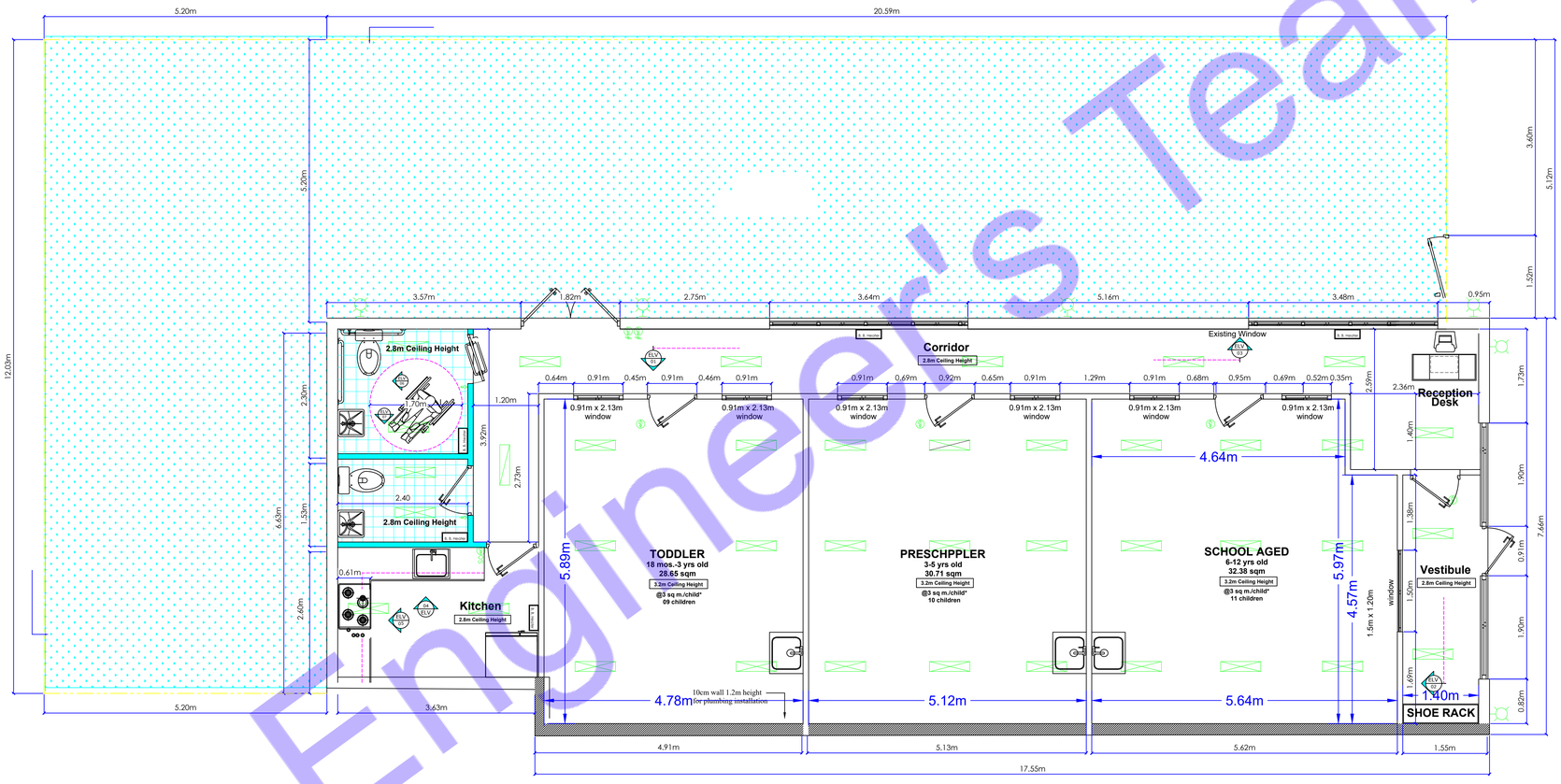
## LIGHTING PLAN SYMBOLS

| | |
|---|---|
| | T BAR LIGHTING |
| S | LINE VOLTAGE SWITCH (120V TO 347V) |
| | DUPLEX 5-15R RECEPTACLE |
| GF | DUPLEX 5-15R RECEPTACLE C/W INTEGRAL GFCI PROTECTION |
| | DUPLEX 5-20R RECEPTACLE, T-SLOT |
| | Range outlet |
| | CAMERA |
| P | PROJECTOR |




## B.B. HEATER SCHEDULE

| MARK | SERVING | NUMBER | WATTS | VOLTAGE | MAKE MODEL | NOTES | HEATER TYPE |
|---|---|---|---|---|---|---|---|
| BBH-1 | BATHROOM ADA | 1 | 900 | 120/60/1 | ARTGOS 1005003687378224 | | BASEBOARD |
| BBH-2 | BATHROOM | 1 | 800 | 120/60/1 | ARTGOS 1005003687378224 | | BASEBOARD |
| BBH-3 | KITCHEN | 1 | 1200 | 120/60/1 | OFM1500BL OUE-OFM1500BL | | BASEBOARD |
| BBH-4 | CORRDOR | 2 | 3000 | 120/60/1 | OwKay izEuWSgwloStSluY | | BASEBOARD |

Engineer's Team

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RM APEGA ID #: 126365
DATE: 28/4/2025
PERMIT NUMBER: P015050
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

**SEAL:**

PROFESSIONAL ENGINEER ALBERTA MOHAMMED-ALI AL-ZABIDI

**TITLE:**

**LIGHTING LAYOUT**

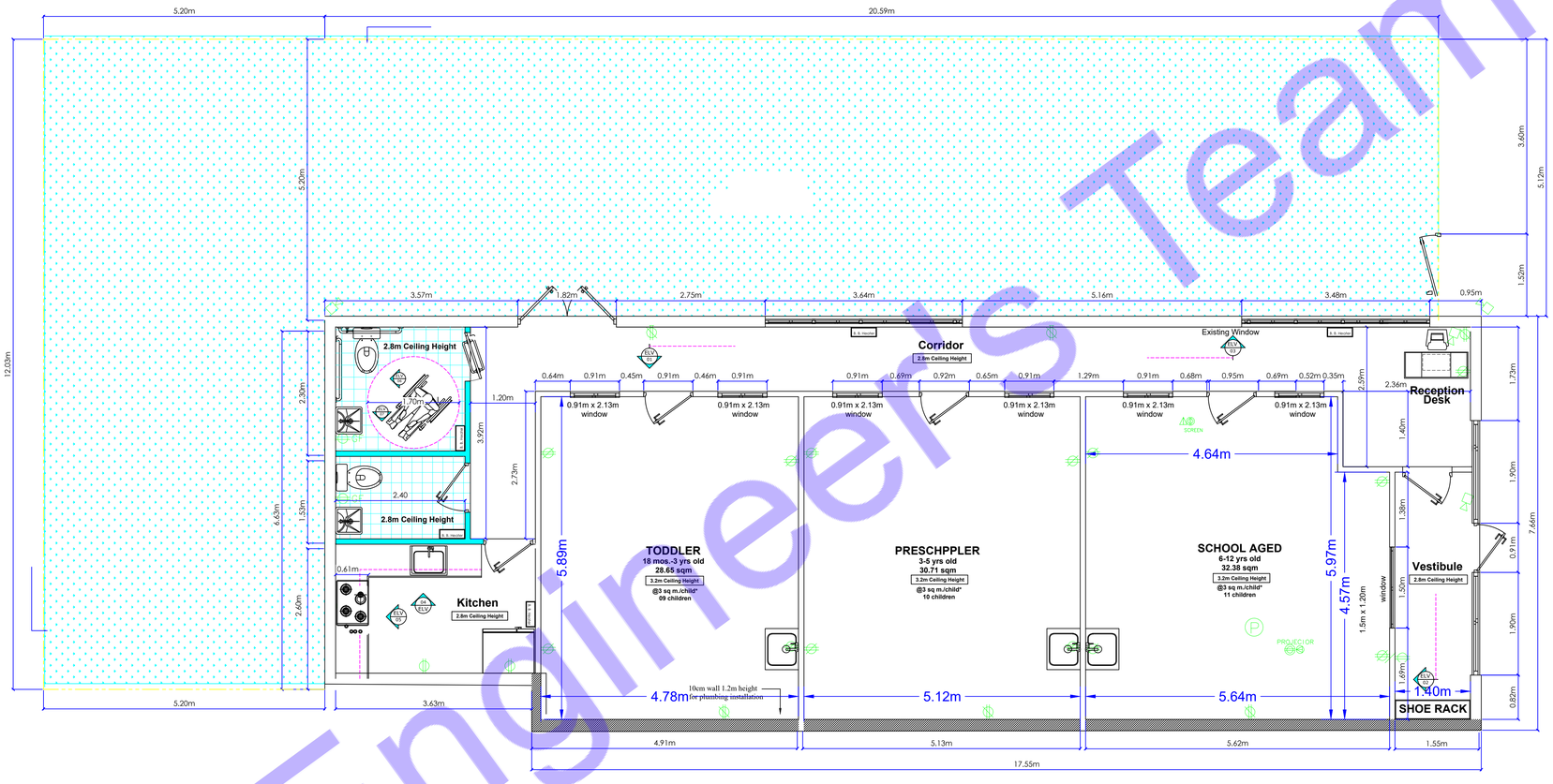
**CLIENT/PROJECT:**
**Kidzonia Childcare Centre**
**Unit14-100 Real Martin Dr.**
**Fort McMurray,AB**

**DATE:** 28 April 2025
**DESCRIPTION:** **REVISION#**
**Issue For BP:** **02**

**SCALE**
**1:100**

**PAGE NO:**
**E100**

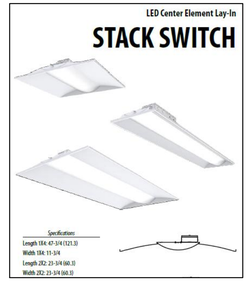
**PREPARED BY: IU**
**APPROVED BY: MA**




**Notes:**
1- Provide 120V AC for the power-operated exit doors & handicap power-operated washroom

2- Provide 120/240 V for electric range

| Series | Size & Lumens | Switchable | Options |
|---|---|---|---|
| STAKS STAK Switchable | 1X4 ALO6 Switchable Lumens - 4000LM, 5000LM, and 6000LM | SWW7 Switchable CCT - 35K, 40K, 50K | (BLANK) No Option * |
| | 2X2 ALO3 Switchable Lumens - 3000LM, 4000LM, and 5000LM | | CP Chicago Plenum Rated * |
| | 2X4 ALO6 Switchable Lumens - 4000LM, 5000LM, and 6000LM | | IE10WCP IE10WCP 10W Emergency backup, 10W * |
| | | | UVOLT 120-347 * |




Engineers Team

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DATE: 28/4/2025
PERMIT NUMBER: P015050
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

**SEAL:**

PROFESSIONAL ENGINEER ALBERTA
MOHAMED-ALI ALZABIDI

**TITLE:**

**ELECTRICAL OUTLET LAYOUT**

**CLIENT/PROJECT:**
**Kidzonia Childcare Centre**
**Unit14-100 Real Martin Dr.**
**Fort McMurray,AB**

**DATE:** 28 April 2025
**DESCRIPTION:**
**Issue For BP:**
**REVISION#** 02

**SCALE** 1:100

**PAGE NO:** E200

**PREPARED BY: IU**

**APPROVED BY: MA**

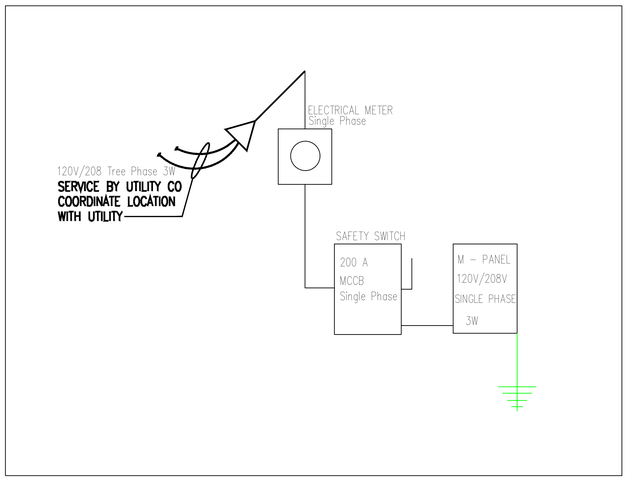
# MAIN PANEL

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Panel Location- | | | | | | | | | | | | | | |
| Voltage (Phase-Ground/Phase-Phase) | | 120 | 208 | Source of Supply-From Service Disconnect/Meter | | | | | | | | | | |
| Phase- | 1 | | | Wire- | 3 | | | | | | | | | |
| Rated Amps- | 145.92 | | | AIC- | 10k | | | | | | | | | |
| MCCB | 200 Amps MCCB | | | Mounting- | Wall Surface | | | | | | | | | |
| Circuit | Description | New/ Existing | Load Type | Breaker Size | Poles | Wire Size | A | | Wire Size | Poles | Breaker Size | Load Type | New/ Existing | Description | Circuit |
| 1 | LIGHTING LOAD | N | | 15 | 1 | #14 | 900 | 8000 | #3 | 1 | 75 | | N | HAVC | 2 |
| 3 | WATER HEATER | N | | 20 | 1 | #12 | 2000 | 600 | #12 | 1 | 20 | | N | Coffee Maker/Toaster | 4 |
| 5 | Refrigerator | N | | 20 | 1 | #12 | 600 | 800 | #12 | 1 | 20 | | N | Microwave Oven | 6 |
| 7 | Dishwasher | N | | 20 | 1 | #12 | 800 | 200 | #12 | 1 | 20 | | N | CT-TODDLER | 8 |
| 9 | CT-PRESCHOOLER | N | | 20 | 1 | #12 | 200 | 200 | #12 | 1 | 20 | | N | CT-SCHOOL AGED | 10 |
| 11 | CT-ADA & BATHROOM | N | | 20 | 1 | #12 | 50 | 200 | #12 | 1 | 20 | | N | CT-KICHEN | 12 |
| 13 | CT-CORRIDOR | N | | 20 | 1 | #12 | 50 | 400 | #12 | 1 | 20 | | N | CT-VEGTIBULE | 14 |
| 15 | BBH-1 | N | | 20 | 1 | #12 | 900 | 1200 | #12 | 1 | 20 | | N | BBH-3 | 16 |
| 17 | BBH-2 | N | | 20 | 1 | #12 | 800 | 6000 | #6 | 1 | 50 | | N | BBH-4 | 18 |
| 19 | SPARE | -- | | -- | | -- | -- | -- | -- | -- | -- | | -- | SPARE | 20 |
| 21 | SPARE | -- | | -- | | -- | -- | -- | -- | -- | -- | | -- | SPARE | 22 |
| 23 | SPARE | -- | | -- | | -- | -- | -- | -- | -- | -- | | -- | SPARE | 24 |
| 25 | SPARE | -- | | -- | | -- | -- | -- | -- | -- | -- | | -- | SPARE | 26 |

| | |
|---|---|
| Connected Load (W) | 23900 |
| Connected Amps | 199 |
| Main Type and Amps Rating | 200 Amps MCCB |

Demand Load Calcultion

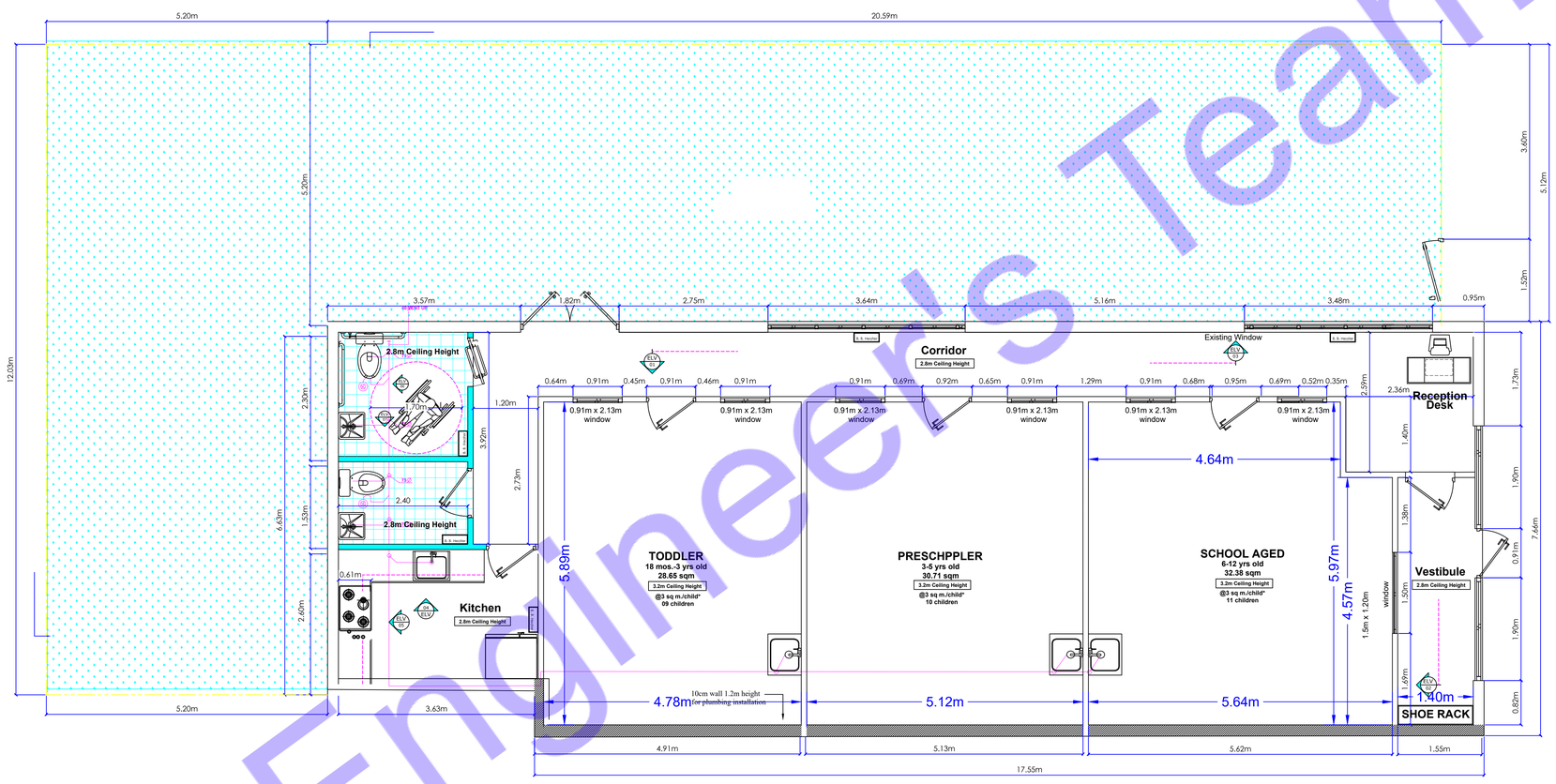
| Load Classification | Connected Load | Demand Factor | Estimated Demand |
|---|---|---|---|
| Lighting - Dwelling Unit | 900 | 125% | 1125 |
| Water Heater - Dwelling Unit | 2000 | 100% | 2000 |
| Receptacle | 13000 | 65% | 8450 |
| Cooling | 8000 | 100% | 8000 |
| Pump | 0 | 125% | 0 |
| Other | 0 | 100% | 0 |
| | | | |
| Demand Load | 23900 | | 19575 |
| Demand Amps | | | 163 |




Engineers Team

## PLUMBING LEGEND

- HEAT TRACE AND INSULATE PIPE
- COLD WATER
- HOT WATER
- SAN — SANITARY LINE BELOW GRADE
- SANITARY WASTE

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**SEAL:**

**TITLE:**
**DRAINAGE LAYOUT**

**CLIENT/PROJECT:**
**Kidzonia Childcare Centre**
**Unit14-100 Real Martin Dr.**
**Fort McMurray,AB**

DATE: 10 April 2025
**DESCRIPTION:** **Issue For BP:**
**REVISION# 01**

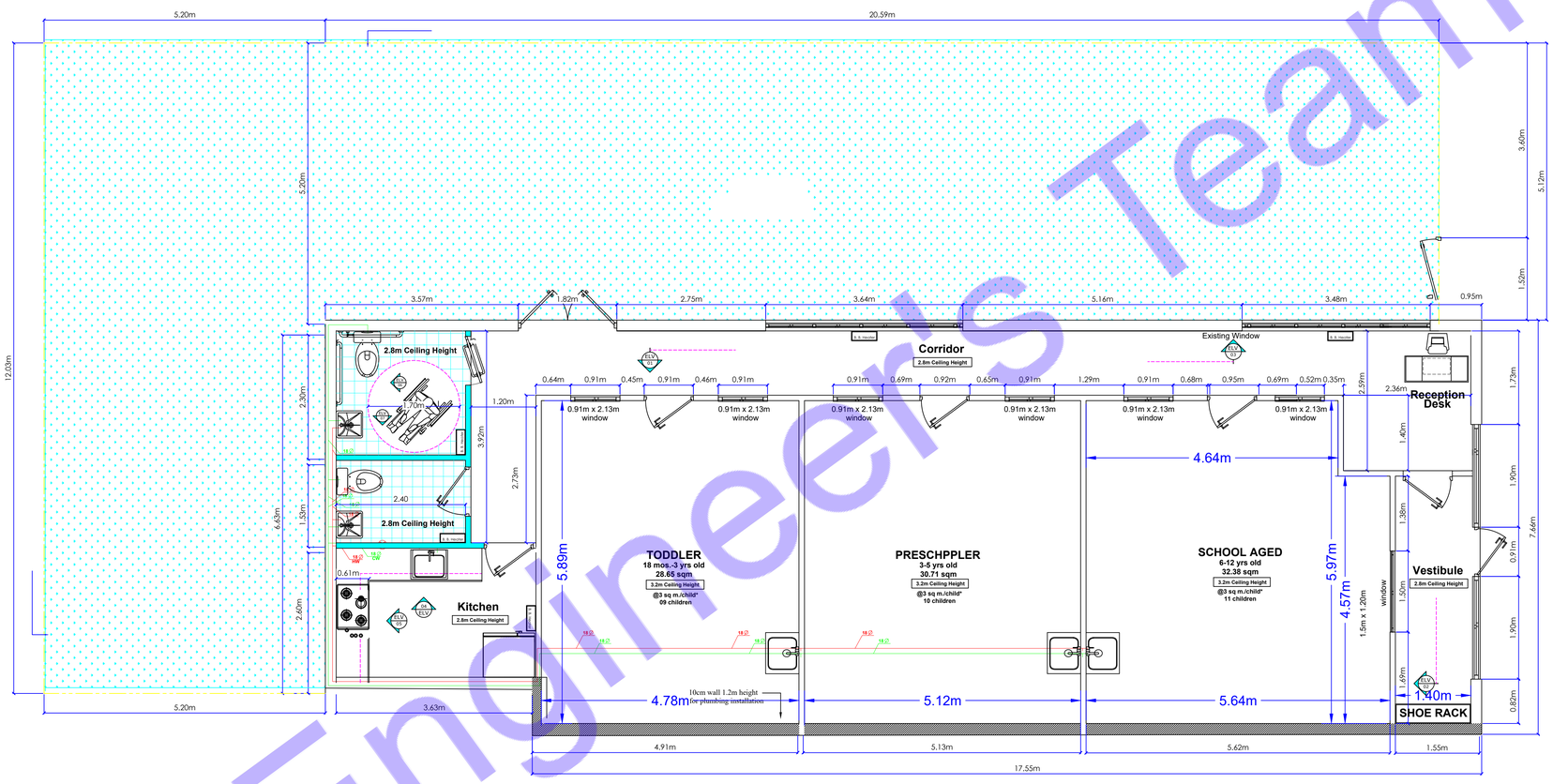
**SCALE** 1:100

**PAGE NO:** M100

**PREPARED BY: OS**
**APPROVED BY: MA**

## PLUMBING LEGEND

| | |
|---|---|
| HEAT TRACE AND INSULATE PIPE | |
| COLD WATER | |
| HOT WATER | |
| SAN | SANITARY LINE BELOW GRADE |
| SANITARY WASTE | |

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**SEAL:**

**TITLE:**
**HOT & COLD WATER LINES**

**CLIENT/PROJECT:**
**Kidzonia Childcare Centre**
**Unit14-100 Real Martin Dr.**
**Fort McMurray,AB**

DATE: 10 April 2025
**DESCRIPTION:** **REVISION#**
**Issue For BP:** **01**

| SCALE | PAGE NO: |
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| 1:100 | M200 |

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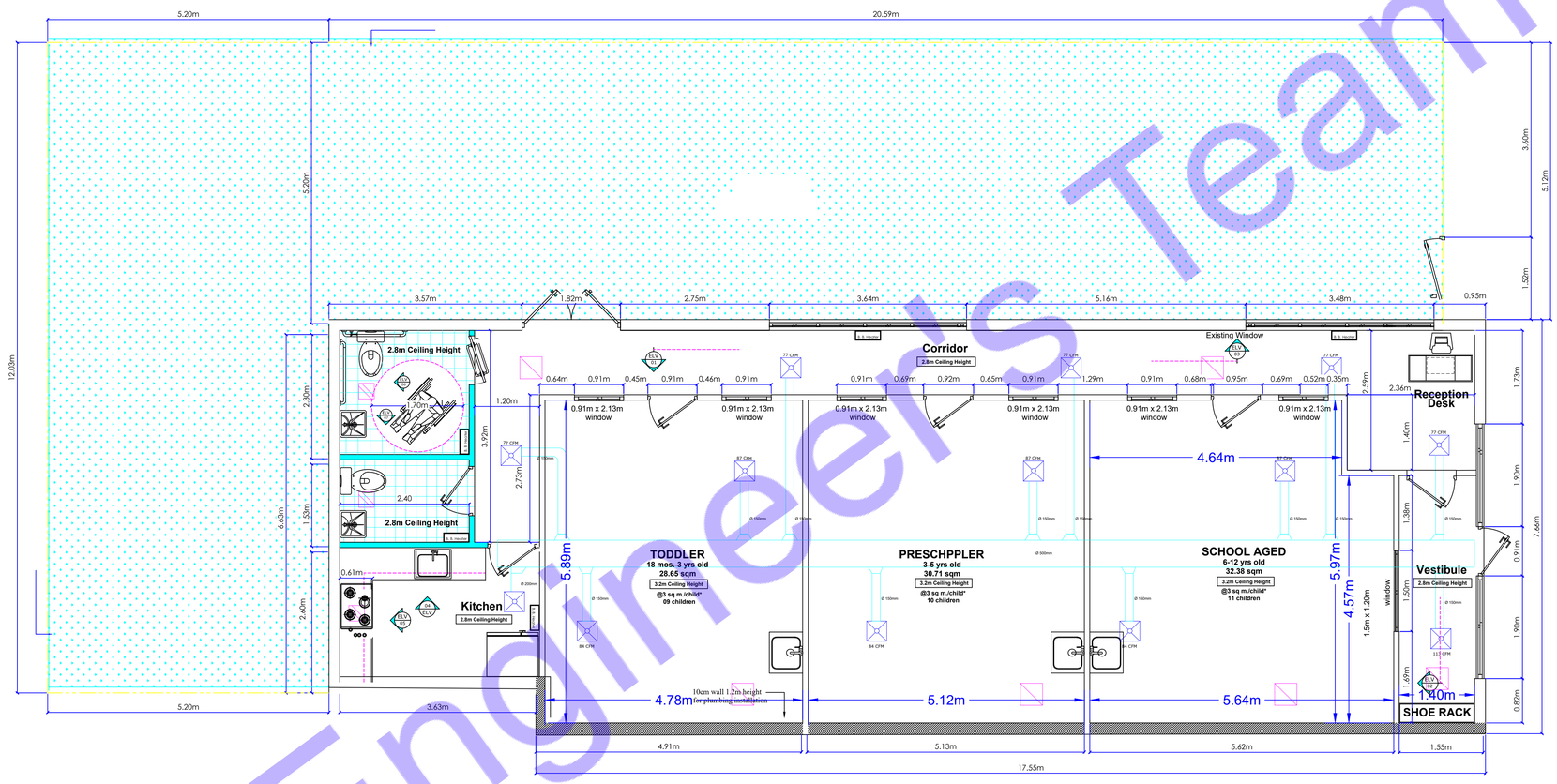
## LEGEND - DUCTWORK

| | |
|---|---|
| SQUARE SUPPLY AIR DIFFUSER | 250ø — DUCT DIMENSION (e.g. 250 DIA.) IN SINGLE-LINE DUCT |
| RETURN AIR GRILLE | 500X400 — DUCT DIMENSIONS, SIDE FACING X DEPTH |
| EXHAUST AIR GRILLE | DUCT TRANSITION, SINGLE LINE DUCT |
| | SQUARE ELBOW WITH MULTI-BLADE TURNING VANES |




Engineers Team

## Notes:

1. Mechanical drawings shall be read in conjunction with architectural drawings and detailed elevations.
2. Dedicated MUA already installed for unit 14
3. Contractor to extend ducting as shown on HVAC plan
4. All fresh air requirements and exhaust rates as per ASHRAE 62.1

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**SEAL:**

PROFESSIONAL ENGINEER ALBERTA MOHAMED-ALI AL-ZABIDI

**TITLE:**

**HVAC PLAN**

**CLIENT/PROJECT:**
**Kidzonia Childcare Centre**
**Unit14-100 Real Martin Dr.**
**Fort McMurray,AB**

**DATE:** 30 April 2025
**DESCRIPTION:** **REVISION#**
**Issue For BP:** **02**

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**APPROVED BY: MA**

**Designed By Engr. Al Amin (MEP Engineer | Director - Engineer's Team LTD)**

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