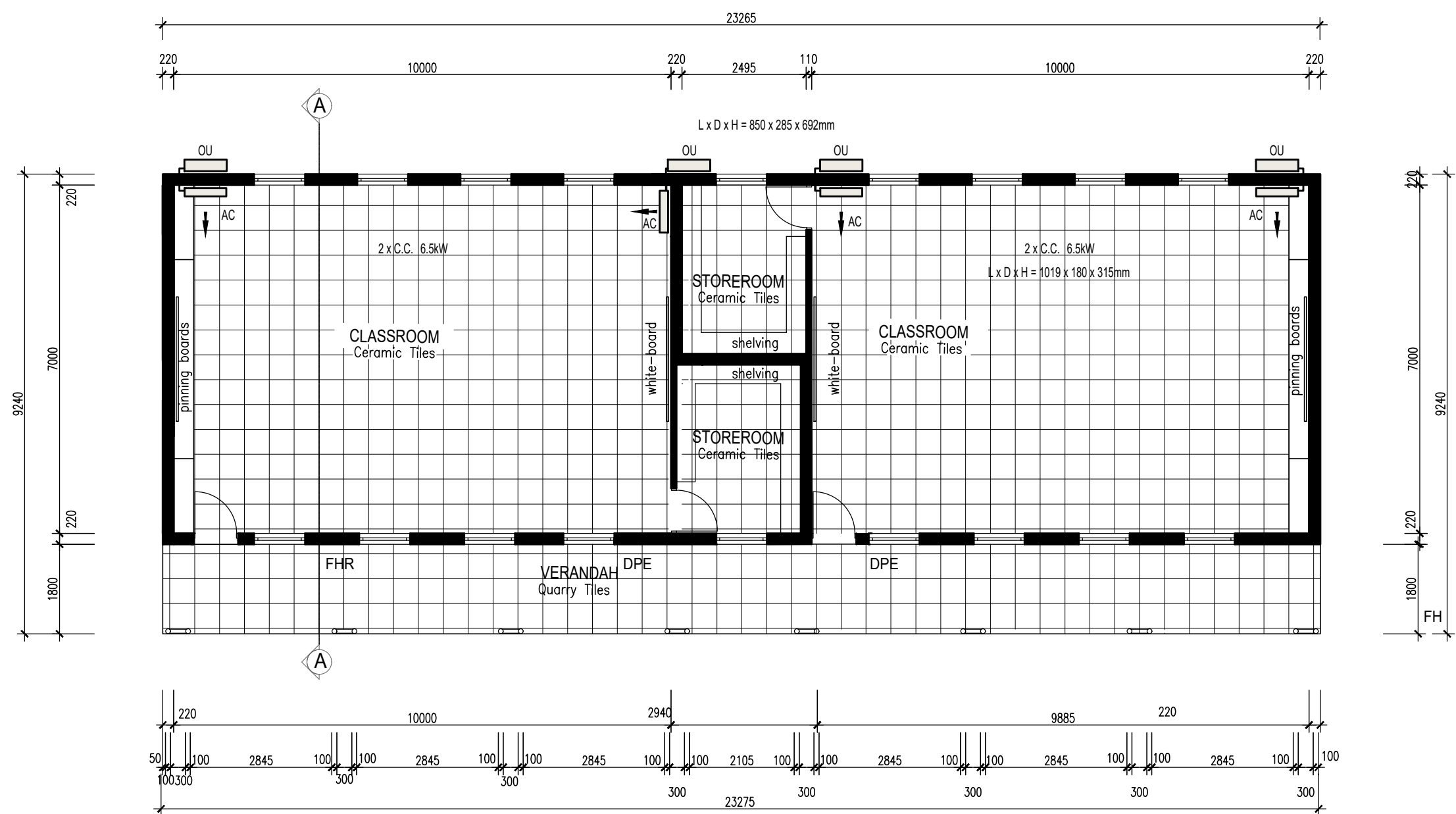
REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-01



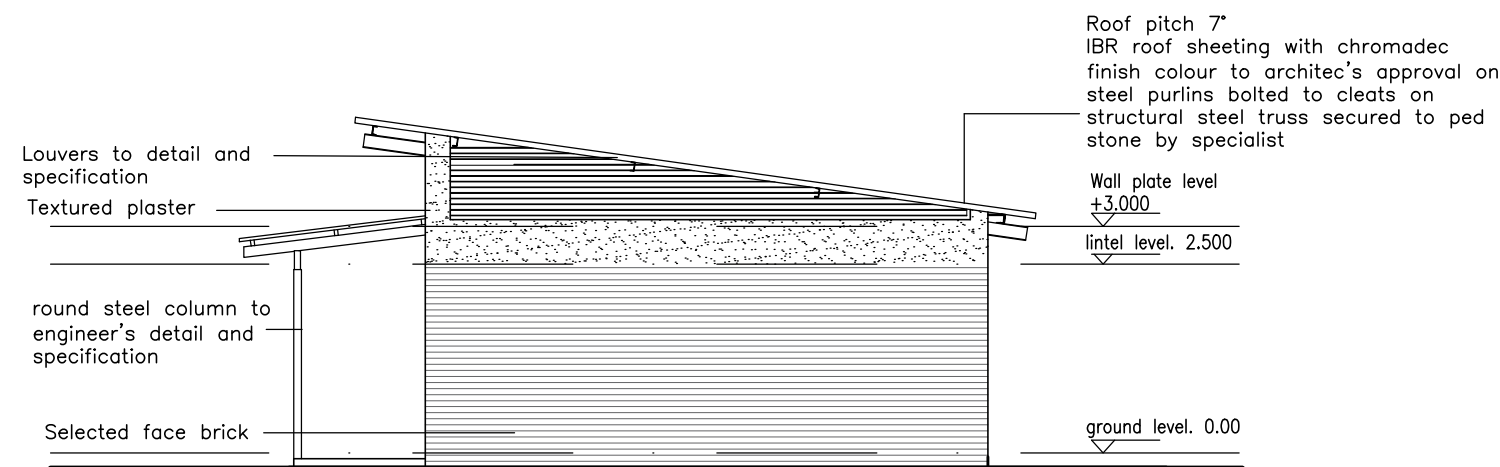
SOUTH ELEVATION
SCALE 1:100



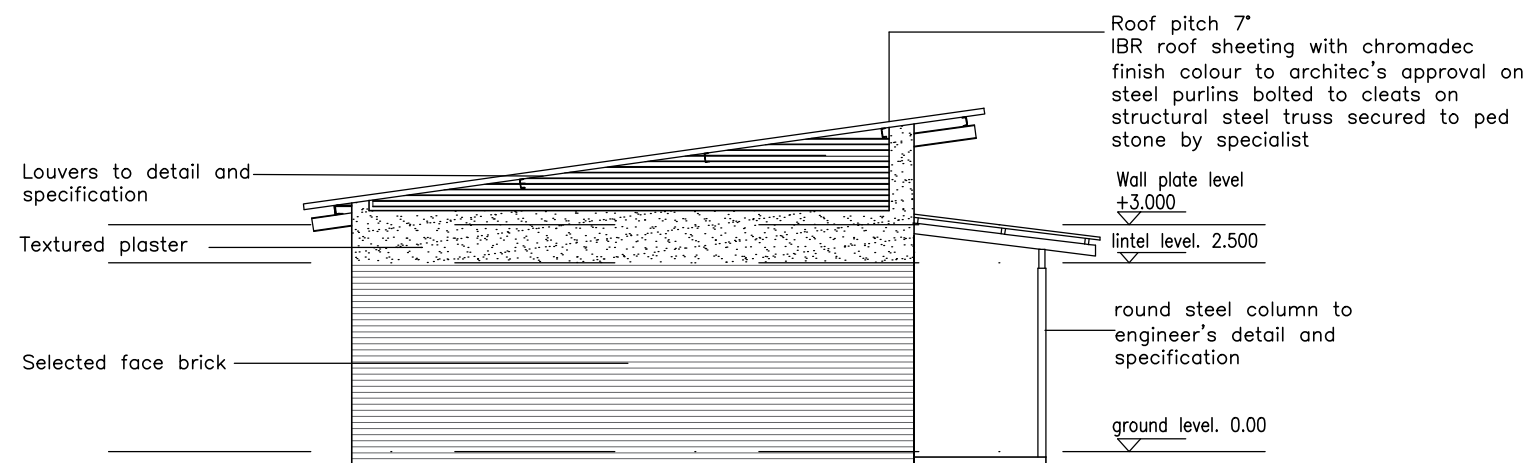
NORTH ELEVATION
SCALE 1:100



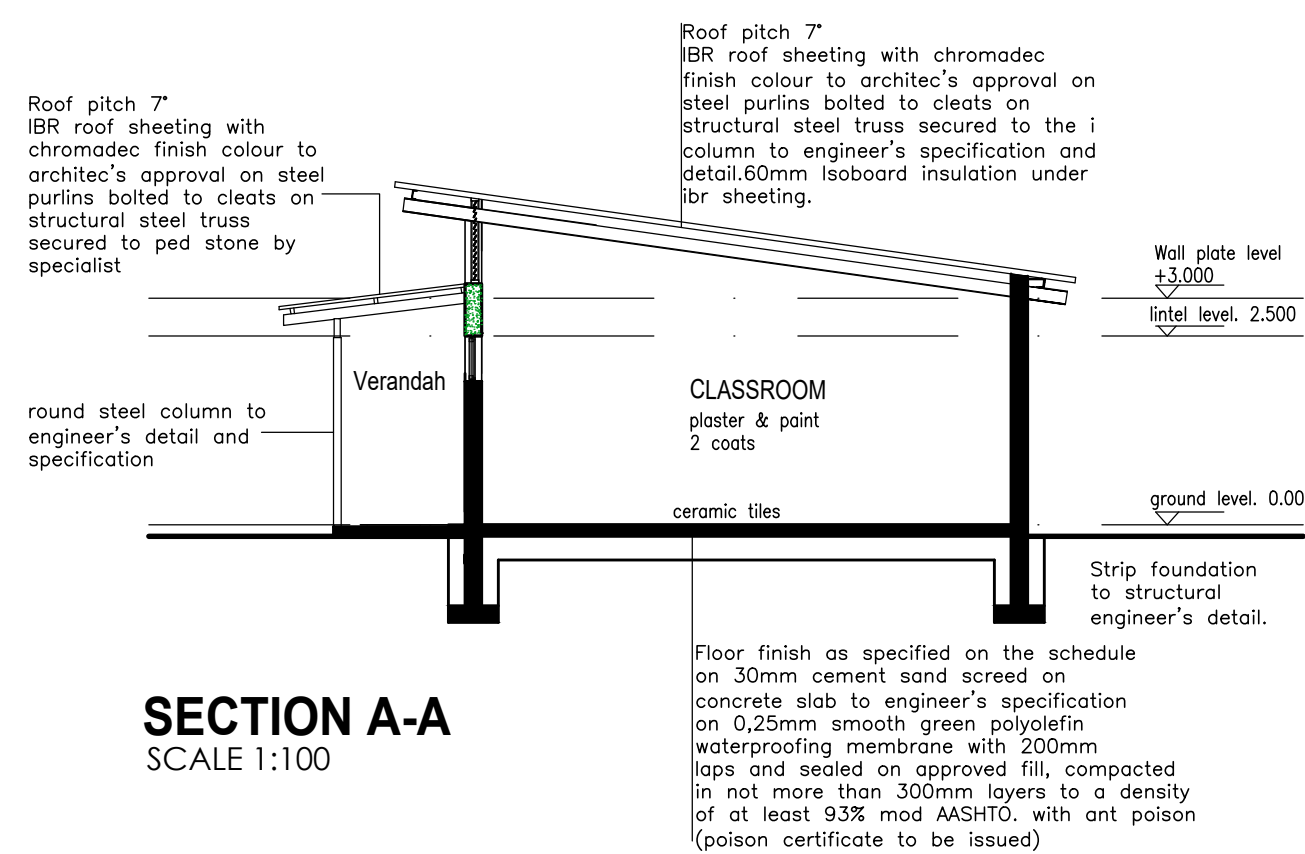
FLOOR PLAN
SCALE 1:100



EAST ELEVATION
SCALE 1:100



WEST ELEVATION
SCALE 1:100



SECTION A-A
SCALE 1:100

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

C.C - COOLING CAPACITY

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL - SIZE: L x D x H = 1019 x 180 x 315mm
AC OUTDOOR CONDENSING UNIT - SIZE: L x D x H = 850 x 285 x 692mm

MECHANICAL DESIGN CONDITIONS:
• EXTERNAL TEMPERATURE - SUMMER : +32°C
• t°C INDOOR DESIGN TEMPERATURE : 22°C
• NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO OF AC INDOOR & OUTDOOR UNITS

GENERAL NOTES
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manufacturers of prefabricated components to verify dimensions on site with contractor prior to manufacture.
all workmanship and materials shall comply with the relevant code of practice and related documents.

GENERAL SPECIFICATION OF WORKS

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termiticide treatment to all gravel fill and to 1,2m

Walls
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallplate level

all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with one coat of sand cement plaster of min. 12mm and max. 19mm thickness 1:5 mix steel floated internally
provide at least 2no. airbricks per room.

DRAINAGE NOTES

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.

all rodding eyes to terminate in ABC cover and tops of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.
provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

Roof externally above ground level and 600x400mm cast iron medium duty manhole cover and frames plumber to check all levels on site prior to the laying of any drains.
all drainage works shall comply with the NBR - SA

owner's signature _____
engineer's signature _____
engineer's no. _____
architect's signature _____
architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS



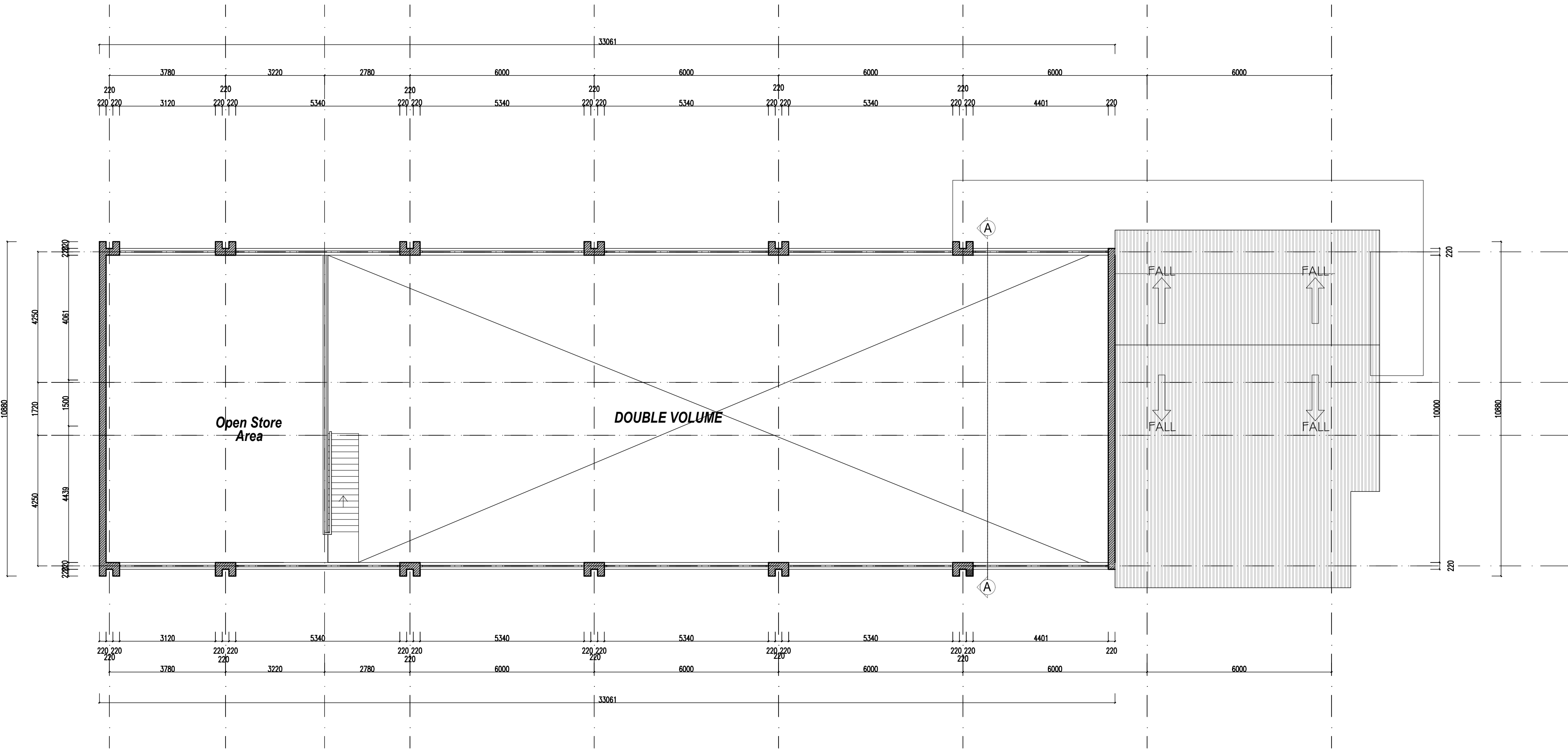
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www.spacedesign.co.za
tel: +27 12 664 1031
fax: +27 12 664 1039
cell: +27 71 585 6565

DRAWING DESCRIPTION

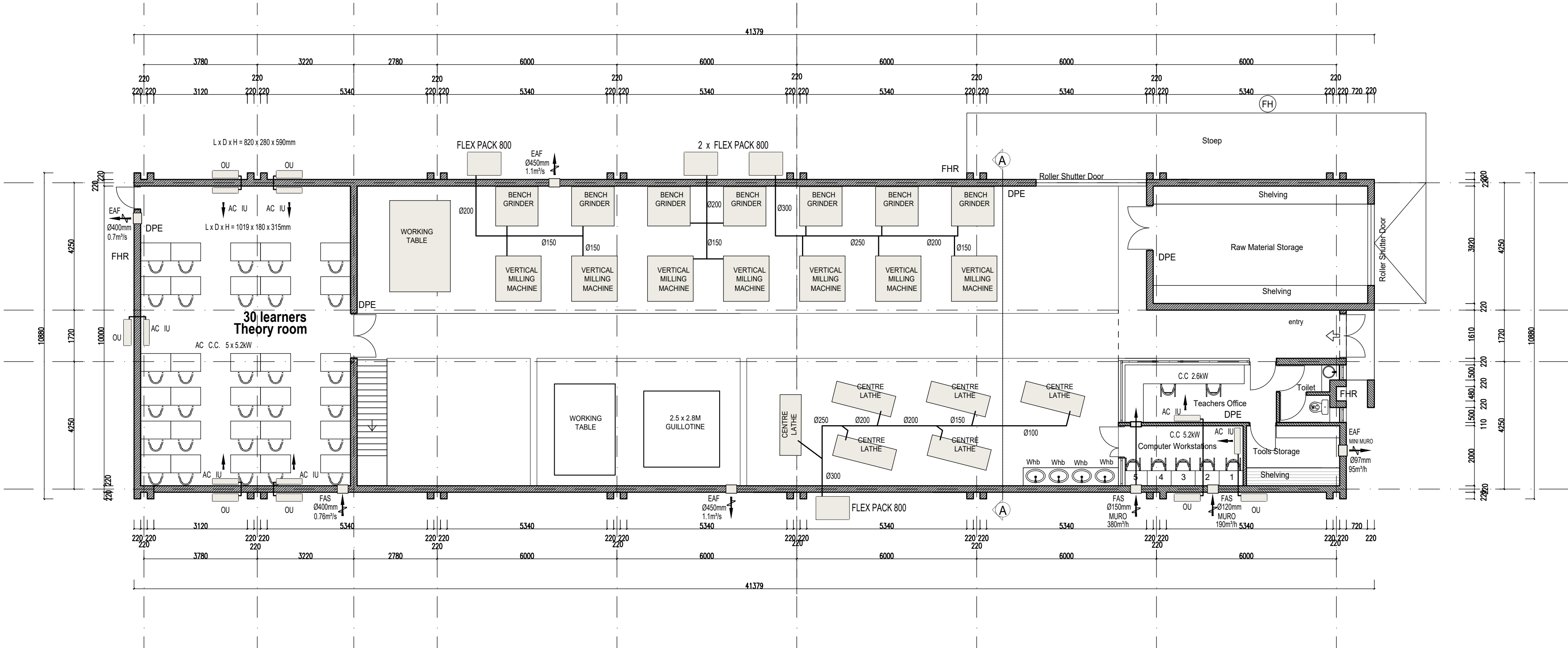
HVAC & FIRE PROTECTION
PROPOSED NEW CLASSROOM
BLOCK FLOOR PLANS; SECTION
& ELEVATIONS

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-02



METAL WORKSHOPS FIRST FLOOR PLAN
SCALE 1:100



METAL WORKSHOPS GROUND FLOOR PLAN
SCALE 1:100

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL

OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:

- EXTERNAL TEMPERATURE - SUMMER : +32°C
- t°C INDOOR DESIGN TEMPERATURE : 22°C
- NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

GENERAL NOTES
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manufacturers of prefabricated components to verify dimensions on site with contractor prior to manufacture.
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GENERAL SPECIFICATION OF WORKS:

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termiticide treatment to all gravel fill and to 1,2m

Walls
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickwork every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickwork every 5th course from dpc up to windowhead and every course thereafter up to wallplate level
all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be finished with coat of sand cement plaster of min. 12mm and max. 18mm thickness 1:5 mix steel floated internally
provide at least 2no. airbricks per room.

DRAINAGE NOTES:

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.

all rodding eyes to terminate in ABC cover and tags of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.

provide sealed traps to all soil and waste fittings.

all sinks to be fitted with 50mm dia. silt traps.

all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

float externally above ground level and 600x400mm cast iron medium duty manhole cover and frames

puncher to check all levels on site prior to the laying of any drains.

all drainage works shall comply with the NBR - SA

owner's signature _____

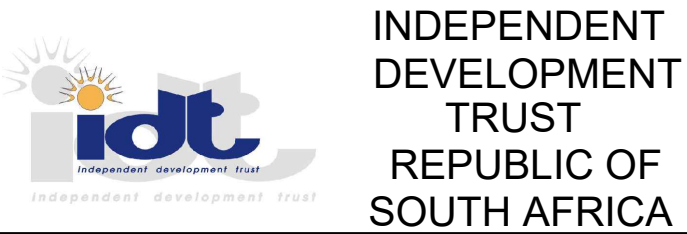
engineer's signature _____

engineer's no. _____

architect's signature _____

architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS

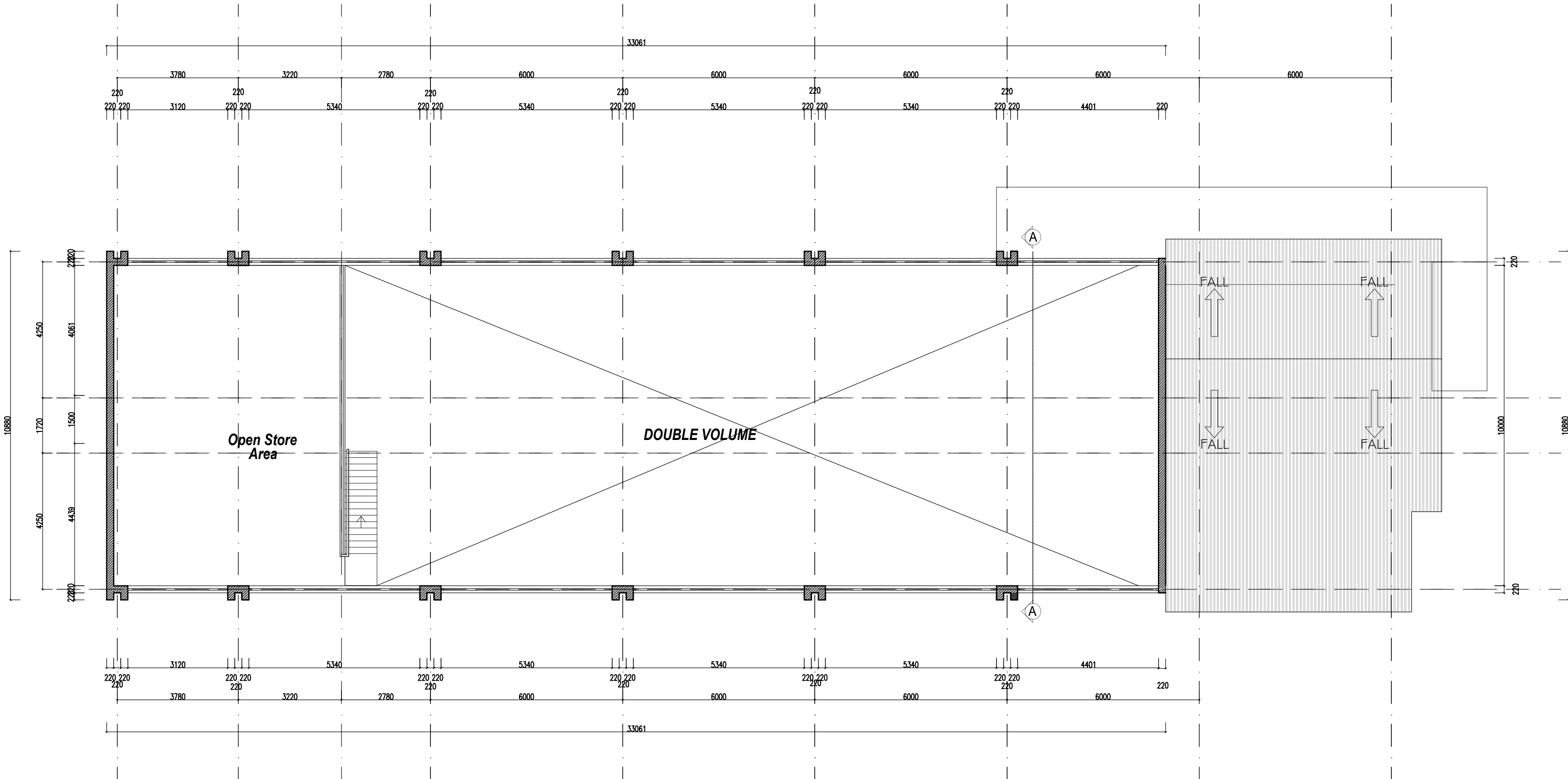


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fax: +27 12 664 1030
cell: +27 71 505 0954

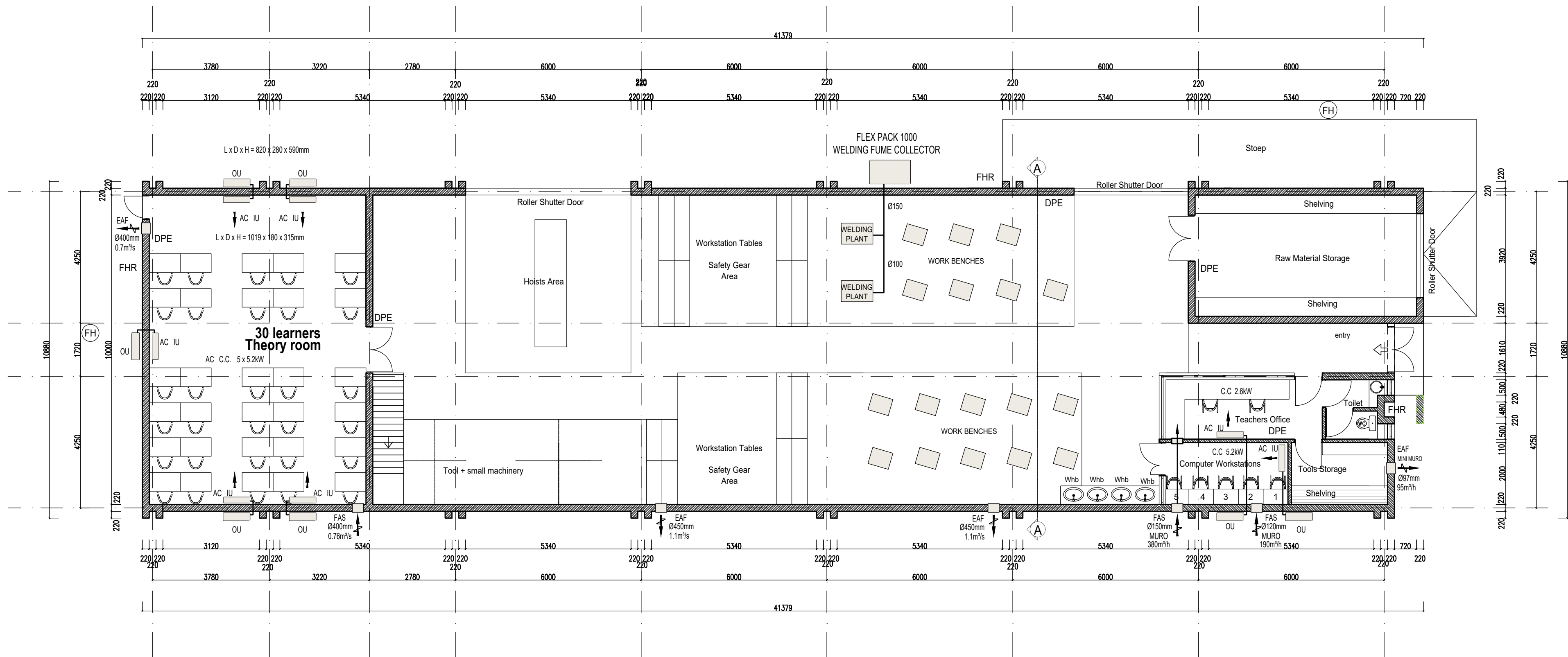
DRAWING DESCRIPTION

HVAC & FIRE PROTECTION
PROPOSED NEW METAL
WORKSHOP
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN
REGISTRATION No.				REVISION No.	
21031				0	
PROJECT No.				DRAWING No.	
2016/07				ME-03	



AUTOMOTIVE WORKSHOP FIRST FLOOR PLAN
SCALE 1:100



AUTOMOTIVE WORKSHOP GROUND FLOOR PLAN
SCALE 1:100

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL
OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:

- EXTERNAL TEMPERATURE - SUMMER : +32°C
- INDOOR DESIGN TEMPERATURE : 22°C
- NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

GENERAL NOTES
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GENERAL SPECIFICATION OF WORKS.

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
terrace treatment to all gravel fill and to 1.2m

Walls
unless otherwise stated, foundation walls shall be of red industrials bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallplate level

all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with coat of sand cement plaster of min. 12mm and max. 19mm thickness 1:5 mix steel floated internally
provide at least 2no. airbricks per room.

DRAINAGE NOTES.

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.

all rodding eyes to terminate in ABC cover and tops of all such covers, gullies and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.

provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

float externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.
all drainage works shall comply with the NBR - SA

owner's signature _____
engineer's signature _____
engineer's no. _____
architect's signature _____
architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS

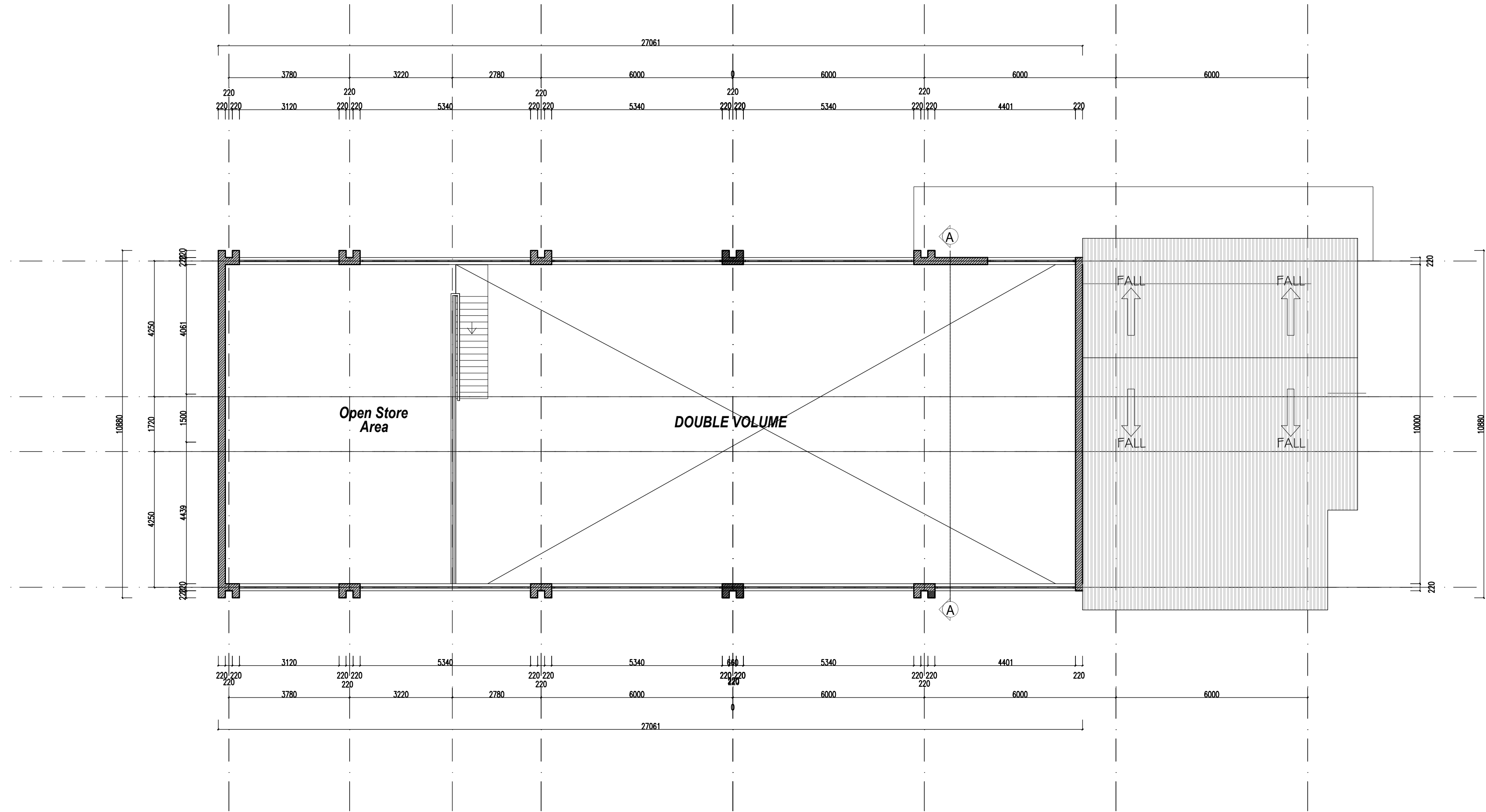


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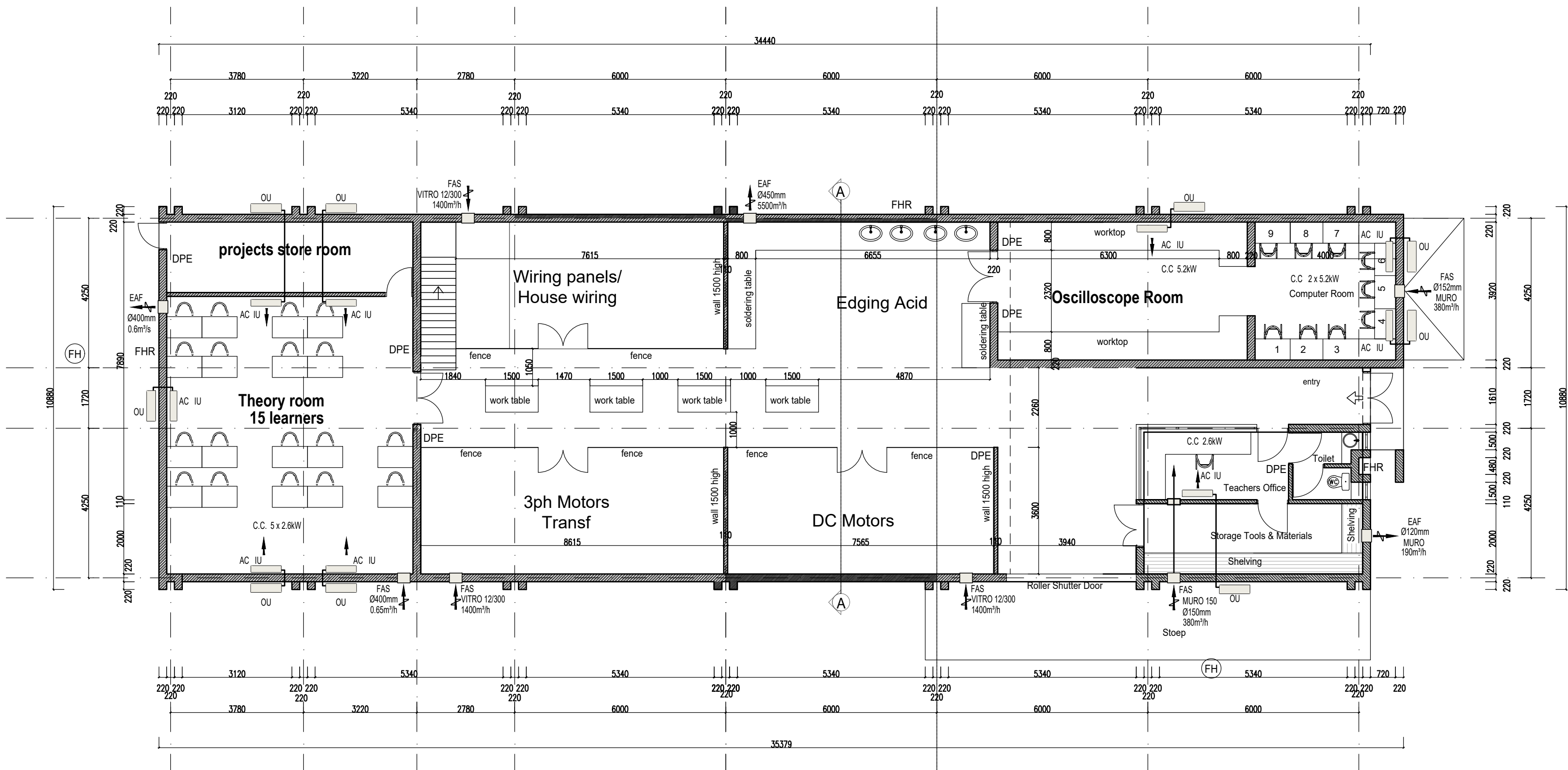
HVAC & FIRE PROTECTION
PROPOSED NEW MOTOR
MECHANICS WORKSHOP
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-04



ELECTRICAL/POWER SYSTEMS WORKSHOPS FLOOR PLAN
SCALE 1:100



ELECTRICAL/POWER SYSTEMS WORKSHOPS GROUND FLOOR PLAN
SCALE 1:100

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL
OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:

- EXTERNAL TEMPERATURE - SUMMER : +32°C
- t°C INDOOR DESIGN TEMPERATURE : 22°C
- NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

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GENERAL SPECIFICATION OF WORKS

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termiticide treatment to all gravel fill and to 1,2m

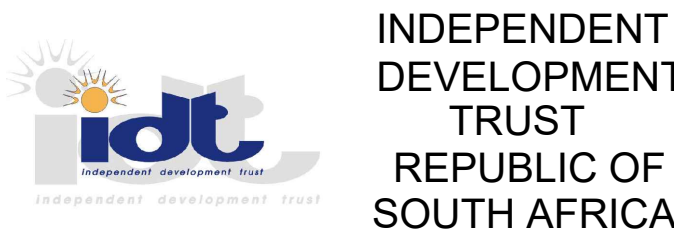
Walls,
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickwork every 3rd course from found. to slab level.
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all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood float externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.
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owner's signature _____
engineer's signature _____
engineer's no. _____
architect's signature _____
architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT
IDT

PROJECT NAME
REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

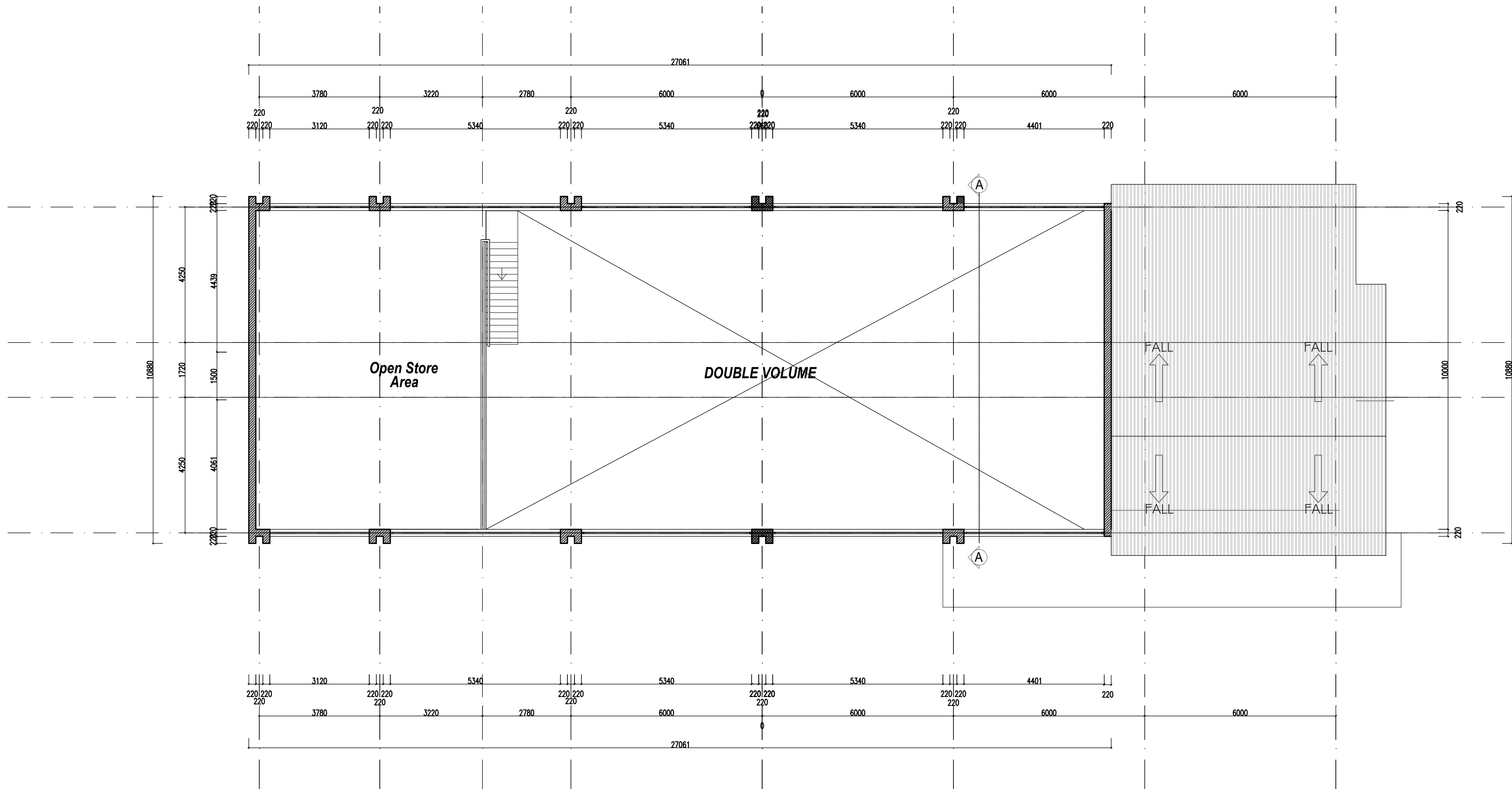
MECHANICAL ENGINEERS

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cell: +27 71 555 9564

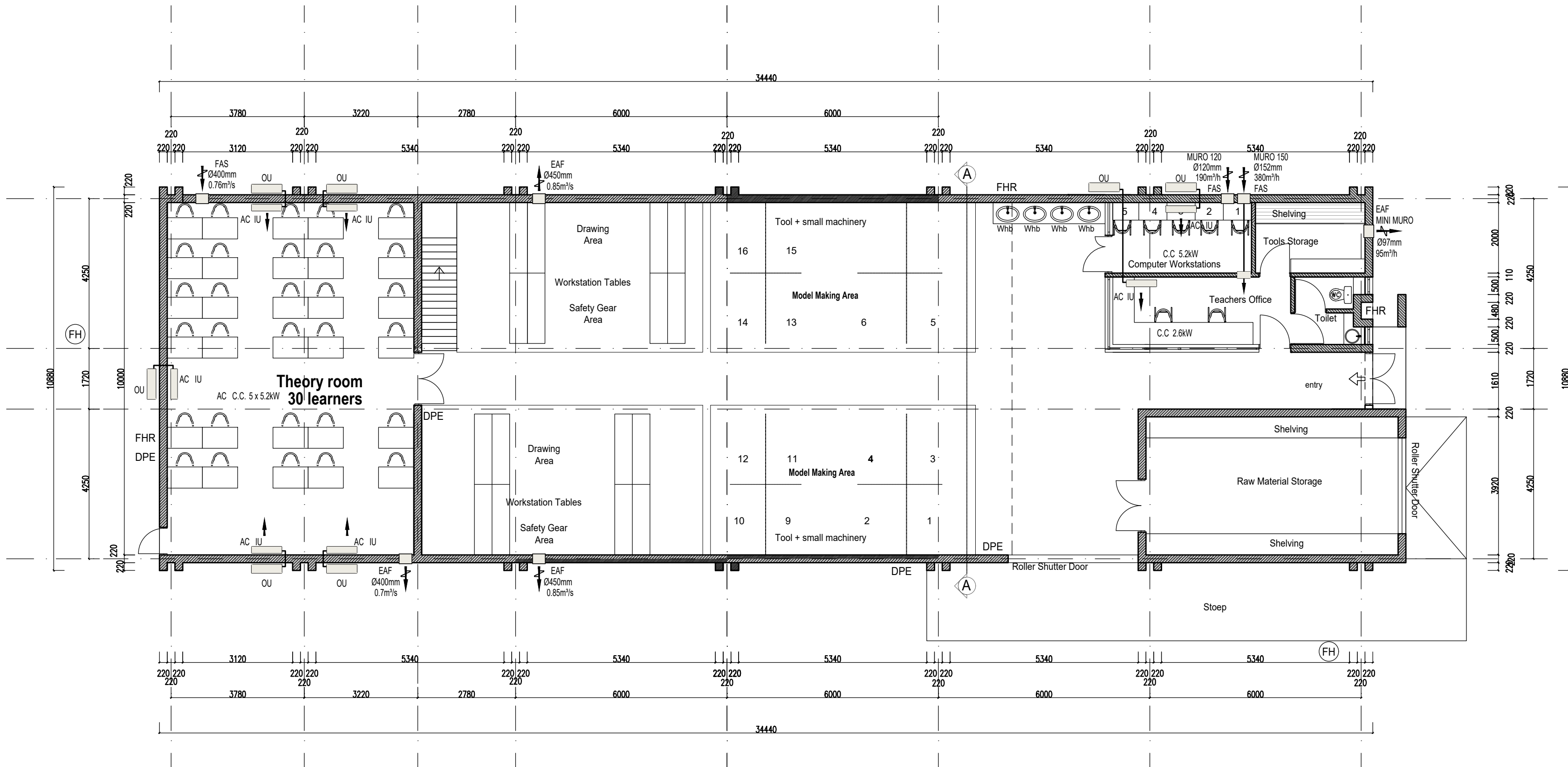
DRAWING DESCRIPTION
HVAC & FIRE PROTECTION
PROPOSED NEW ELECTRICAL &
POWER SYSTEMS WORKSHOPS
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-06



CIVIL SERVICES WORKSHOP FIRST FLOOR PLAN
SCALE 1:100



CIVIL SERVICES WORKSHOP GROUND FLOOR PLAN
SCALE 1:100

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL

OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:

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Walls,
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallplate level.

all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with one coat of sand cement plaster of min. 12mm and max. 18mm thickness 1:5 mix steel floated internally

provide at least 2no. airbricks per room.

DRAINAGE NOTES

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.

all rodding eyes to terminate in ABC cover and tops of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.

provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

Roof externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.

all drainage works shall comply with the NBR - SA

owner's signature

engineer's signature

engineer's no.

architect's signature

architect's no.

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS

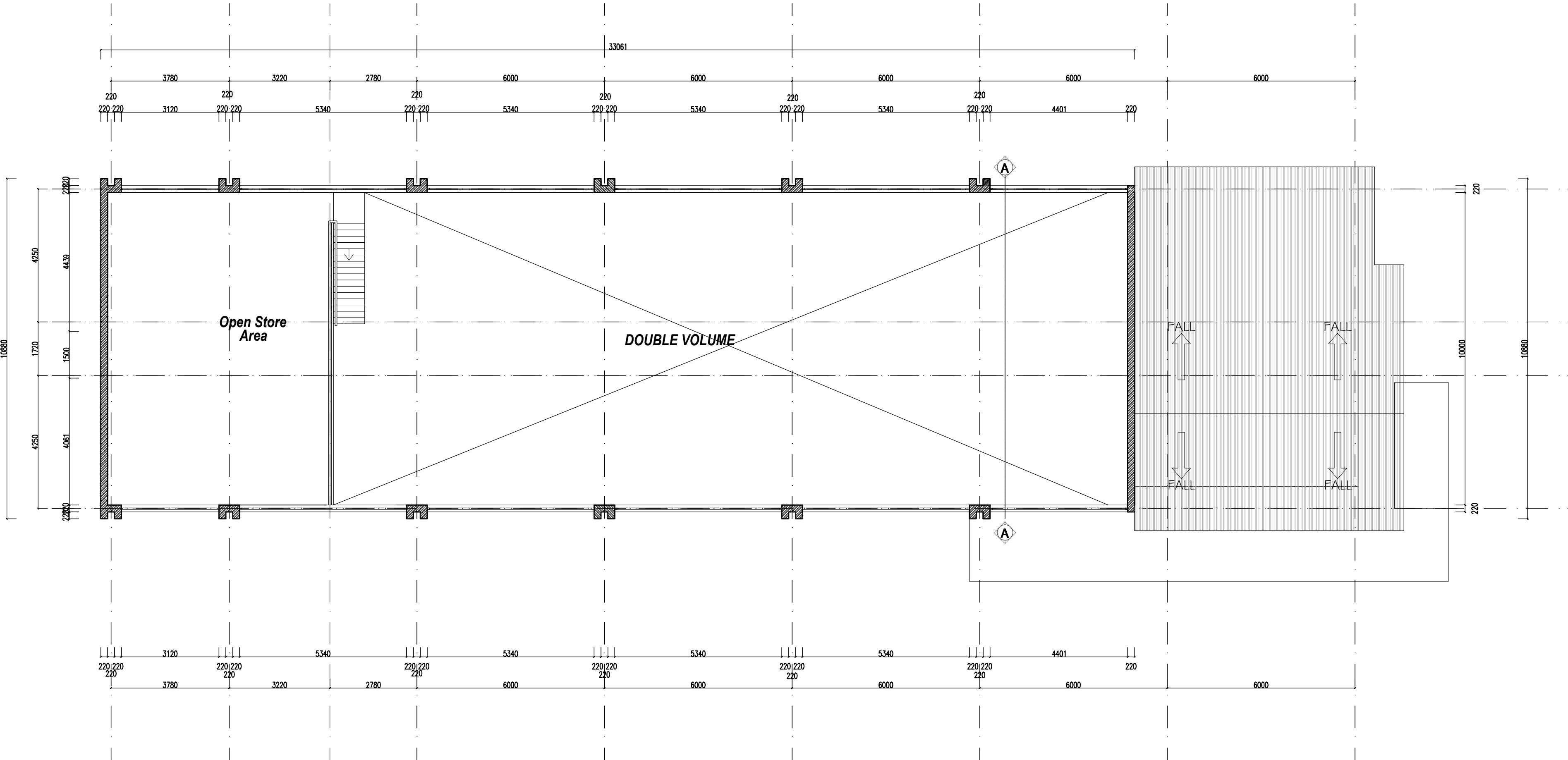


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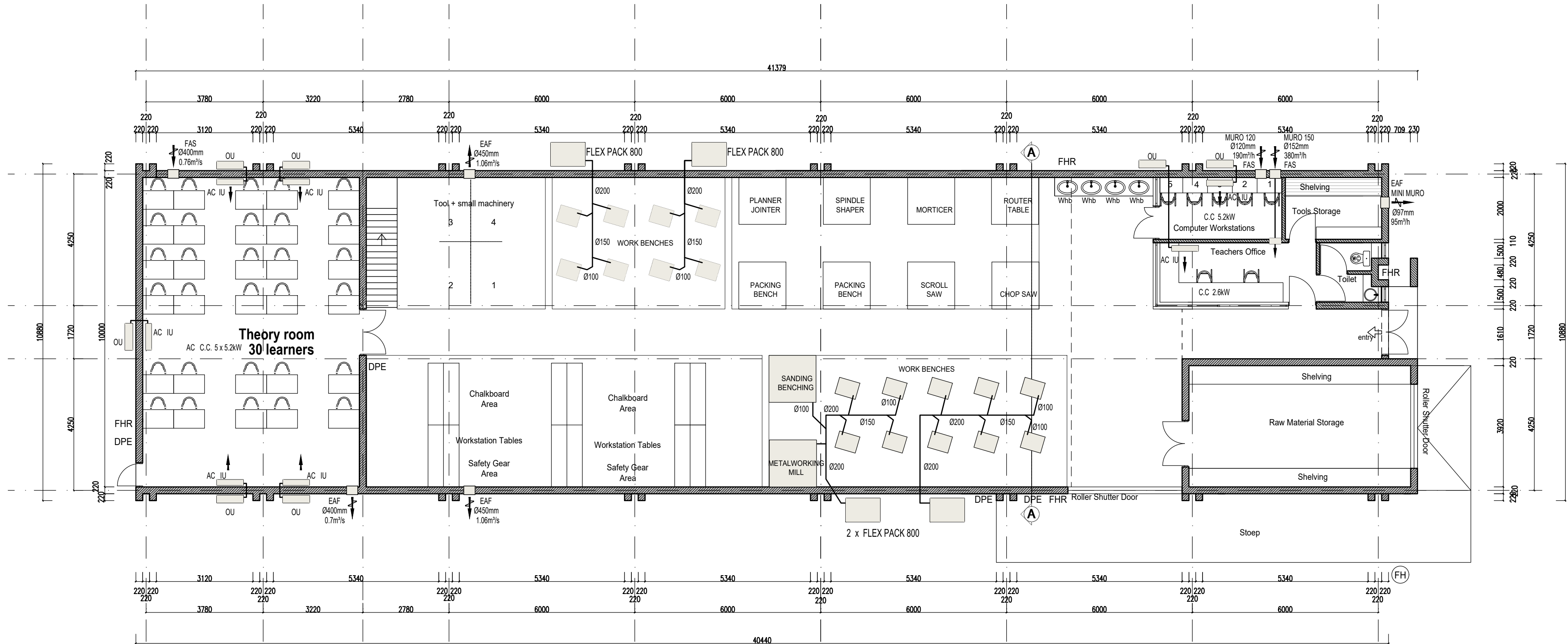
HVAC & FIRE PROTECTION
PROPOSED NEW CIVIL SERVICES
WORKSHOP
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-07



WOOD WORK & CIVIL WORKSHOPS FLOOR PLAN
SCALE 1:100



WOOD WORK & CIVIL WORKSHOPS GROUND FLOOR PLAN
SCALE 1:100

GENERAL NOTES
DRAWINGS MUST NOT BE SCALED. FIGURED DIMENSIONS ONLY MAY BE USED. DIMENSIONS SHOULD BE VERIFIED IN FIELD AND ANY DISCREPANCIES REPORTED TO THE AGENT IMMEDIATELY. THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF SPACE DESIGN ARCHITECTS AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

manufacturers of prefabricated components to verify dimensions on site with contractor prior to manufacture.
all workmanship and materials shall comply with the relevant code of practice and related documents.

GENERAL SPECIFICATION OF WORKS

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termicide treatment to all gravel fill and to 1,2m

Walls
unless otherwise stated, foundation walls shall be of red industrials bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.
unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallhead level.
all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with one coat of sand cement plaster of min. 12mm and max. 13mm thickness 1:5 mix steel floated internally
provide at least 2no. airbricks per room.

DRAINAGE NOTES

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.
all rodding eyes to terminate in ABC cover and tops of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.
provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
of manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

floor externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.
all drainage works shall comply with the NBR - SA

owner's signature _____
engineer's signature _____
engineer's no. _____
architect's signature _____
architect's no. _____

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL
OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:

- EXTERNAL TEMPERATURE - SUMMER : +32°C
- t°C INDOOR DESIGN TEMPERATURE : 22°C
- NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO OF AC INDOOR & OUTDOOR UNITS



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS



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tel: +27 12 664 1031
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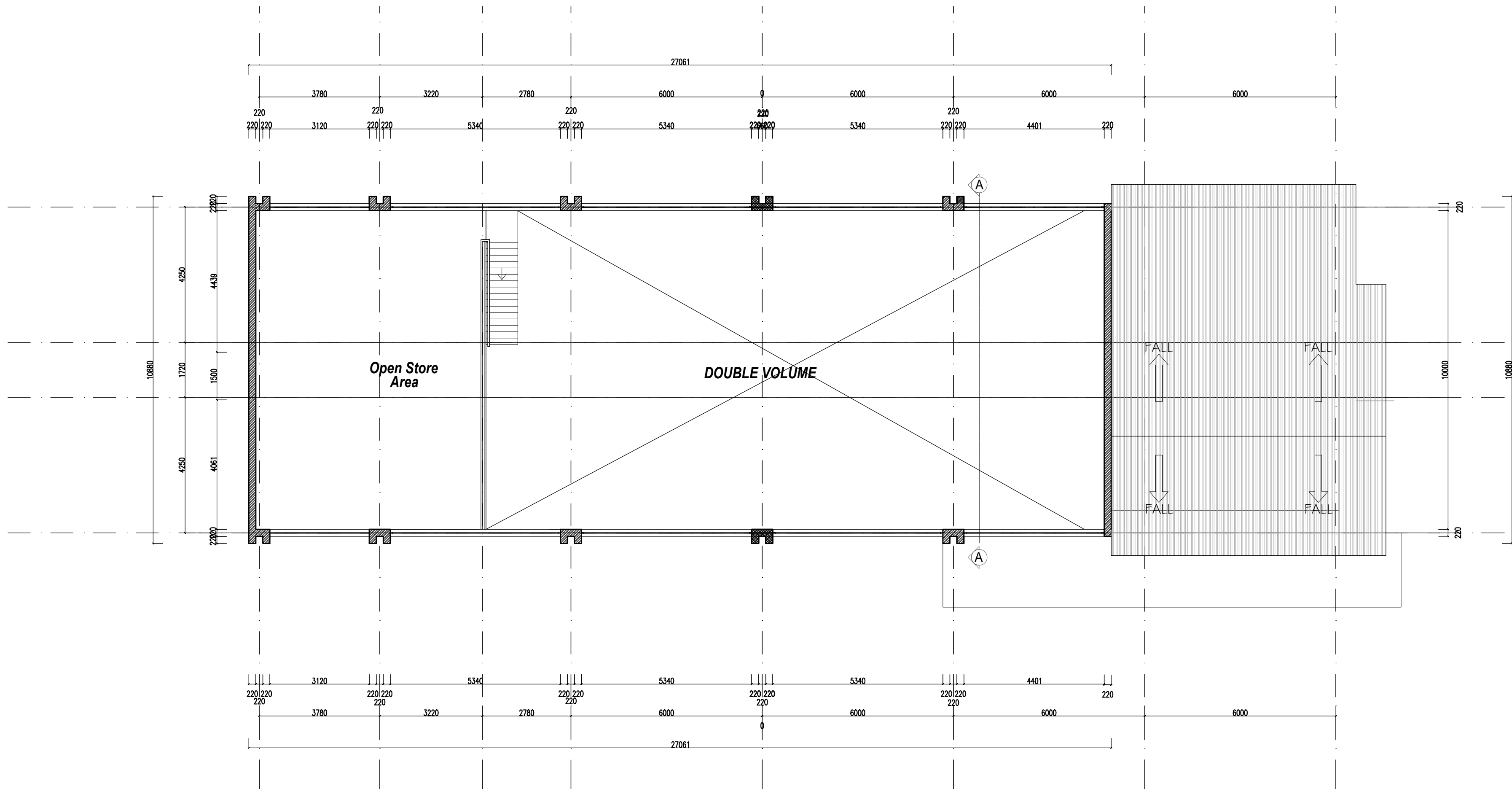
Engineering & Project Management

DRAWING DESCRIPTION

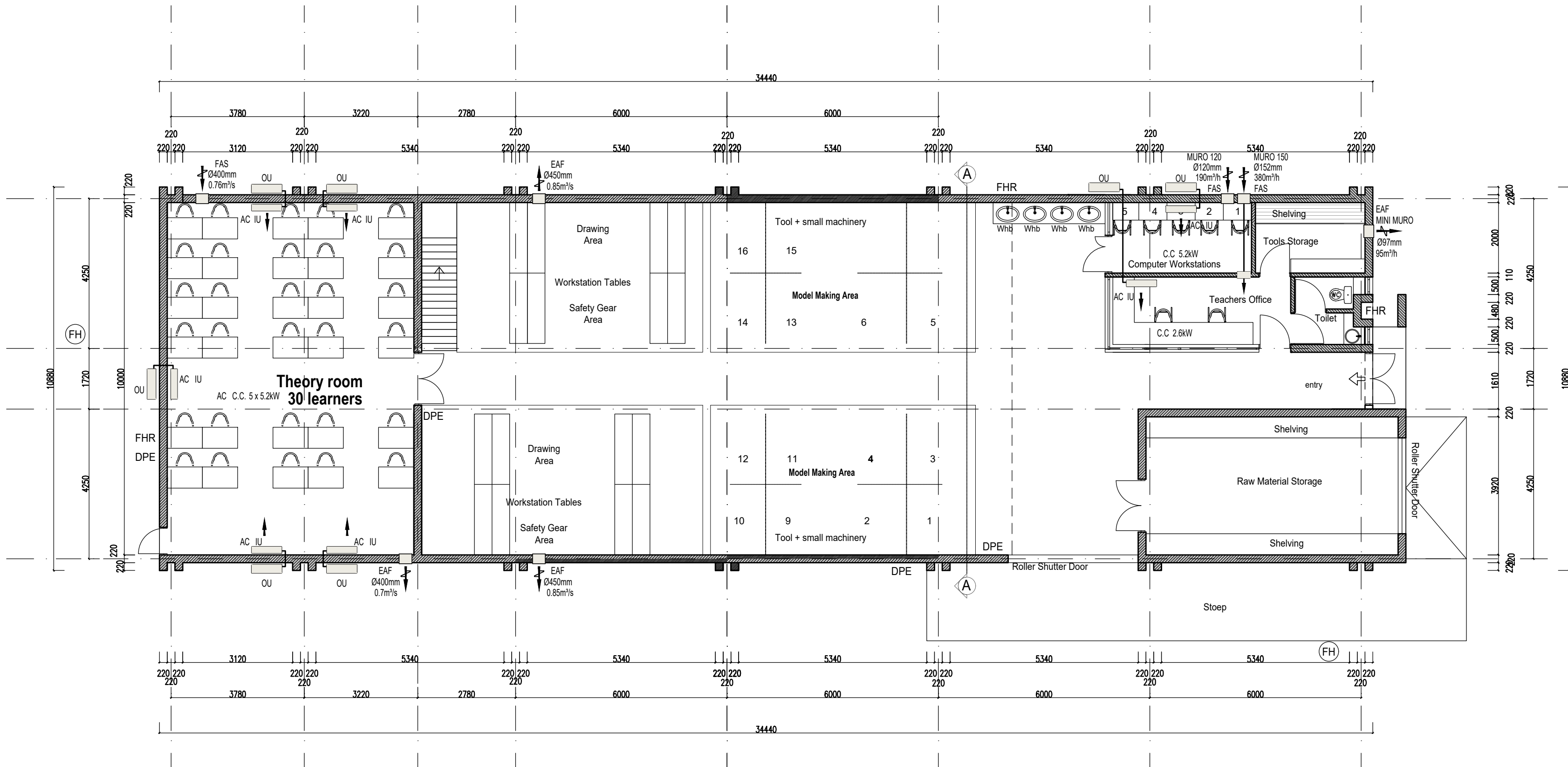
HVAC & FIRE PROTECTION
PROPOSED NEW WOODWORK &
METALWORK WORKSHOPS
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-08



BUILDING WORKSHOP FIRST FLOOR PLAN
SCALE 1:100



BUILDING WORKSHOP GROUND FLOOR PLAN
SCALE 1:100

LEGEND:

- DPE - DRY POWDER EXTINGUISHERS
- FHR - FIRE HOSE REEL
- FH - FIRE HYDRANT
- AC - INDOOR UNIT - HIGH WALL
- OU - OUTDOOR CONDENSING UNIT
- C.C - COOLING CAPACITY
- FAS - FRESH AIR SUPPLY FAN WALL MOUNTED
- EAF - EXTRACT AIR FAN WALL MOUNTED

- MECHANICAL DESIGN CONDITIONS:**
- EXTERNAL TEMPERATURE - SUMMER : +32°C
 - t°C INDOOR DESIGN TEMPERATURE : 22°C
 - NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

GENERAL NOTES
DRAWINGS MUST NOT BE SCALED. FIGURED DIMENSIONS ONLY MAY BE USED. DIMENSIONS SHOULD BE VARIED IN FIELD AND ANY DISCREPANCIES REPORTED TO THE AGENT IMMEDIATELY. THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF SPACE DESIGN ARCHITECTS AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

manufacturers of prefabricated components to verify dimensions on site with contractor prior to manufacture.
all workmanship and materials shall comply with the relevant code of practice and related documents.

GENERAL SPECIFICATION OF WORKS

Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termiticide treatment to all gravel fill and to 1,2m

Walls
unless otherwise stated, foundation walls shall be of red industrial bricks bedded in 1:5 mix mortar and to have brickforce every 3rd course from found. to slab level.

unless otherwise stated, superstructure brickwork shall be of tested and approved stock type bricks bedded in 1:5 mix mortar and to have brickforce every 5th course from dpc up to windowhead and every course thereafter up to wallplate level.

all dpc's to be min. 150mm above finished ground level.
unless otherwise specified, all walls shall be treated with one coat of sand cement plaster of min. 12mm and max. 18mm thickness 1:5 mix steel floated internally

provide at least 2no. airbricks per room.

DRAINAGE NOTES

provide inspection eyes to all bends, junctions and changes in direction to all soil, waste and drain pipes.

all rodding eyes to terminate in ABC cover and tops of all such covers, gulleys and manholes to be min. 150mm above finished ground level.

ventilation pipe to terminate at least 900mm above eaves

where depth of drain is less than 400mm, drain is to be encased in 100mm thick grade 20 concrete all round.

provide sealed traps to all soil and waste fittings.

all sinks to be fitted with 50mm dia. silent traps.

all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood

floor externally above ground level and 600x400mm cast iron medium duty manhole cover and frames

plumber to check all levels on site prior to the laying of any drains.

all drainage works shall comply with the NBR - SA

owner's signature

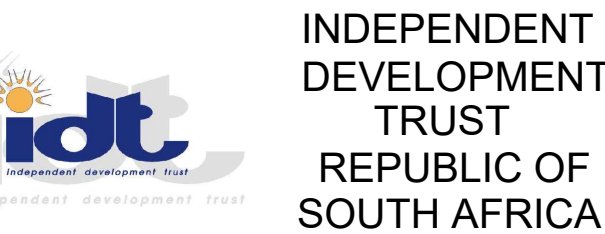
engineer's signature

engineer's no.

architect's signature

architect's no.

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS

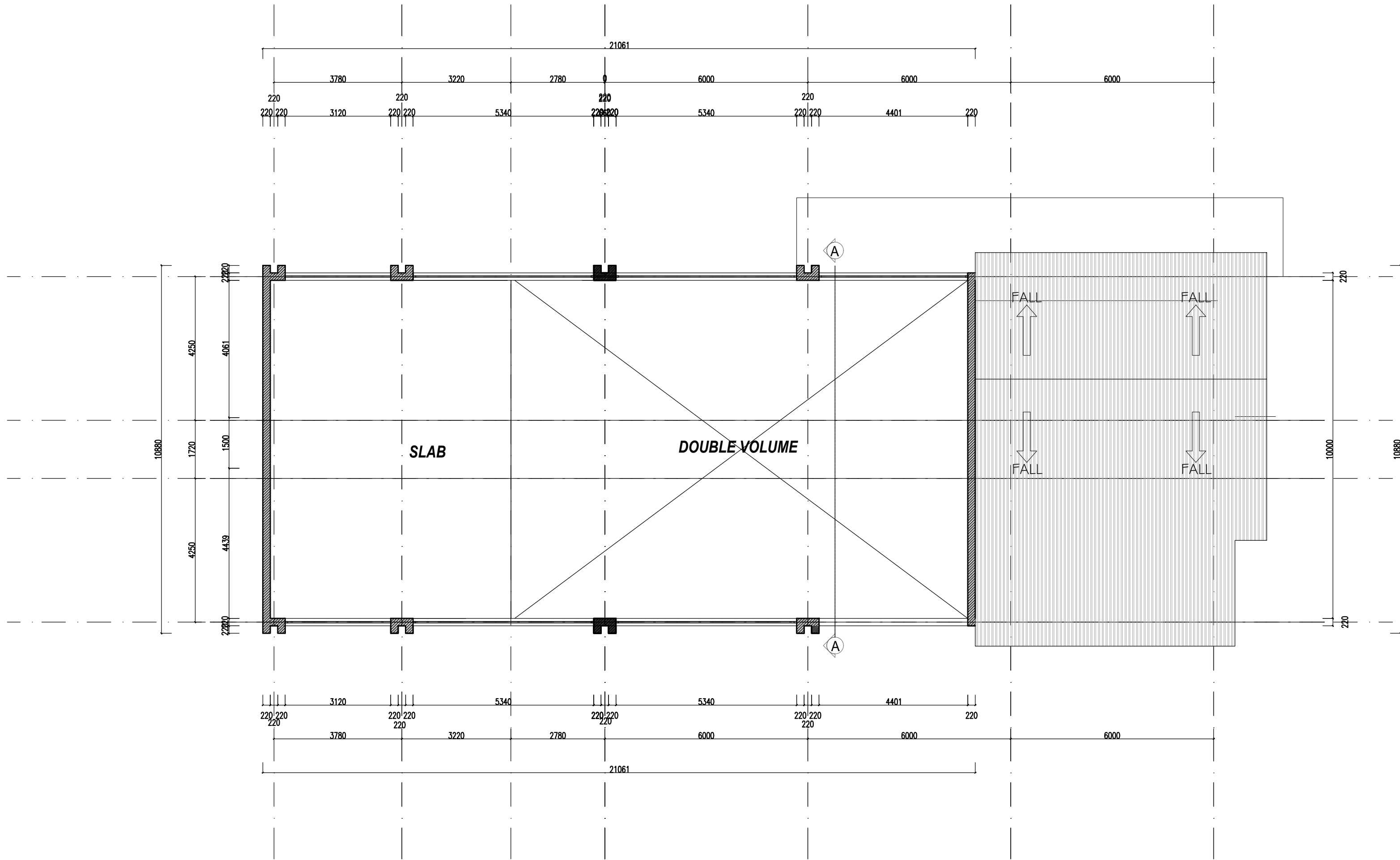


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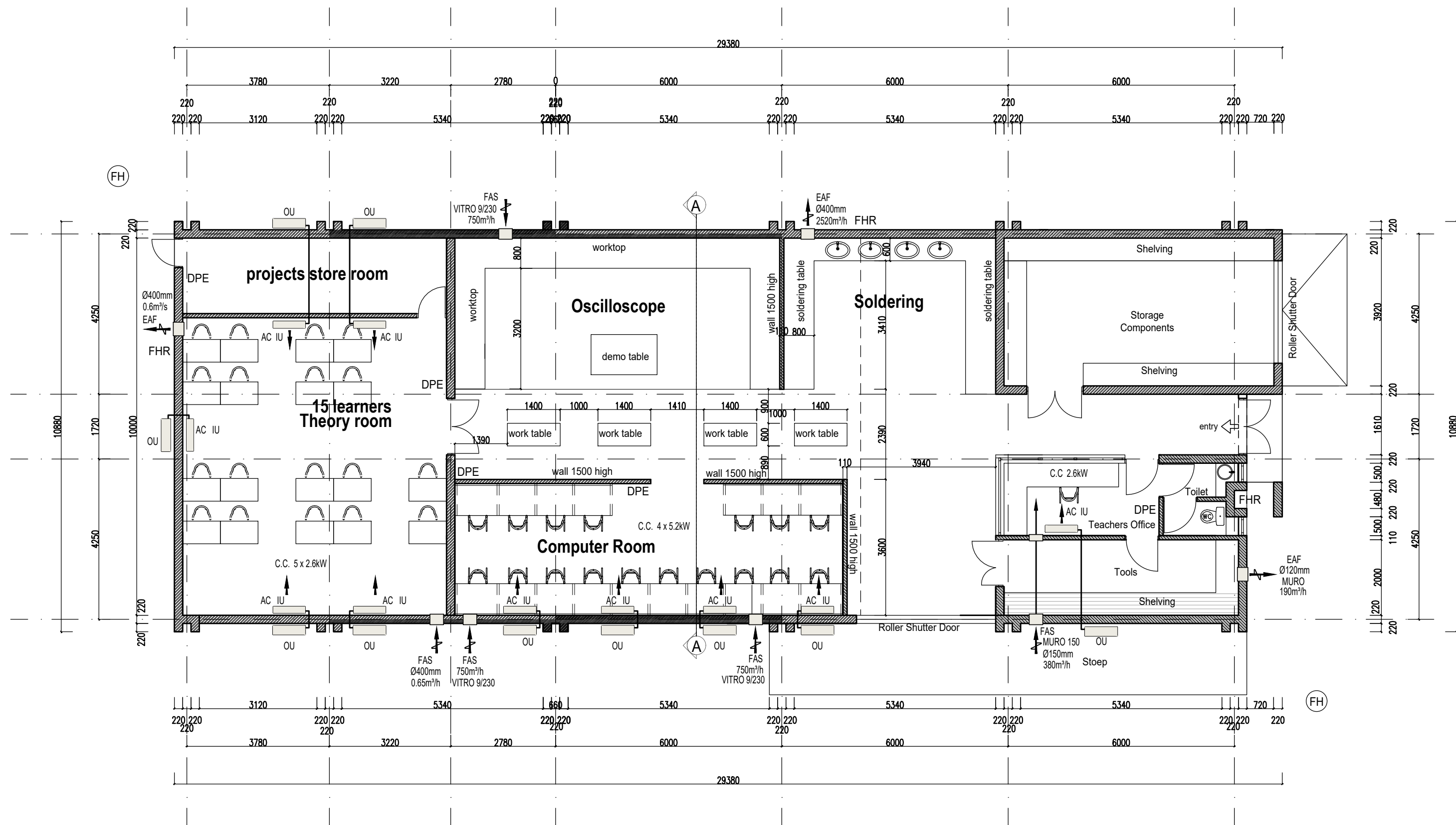
HVAC & FIRE PROTECTION
PROPOSED NEW BUILDING
WORKSHOP
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-09



DIGITAL & ELECTRONIC WORKSHOPS FLOOR PLAN
SCALE 1:100



DIGITAL & ELECTRONIC WORKSHOPS GROUND FLOOR PLAN
SCALE 1:100

GENERAL NOTES
DRAWINGS MUST NOT BE SCALED. FIGURED DIMENSIONS ONLY MAY BE USED. DIMENSIONS SHOULD BE VERIFIED IN FIELD AND ANY DISCREPANCIES REPORTED TO THE AGENT IMMEDIATELY. THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF SPACE DESIGN ARCHITECTS AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT AUTHORITY.

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all workmanship and materials shall comply with the relevant code of practice and related documents.

GENERAL SPECIFICATION OF WORKS
Foundations
minimum depth of foundations to be 700mm to underside of floor slab and where not specified to suit site conditions.
termicide treatment to all gravel fill and to 1,2m

Walls
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provide at least 2 no. airbricks per room.

DRAINAGE NOTES
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provide sealed traps to all soil and waste fittings.
all sinks to be fitted with 50mm dia. silent traps.
all manholes to be 900x600mm internally in 230mm brick walls rendered smooth internally and wood float externally above ground level and 600x400mm cast iron medium duty manhole cover and frames
plumber to check all levels on site prior to the laying of any drains.
all drainage works shall comply with the NBR - SA

owner's signature _____
engineer's signature _____
engineer's no. _____
architect's signature _____
architect's no. _____

REV NO	DESCRIPTION	DATE	BY



CLIENT

IDT

PROJECT NAME

REFURBISHMENT OF WAGPOS
TECHNICAL SCHOOL

MECHANICAL ENGINEERS



DRAWING DESCRIPTION

HVAC & FIRE PROTECTION
PROPOSED NEW DIGITAL &
ELECTRONIC WORKSHOPS
GROUND & FIRST FLOOR PLAN

designed	drawn	checked	passed	date	scale
B.C	B.C	B.C		07/2019	AS SHOWN

REGISTRATION No.	REVISION No.
21031	0
PROJECT No.	DRAWING No.
2016/07	ME-10

LEGEND:

DPE - DRY POWDER EXTINGUISHERS

FHR - FIRE HOSE REEL

FH - FIRE HYDRANT

AC INDOOR UNIT - HIGH WALL
OU OUTDOOR CONDENSING UNIT

C.C - COOLING CAPACITY

FAS FRESH AIR SUPPLY FAN WALL MOUNTED

EAF EXTRACT AIR FAN WALL MOUNTED

MECHANICAL DESIGN CONDITIONS:
• EXTERNAL TEMPERATURE - SUMMER : +32°C
• t°C INDOOR DESIGN TEMPERATURE : 22°C
• NUMBER OF AIR EXCHANGES PER HOUR : 6

NOTE: SEE BILL OF QUANTITIES FOR ALL TECHNICAL INFO
OF AC INDOOR & OUTDOOR UNITS

