

FTKA LABORATORY PROFILE



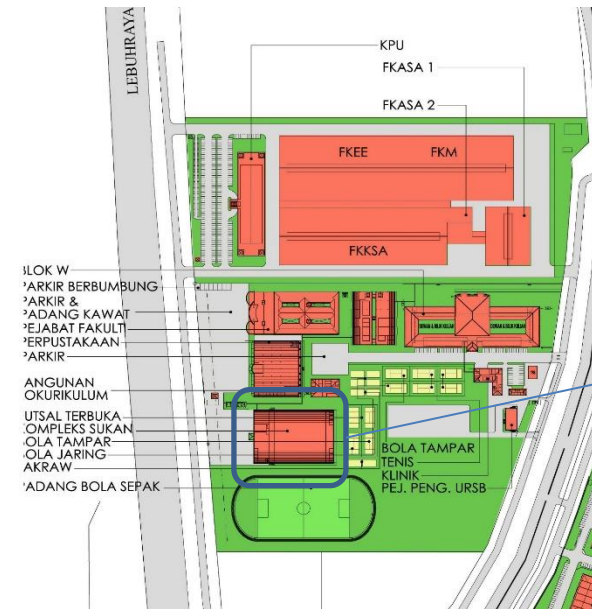
FTKA

BLOK C,
UMPSA

HIGHWAY &
TRAFFIC LAB

BASIC INFORMATION

Location:
Block C Makmal FTKA



Highway & Traffic
Laboratory
Block C Makmal FTKA

Person in Charge

No	Name	Phone and email
1	Pn. Siti Sarah Bte Abd Jalil	Office : 094315014 Email: sitisarah@umpsa.edu.my
2	En. Mohd Sani bin Mohd Noh	Office : 094315014 Email : sani@umpsa.edu.my
3	En. Amir Asyraf Bin Hj Idris	Office : 094315014 Email : aasraf@umpsa.edu.my

LIST OF EQUIPMENTS

Nature of Equipments

- Focus on physical learning and teaching for undergraduate & postgraduate students.
- Our laboratory also offers services to external parties who wish to obtain technical services.

No	Item	Quantity	Status	usage
1	MARSHALL & CBR MACHINE	2	ok	PnP & RnD
2	MARSHALL COMPACTOR	3	ok	PnP & RnD
3	COMPRESSION MACHINE	3	ok	PnP & RnD
4	SPECIFIC GRAVITY APPARATUS	1	ok	PnP & RnD
5	ASPHALT PENETRATION TEST	2	ok	PnP & RnD
6	SOFTENING POINT APPARATUS	2	ok	PnP & RnD
7	ASPHALT TESTING SYSTEM	3	ok	PnP & RnD
8	HIGH CAPACITY SIEVE SHAKER	1	ok	PnP & RnD
9	FURNACE	1	ok	PnP & RnD
10	LA MACHINE	2	ok	PnP & RnD
11	METROCOUNT	1	ok	PnP & RnD
12	SPEED MEASUREMENT	3	ok	PnP & RnD

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No	Item	Quantity	Status	usage
13	BUOYANCY BALANCE	2	ok	PnP & RnD
14	WATER BATH	3	ok	PnP & RnD
15	FUME HOOD	2	ok	PnP & RnD
16	MARSHALL EXTRUDER	2	ok	PnP & RnD
17	SIEVE SHAKER	4	ok	PnP & RnD
18	DRYING OVEN	3	ok	PnP & RnD
19	ASPHALT CENTRIFUGE	1	ok	PnP & RnD
20	DUCTILOMETER	1	ok	PnP & RnD
21	DIGITAL WATER BATH	3	ok	PnP & RnD

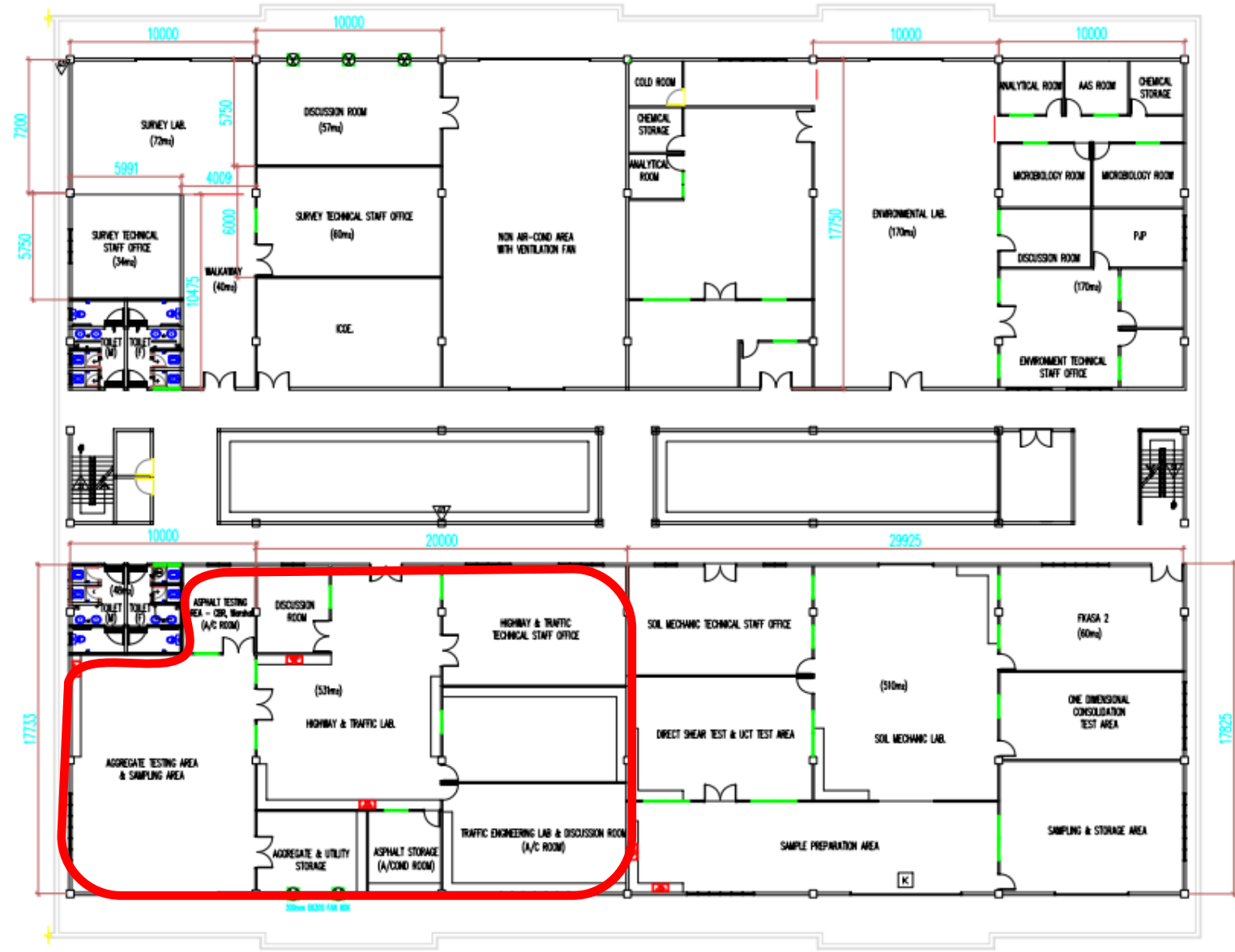
LIST OF SERVICES

No	Testing
1	Asphalt Test i. Softening Point Test ii. Penetration test iii. Asphalt Concrete test iv. Ductility test v. Thin Oven Film vi. Asphalt Extraction
2	Aggregate Test i. Aggregate Crushing Value (ACV) ii. Aggregate Impact Value (AIV) iii. 10 % Fines Aggregate test iv. Flakiness Index & Elongation v. Sieve Analysis vi. Los Angelas Abrasion Test (LA) vii. Water Absorption viii. Soundness ix. Specific Gravity

LIST OF SERVICES

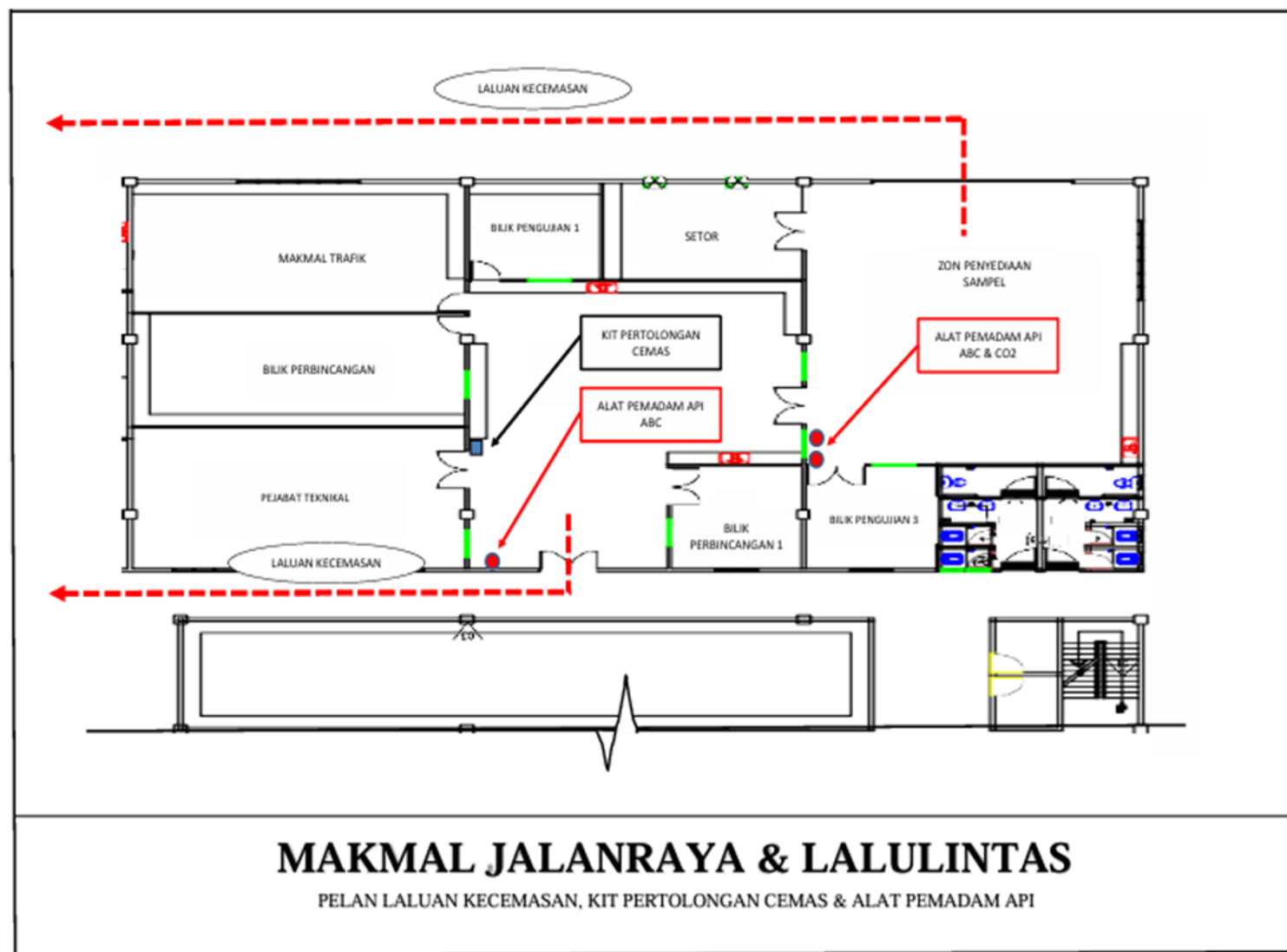
No	Testing
3	Traffic Test i. Spot Speed study ii. Traffic Counting

LAB LAYOUT



GROUND FLOOR PLAN CIVIL LAB

LAB LAYOUT



LAB PICTURES



Oven



Water Bath



Universal Testing System



Sieve shaker, Marshall Compactor & LA Machine



Furnace & Asphalt centrifuge

LAB PICTURES



Compression machine



Sieve shaker



LA machine



Heavy duty sieve shaker



Speed Measurement



Marshall/CBR

LAB PICTURES



Asphalt Concrete testing



Asphalt mixer



Marshall test



Preparation sample



Preparation sample

LAB

ACHIVEMENT

No	Research
1	Nano Cold Asphalt – PM Ir Dr Khairil Azman / Citrex 2025 (Gold)
2	Hybrid asphalt for self-healing binder – PM Dr Ramadhan / Citrex 2023 (Gold)
3	Natural waste for stronger roads – PM Dr Ramadhan / Citrex 2025 (Gold)
4	A Novel of Hybrid Asphalt as Modified Binder and Mixture – PM Dr Ramadhan
5	The Influence of Various Curing and Setting Times Towards the Performance of Nano Cold Mix Asphalt – PM Ir Dr Khairil Azman
