

TENDER DRAWING
(ARCHITECT)

ARCHITECTURAL MAIN DRAWING

CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN
PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT
DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

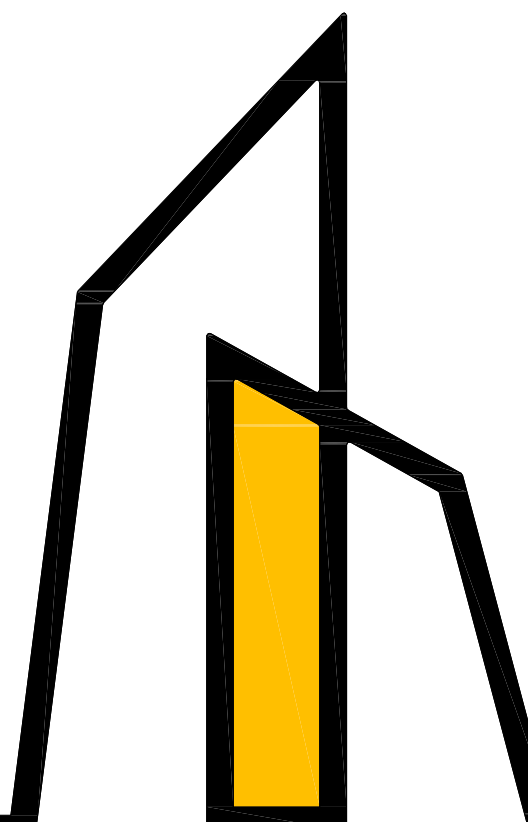


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Bahagian Binaan dan Selenggaraan,
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AZIZUL AZWAR ARCHITECT

NO. 10-2, 2ND. FLOOR, JALAN SP 6,
TAMAN SEMABOK PERDANA,
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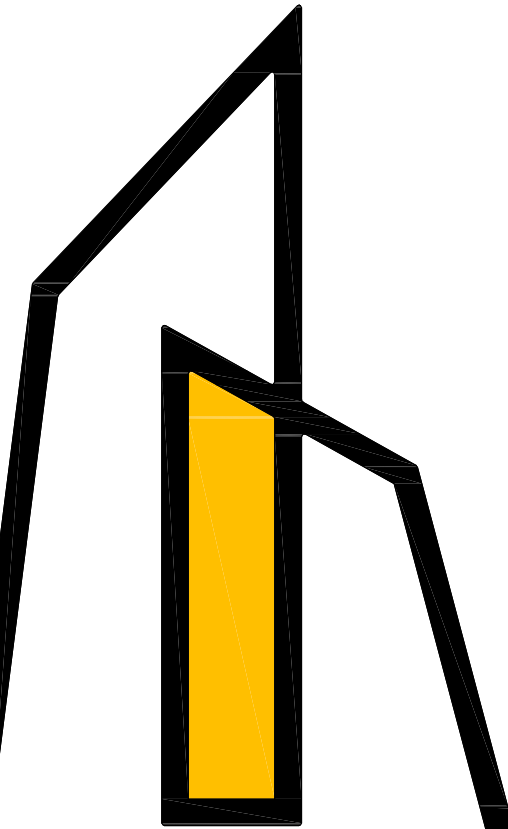
SENARAI LUKISAN
(ARCHITECTURAL MAIN DRAWING)

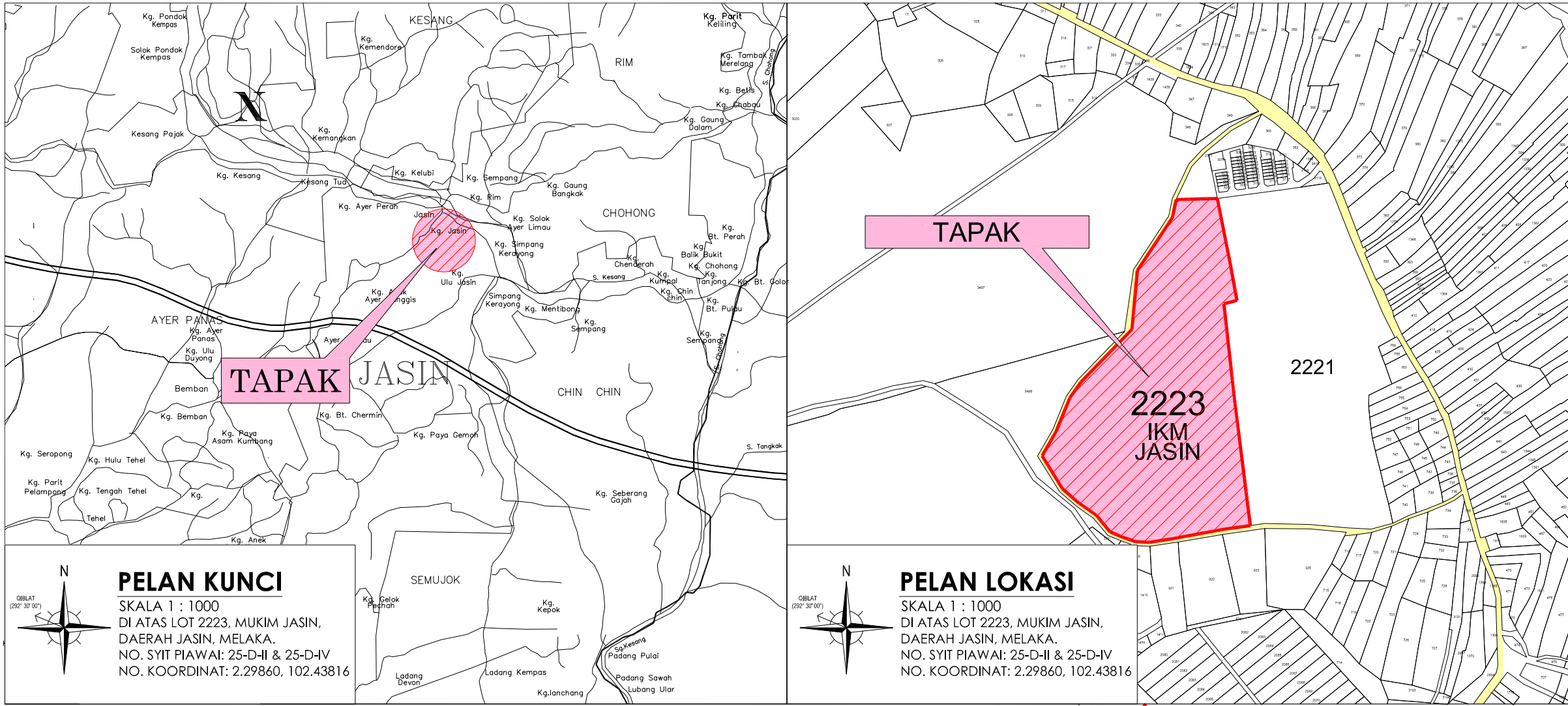
NO.	NO. LUKISAN	TAJUK LUKISAN
1.	AAA/374/2024/MD-01	PELAN KUNCI PELAN LOKASI PELAN TAPAK PELAN TAPAK 2
2.	AAA/374/2024/MD-02	PELAN LANTAI PELAN BUMBUNG PERINCIAN 'OIL INTERCEPTOR & OIL STORAGE TANK' PERINCIAN TANGKI SPAH RAJAH SKEMATIK PERPAIPAN DAN SANITARI
3.	AAA/374/2024/MD-03	KERATAN X-X KERATAN Y-Y PANDANGAN HADAPAN PANDANGAN BELAKANG PANDANGAN KIRI PANDANGAN KANAN

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NO. KUMPULAN	TAJUK PERHAL	MAKSUD BANGUNAN DICADANGKAN UNTUK DIGUNAKAN
II	INSTITUSIONAL	DIGUNAKAN SEBAGAI TEMPAT PENDIDIKAN

SYOR KEHENDAK-KEHENDAK PEPASANGAN SISTEM KESELAMATAN KEBAKARAN

Adalah saya sebagai **Orang Utama Yang Mengemukakan (PSP)** mencadangkan agar maksud utama penggunaan cadangan projek seperti di atas adalah dalam kumpulan Maksud **II, INSTITUSIONAL** dan keperluan kelengkapan keselamatan kebakaran adalah seperti berikut, [Keperluan kelengkapan keselamatan kebakaran hendaklah ditentukan mengikut UKBS 1984 pada sesuatu cadangan projek.]

PELAN TAPAK:

- Adakan 1 buah paip bomba jenis tiang dua hala dengan pengeluaran air sebanyak 1135 liter seminit bagi setiap paip bomba seperti mana yang ditandakan di dalam pelan.
- Paip bomba sedadua hendaklah dalam jarak 91.5 meter dan dalam keadaan baik.
- Adakan jalan masuk perkaras bomba (access road) dengan lebar tidak kurang 4 meter yang boleh menampung beban 30 tan seperti mana yang ditandakan di dalam pelan.
- Kecerunan jalan akses perkaras bomba hendaklah tidak kurang 1:1.5.
- Kelengkapan kelegakan hendaklah tidak kurang daripada 5 meter.
- Jarak antara bangunan hendaklah mematuhi Jadual Ke Enam UKBS 1984 / SBO By Laws

KEHENDAK-KEHENDAK AM:

- Semua pendawaian elektrik bagi sistem kecemasan hendaklah dipasang di dalam konduktif logam atau daripada kabel yang mempunyai penembal mineral tahan api. Pemasangan hendaklah sepanjang kawasan yang paling kurang risiko kebakarannya dan mematuhi uuk 253, UKBS 1984 / SBO By Laws 247.
- Semua elemen struktur hendaklah mempunyai tempoh ketahanan api mengikut UKBS 1984 / SBO By Laws.
- Semua paparan tanda keselamatan kebakaran hendaklah mematuhi MS 982, 1985, contohnya seperti senarai di bawah dan lain-lain tanda keselamatan yang berkaitan.
 - Pinlu optik ini hendaklah senifika ditutup
 - KELUAR
 - Alat Pemadam Api
- Adakan 'Graphic Design of Floor Plan' bertakar belakang warna putih yang menunjukkan tangga keselamatan, laluan-laluan keselamatan, jalan-jalan keluar dan kedudukan alat-alat pencegah kebakaran. Penempatannya hendaklah di tempat yang mudah dilihat.

PEPASANGAN KESELAMATAN KEBAKARAN (MEKANIKAL DAN ELEKTRIKAL):

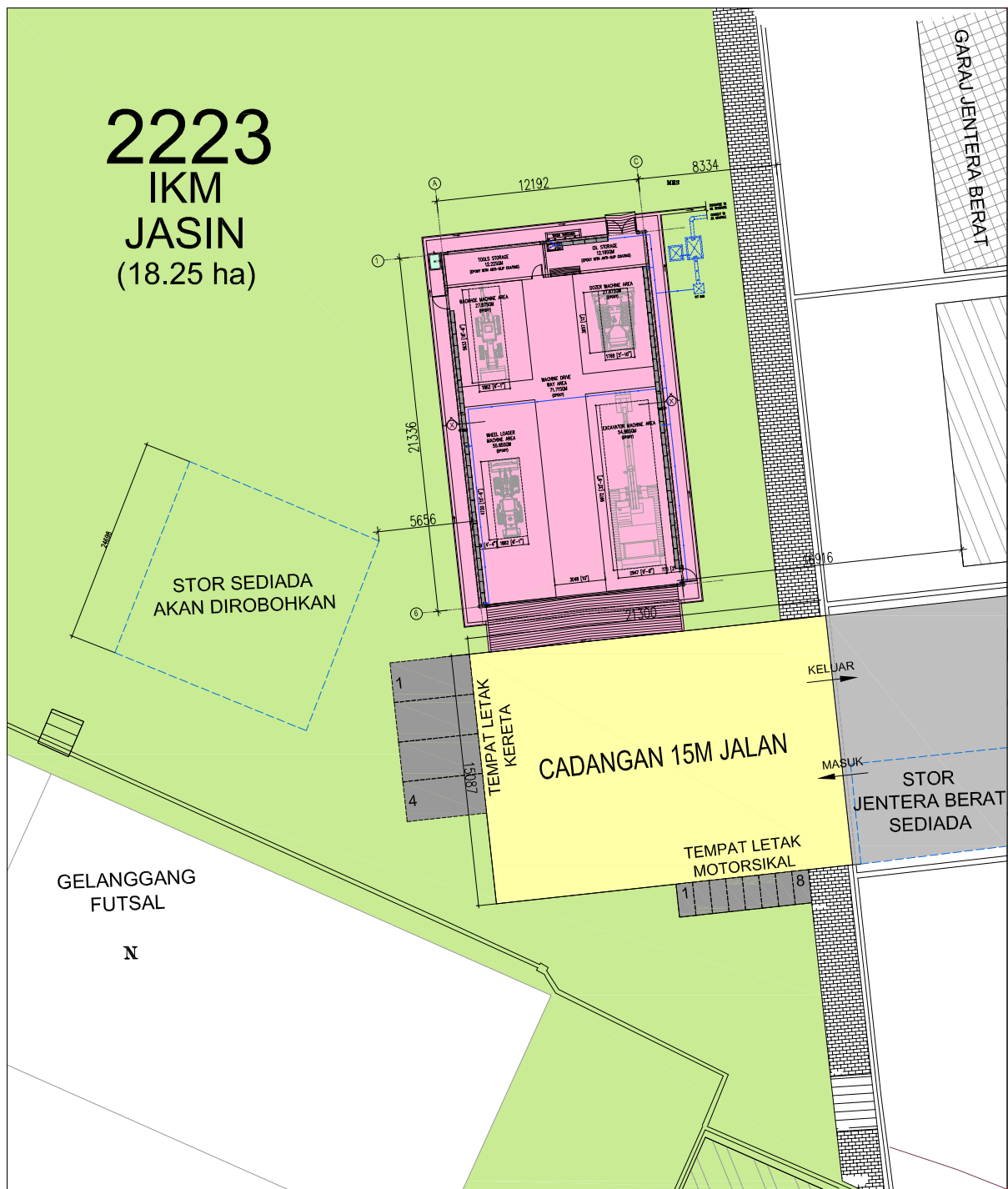
- Adakan 4 alat pemadam api yang bersesuaian menurut MS 1539: Part 1: 2002 seperti mana yang ditandakan di dalam pelan.
- Adakan 3 lampu tanda "KELUAR" kecemasan yang menggunakan dua kuasa karan seperti mana yang ditandakan di dalam pelan. Lampu-lampu tersebut hendaklah dari jenis yang dibenarkan oleh Jabatan Bomba dan Penyelamat, Malaysia.
- Adakan 4 lampu kecemasan yang menggunakan dua kuasa karan seperti mana yang ditandakan di dalam pelan. Lampu-lampu tersebut hendaklah dari jenis yang dibenarkan oleh Jabatan Bomba dan Penyelamat, Malaysia.

PEPASANGAN KESELAMATAN KEBAKARAN (ARKITEKTURAL):

- Selapa elemen struktur hendaklah ditunjukkan dan dinyatakan berdasarkan kepada UBBL 1984.
- Penggunaan tingg bangunan dan salutan permukaan dinding dalaman hendaklah mematuhi Pengelasan Seksyen Kemerebakkan Api dan menepati kehendak-kehendak Jadual Kelapan, UKBS 1984 / SBO By Laws.
- Semua dinding pembahagi dalaman hendaklah dari jenis rintangan ½ jam dan dari jenis yang dibenarkan oleh Jabatan Bomba dan Penyelamat, Malaysia.
- Pembinaan dinding luar dan pemasangan salutan (cladding) hendaklah berdasarkan peruntukan UBBL 1984. Rekabentuk, bahan dan spesifikasi salutan hendaklah dikemukakan.
- Pembinaan bumbung hendaklah berdasarkan UBBL 1984 serta mengemukakan secara spesifik rekabentuk dan bahan yang digunakan.

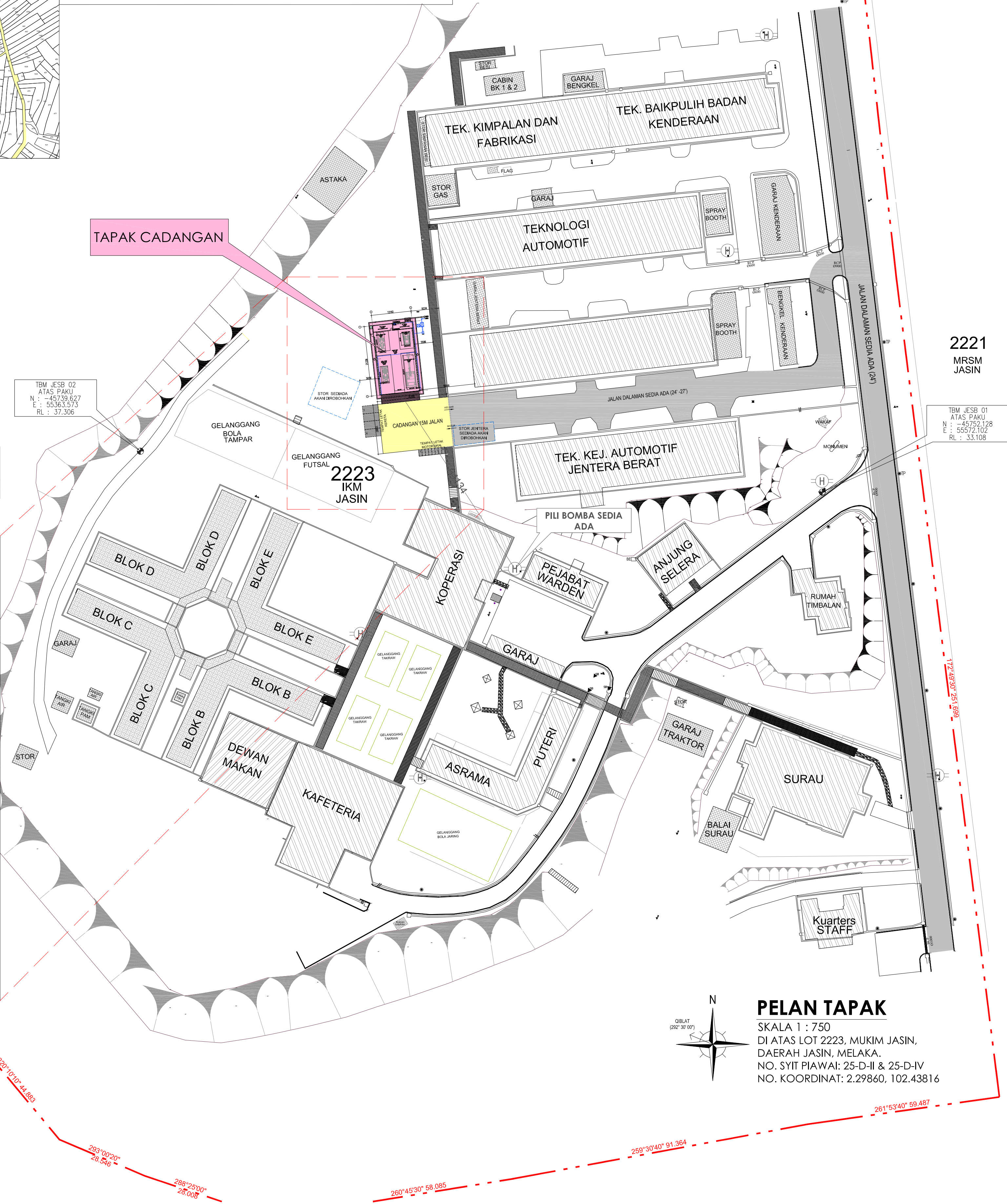
PERINGATAN:

- Segala syarat-syarat yang dikemukakan adalah tertakluk kepada rekabentuk dan kegunaan bangunan tersebut. Sekiranya terdapat sebarang perubahan yang dilakukan ke atas rekabentuk atau kegunaannya seperti yang dicatitkan di atas pelan, maka hendaklah diujuk ke Jabatan Bomba dan Penyelamat, Malaysia untuk dikaji semula.
- Segala pemilihan bahan dan penggunaannya yang berkaitan dengan keselamatan kebakaran bagi projek cadangan serta sistem pencegahan kebakaran hendaklah mematuhi UKBS 1984 / SBO By Laws dan peraturan-peraturan yang diterima sahaja yang dibenarkan oleh Jabatan Bomba dan Penyelamat, Malaysia.
- Penghasilan pelan ini adalah tidak tertakluk kepada penyimpanan, penggunaan, pemerosesan dan penghasilan bahan berbahaya atau kimia berbahaya. Sekiranya terdapat sebarang penyimpanan, penggunaan, pemerosesan dan penghasilan bahan berbahaya atau kimia berbahaya setelah pelan ditahkan maka pelan bangunan tersebut hendaklah diujuk kembali ke jabatan ini untuk dikaji semula.
- Pelan lukisan dan pengiraan bagi semua pemasangan tetap hendaklah dikemukakan ke Jabatan Bomba dan Penyelamat, Malaysia. Jumlah pelan-pelan yang dikemukakan hendaklah tidak kurang tiga perenggu.
- Mano-mano premis yang mengandungi, memproses atau menyimpan bahan-bahan bahaya hendaklah diadakan tanda khas mengikut simbol 'Hazchem Code'. Tanda-tanda ini hendaklah mudah dilihat.



PETUNJUK:-

- Bangunan Cadangan
- Jalan Dalamann Berturap
- Jalan Sedia Ada
- Kawasan Hijau
- Laluan Pejalan Kaki
- Jalan Konkrit Sedia Ada
- Laluan Pejalan Kaki Sedia Ada
- Tangga Sedia Ada
- Bangunan Sedia Ada
- Garaj/Star Sedia Ada
- Tebing Sedia Ada
- Pembetung Sedia Ada



NOTA :

TENDER DRAWING (ARCHITECT)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

REV.	DATE	DESCRIPTION	BY

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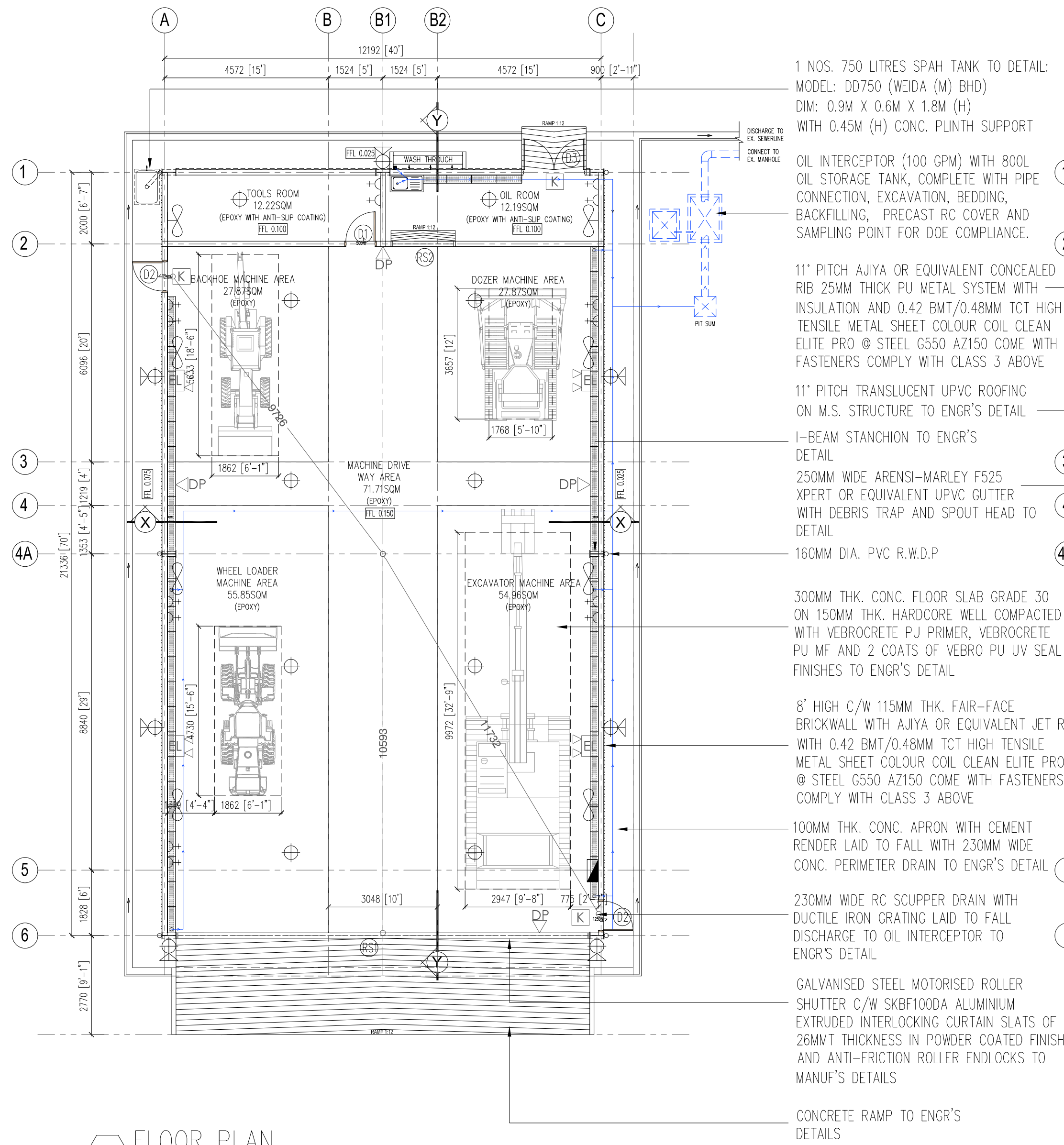
JURUKUR BAHAN :

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TAJUK LUKISAN :

PELAN KUNCI
PELAN LOKASI
PELAN TAPAK
PELAN TAPAK 2

DIREKA OLEH :	HAIRUL	DILUKIS OLEH :	ADIB
DISEMAK OLEH :	AR. AZIZUL	DILULUSKAN OLEH :	AR. AZIZUL
TARIKH :	24 JUN 2026	NO. LUKISAN :	
SKALA :	TERTERA		
PROJECT NO.	AAA/374/2024/MD-01	AG/0226/08	1/3



1 NOS. 750 LITRES SPAH TANK TO DETAIL:
MODEL: D0750 (WEIDA (M) BHD)
DIM: 0.9M X 0.6M X 1.8M (H)
WITH 0.45M (H) CONC. PLINTH SUPPORT

OIL INTERCEPTOR (100 GPM) WITH 800L
OIL STORAGE TANK, COMPLETE WITH PIPE
CONNECTION, EXCAVATION, BEDDING,
BACKFILLING, PRECAST RC COVER AND
SAMPLING POINT FOR DOE COMPLIANCE.

11' PITCH AJIYA OR EQUIVALENT CONCEALED
RIB 25MM THICK PU METAL SYSTEM WITH
INSULATION AND 0.42 BMT/0.48MM TCT HIGH
TENSILE METAL SHEET COLOUR COIL CLEAN
ELITE PRO @ STEEL G550 AZ150 COME WITH
FASTENERS COMPLY WITH CLASS 3 ABOVE

11' PITCH TRANSLUCENT UPVC ROOFING
ON M.S. STRUCTURE TO ENGR'S DETAIL

I-BEAM STANCHION TO ENGR'S
DETAIL

250MM WIDE ARENSI-MARLEY F525
XPRT OR EQUIVALENT UPVC GUTTER
WITH DEBRIS TRAP AND SPOUT HEAD TO
DETAIL

160MM DIA. PVC R.W.D.P

300MM THK. CONC. FLOOR SLAB GRADE 30
ON 150MM THK. HARDWARE WELL COMPACTED
WITH VEBROCRETE PU PRIMER, VEBROCRETE
PU MF AND 2 COATS OF VEBRO PU UV SEAL
FINISHES TO ENGR'S DETAIL

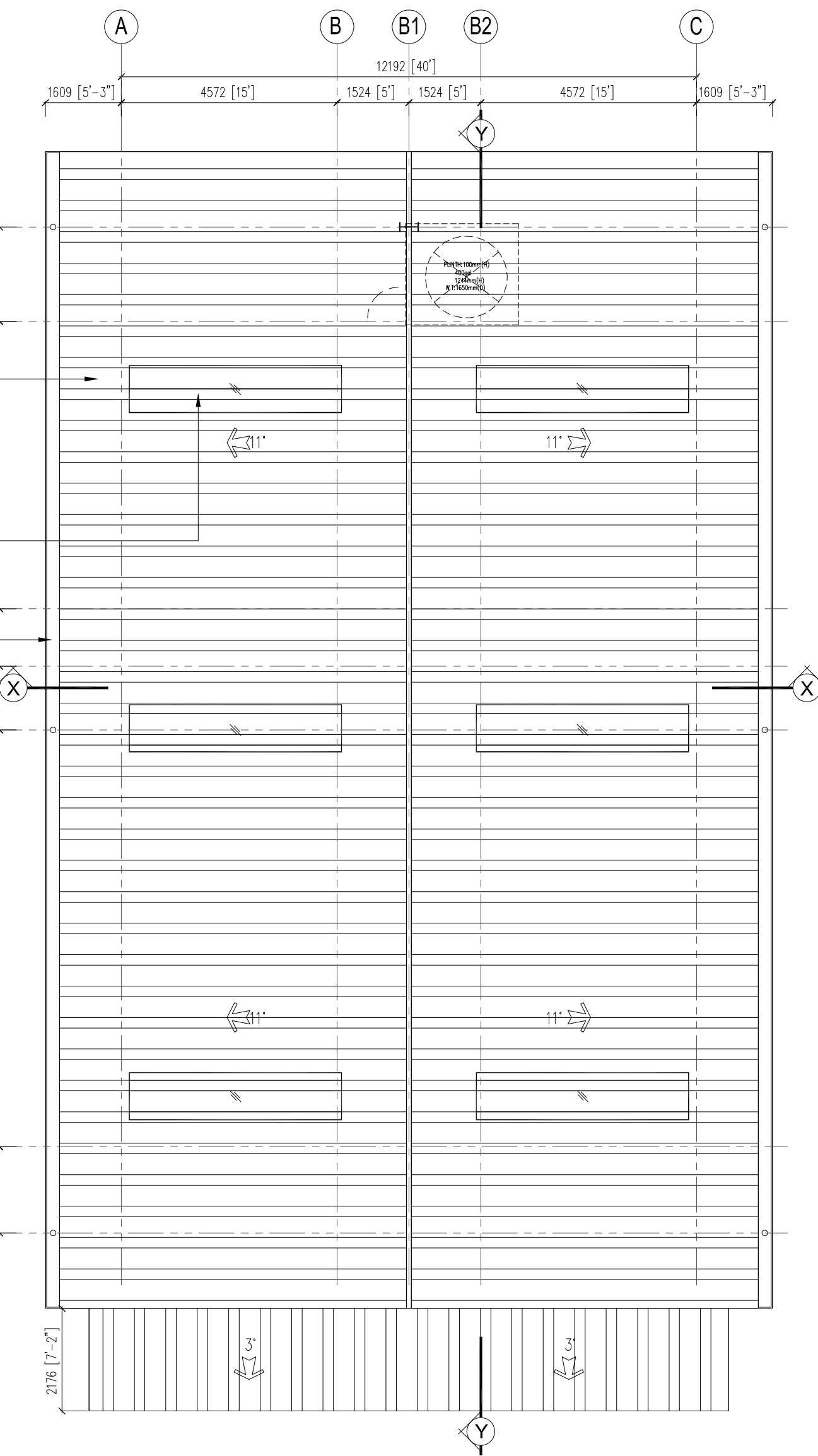
8' HIGH C/W 115MM THK. FAIR-FACE
BRICKWALL WITH AJIYA OR EQUIVALENT JET RIB
WITH 0.42 BMT/0.48MM TCT HIGH TENSILE
METAL SHEET COLOUR COIL CLEAN ELITE PRO
@ STEEL G550 AZ150 COME WITH FASTENERS
COMPLY WITH CLASS 3 ABOVE

100MM THK. CONC. APRON WITH CEMENT
RENDER LAID TO FALL WITH 230MM WIDE
CONC. PERIMETER DRAIN TO ENGR'S DETAIL

230MM WIDE RC SCUPPER DRAIN WITH
DUCTILE IRON GRATING LAID TO FALL
DISCHARGE TO OIL INTERCEPTOR TO
ENGR'S DETAIL

GALVANISED STEEL MOTORISED ROLLER
SHUTTER C/W SKBF100DA ALUMINIUM
EXTRUDED INTERLOCKING CURTAIN SLATS OF
26MMT THICKNESS IN POWDER COATED FINISH
AND ANTI-FRICTION ROLLER ENDLOCKS TO
MANUF'S DETAILS

CONCRETE RAMP TO ENGR'S
DETAILS



BOMBA LEGEND:

SYMBOL	DESCRIPTION	TOTAL
	TWIN HEAD EMERGENCY LIGHT	4
	'KELUAR' SIGN	3
	ABC DRY POWDER FIRE EXTINGUISHER	4

LEGEND OF ELECTRICAL LAYOUT:

SYMBOL	DESCRIPTION	QUANTITY
	LIGHT POINT	10
	WALL LIGHT POINT	7
	24" WALL FAN POINT	8
	POWER POINT 13A	14
	DISTRIBUTION BOARD	1

SCHEDULE OF AREA:

NO.	AREA/ROOM	OPEN AREA	CLOSE AREA
1)	EXCAVATOR MACHINE AREA	-	54.96 sq.m
2)	WHEEL LOADER MACHINE AREA	-	54.96 sq.m
3)	DOZER MACHINE AREA	-	27.87 sq.m
4)	BACKHOE MACHINE AREA	-	27.87 sq.m
5)	MACHINE DRIVEWAY AREA	-	70.08 sq.m
6)	TOOLS ROOM	-	12.19 sq.m
7)	OIL ROOM	-	12.19 sq.m
TOTAL AREA		-	260.12 sq.m

TOTAL AREA	260.12 sq.m
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DOOR AND WINDOW SCHEDULE:

TYPE	SPECIFICATION	UNIT (S)	DIMENSION (W x H)
D1	MS FRAME SINGLE LEAF TIMBER FLUSH DOOR TO MANUF'S DETAIL	1	900mm x 2100mm
D2	MS FRAME SINGLE LEAF TIMBER FLUSH DOOR TO MANUF'S DETAIL	2	900mm x 2100mm
D3	MS FRAME DOUBLE LEAF TIMBER FLUSH DOOR TO MANUF'S DETAIL	1	1800mm x 2100mm
RS1	GALVANISED STEEL MOTORISED ROLLER SHUTTER C/W SKBF100DA ALUMINIUM EXTRUDED INTERLOCKING CURTAIN SLATS OF 26MMT THK. IN POWDER COATED FINISH AND ANTI-FRICTION ROLLER ENDLOCKS TO MANUF'S DETAIL	1	11562mm x 6000mm
RS2	GALVANISED STEEL ROLLER SHUTTER TO MANUF'S DETAIL	1	1800mm x 2100mm

NATURAL LIGHTING AND VENTILATION CALCULATION:

AREA/ROOM	AREA (sq.m)	NATURAL LIGHTING CALCULATION (10%)		FREE AIR FLOW CALCULATION (5%)	
		REQUIRED (10%)	PROVIDED	REQUIRED (5%)	PROVIDED
HEAVY MACHINE & DRIVE WAY AREA	71.71 sq.m	7.17 sq.m	109.50	3.59 sq.m	82.50
TOOLS ROOM	12.19 sq.m	1.22 sq.m	4.27	0.61 sq.m	4.27
OIL ROOM	12.19 sq.m	1.22 sq.m	4.27	0.61 sq.m	4.27

NOTA :

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(ARCHITECT)

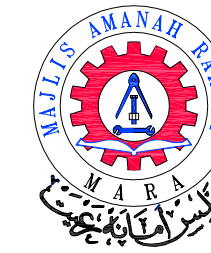
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KERJA - KERJA BERKAITAN BAGI
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JENTERA BERAT DI INSTITUT KEMAHIRAN
MARA (IKM) JASIN, MELAKA.

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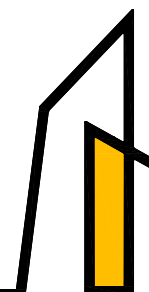
REV.	DATE	DESCRIPTION	BY

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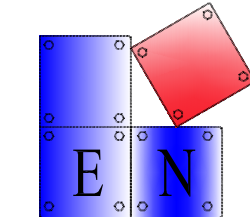
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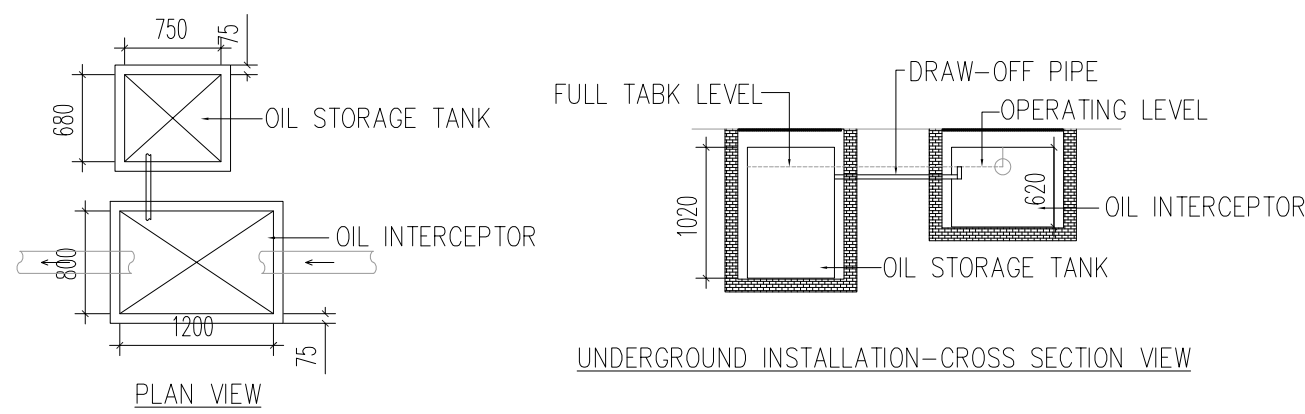
PELAN LANTAI
PELAN BUMBUNG
PERINCIAN 'OIL INTERCEPTOR & OIL STORAGE TANK'
PERINCIAN TANGKI SPAH
RAJAH SKEMATIK PERPAIPAN DAN SANITARI

DIREKA OLEH :	HAIRUL	DILUKIS OLEH :	ADIB
DISEMAK OLEH :	AR. AZIZUL	DILULUSKAN OLEH :	AR. AZIZUL
TARIKH :	24 JUN 2026	NO. LUKISAN :	
SKALA :	1:100	PROJECT NO.	AAA/374/2024/IMD-02
			AG/0226/08

2/3

DETAIL OF OIL INTERCEPTOR & OIL STORAGE TANK

NOT TO SCALE



LAKASA Oil Interceptor Data

Model	Flowrate (GPM)	Flowrate (litre/sec)	weight full (kg)	Length A (mm)	Width B (mm)	Height C (mm)	Pipe Size (mm)	E (mm)	F (mm)
LK3075A	75	5.68	550	1200	800	620	100	130	490

Oil Storage Tank Data

Model	Capacity (litres)	Length (mm)	Width (mm)	Height (mm)
LS0500	500	750	680	1110

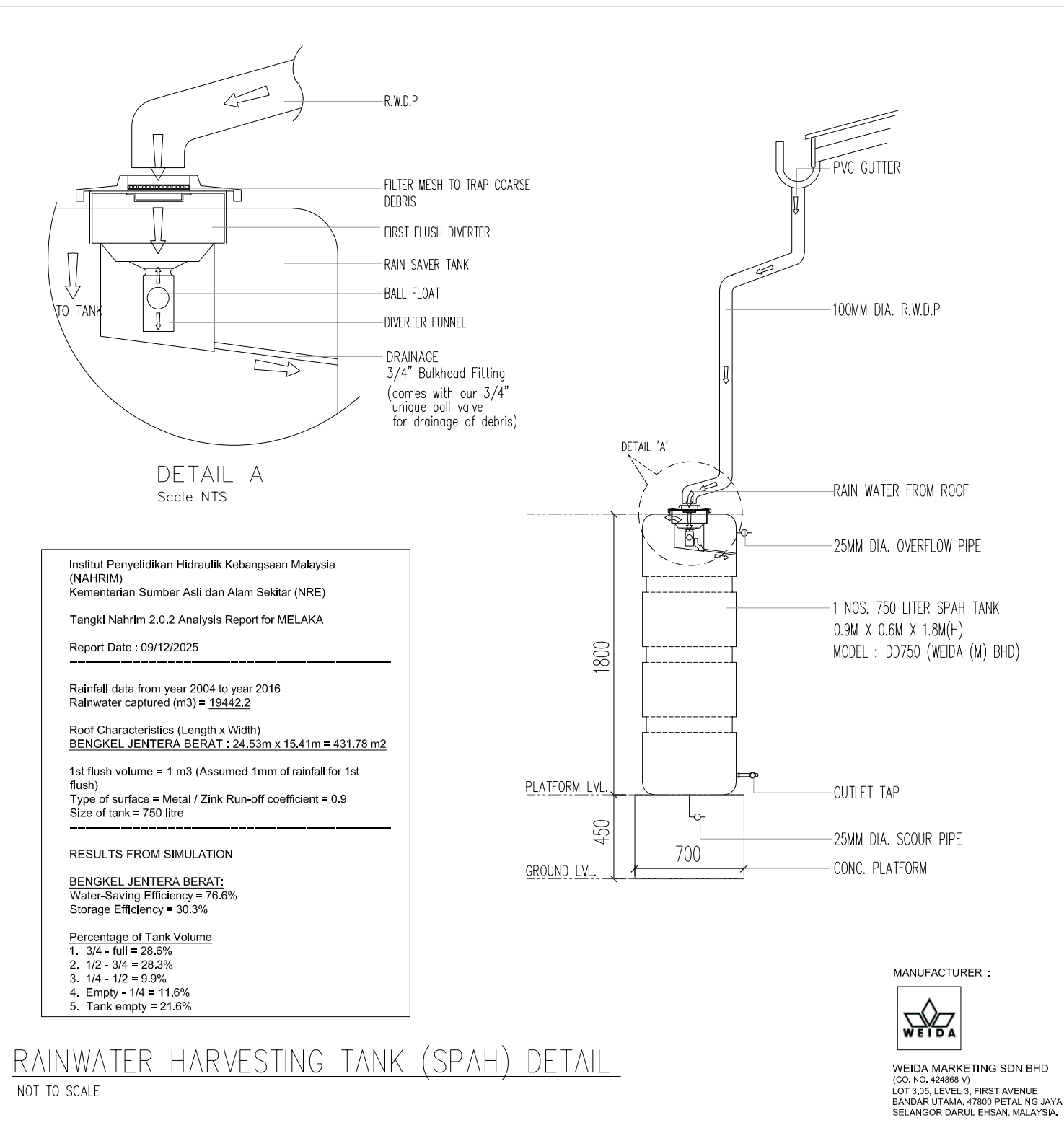
LEGEND

SYMBOL	TYPE	COLOUR
	25MM. (1") # POLY 'STEEL' RISING PIPE	RED
	20MM. (3/4") # UPVC - CLASS 'D' SUPPLY PIPE	GREEN
	20MM. (3/4") # UPVC - CLASS 'D' DISTRIBUTION PIPE	GREEN
	12.5MM. (1/2") # UPVC - CLASS 'D' SERVICE PIPE	YELLOW

SYARAT-SYARAT:-

- Paip-paip poly steel hendaklah digunakan daripada paip utama hingga ke tangki simpanan air.
- Paip-paip PVC Kelas 'C' dibenarkan dipasang di kawasan dalam bangunan sahaja.
- Paip-paip PVC Kelas 'D' dibenarkan sekiranya ditanam.
- Pemassangan meter hendaklah diantara parit dan pagar.
- Tangki simpanan air hendaklah jenis yang diluluskan dan ditutup.

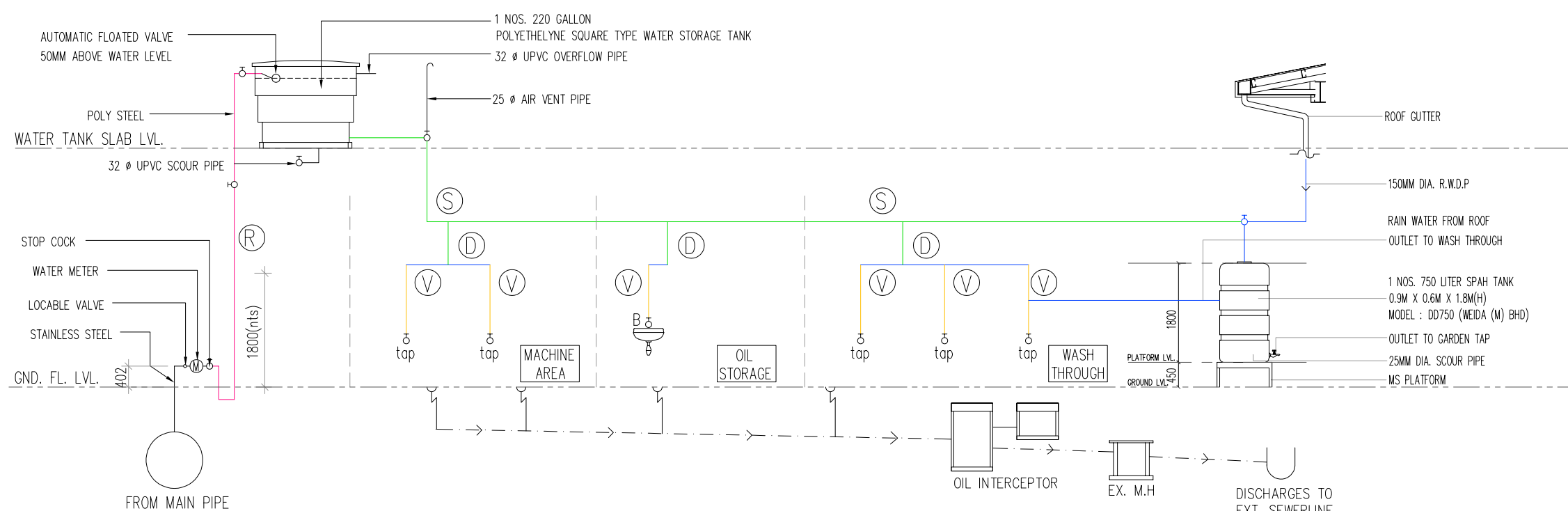
NOTE : ALL PIPES TO BE CONCEALED

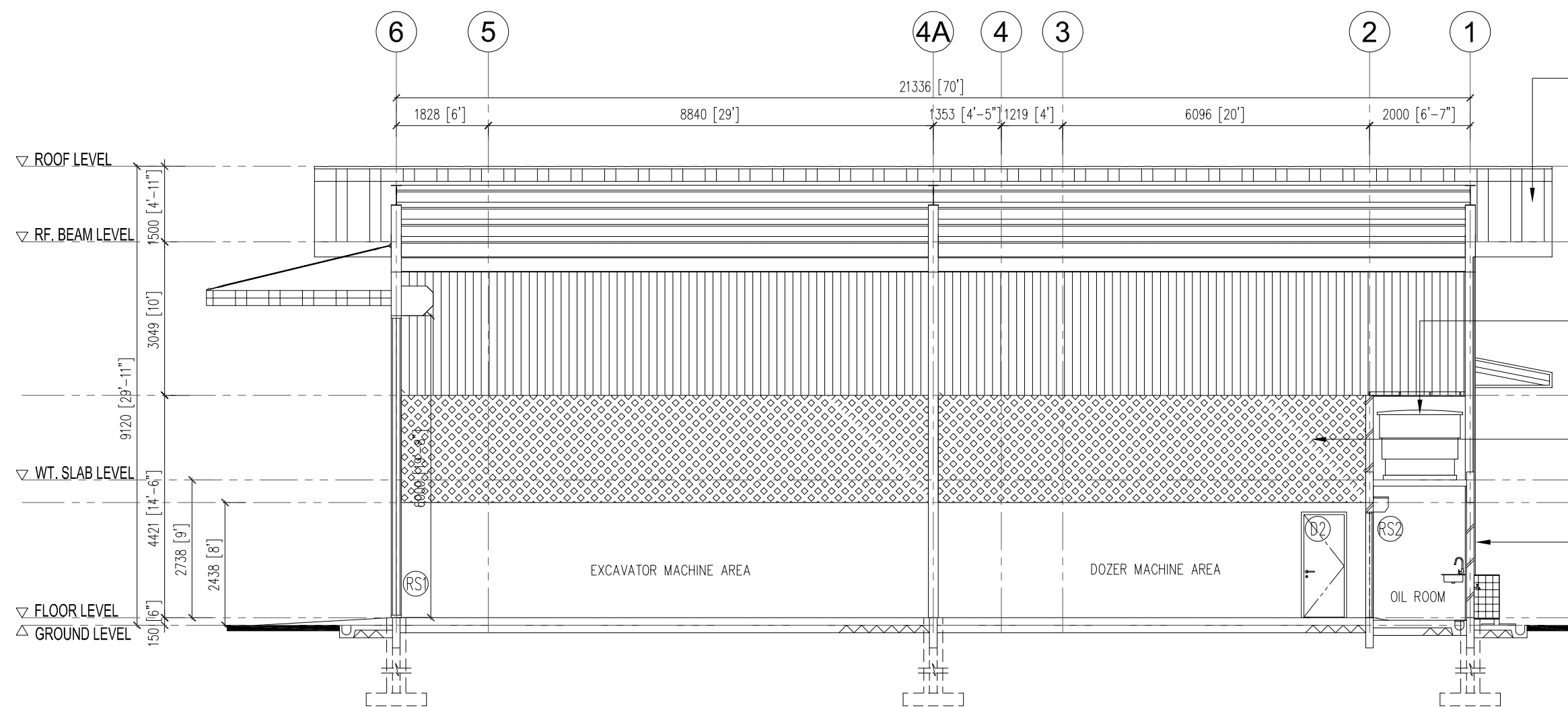


Institut Penyelidikan Hidraulik Kebangsaan Malaysia (NAHRIM) Kementerian Sumber Air dan Alam Sekitar (NRE) Tangki Nahrin 2.0.2 Analysis Report for MELAKA Report Date : 09/12/2025 Rainfall data from year 2004 to year 2016 Rainwater captured (m3) = 19442.2 Roof Characteristics (Length x Width) BENGKEL JENTERA BERAT : 24.53m x 15.41m = 431.78 m2 1st flush volume = 1 m3 (Assumed 1mm of rainfall for 1st flush) Type of surface = Metal / Zinc Run-off coefficient = 0.9 Size of tank = 750 ltr RESULTS FROM SIMULATION Water-Saving Efficiency = 76.6% Storage Efficiency = 32.3% Percentage of Tank Volume 1. 3/4 - full = 28.6% 2. 1/2 - 3/4 = 28.2% 3. 1/4 - 1/2 = 9.9% 4. Empty - 1/4 = 11.6% 5. Tank empty = 21.6%
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DIAGRAMMATIC OF PLUMBING & SANITARY LAYOUT

NOT TO SCALE





SECTION Y-Y
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100

11" PITCH AJIYA OR EQUIVALENT CONCEALED RIB 25MM THICK PU METAL SYSTEM WITH INSULATION AND 0.42 BMT/0.48MM TCT HIGH TENSILE METAL SHEET COLOUR COIL CLEAN ELITE PRO @ STEEL G550 AZ150 COME WITH FASTENERS COMPLY WITH CLASS 3 ABOVE

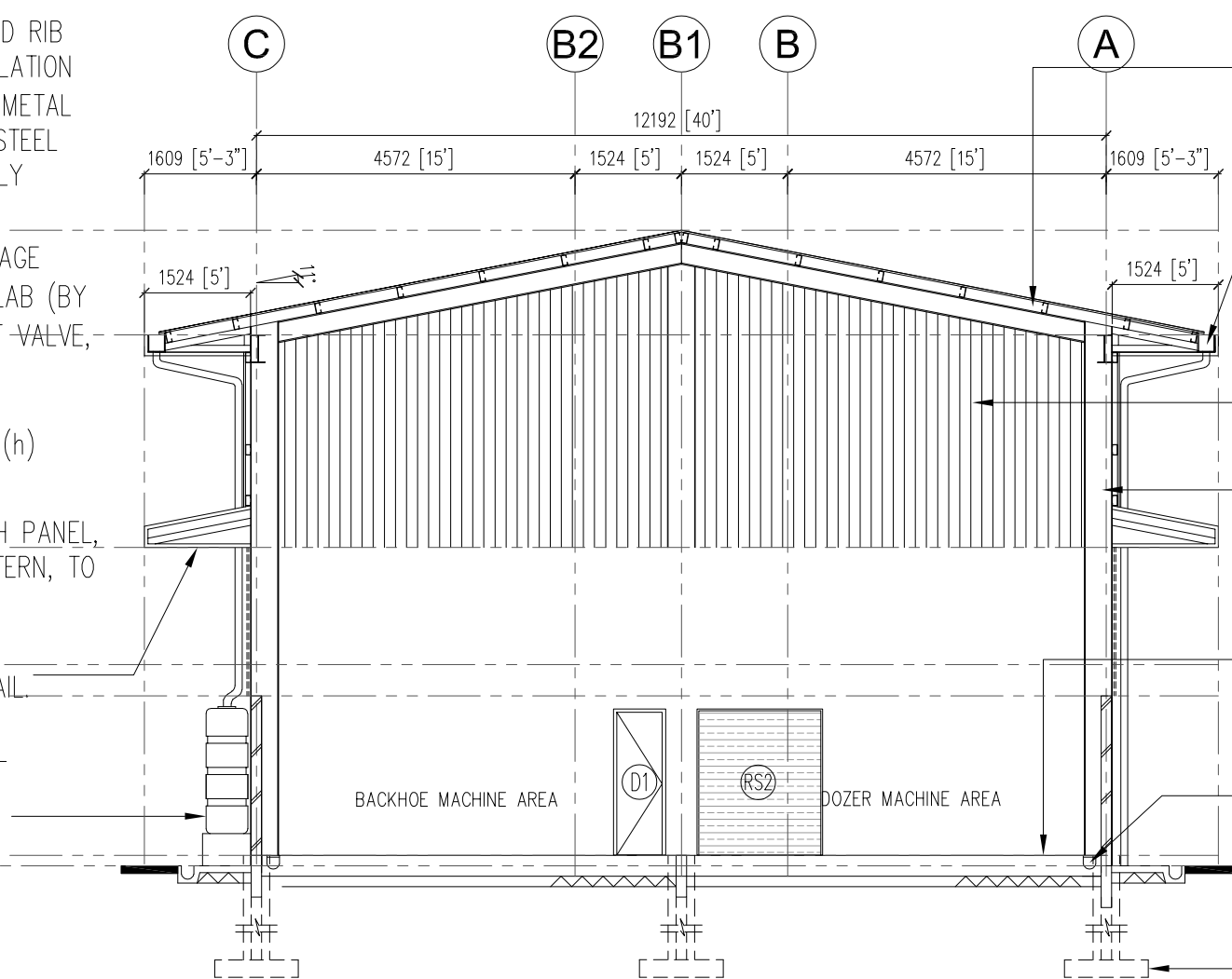
POLYETHYLENE SQUARE TYPE WATER STORAGE TANK, MOUNTED ON R.C BEAM/PLINTHS/SLAB (BY OTHERS) - 6" W 25Ø VENT PIPE, BALL-FLOAT VALVE, 32Ø OVERFLOW & SCOUR PIPE
CAP.TANK: 220 gall. x 1 UNIT
SIZE : 1400mm(l) x 1400mm(w) x 900mm(h)
PLINTH:100mm x 50mm x 3mm thk.

HOT-DIPPED GALVANISED STEEL WIRE MESH PANEL, MIN. 3.0MM DIA. WIRE, WITH DIAMOND PATTERN, TO BE PAINTED BLACK TO MANUF'S DETAIL

11" PITCH METAL DECK AWNING ROOF ON LIGHTWEIGHT STEEL TRUSS TO ENGR'S DETAIL

8" HIGH 115MM THK. FAIR-FACE BRICKWALL

1 NOS. 750 LITRES SPAH TANK TO DETAIL
MODEL: DD750. (WEIDA (M.) BHD)
DIM: 0.9M X 0.6M X 1.8M (H)
WITH 0.45M (H) CONC. PLINTH SUPPORT



SECTION X-X
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100

MS ROOF PORTAL FRAME STRUCTURE TO ENGR'S DETAIL

250MM WIDE ARENSI-MARLEY F525 XPRT OR EQUIVALENT UPVC GUTTER WITH DEBRIS TRAP AND SPOUT HEAD TO DETAIL

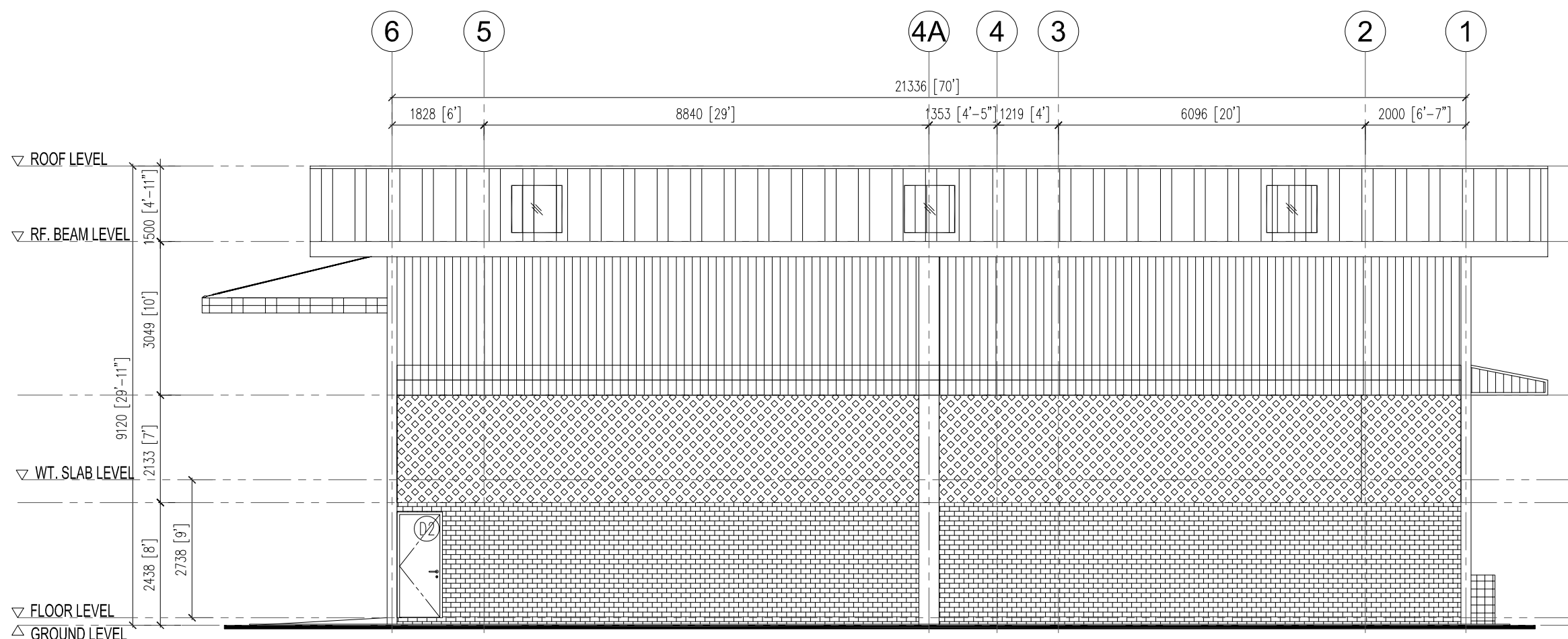
10" HIGH AJIYA OR EQUIVALENT JET RIB WITH 0.42 BMT/0.48MM TCT HIGH TENSILE METAL SHEET COLOUR COIL CLEAN ELITE PRO @ STEEL G550 AZ150 COME WITH FASTENERS COMPLY WITH CLASS 3 ABOVE

I-BEAM STANCHION TO ENGR'S DETAIL

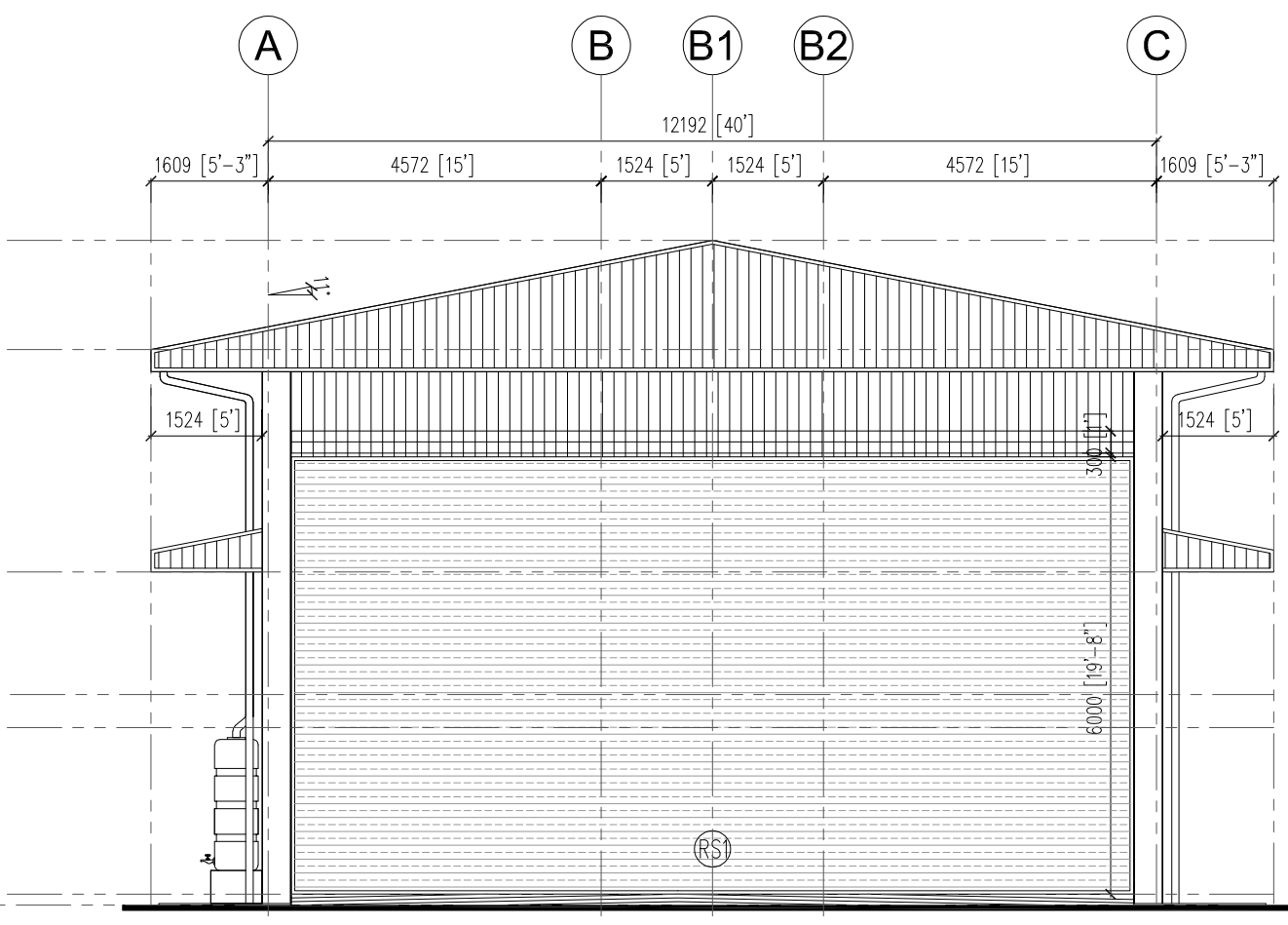
300MM THK. CONC. FLOOR SLAB GRADE 30 ON 150MM THK. HARDCORE WELL COMPACTED WITH VEBROCRETE PU PRIMER, VEBROCRETE PU MF AND 2 COATS OF VEBRO PU UV SEAL FINISHES TO ENGR'S DETAIL

230MM WIDE RC SCUPPER DRAIN WITH DUCTILE IRON GRATING LAID TO FALL DISCHARGE TO OIL INTERCEPTOR TO ENGR'S DETAIL

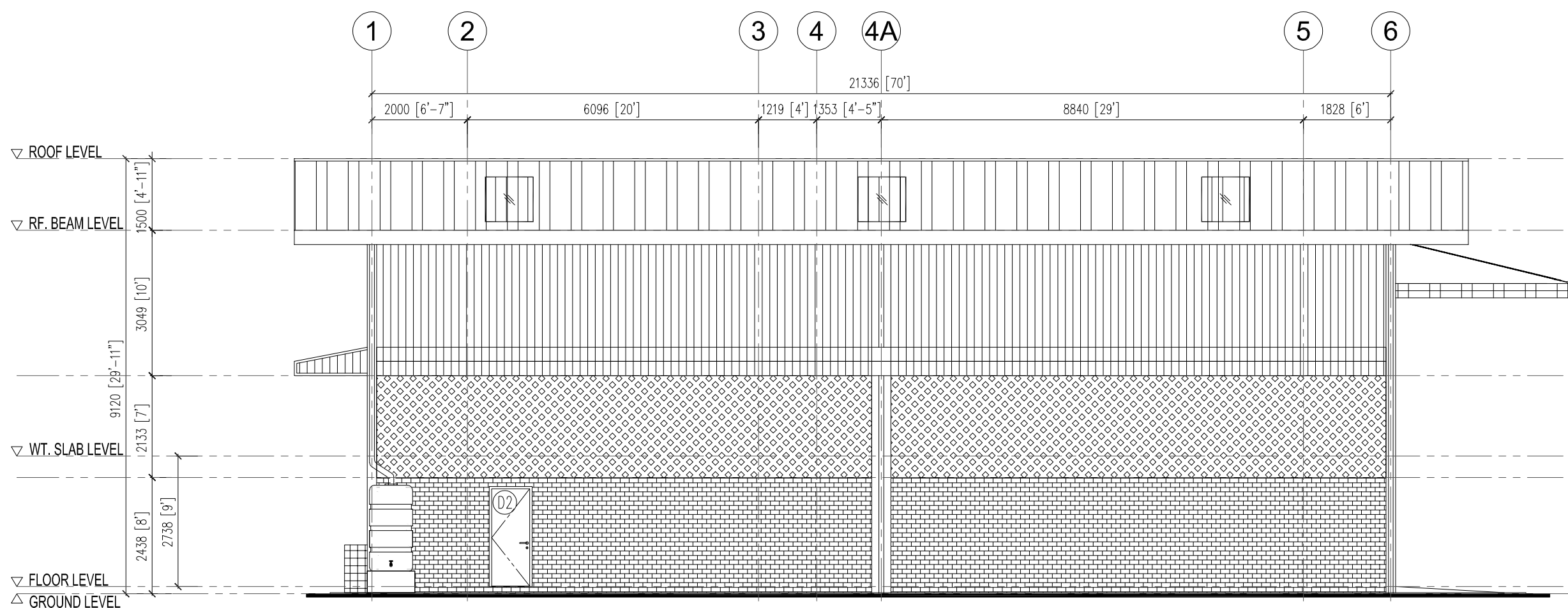
RC FOUNDATION TO ENGR'S DETAIL



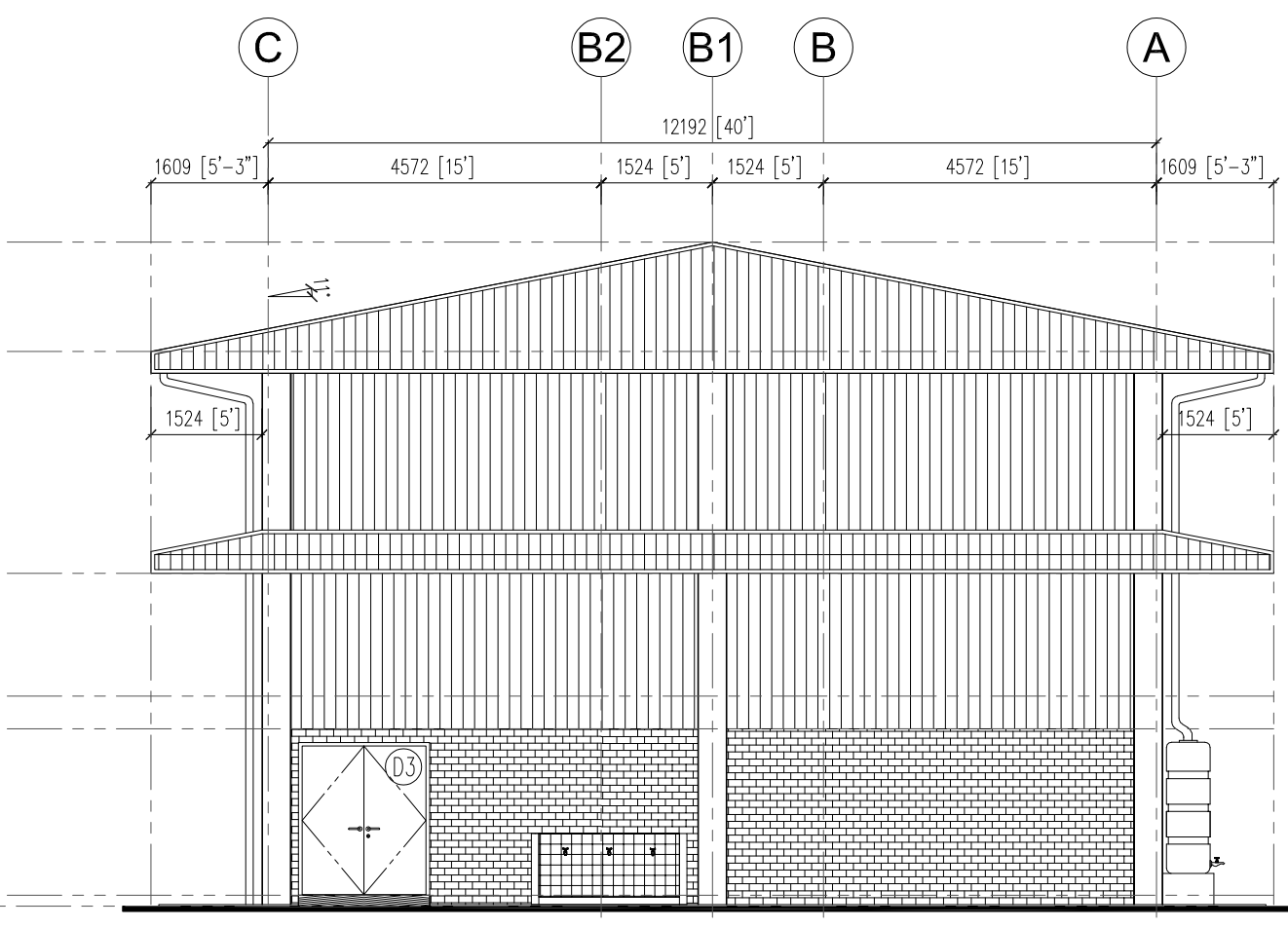
RIGHT ELEVATION
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100



FRONT ELEVATION
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100



LEFT ELEVATION
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100



REAR ELEVATION
HEAVY MACHINERY WORKSHOP (260.125QM/27995QFT)
SCALE 1:100

NOTA :

TENDER DRAWING
(ARCHITECT)

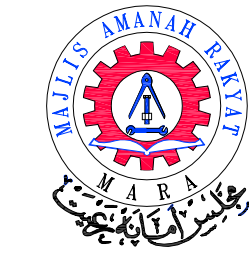
PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

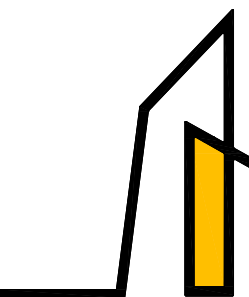
NOTA :

REV.	DATE	DESCRIPTION	BY

PEMILIK :

**MAJLIS AMANAH RAKYAT**
Bahagian Binaan dan Selenggaraan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

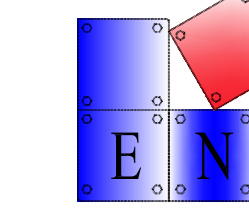
ARKITEK :

**AZIZUL AZWAR ARCHITECT**
No. 10-2, 2nd, Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
016-421 2703
aaarchitect.adm@gmail.com

JURUTERA C&S :

**A.KHIR.HAKIM PERUNDING**
No. 26, Jalan Pulau Indah
U10/59, Taman Subang Impian,
40170 Shah Alam, Selangor.
019-303 1439
akhakimin@gmail.com

JURUTERA M&E :

**ENHILL CONSULTANT**
9-1, Jalan PM 1/1, Taman Pandan Mawar,
Jalan Dato' Wiria Poh Ah Tiam,
75250 Melaka.
06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :

**QUANTICOS SDN. BHD.**
1B-2, 2nd Floor, Jalan Wawasan 4/1,
Bandar Baru Ampang,
68000 Ampang, Selangor.
03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :

KERATAN X-X & KERATAN Y-Y
PANDANGAN HADAPAN & PANDANGAN BELAKANG
PANDANGAN KIRI & PANDANGAN KANAN

DIREKA OLEH :	HAIRUL	DILUKIS OLEH :	ADIB
DISEMAK OLEH :	AR, AZIZUL	DILULUSKAN OLEH :	AR, AZIZUL
TARIKH :	24 JUN 2026	NO. LUKISAN :	
SKALA :	1:100	PROJECT NO.	AAA/374/2024/MD-03
			AG/0226/08

TENDER DRAWING
(ARCHITECT)

ARCHITECTURAL DETAIL DRAWING

CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN
PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT
DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

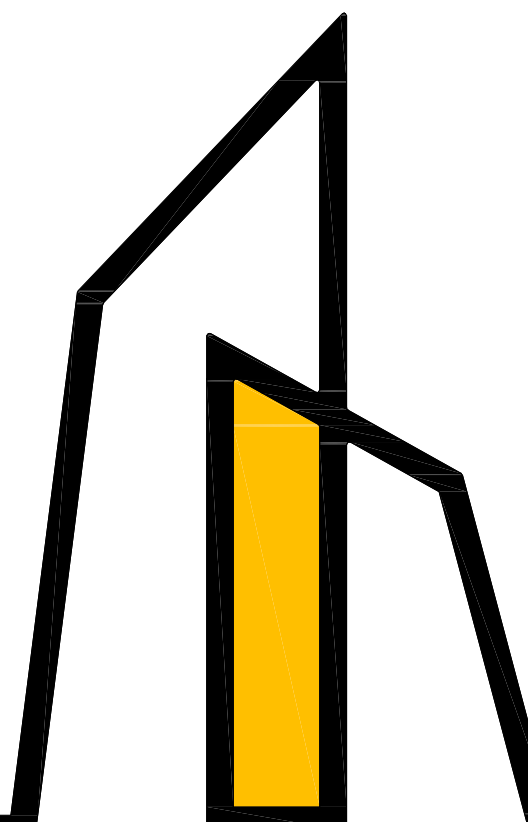


MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

AZIZUL AZWAR ARCHITECT

NO. 10-2, 2ND. FLOOR, JALAN SP 6,
TAMAN SEMABOK PERDANA,
SEMABOK, 75050 MELAKA.

+606-2888 827
+6016-421 2703
aaarchitect.adm@gmail.com



TENDER DRAWING
(ARCHITECT)

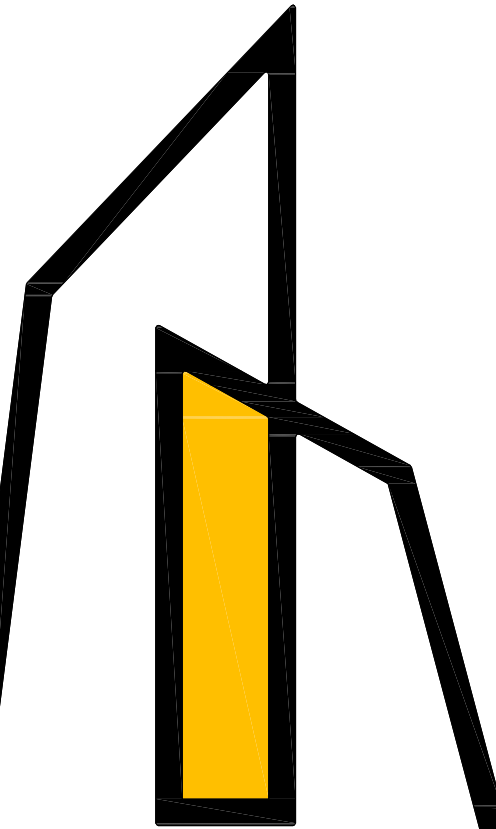
SENARAI LUKISAN
(ARCHITECTURAL DETAIL DRAWING)

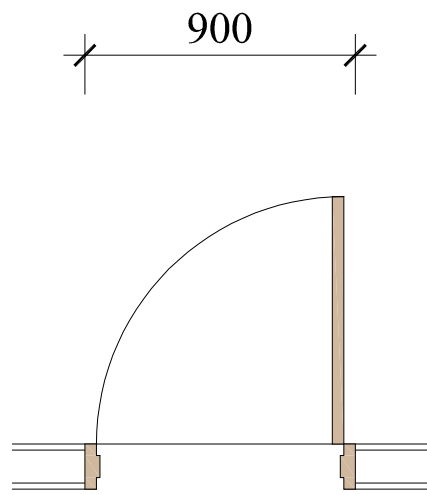
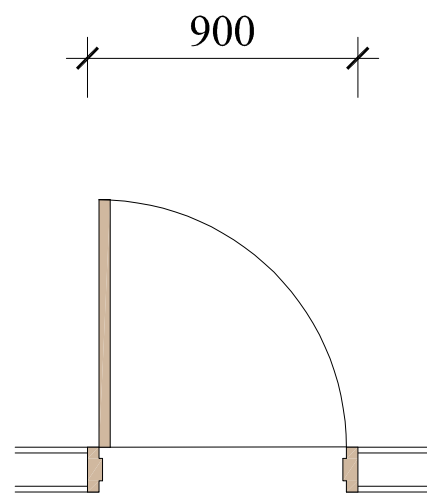
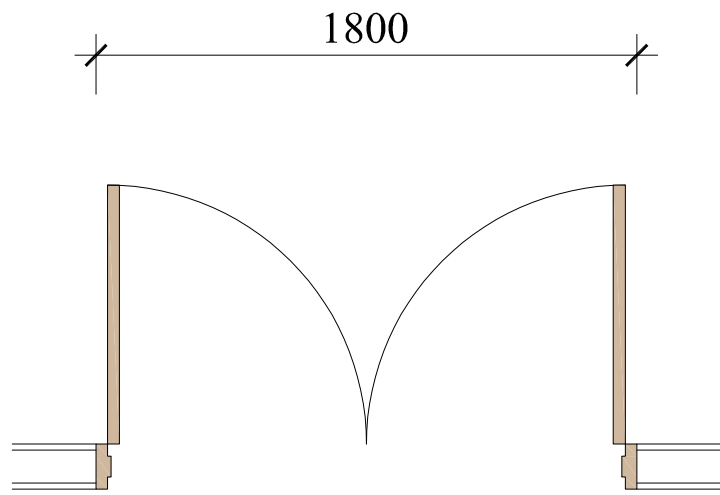
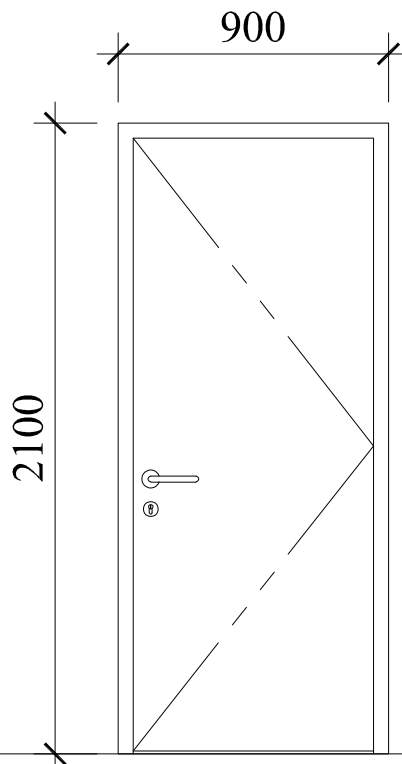
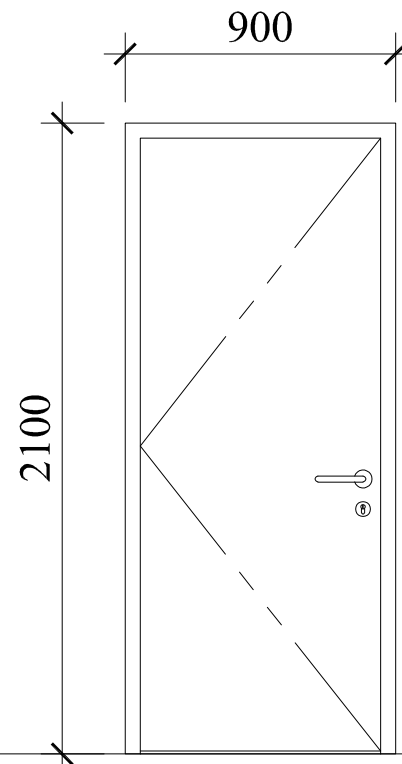
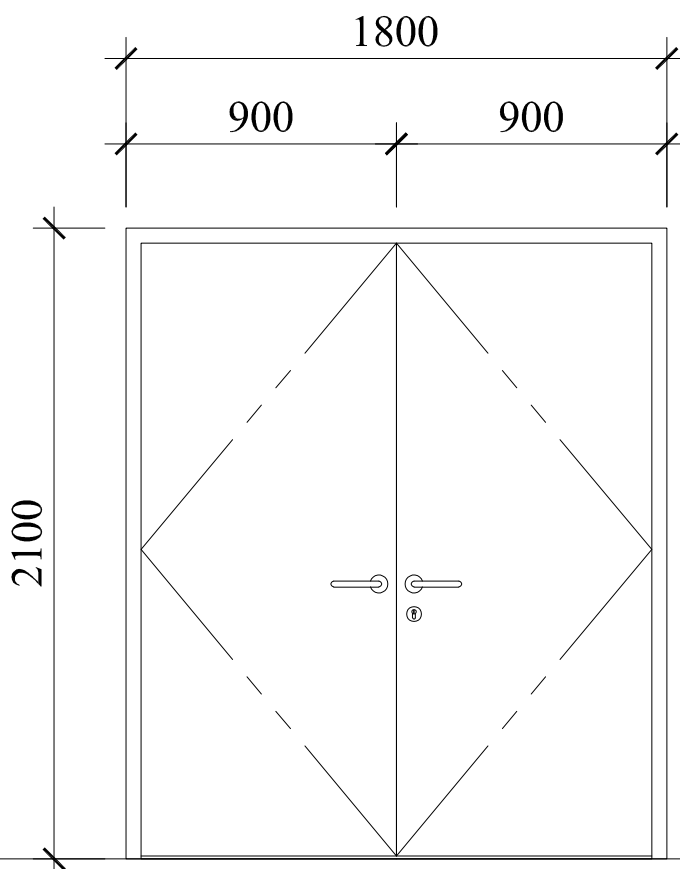
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2.	AAA/374/2024/D-02A AAA/374/2024/D-02B AAA/374/2024/D-02C	PELAN SILING PERINCIAN SILING 1 PERINCIAN SILING 2
3.	AAA/374/2024/D-03A AAA/374/2024/D-03B AAA/374/2024/D-03C	PERINCIAN BUMBUNG 1 PERINCIAN BUMBUNG 2 PERINCIAN BUMBUNG 3
4.	AAA/374/2024/D-04A AAA/374/2024/D-04B	PERINCIAN KEMASAN LANTAI 1 PERINCIAN KEMASAN LANTAI 2
5.	AAA/374/2024/D-05	PERINCIAN BILIK PERALATAN DAN BILIK PENYIMPANAN MINYAK
6.	AAA/374/2024/D-06	PERINCIAN SISTEM LAPISAN KALIS AIR
7.	AAA/374/2024/D-07	PERINCIAN PAPAN TANDA PROJEK

AZIZUL AZWAR ARCHITECT

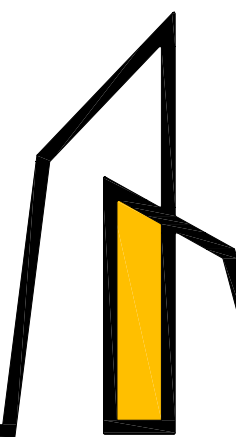
NO. 10-2, 2ND. FLOOR, JALAN SP 6,
TAMAN SEMABOK PERDANA,
SEMABOK, 75050 MELAKA.

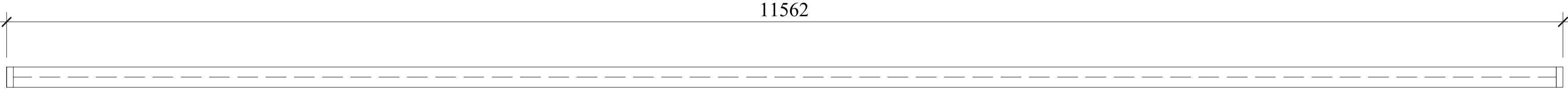
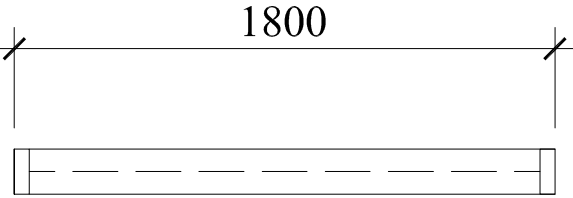
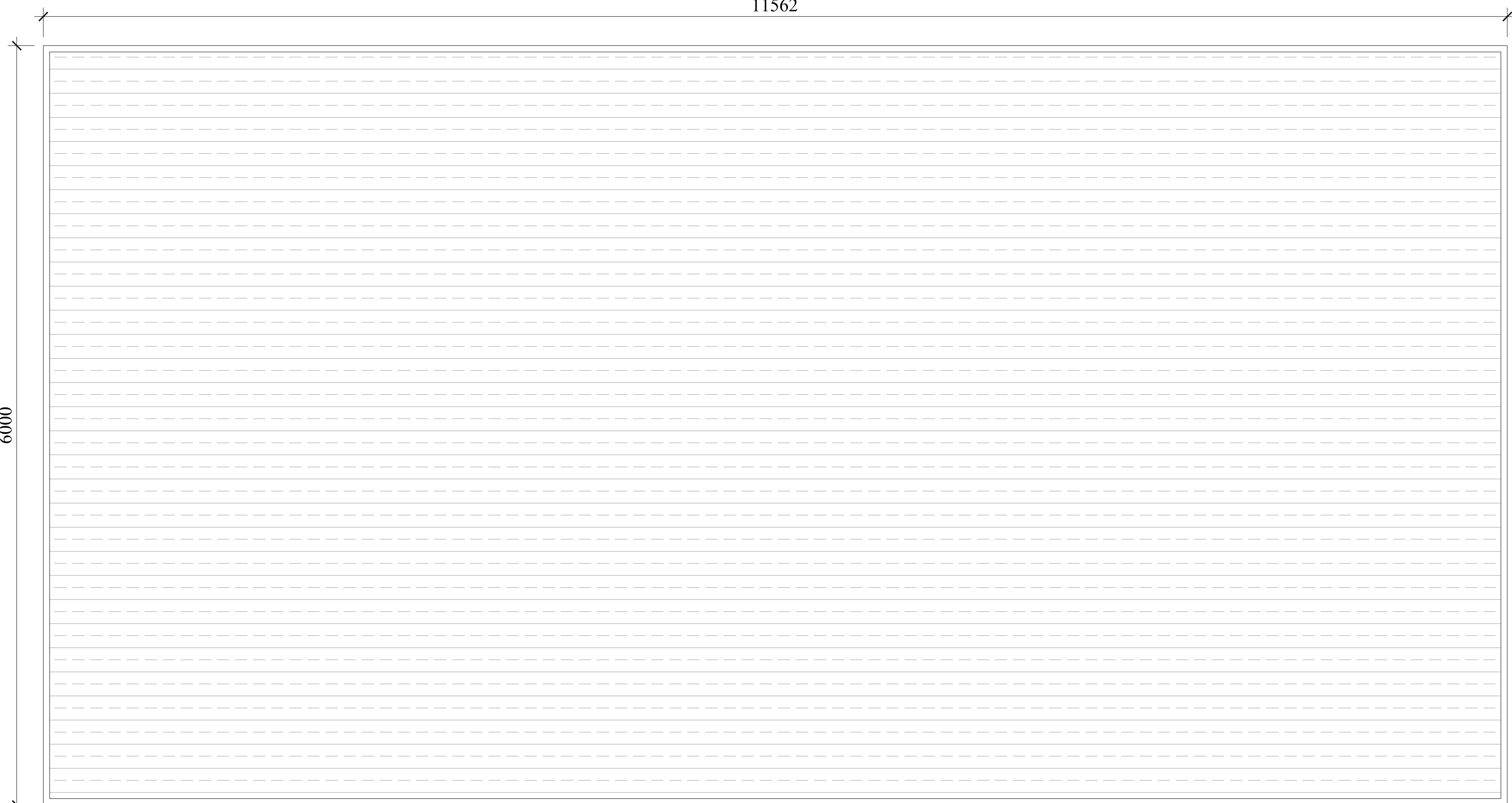
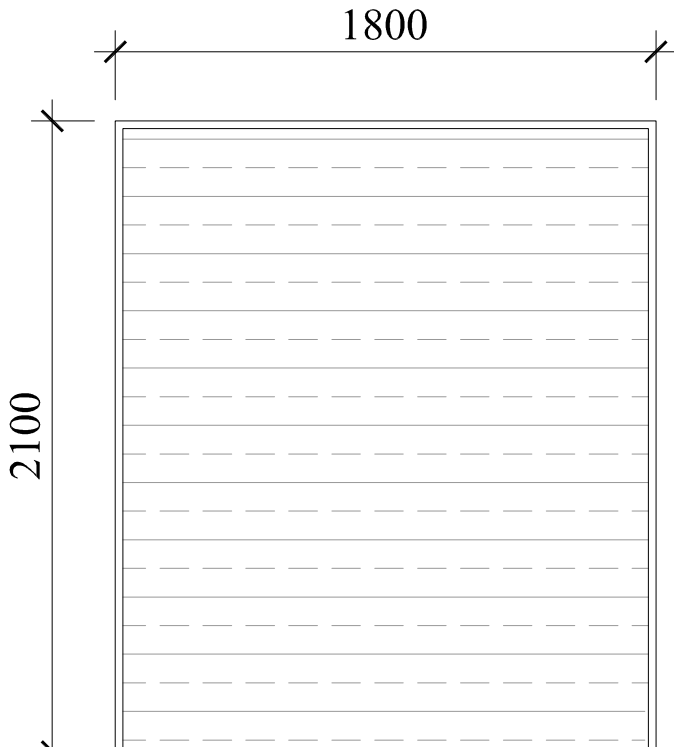
+606-2888 827
+6016-421 2703
aaarchitect.adm@gmail.com



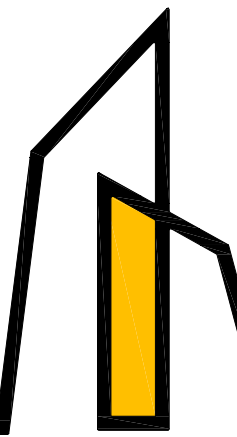
TYPE	D1	D2	D3
FIN. FLOOR LEVEL ▽			
			
SPECIFICATION	M.S. FRAME SINGLE LEAF SOLID CORE TIMBER FLUSH DOOR TO MANUF'S DETAIL	M.S. FRAME SINGLE LEAF SOLID CORE TIMBER FLUSH DOOR TO MANUF'S DETAIL	M.S. FRAME DOUBLE LEAF SOLID CORE TIMBER FLUSH DOOR TO MANUF'S DETAIL
SIZE	900mm (W) X 2100mm (H)	900mm (W) X 2100mm (H)	1800mm (W) X 2100mm (H)
LOCATION	TOOL ROOM	HEAVY MACHINE AREA	OIL ROOM
QUANTITY	1	2	1

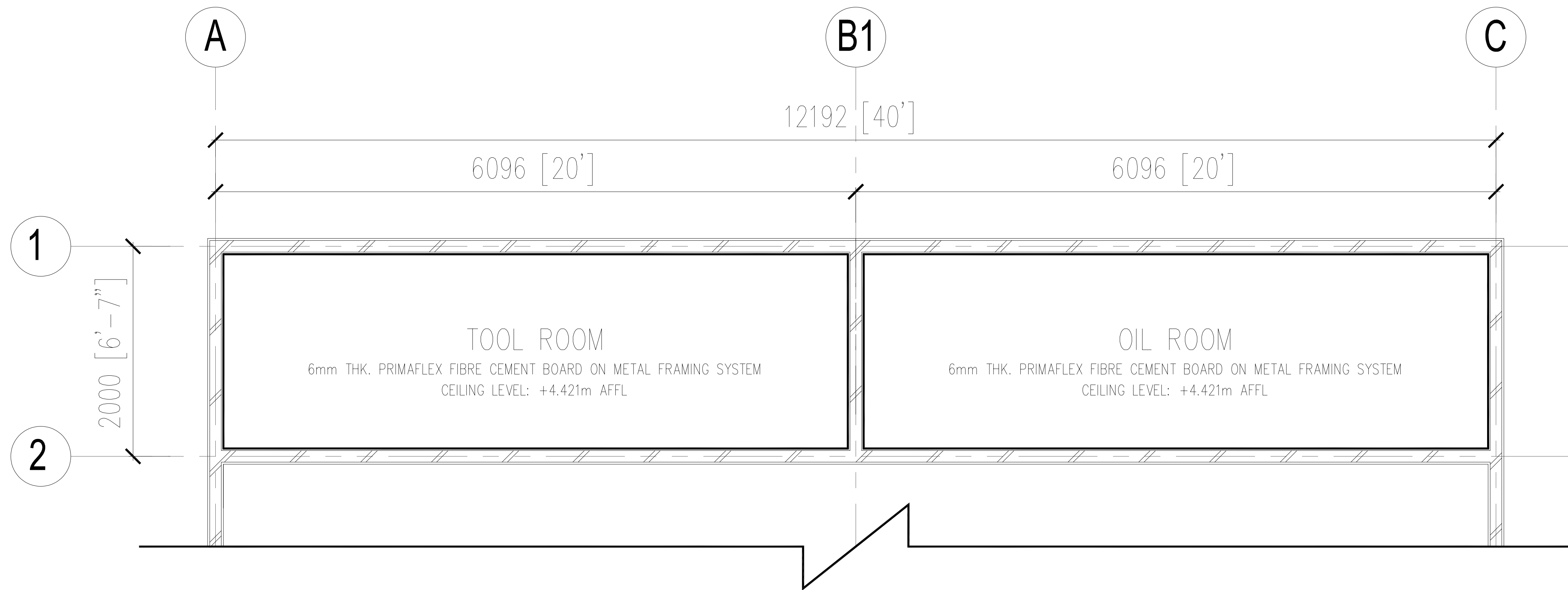
TENDER DRAWING
(ARCHITECT)

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-01A	
						TARIKH :	24 JUN 2026	
			TAJUK LUKISAN			DILUKIS :	ADIB	
			JADUAL PINTU 1	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.			DISEMAK :	AR. AZIZUL

TYPE	RS1	RS2
FIN. FLOOR LEVEL ▽		
		
SPECIFICATION	GALVANISED STEEL MOTORISED ROLLER SHUTTER C/W SKBF100DA ALUMINIUM EXTRUDED INTERLOCKING CURTAIN SLATS OF 26MMT THK. IN POWDER COATED FINISH AND ANTI-FRICTION ROLLER ENDLOCKS TO MANUF'S DETAIL	GALVANISED STEEL ROLLER SHUTTER TO MANUF'S DETAIL
SIZE	11562mm (W) X 6000mm (H)	1800mm (W) X 2100mm (H)
LOCATION	HEAVY MACHINE AREA (MAIN ENTRANCE)	OIL ROOM
QUANTITY	1	1

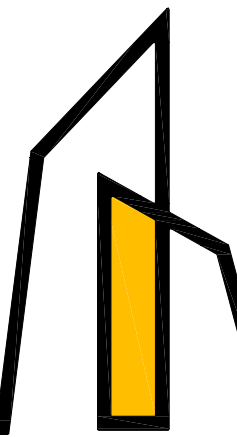
TENDER DRAWING
(ARCHITECT)

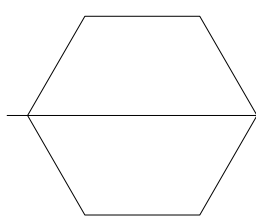
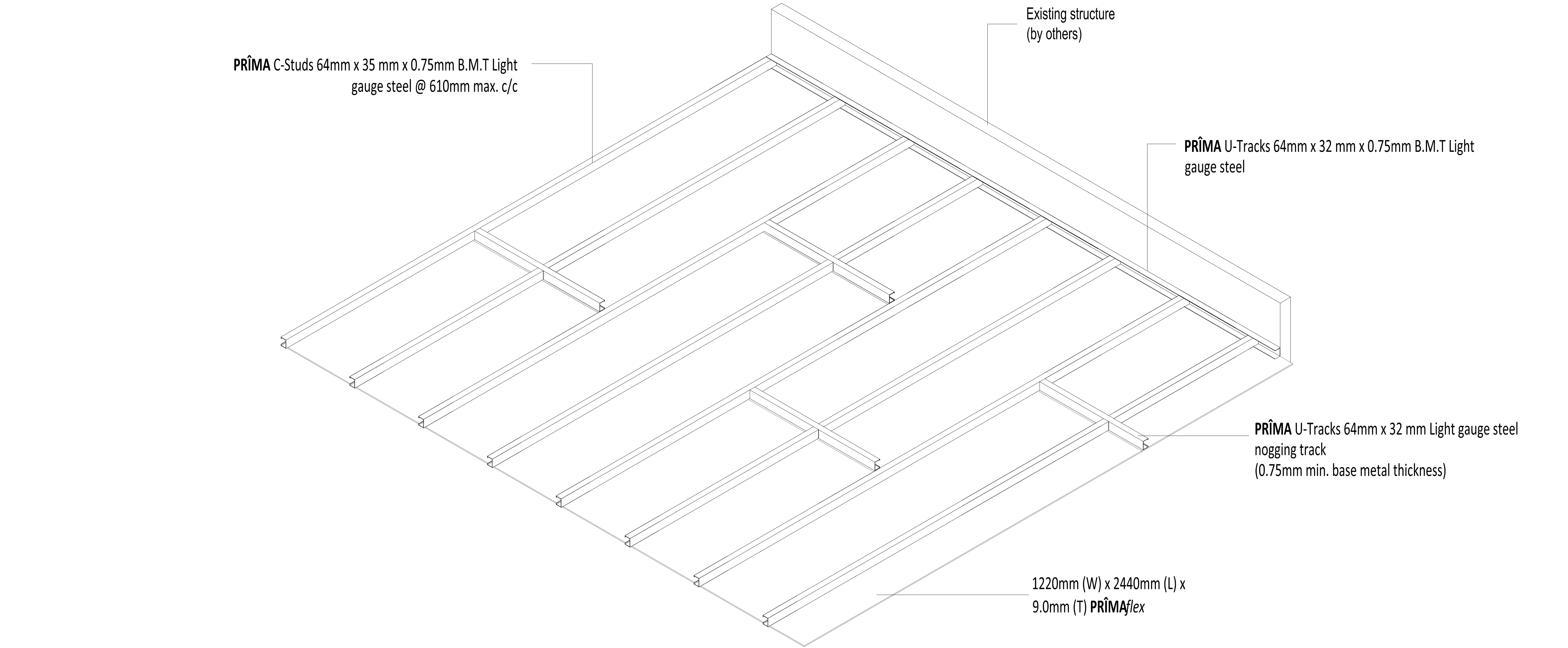
ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-01B
						TARIKH :	24 JUN 2026
			TAJUK LUKISAN			DILUKIS :	ADIB
			JADUAL PINTU 2	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.		DISEMAK :	AR. AZIZUL



REFLECTED CEILING PLAN
SCALE 1:25

TENDER DRAWING
(ARCHITECT)

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA) TAJUK LUKISAN PELAN SILING (BILIK PERALATAN DAN BILIK PENYIMPANAN MINYAK)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-02A
						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
			This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.			DISEMAK :	AR. AZIZUL

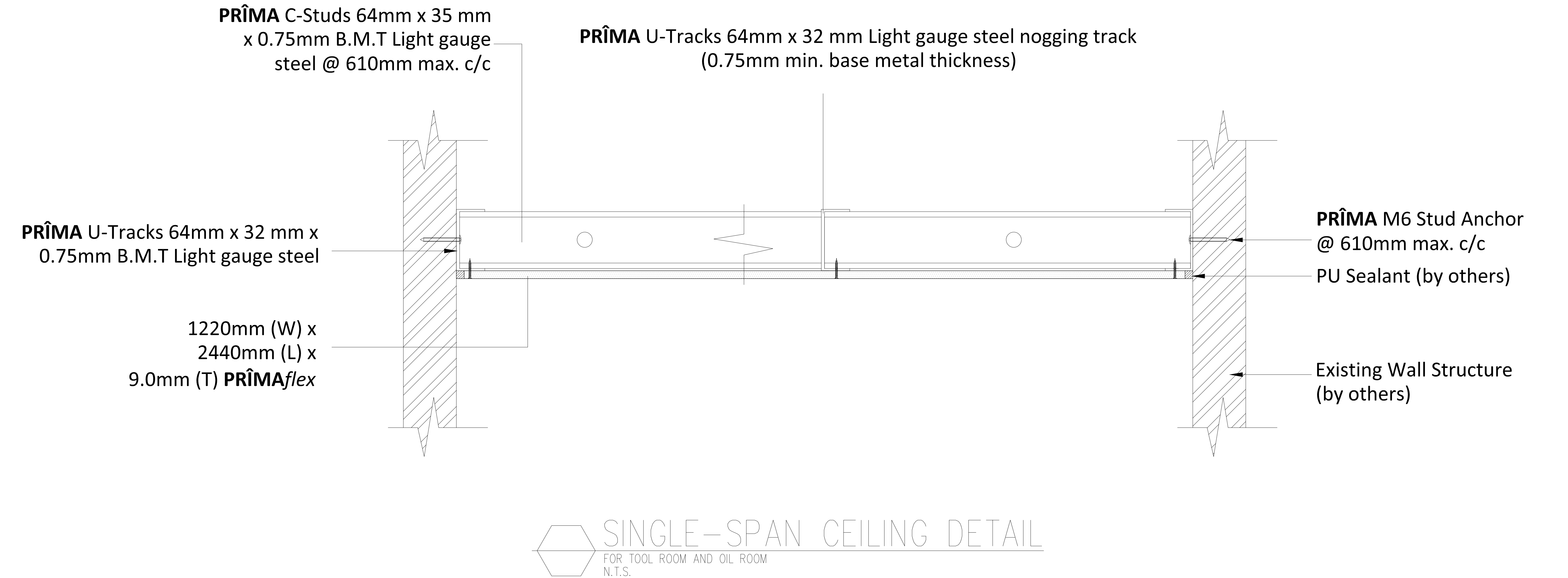


TYPICAL SINGLE-SPAN CEILING LAYOUT
FOR TOOL ROOM AND OIL ROOM
N.T.S.

- NOTES:
1. THIS DRAWING SHOWS THE MINIMUM REQUIREMENT FOR TYPICAL CONSTRUCTION.
 2. MANUALLY RECESS THE SHORT EDGES.
 3. SUPPORT BATTEN SYSTEM SHALL FIXED 1500mm MAX. C/C IN BOTH DIRECTION.
 4. EXPANSION JOINT AT EVERY 9000mm MAX. C/C.
 5. THIS SYSTEM IS NOT RECOMMENDED FOR NARROW EAVES (EAVES WITH LESS THAN 600mm AVERAGE CLEARANCE).

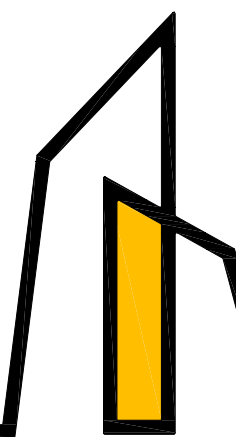
TENDER DRAWING
(ARCHITECT)

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com	PROJEK	CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK	MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-02B
								TARIKH :	24 JUN 2026
								DILUKIS :	ADIB
								DISEMAK :	AR. AZIZUL
					TAJUK LUKISAN PERINCIAN SILING 1 (FIBRE CEMENT BOARD ON METAL FRAMING SYSTEM)	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.			



- NOTES:
1. THIS DRAWING SHOWS THE MINIMUM REQUIREMENT FOR TYPICAL CONSTRUCTION.
 2. MANUALLY RECESS THE SHORT EDGES.
 3. SUPPORT BATTEN SYSTEM SHALL FIXED 900mm MAX. C/C IN BOTH DIRECTION.
 4. EXPANSION JOINT AT EVERY 9000mm MAX. C/C.
 5. THIS SYSTEM IS NOT RECOMMENDED FOR NARROW EAVES (EAVES WITH LESS THAN 600mm AVERAGE CLEARANCE).

TENDER DRAWING
(ARCHITECT)

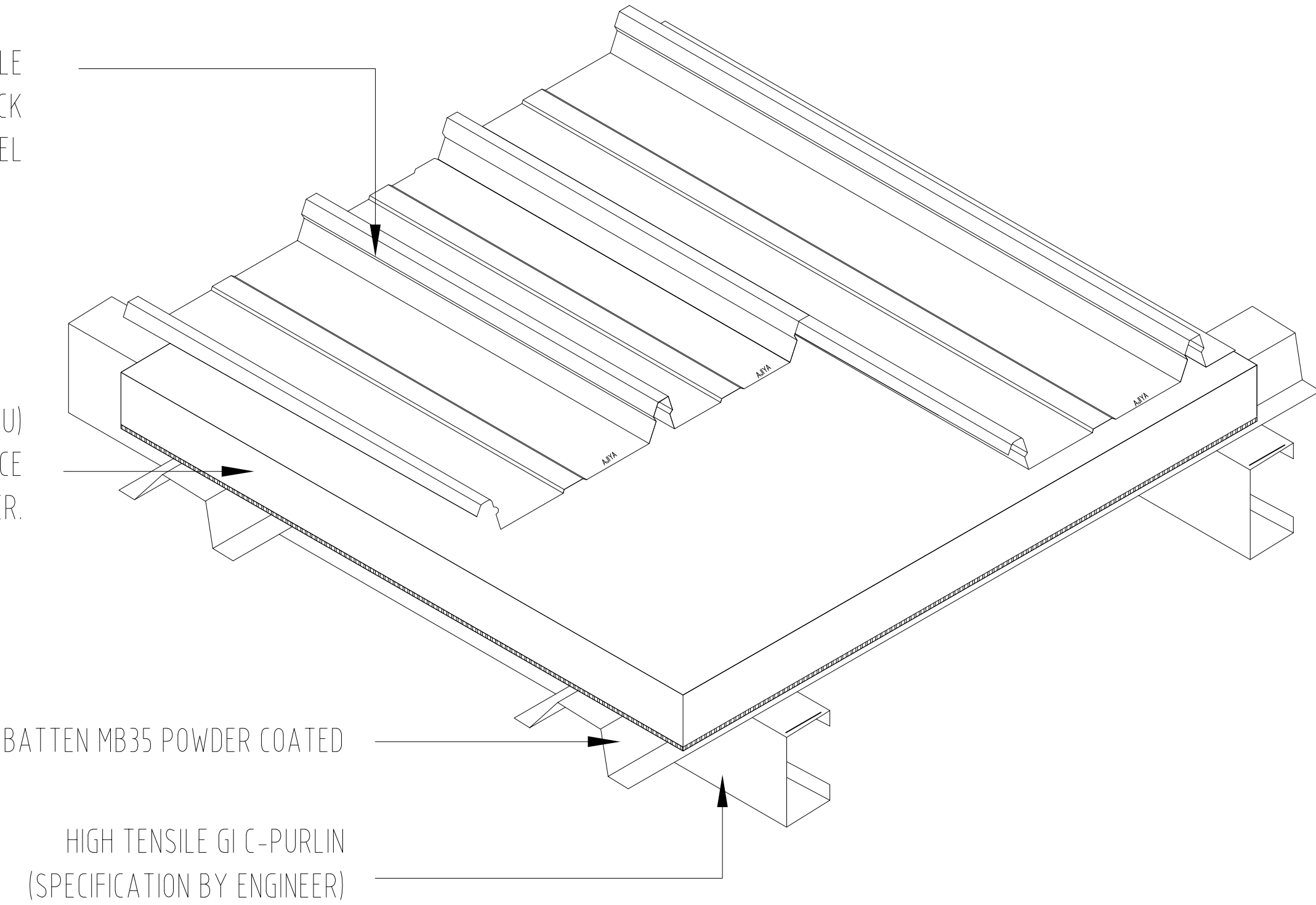
ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK	CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK	MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-02C
								TARIKH :	24 JUN 2026
								DILUKIS :	ADIB
					TAJUK LUKISAN PERINCIAN SILING 2 (FIBRE CEMENT BOARD ON METAL FRAMING SYSTEM)	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.			DISEMAK :

METAL ROOFING SYSTEM

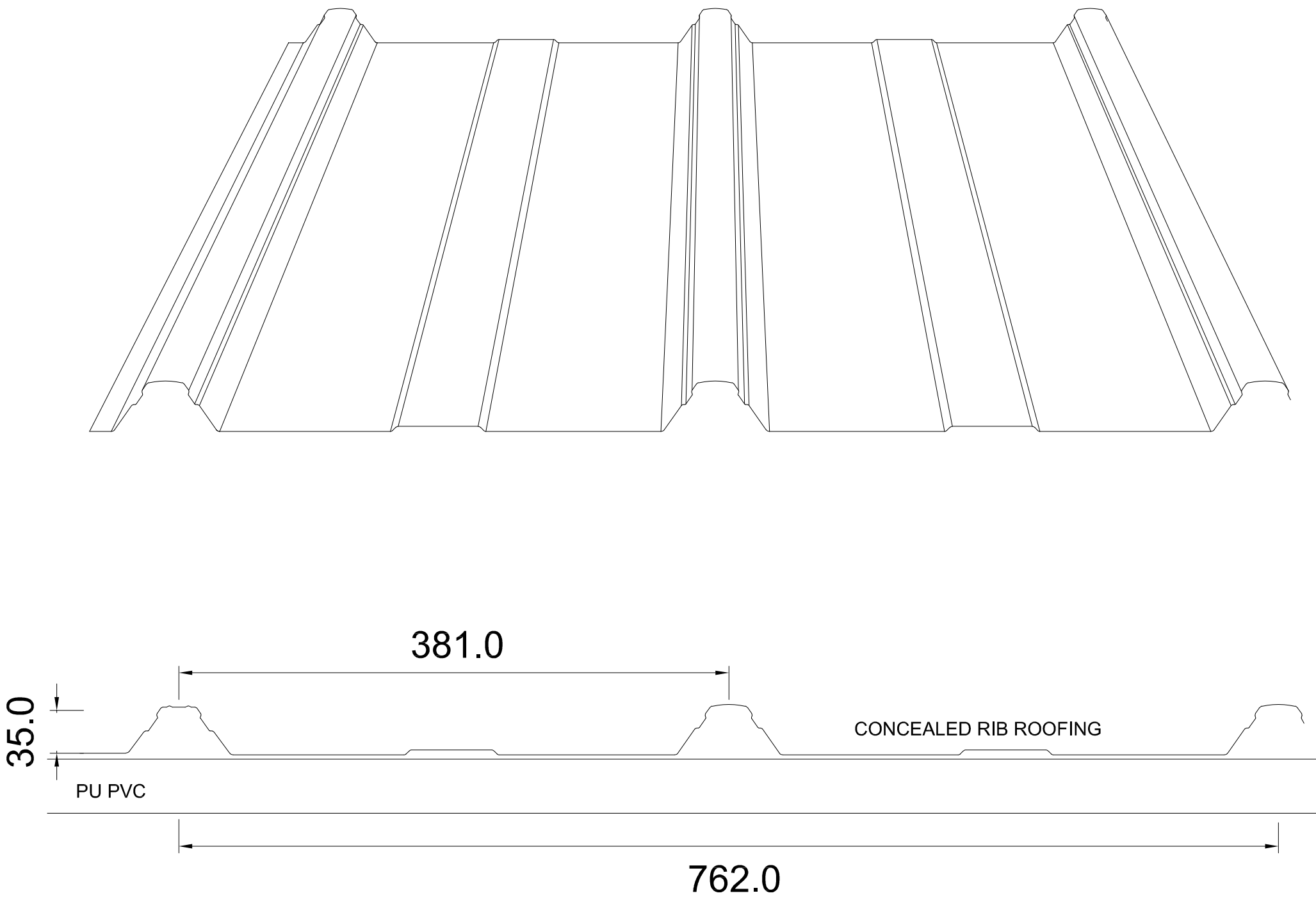
ISOMETRIC VIEW 50MM PU FOAM

CONCEALED RIB 0.40 MM BMT/0.47MM TCT HIGH TENSILE METAL ROOFING SHEET IN COLOURCOIL PREMIUM SERIES ROCK AZ100 G550 STEEL

50MM THK POLYURETHANE (PU) WITH CLASS 3 PROPRIETARY CORROSION RESISTANCE FASTENER.



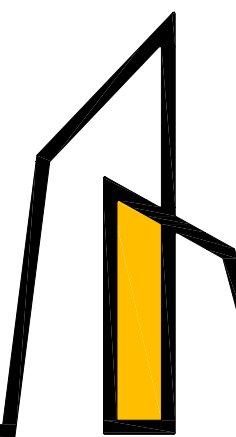
SECTION VIEW



Panel End Cut Back	Panel End Lap
PU Foam Cut Back For installation of insulated metal roof, the following measures are recommended. -Cut back at eaves - 100mm -Cut back at end laps - 150mm	150mm 5mm gap 10mm Sealing PU Foam Self tapping screw with sealing washer

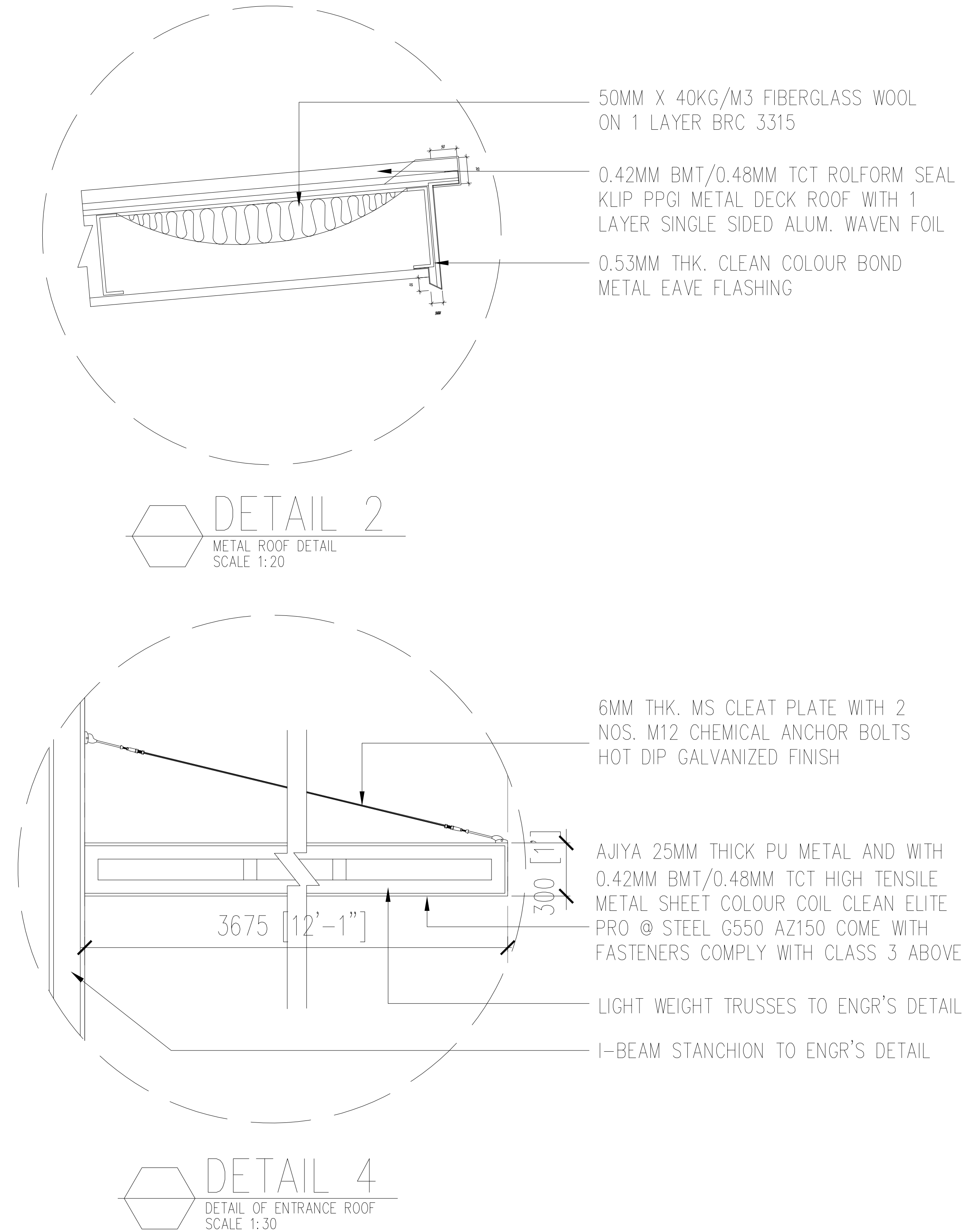
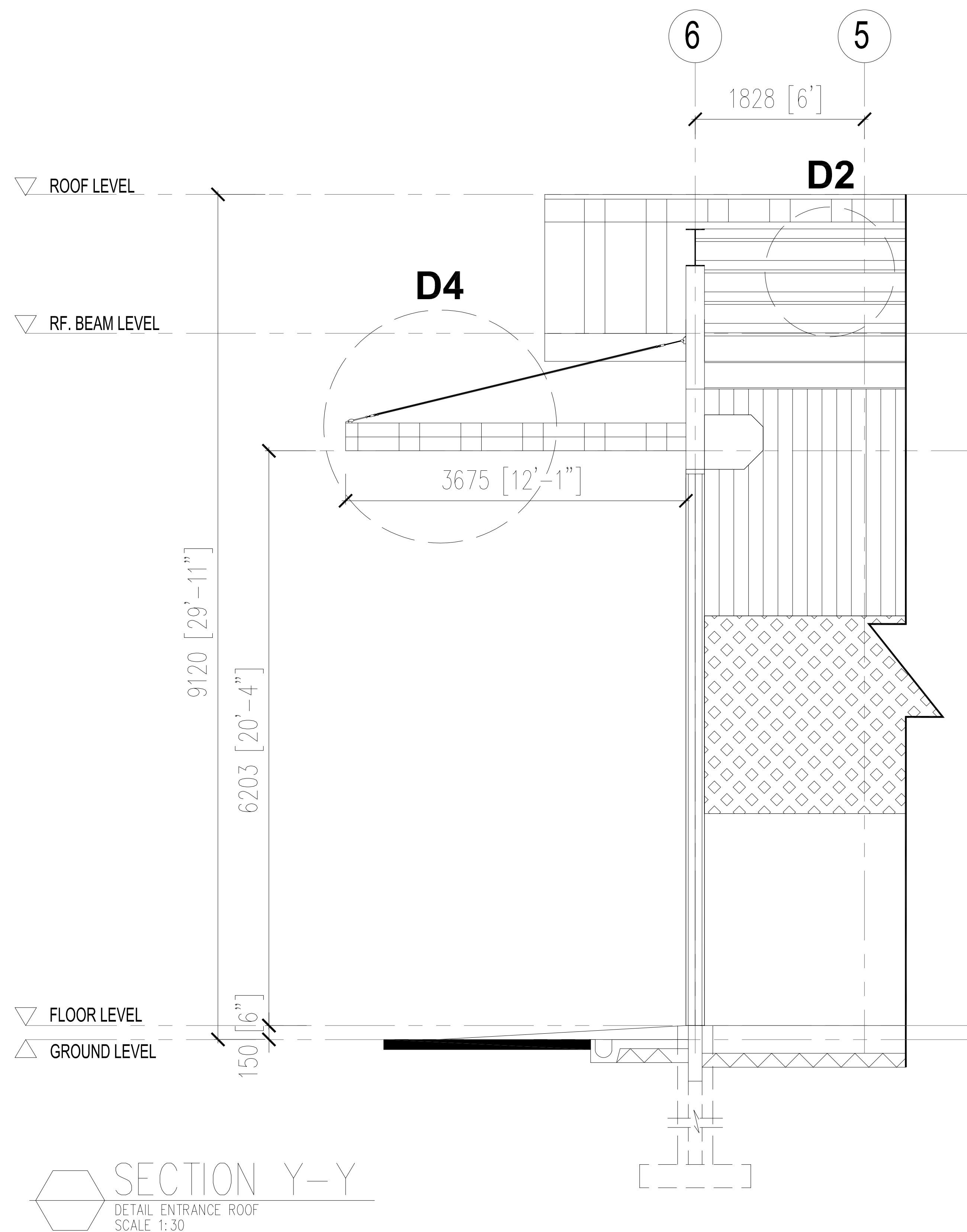
DIMENSIONS	TOLERANCE
Rib height : 35.0mm ± 1mm	Thickness for material : ±0.03mm
Effective cover : 762mm	Effective Width : ±5mm
Minimum roof pitch : 2°	Finishing Lenght : ±5mm

TENDER DRAWING (ARCHITECT)

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK	CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK	MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-03A	
								TARIKH :	24 JUN 2026	
					TAJUK LUKISAN			DILUKIS :	ADIB	
					PERINCIAN BUMBUNG 1	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.			DISEMAK :	AR. AZIZUL

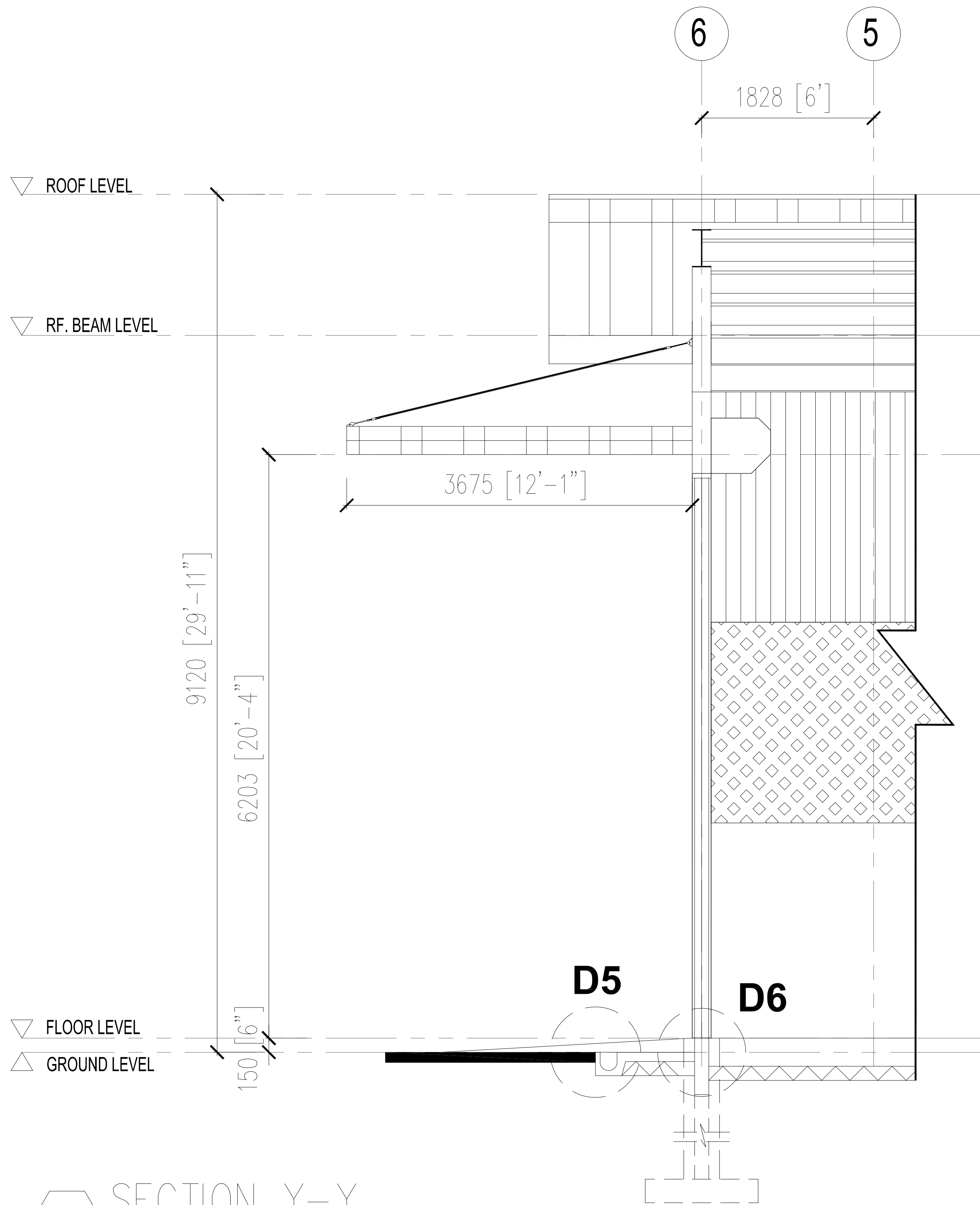


ARKITEK  AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA) TAJUK LUKISAN PERINCIAN BUMBUNG 2	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-03B
						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
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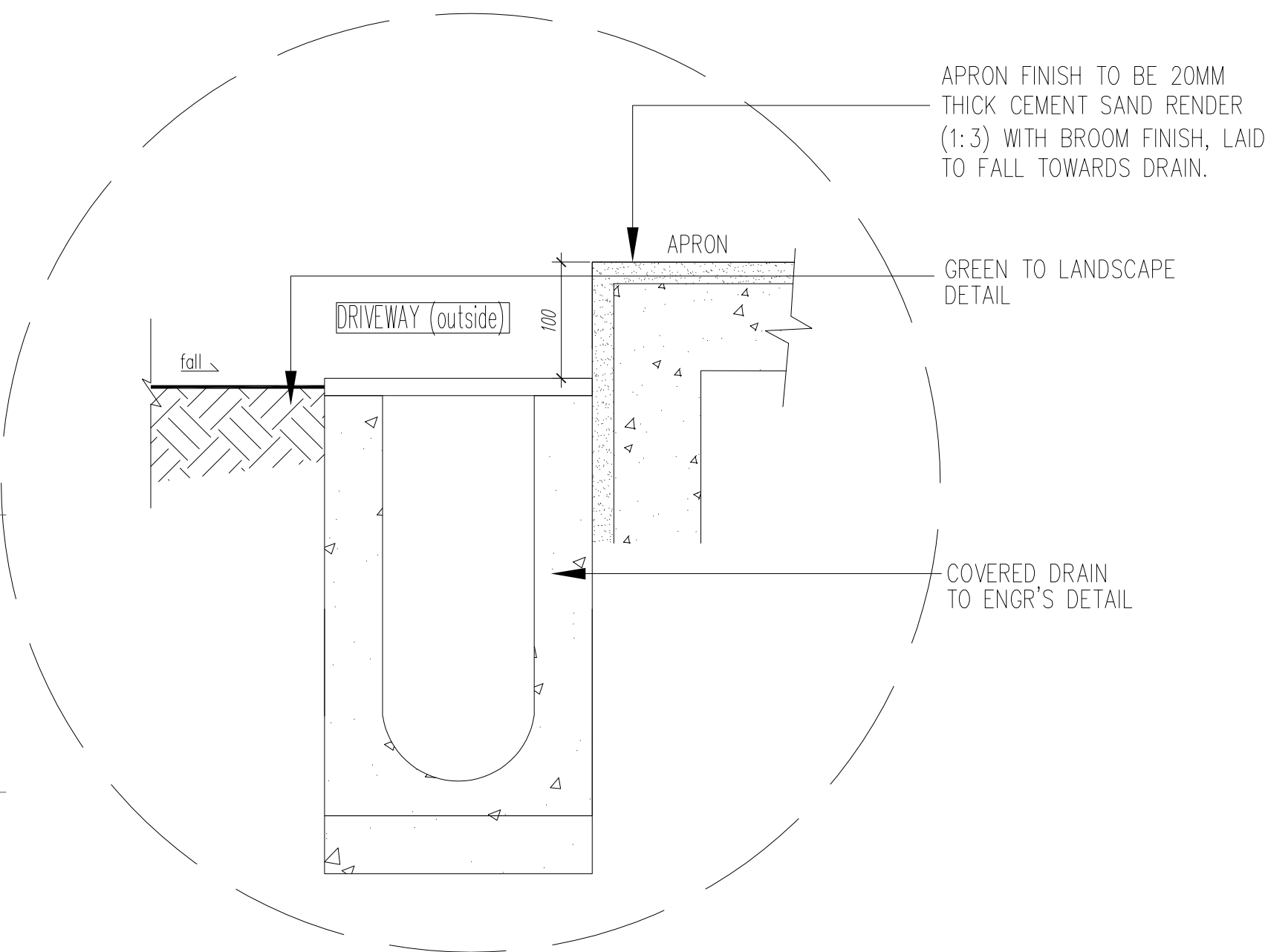


TENDER DRAWING
(ARCHITECT)

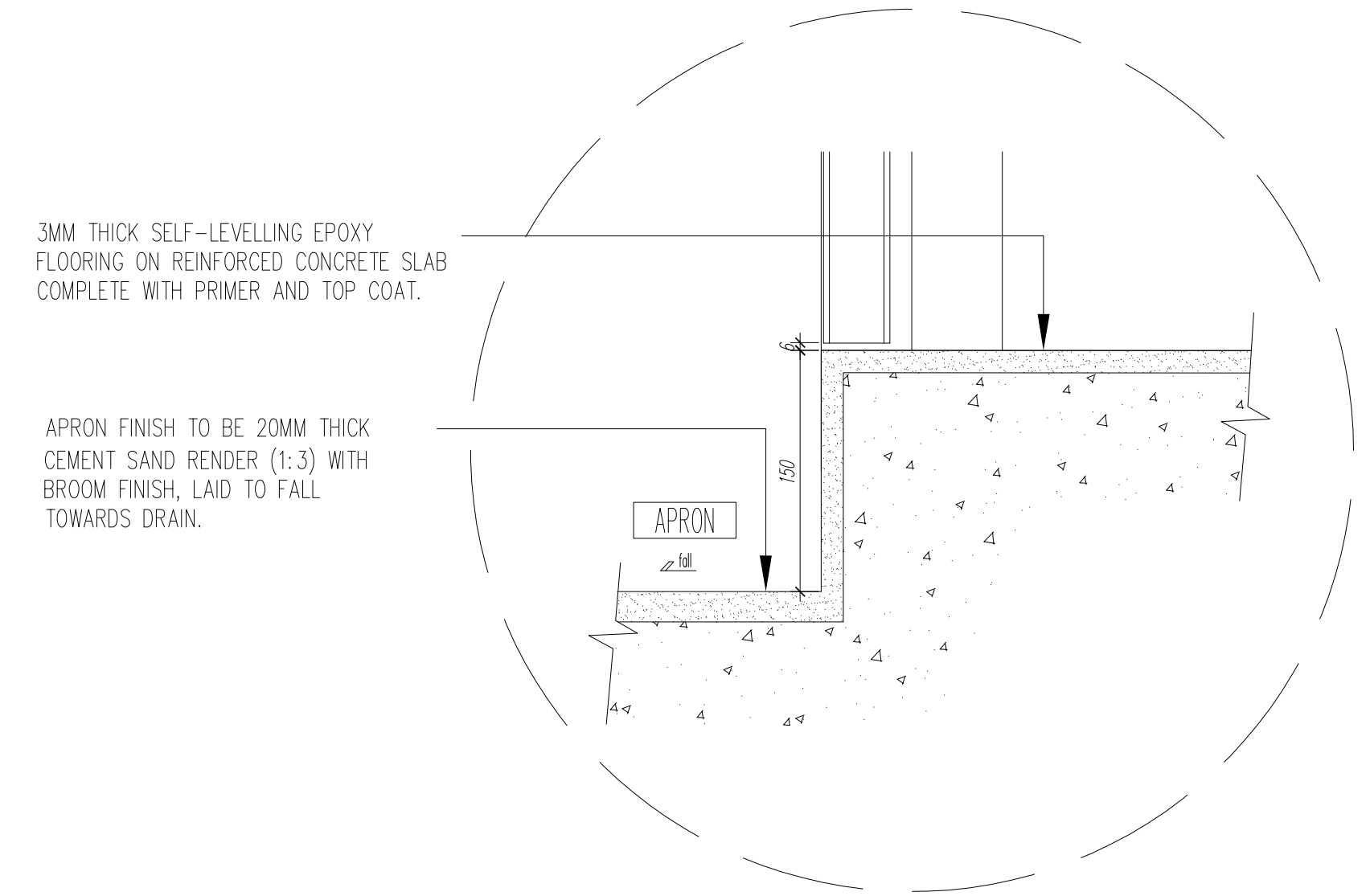
ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA) TAJUK LUKISAN PERINCIAN BUMBUNG 3	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-03C
						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
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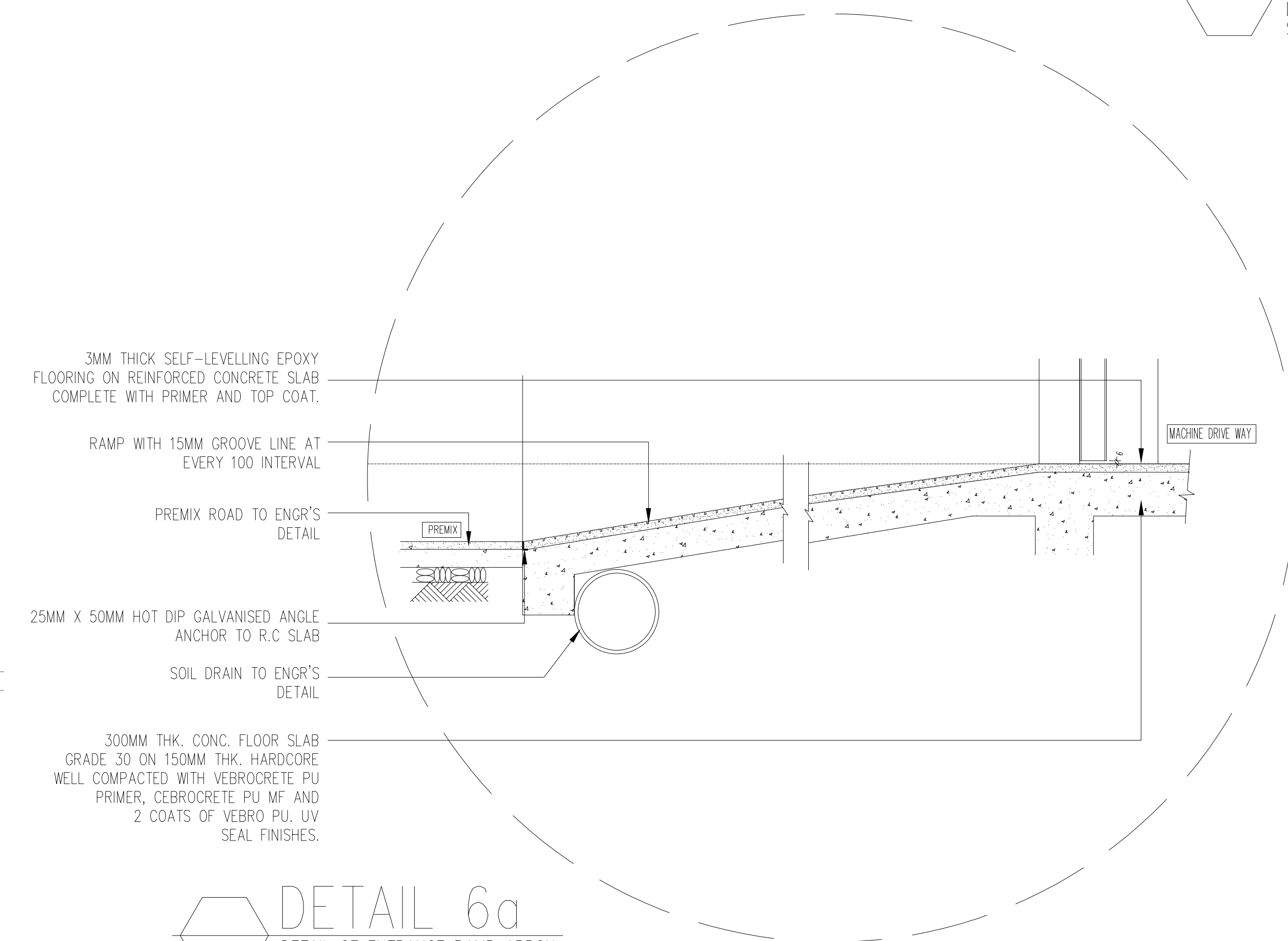
SECTION Y-Y
DETAIL OF FLOOR FINISHES
SCALE 1:30



DETAIL 5
DETAIL OF DRAIN
SCALE 1:30



DETAIL 6b
DETAIL OF ENTRANCE APRON
SCALE 1:30

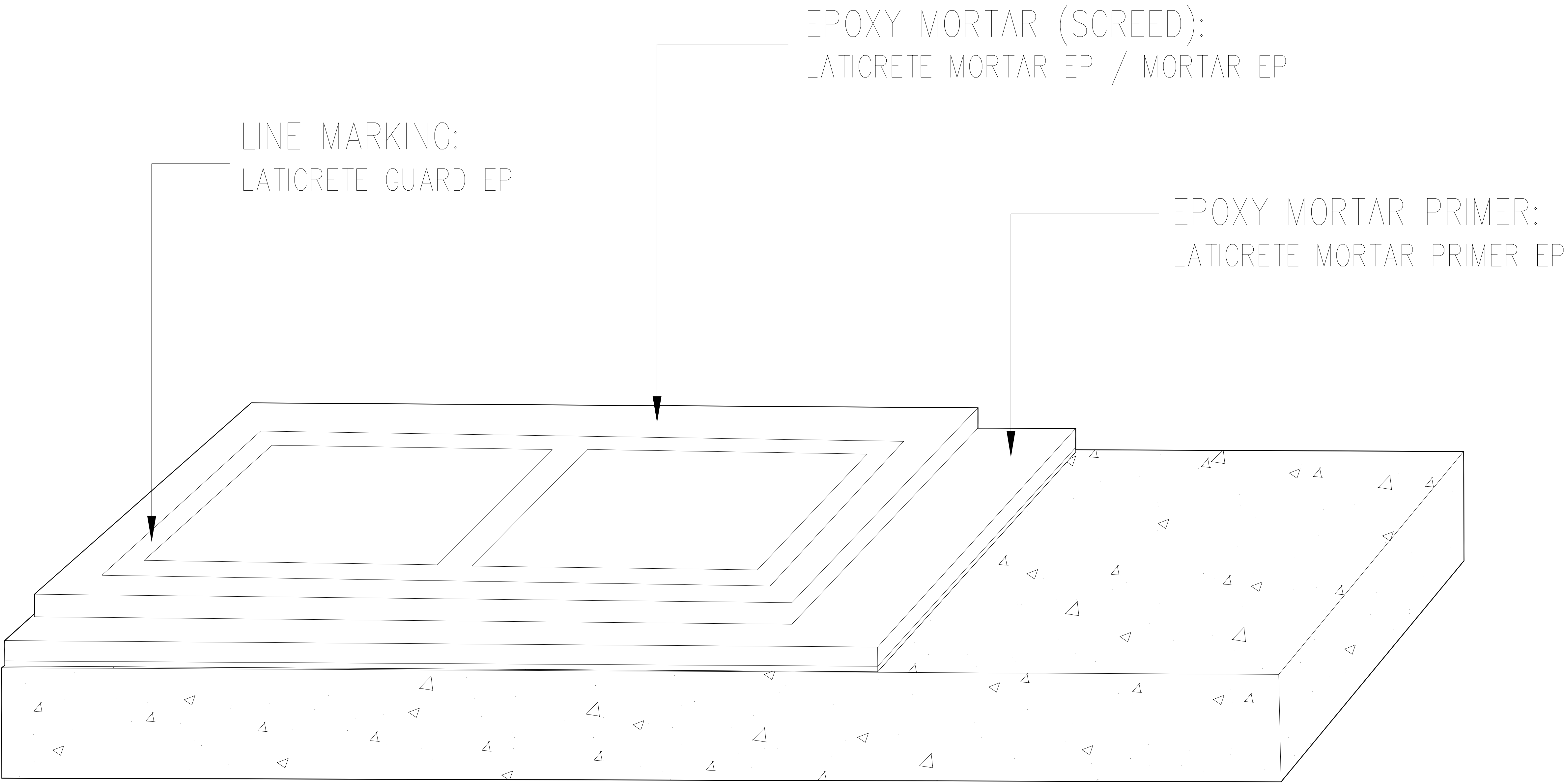


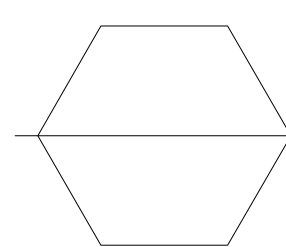
DETAIL 6a
DETAIL OF ENTRANCE RAMP APRON
SCALE 1:30

TENDER DRAWING
(ARCHITECT)

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						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
						DISEMAK :	AR. AZIZUL

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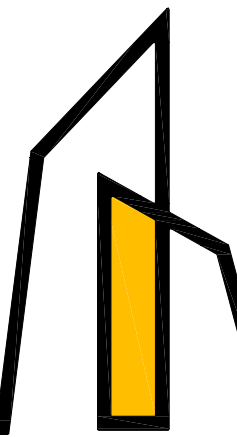


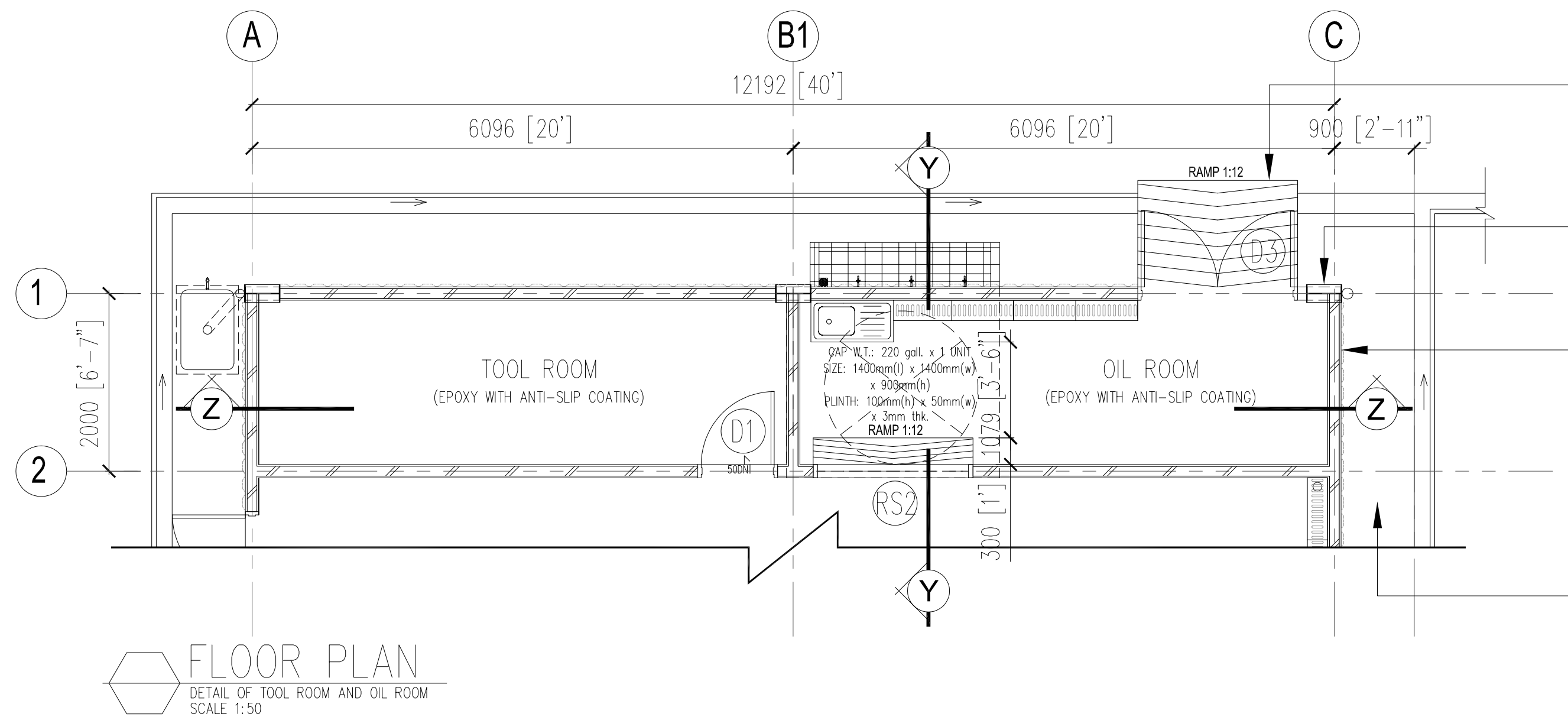


EPOXY COATING FLOOR FINISHES

FOR HEAVY MACHINE AREA, TOOL ROOM AND OIL ROOM
N.T.S.

TENDER DRAWING
(ARCHITECT)

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA) TAJUK LUKISAN PERINCIAN KEMASAN LANTAI 2 (BENGKEL JENTERA BERAT, BILIK PERALATAN & BILIK PENYIMPANAN MINYAK)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-04B
						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
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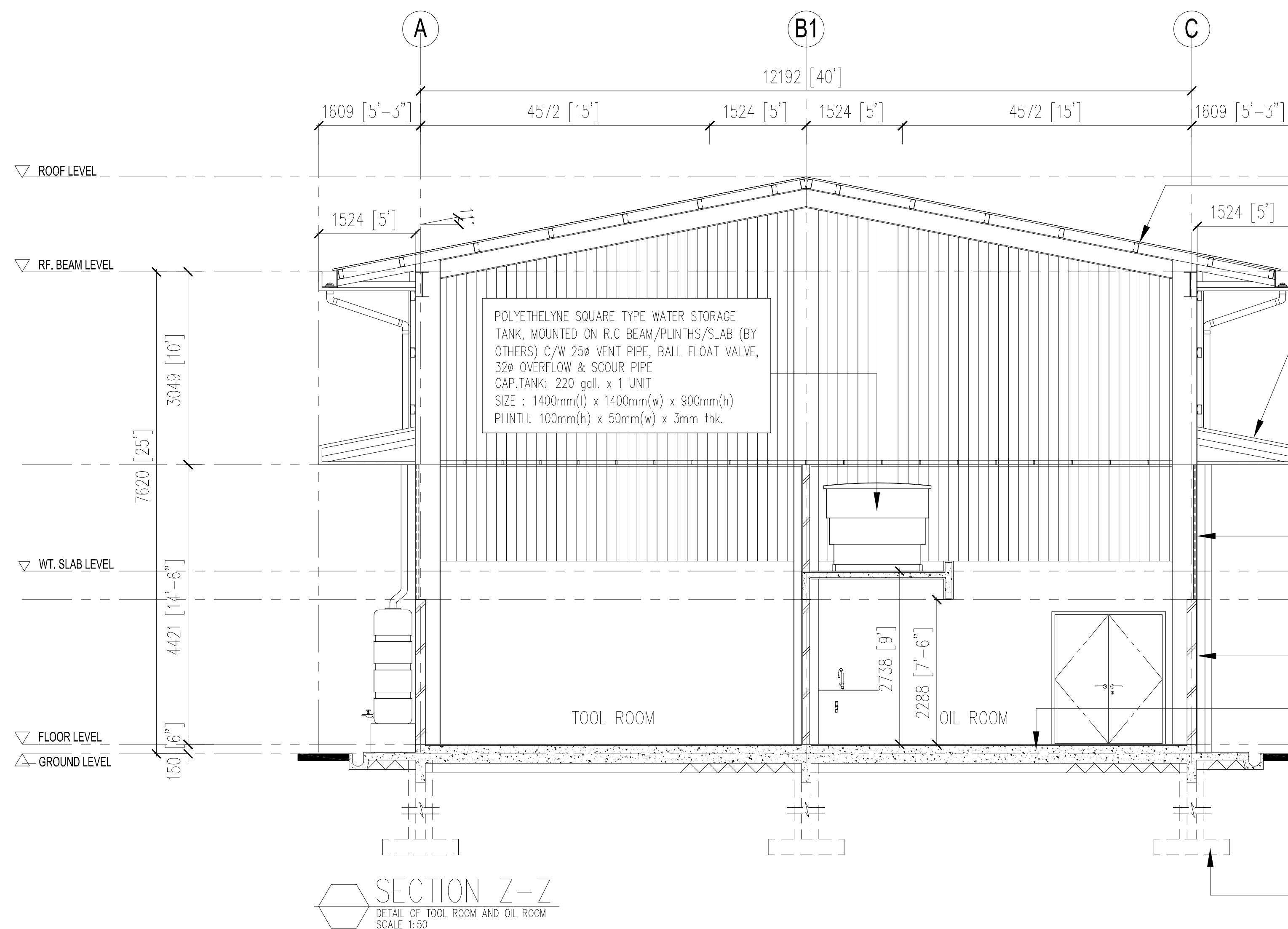


RC RAMP SLAB (SLOPE 1:12) 100MM THK. ON 150MM THK. HARDCORE WELL COMPACTED WITH NON-SLIP TROWELLED FINISH

I-BEAM STANCHION TO ENGR'S DETAIL

8' HIGH C/W 115MM THK. FAIR-FACE BRICKWALL WITH AJIYA OR EQUIVALENT JET RIB WITH 0.48MM TCT HIGH TENSILE METAL SHEET COLOUR COIL CLEAN ELITE PRO @ STEEL G550 AZ150 COME WITH FASTENERS COMPLY WITH CLASS 3 ABOVE

100MM THK. CONC. APRON WITH CEMENT RENDER LAID TO FALL WITH 230MM WIDE CONC. PERIMETER DRAIN TO ENGR'S DETAIL



MS ROOF PORTAL FRAME STRUCTURE TO ENGR'S DETAIL

11°-PITCH METAL DECK-AWNING ROOF ON LIGHTWEIGHT STEEL TRUSS TO ENGR'S DETAIL.

I-BEAM STANCHION TO ENGR'S DETAIL

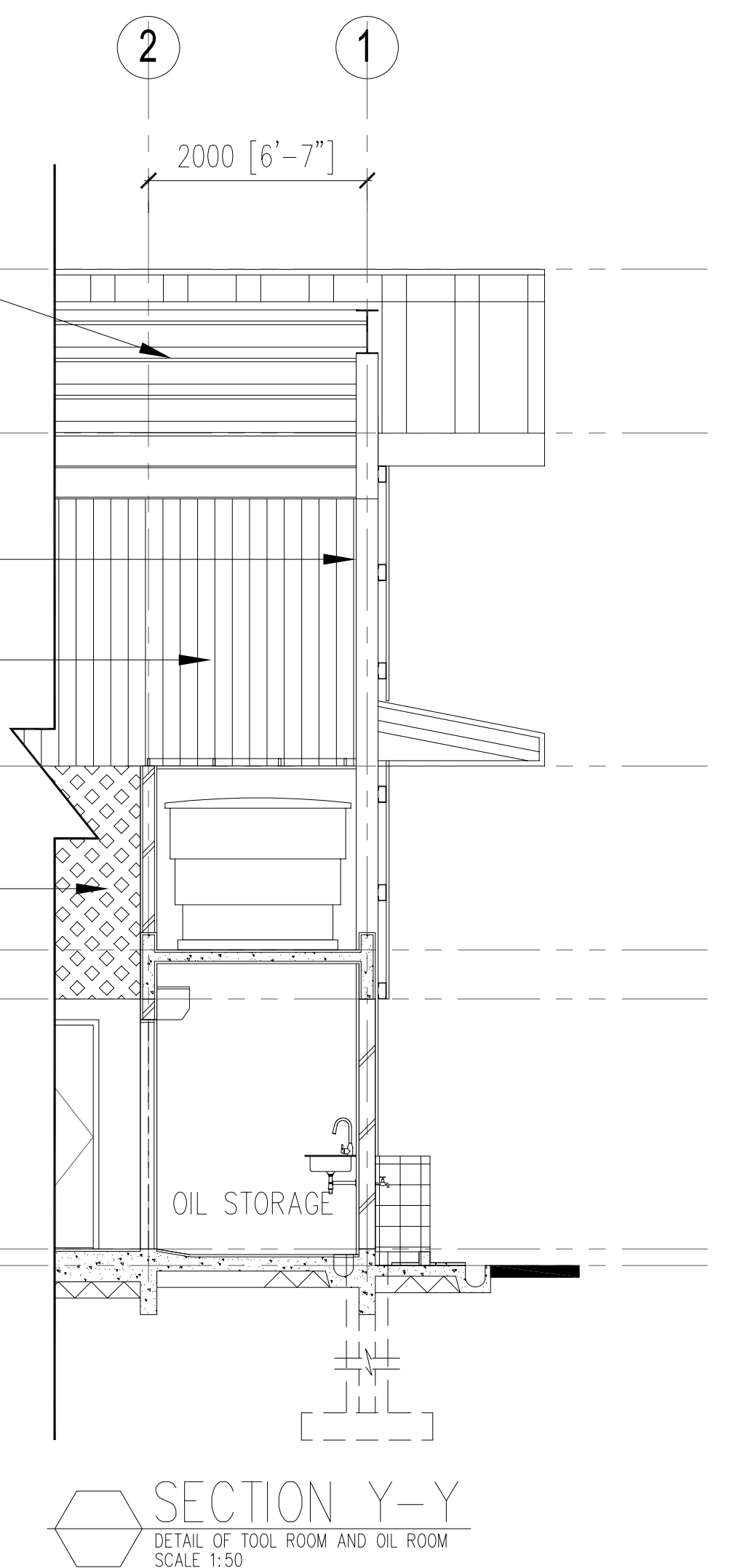
10' HIGH AJIYA OR EQUIVALENT JET RIB WITH 0.48MM TCT HIGH TENSILE METAL SHEET COLOUR COIL CLEAN ELITE PRO @ STEEL G550 AZ150 COME WITH FASTENERS COMPLY WITH CLASS 3 ABOVE

HOT-DIPPED GALVANISED STEEL WIRE MESH PANEL, MIN. 3.0MM DIA. WIRE, WITH DIAMOND PATTERN, TO BE PAINTED BLACK TO MANUF'S DETAIL

8' HIGH 115MM THK. FAIR-FACE BRICKWALL

300MM THK. CONC. FLOOR SLAB GRADE 30 ON 150MM THK. HARDCORE WELL COMPACTED WITH VEBROCRETE PU PRIMER, VEBROCRETE PU MF AND 2 COATS OF VEBRO PU UV SEAL FINISHES TO ENGR'S DETAIL

RC FOUNDATION TO ENGR'S DETAIL

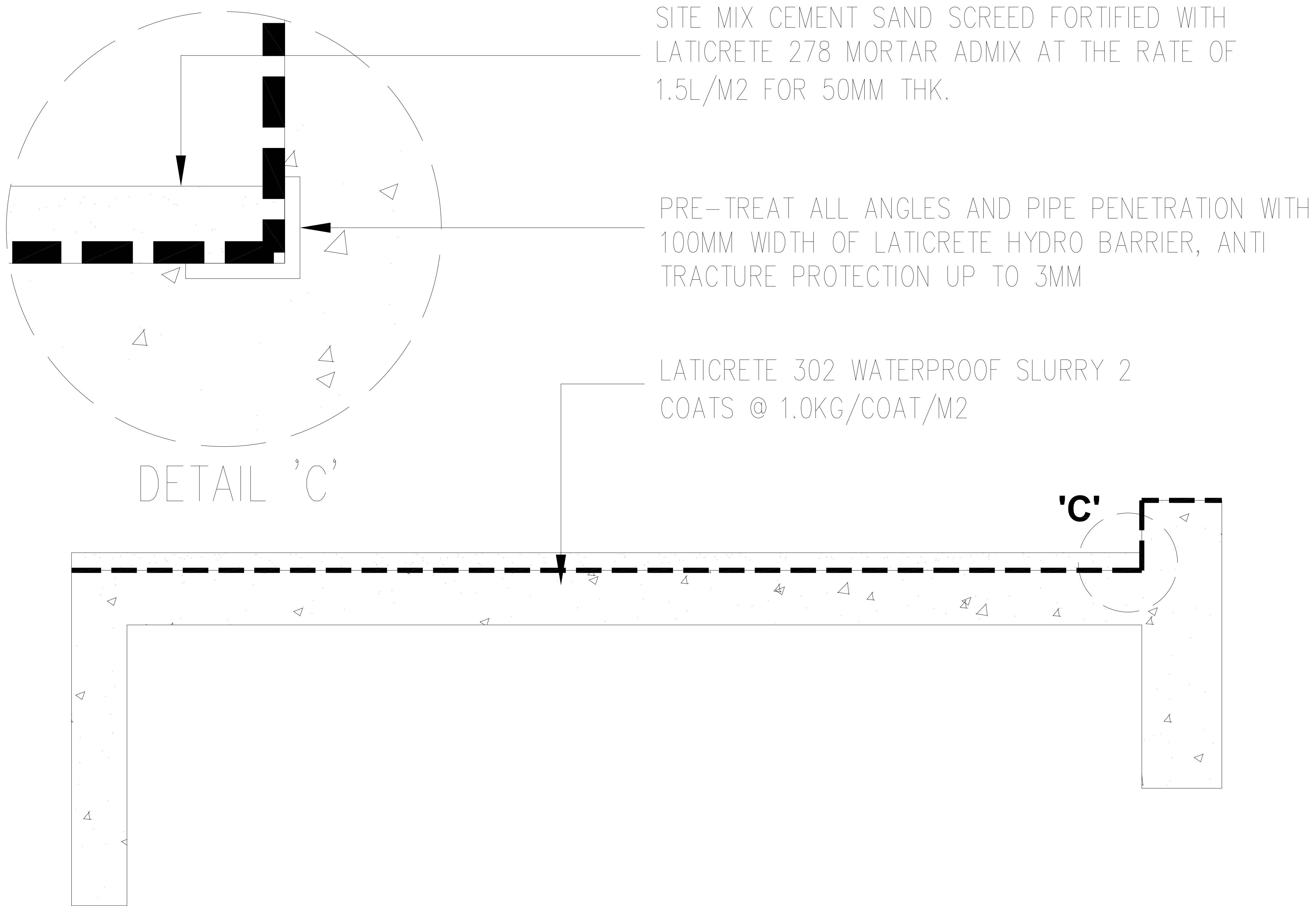


SECTION Y-Y
DETAIL OF TOOL ROOM AND OIL ROOM
SCALE 1:50

TENDER DRAWING
(ARCHITECT)

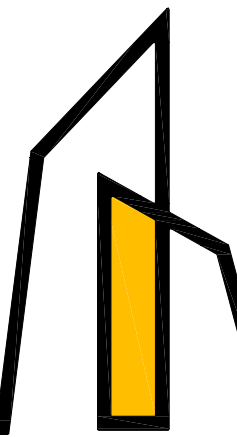
ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMILIK MAJLIS AMANAH RAKYAT (MARA) TAJUK LUKISAN PERINCIAN BILIK PERALATAN & BILIK PENYIMPANAN MINYAK	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-05
						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
						DISEMAK :	AR. AZIZUL

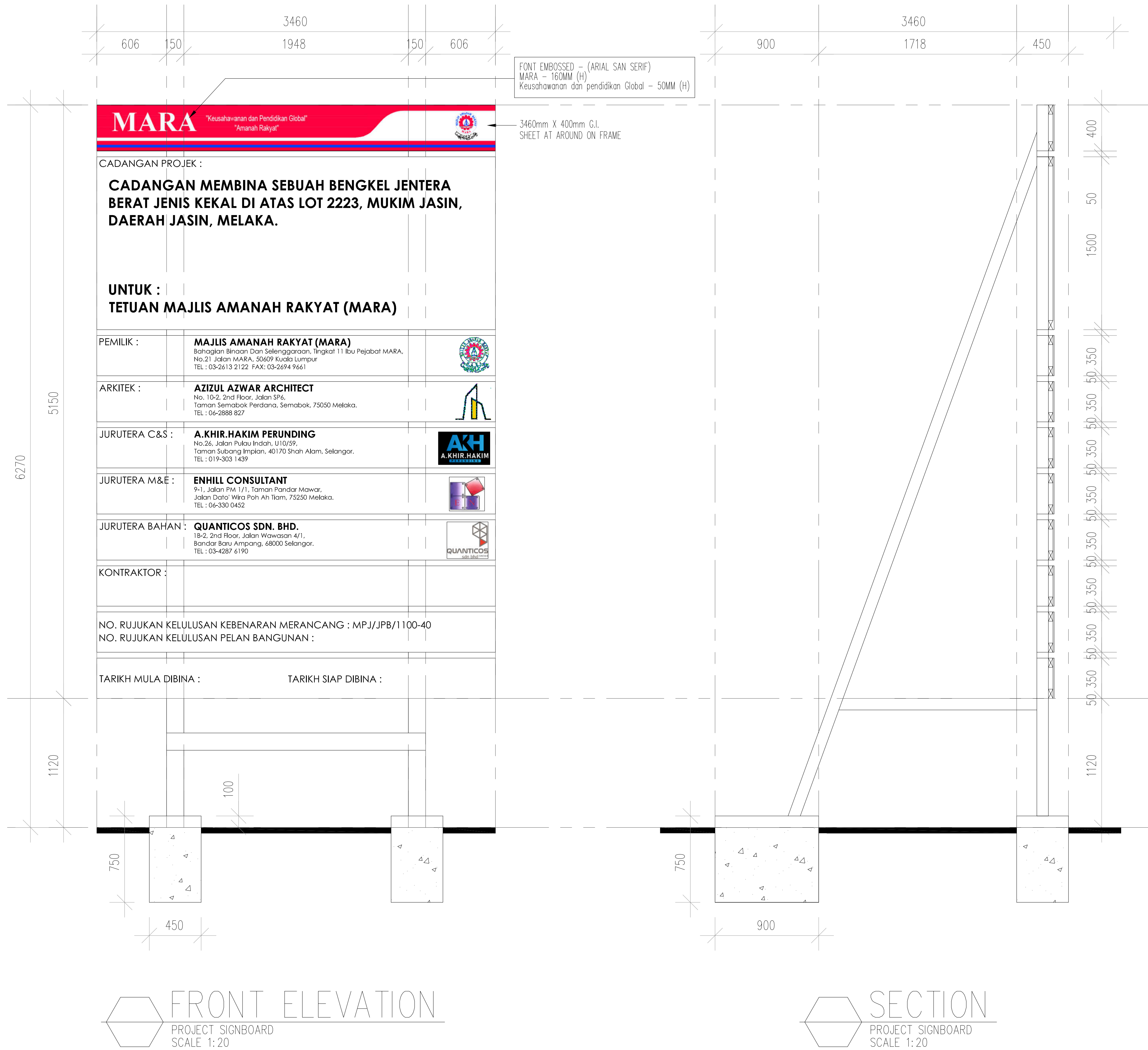
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 WATERPROOFING (CONCEALED SYSTEM)
FOR WATER TANK SLAB
N.T.S.

**TENDER DRAWING
(ARCHITECT)**

ARKITEK AZIZUL AZWAR ARCHITECT NO. 10-2, 2ND. FLOOR, JALAN SP 6, TAMAN SEMABOK PERDANA, SEMABOK, 75050 MELAKA. +606-2888 827 +6016-421 2703 aaarchitect.adm@gmail.com 	PROJEK CADANGAN KERJA-KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA-KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.	PEMLIK MAJLIS AMANAH RAKYAT (MARA)	No.	TARIKH	PINDAAN	NO LUKISAN :	AAA/374/2024/D-06
						TARIKH :	24 JUN 2026
			TAJUK LUKISAN			DILUKIS :	ADIB
			PERINCIAN SISTEM LAPISAN KALIS AIR	This drawing is copyright. Contractors must check all dimension on site. Only figured dimensions are to be worked on. Discrepancies must be reported to the Architect before proceeding.		DISEMAK :	AR. AZIZUL



TENDER DRAWING
(ARCHITECT)

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						TARIKH :	24 JUN 2026
						DILUKIS :	ADIB
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CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

LIST OF DRAWING
CIVIL & STRUCTURE

NO.	DRAWING NO.	DRAWING TITLE
1.	AKHP/25-10/IKM/S/GN/01	GENERAL NOTE
2.	AKHP/25-10/IKM/S/LP/01	GROUND FLOOR PLAN SECTION & DETAILS
3.	AKHP/25-10/IKM/S/PR/LP/01	ROOF PURLIN LAYOUT PLAN CONNECTION DETAILS
4.	AKHP/25-10/IKM/S/FR/01	STEEL FRAMING PLAN & FRAME ELEVATION
5.	AKHP/25-10/IKM/S/RD/LP/01	ROAD LAYOUT PLAN & TYPICAL SECTION

JURUTERA C&S



A.KHIR.HAKIM PERUNDING
No. 26, Jalan Pulau Indah
U10/59, Taman Subang Impian,
40170 Shah Alam, Selangor.
019-303 1439
akhakimin@gmail.com

A. GENERAL NOTES:

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE COMMENCEMENT OF WORKS. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY DISCREPANCY.
2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF UNIFORM BUILDING BY-LAWS
3. MEANS AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION, BRACING, SHORING, TEMPORARY SUPPORTS, ETC. ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL WORKS WITH THE STRUCTURAL DRAWINGS. THE OWNER'S PRESENTATIVE/ARCHITECT/ STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR OMISSIONS.
6. THE CONTRACTOR SHALL VERIFY ALL FLOORS AND ROOF MOUNTED MECHANICAL EQUIPMENT WEIGHTS, FLOOR AND/OR ROOF OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND M & E DRAWINGS.
7. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
8. THE CONTRACTOR SHALL SUBMIT METHOD STATEMENT OF ERECTION (INCLUSIVE OF FORMWORK LAYOUT PLAN AND FIXING DETAIL) OF TEMPORARY FORMWORK FOR SLAB CONSTRUCTION TO ENGINEER FOR APPROVAL BEFORE COMMENCEMENT OF WORKS. THE FORMWORK IS REQUIRED TO PROVIDE LATERAL RESTRAINT TO THE STEEL BEAM DURING CONSTRUCTION STAGE.
9. IF SYSTEM FORMWORK IS USED, SPECIAL CARE SHALL BE PROVIDED FOR EDGE BEAM (SUPPORTING SLAB AT ONE SIDE OF THE BEAM ONLY) TO PREVENT TWISTING. PROPOSAL SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL BEFORE COMMENCEMENT OF WORKS.
10. AT A PARTICULAR FLOOR, NO BRICKWALL SHALL BE ERECTED UNTIL THE FLOOR SLAB AND THE CORE WALL AT THAT FLOOR ARE COMPLETELY CONSTRUCTED.
11. A GAP OF 25mm SHALL BE PROVIDED BETWEEN SOFFIT OF STEEL BEAMS AND TOP OF BRICKWALL. SUCH GAP SHALL ONLY BE SEALED UPON COMPLETION OF BRICKWALL AT THE UPPER FLOOR.
12. (-150) DENOTES TOP OF STEEL IS 150mm BELOW TYPICAL TOP OF STEEL LEVEL WHICH IS STRUCTURAL SLAB LEVEL MINUS TYPICAL SLAB THICKNESS.
13. ALL BEAM OR GIRDER SUPPORTING R.C. SLAB SHALL BE PROVIDED WITH SHEAR STUD AT 300 c/c UNLESS OTHERWISE STATED.
14. ALL SHEAR STUDS SHALL BE 19mm DIA. x 100mm LONG, UNIFORMLY PLACED UNLESS OTHERWISE STATED. (ULTIMATE TENSILE STRENGTH : 450 MPa). DENOTES REQUIRED NUMBERS OF SHEAR CONNECTOR FOR BEAM OR GIRDER.
15. THE CONTRACTOR SHALL UNDERSTAND THE CONSTRUCTION DRAWING PRIOR TO THE BEGINNING OF THE WORK. IF THERE ANY QUESTIONS OR INCONSISTENCIES ABOUT MEMBER SIZE, PLAN, ELEVATION AND DETAIL, HE SHALL SUBMIT THE QUIRIES TO ENGINEER FOR EXPLANATION OR REVISION. THE CONTRACTOR SHALL BEAR THE FULL RESPONSIBILITY AS A CONSEQUENCE OF MIS-INTERPRETING THE DRAWINGS.

FOUNDATION WORKS

1. EXCAVATION FOR FOOTING SHALL BE TAKEN DOWN TO UNDISTURBED GROUND AND THE BACKFILLING MATERIAL ARRANGEMENT OF REINFORCEMENT BARS AND DEPTH TO BE APPROVED BY THE ENGINEER BEFORE CONCRETING WORKS CAN COMMENCE.
2. FOR DEEP EXCAVATION i.e. > 1.8m THE CONTRACTOR SHALL SUBMIT THE METHOD STATEMENT TO THE ENGINEER ENDORSED BY THEIR PROFESSIONAL ENGINEER.
3. DURING RAFT FOUNDATION EXCAVATION, ENGINEER'S REPRESENTATIVE MUST BE INFORMED IF SOFT LAYER IN FOUNDING LEVEL IS ENCOUNTERED.
4. 6 MACKINTOSH PROBES SHALL BE CARRIED OUT AT LOCATION INSTRUCTED BY ENGINEER WITH MINIMUM STARTING DEPTH OF 0.5m ABOVE THE FOUNDING LEVEL.
5. THE ALLOWABLE SOIL BEARING PRESSURE FOR RAFT FOUNDATION IS 100 N/mm2 ABOVE THE FOUNDING LEVEL.

B. SITE PREPARATION AND COMPACTED FILL

1. STRIP OFF ALL SURFACE VEGETATION AND SOIL CONTAINING ORGANIC MATTER.
2. EXCAVATE AND REMOVE EXCESS MATERIAL TO THE REQUIRED DESIGN LEVEL.
3. TEST ROLL THE EXPOSED SUBGRADE WITH AT LEAST FOUR PASSES OF A HEAVY DUTY ROLLER WEIGHING NOT LESS THAN 10 TONNES TO REVEAL ANY SOFT AREAS.
4. EXCAVATE SOFT AREAS AND REPLACE WITH COMPACTED SELECTED FILL. IF SOFT AREAS APPEAR EXTENSIVE, CONSULT WITH THE SUPERINTENDING OFFICER PRIOR TO EXCAVATING.
5. ENSURE THE SUBGRADE IS AS SPECIFIED.
6. IF ADDITIONAL FILL IS REQUIRED TO RAISE THE SUBGRADE LEVEL, ONLY SELECTED FILL SHOULD BE USED. THE FILL MATERIAL SHALL BE FREE FROM ORGANIC OR OTHER DELETERIOUS MATTER OR ROCK PARTICLES EXCEEDING 150mm IN MAXIMUM DIMENSION AND THE STANDARD SPECIFIED. MATERIAL TO BE USED WITHIN 500mm OF THE FORMATION LEV. SHALL HAVE A MAXIMUM PARTICLE SIZE OF 50mm.
7. ALL FILLING SHOULD BE PLACED IN UNIFORM HORIZONTAL LAYERS NOT EXCEEDING 300mm LOOSE THICKNESS, AND EACH LAYER COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY ACHIEVED IN THE STANDARD COMPACTION TEST (BRITISH STANDARD) AND TO BE VERIFIED BY FIELD TESTING BEFORE PLACING THE NEXT LAYER. THE TOP LAYER SHALL BE PROOF ROLLED.

C. STRUCTURAL STEELWORK

1. READ THIS DRAWINGS IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S & ENGINEER'S DRAWING.
2. ALL DIMENSIONS TO BE RECONFIRMED BY THE ARCHITECT, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IN CHARGE BEFORE WORK COMMENCES.
3. ALL STRUCTURAL STEEL, PLATES, ANGLES ETC. SHALL BE HOT ROLL SECTION GRADE 43A UNLESS OTHERWISE STATED.
4. ALL PURLINS SHALL BE HIGH TENSILE GALVANIZED COLD FORMED SECTION (FY=450N/mm2)
5. ALL ϕ OF STEEL BEAMS AND ϕ OF STEEL COLUMNS SHALL COINCIDES WITH EACH OTHERS UNLESS OTHERWISE STATED.
6. ALL TRUSS MEMBERS SHALL BE CONNECTED FOR FULL TENSILE CAPACITY OF THE MEMBER.
7. ALL WELDING SHALL BE 6mm FILLET WELD ALL ROUND UNLESS NOTED OTHERWISE.
8. ALL STEEL STRUCTURE EXPOSE TO WEATHER SHALL BE CLEAN BLAS TO SA2.5 OR SSPC10 BEFORE ANY PROTECTIVE COATING SYSTEM IS APPLIED.
9. PROVIDED PAINT SYSTEM SHOULD BE AS FOLLOW :
 - i.) SURFACE PREPARATION: 1 COAT OF PRIMER TO 40 Microns AND 1 COAT OF FINISHING TO 40 Microns TO TOTAL 80 Microns

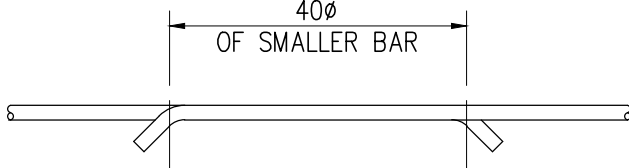
10. ALL BOLTS AND NUTS TO COMPLY WITH BS5950-1:2000 (OR EQUIVALENT) BS 4395 (OR EQUIVALENT)
 - BOLTS > M24 BOLTS TO BE GRADE 10.9
 - BOLTS < M24 BOLTS TO BE GRADE 8.8
 - ALL ANCHOR BOLTS TO BE GRADE 8.8
11. ALL WELDING ELECTRODES SHALL COMPLY TO BS 639 WITH MINIMUM WELD GRADE OF E51 FOR ALL STEEL ELEMENTS OF GRADE A43 AND MINIMUM WELD GRADE OF E70 FOR ALL STEEL ELEMENTS OF GRADE 50B
12. UNLESS OTHERWISE INDICATED, FILLET WELD SHALL BE CONTINUOUS, BUTT WELD SHALL BE CONTINUOUS COMPLETE PENETRATION.
13. WHERE CONSTRUCTION DRAWING INDICATE NOT WELD SYMBOL AND WELD SIZE AT THE CONNECTION, CONTRACTOR SHALL MAKE THE WELDING DETAILS IN THE SHOP DRAWING COMPLYING TO THE CONSTRUCTION SPECIFICATION AND SUBMIT TO THE ENGINEER FOR APPROVAL BEFORE COMMENCING WORK.
14. THE CONTRACTOR SHALL SUBMIT THE SHOP DRAWING INCLUDING MEMBER SIZE AND CONNECTION DETAILS FOR ENGINEER'S APPROVAL.
15. THE STRUCTURE WILL BE UNSTABLE UNTIL ALL STEEL MEMBERS ARE ERECTED, CONNECTIONS ARE COMPLETELY BOLTED AND/OR WELDED AND INSPECTED, AND THE FLOOR DECK ATTACHED TO THE STEEL FRAMING AND THE CONCRETE PLACED AND CURED. UNTIL SUCH TIME TEMPORARY BRACINGS ARE REQUIRED AND MUST REMAIN IN PLACE.

D. CONCRETE WORK

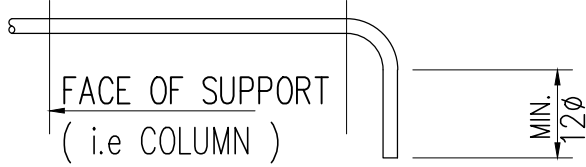
1. ALL R.C DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS. WHERE THERE ARE DISCREPANCIES BETWEEN THE R.C AND ARCHITECTURAL DRAWINGS THE S.O. DECISION SHALL BE SOUGHT, ONLY FIGURED DIMENSIONS ARE TO BE WORKED.
2. ALL R.C WORKS HAS BEEN DESIGNED IN ACCORDANCE WITH BS 8110 : 1997
3. ALL CONCRETE WORKS TO BE IN ACCORDANCE WITH THE BRITISH STANDARD BS 8110 AND ITS TESTING SHALL BE IN ACCORDANCE WITH BS 1881.
4. CLEAR COVER TO ALL REINFORCEMENTS UNLESS OTHERWISE STATED: -
 - i) SLAB = 25 mm
 - ii) BEAMS = 30 mm
 - iii) COLUMNS = 40 mm
 - iv) MEMBER IN CONTACT WITH GROUND = 40 mm
 - v) WALLS = 30 mm
 - vi) FOUNDATION = 50 mm
5. CONCRETE MIX USED SHALL BE OF THE STATED GRADE WITH AGGREGATE OF MAXIMUM 20mm SIZE.
6. ALL CONCRETE PLACED TO BE COMPACTED WITH AN APPROVED TYPE OF VIBRATOR.
7. THE BOTTOM OF ALL PILECAPS, GROUND BEAMS AND SLABS RESTING ON GROUND SHALL HAVE A MINIMUM 50mm THK. LEAN CONCRETE OF GRADE 15.
8. IF GRADE 35 CONCRETE IS SPECIFIED TO BE USED, THE CONCRETE SHALL HAVE A MINIMUM CUBE STRENGTH OF 23 N/mm² AT 7 DAYS AND 35 N/mm² AT 28 DAYS.
9. IF GRADE 30 CONCRETE IS SPECIFIED TO BE USED, THE CONCRETE SHALL HAVE A MINIMUM CUBE STRENGTH OF 20 N/mm² AT 7 DAYS AND 30 N/mm² AT 28 DAYS.
10. THE CONTRACTOR SHALL SUBMIT THE CONCRETE CUBE TEST RESULT ENDORSED BY THEIR PROFESSIONAL ENGINEER EVERY FORTNIGHTLY.
11. ALL STEEL REINFORCEMENT BAR TO COMPLY WITH M.S 146 (EQUIVALENT TO BS 4449) UNLESS OTHERWISE STATED. STEEL FABRIC TO COMPLY WITH M.S 145 (EQUIVALENT TO BS 4483).

REINFORCEMENT SYMBOLS :

 - T - HOT ROLLED HIGH TENSILE STEEL BAR (SPECIFIED CHARACTERISTIC STRENGTH $f_y = 460 \text{ N/mm}^2$)
 - R - MILD STEEL BAR (SPECIFIED CHARACTERISTIC STRENGTH $f_y = 250 \text{ N/mm}^2$)
 - A, B - STANDARD STEEL FABRIC (SPECIFIED CHARACTERISTIC STRENGTH $f_y = 485 \text{ N/mm}^2$)
12. NO OPENING OR HOLES ARE PERMITTED IN CONCRETE MEMBER OTHER THAN THOSE DETAILED OR AUTHORISED. NO BARS ARE TO BE CUT WITHOUT SPECIFIC INSTRUCTION FROM THE ENGINEER.
13. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH BS 8110.
14. ALL REINFORCEMENT BARS SHALL BE SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
15. THE CONTRACTOR SHALL INFORM THE ENGINEER WHEN REINFORCEMENT IS READY FOR INSPECTION BEFORE CONCRETE IS POURED AND ADEQUATE NOTICE (MIN. 24HRS) SHALL BE GIVEN TO ENABLE INSPECTION TO BE CARRIED OUT.
16. THE POSITION OF ALL STIFFENERS FOR BRICKWALL TO FOLLOW ARCHITECTURE REQUIREMENTS. REINFORCEMENT DETAILS OF STIFFENER TO FOLLOW THE RELEVANT STRUCTURAL DRAWINGS.
17. MINIMUM LAPPING AND ANCHORAGE LENGTH



MINIMUM LAP LENGTH



MINIMUM TENSION ANCHORAGE LENGTH Ldh,
FOR STANDARD END HOOKS SHOULD BE MINIMUM 40D

18. GRADE CONCRETE : =
 - i) BEAM/SLAB = 30 N/mm2 (MIN)
 - ii) CAST IN-SITU SUPERSTRUCTURE = 30 N/mm2 (MIN)
 - iii) COLUMN/STUMPS = 30 N/mm2 (MIN)
 - iv) PILE CAP = 40 N/mm2 (MIN)
 - v) R.C WALL = 30 N/mm2 (MIN)
 - iv) R.C WATER TANK = 30 N/mm2 (MIN)

NOTA :

TENDER DRAWING
(STRUCTURE)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN
MENAIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA
- KERJA BERKAITAN BAGI PENINGKATAN
PROGRAM SIJIL KE DIPLOMA DALAM
BIDANG AUTOMOTIF JENTERA BERAT DI
INSTITUT KEMAHIRAN MARA (IKM) JASIN,
MELAKA.

NOTA :

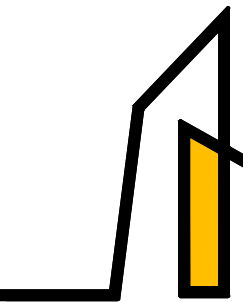
REV.	DATE	DESCRIPTION	BY

PEMLIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
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Semabok, 75050 Melaka.

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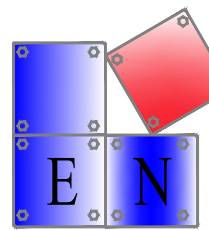
JURUTERA C&S :



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U10/59, Taman Subang Impian,
40170 Shah Alam, Selangor.

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Jalan Dato' Wira Poh Ah Tiam,
75250 Melaka.

06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :



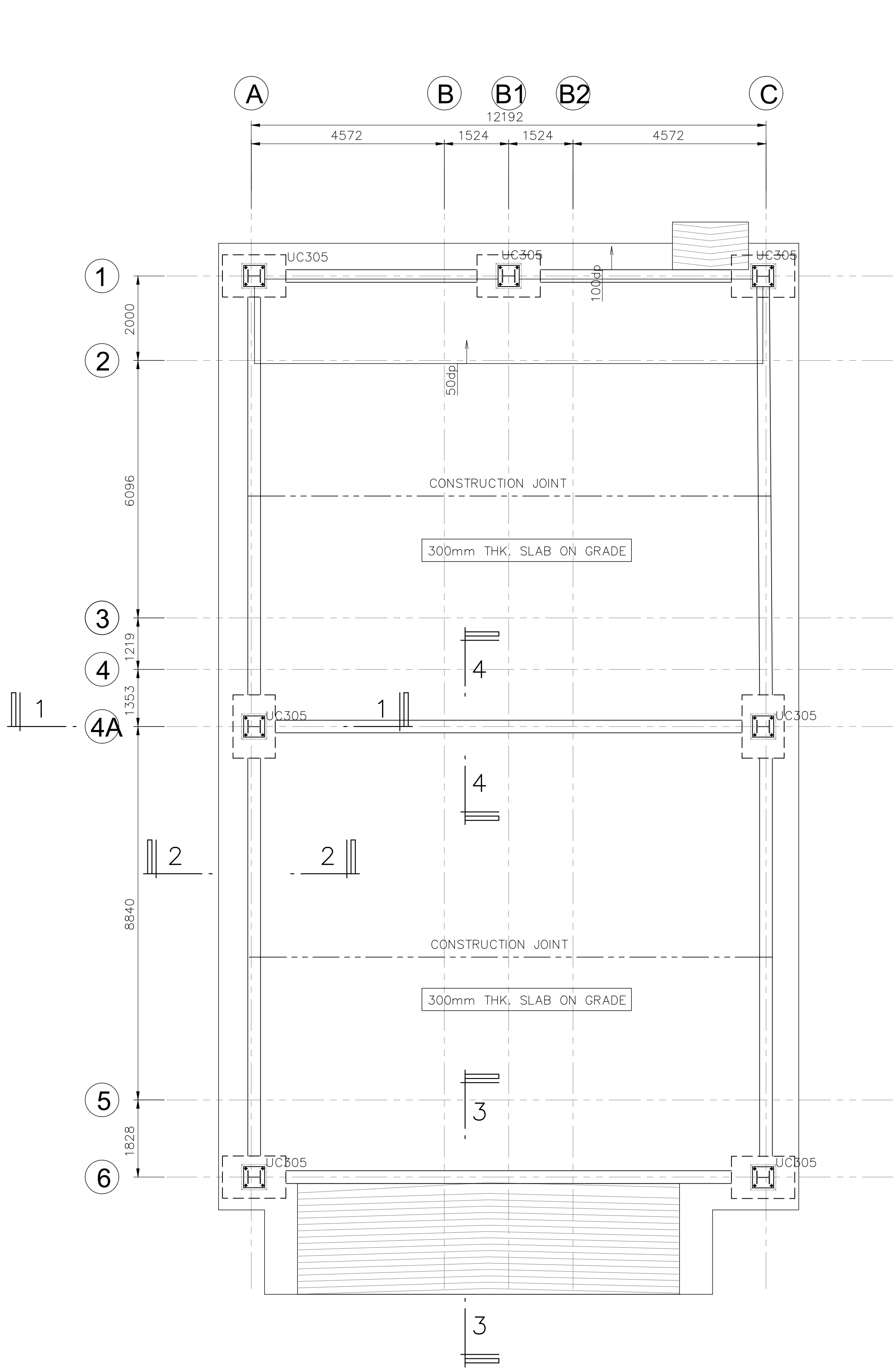
QUANTICOS SDN. BHD.
1B-2, 2nd Floor, Jalan Wawasan 4/1,
Bandar Baru Ampang,
68000 Ampang, Selangor.

03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :

GENERAL NOTES

DIREKA OLEH :	AKH	DILUKIS OLEH :	BKT
DISEMAK OLEH :	Ir. Ahmad Khairul Hakimi	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026	NO. LUKISAN :	
SKALA :			
NO. LUKISAN: AKHP/25-10/IKM/S/GN/01			1/1



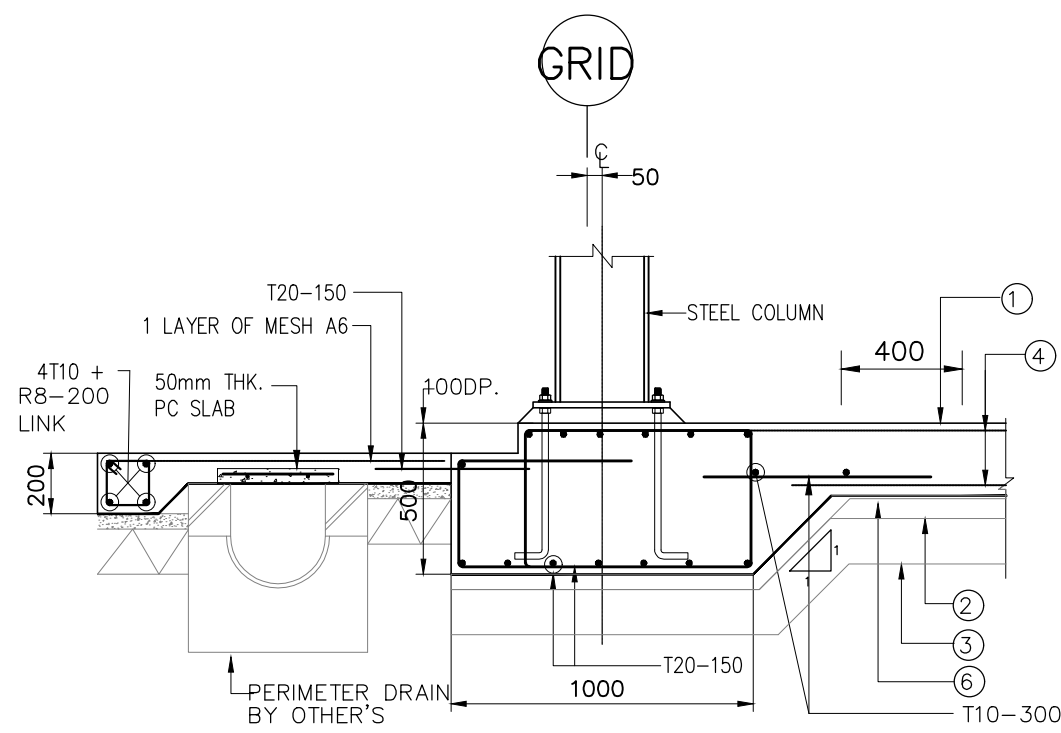
GROUND FLOOR PLAN
SCALE 1 : 75

NOTES FOR GROUND FLOOR SLAB

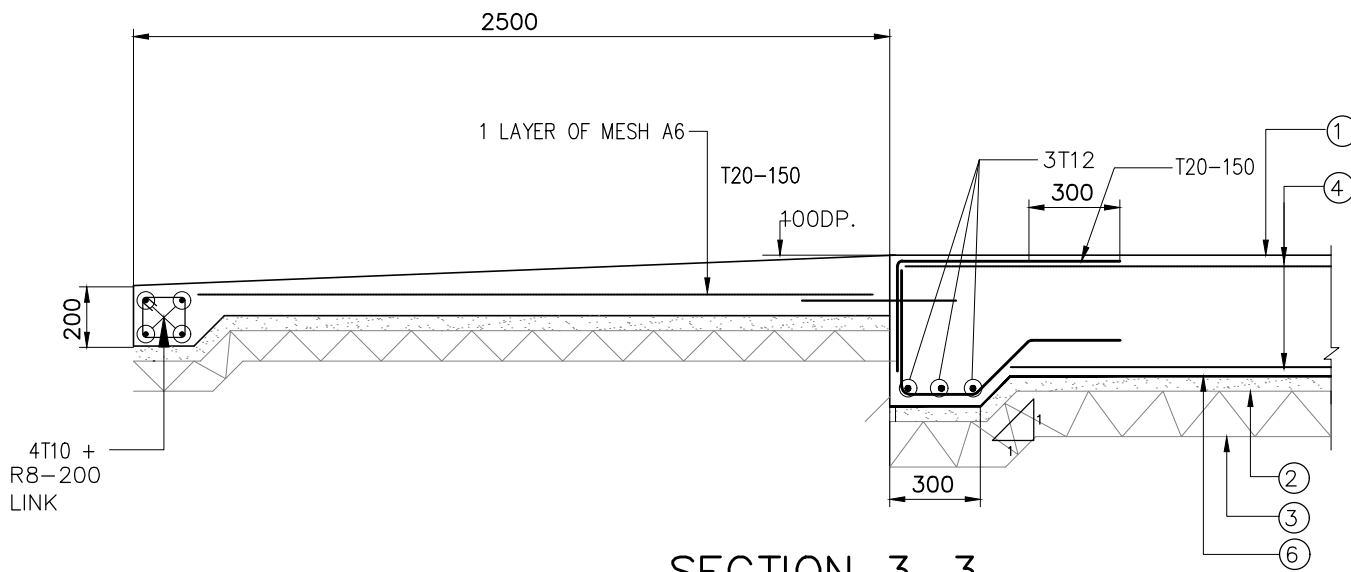
1. CONCRETE GRADE FOR GROUND FLOOR SLAB SHALL BE OF 30 UNLESS OTHERWISE STATED ($f_{cu} = 30 \text{ N/mm}^2$).
2. DURING GROUND FLOOR SLAB BASE FORMATION, ENGINEER'S REPRESENTATIVE MUST BE INFORMED IF SOFT LAYER IN FOUNDING LEVEL IS ENCOUNTERED.
3. 6 MACKINTOSH PROBES SHALL BE CARRIED OUT AT LOCATION INSTRUCTED BY ENGINEER WITH MINIMUM STARTING DEPTH OF 0.5m ABOVE THE FOUNDING LEVEL.
4. THE ALLOWABLE BEARING PRESSURE FOR GROUND FLOOR SLAB IS 100 kPa.

LEGEND:

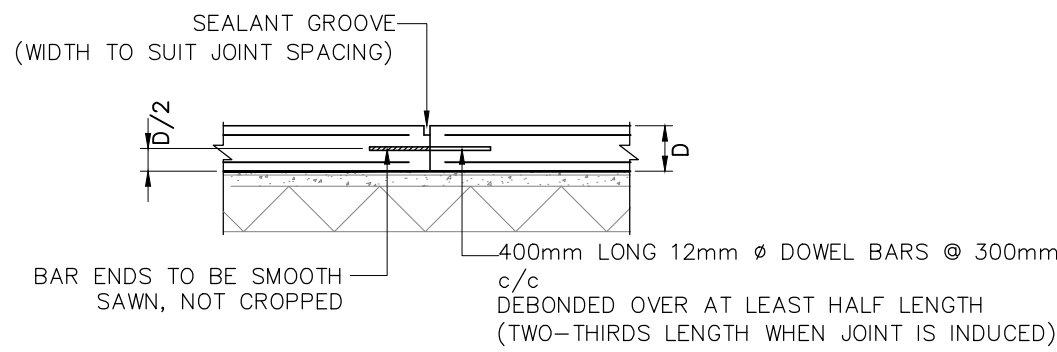
1. ALL R.C. SLAB THICKNESS SHALL BE 300mm THK ON GRADE UNLESS OTHERWISE NOTED.
2. _____ INDICATE CONSTRUCTION JOINT DETAIL.



SECTION 1-1
SCALE 1: 25

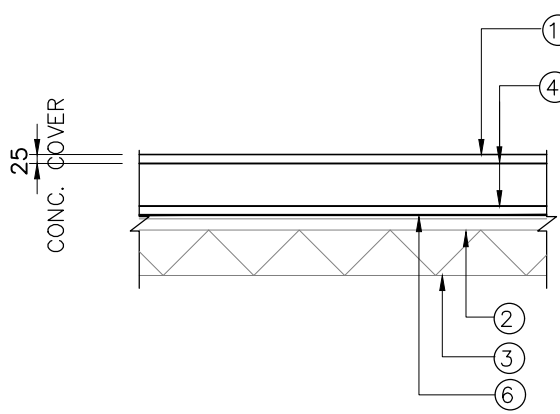


SECTION 3-3
SCALE 1: 25



CONSTRUCTION JOINT DETAIL

SCALE: 1: 25

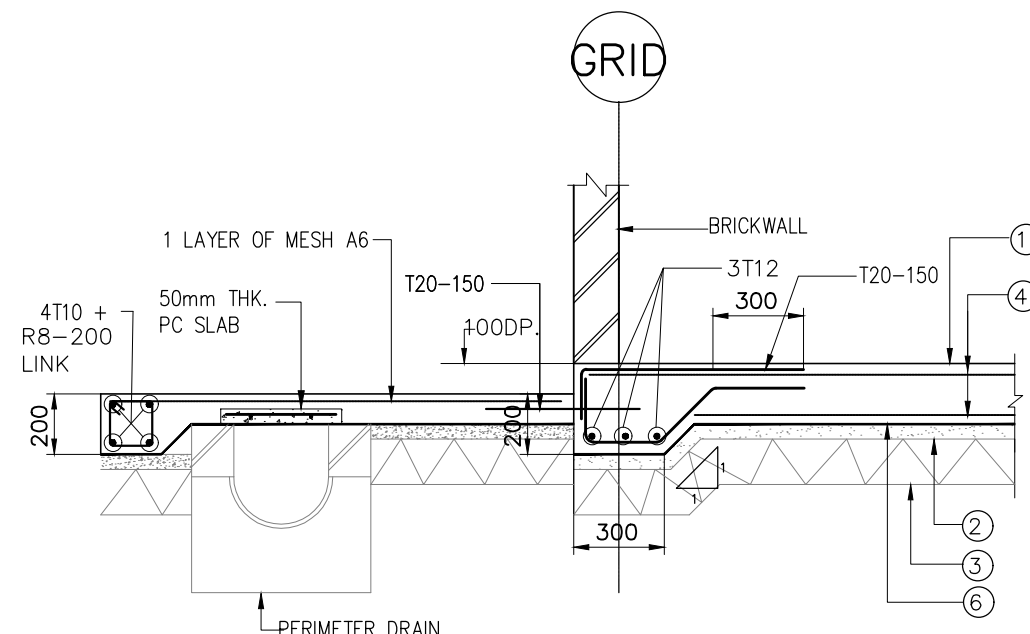


TYPICAL SECTION OF 300mm THK.
GROUND FLOOR SLAB ON GRADE

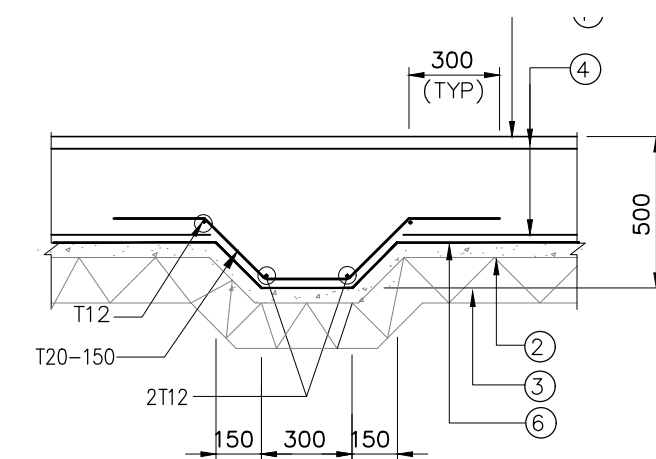
SCALE: 1: 25

LEGENDS

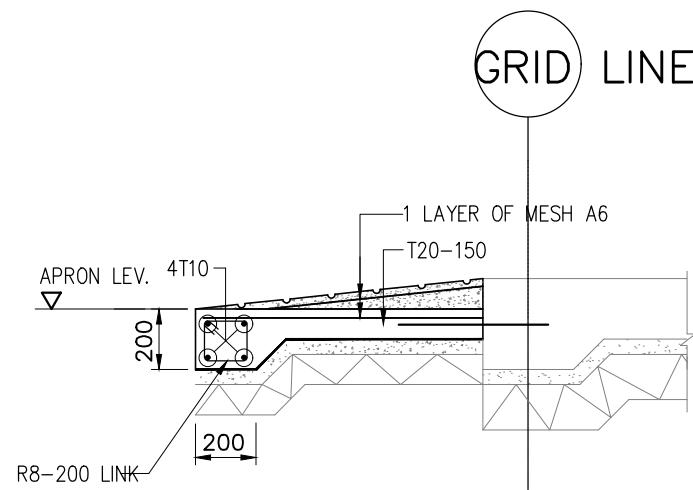
- ① DENOTES 300mm THK. SLAB ON GRADE.
- ② 50mm THK. LEAN CONC.
- ③ DENOTES 150mm THK. WELL COMPACTED HARD CORE
- ④ DENOTES TWO LAYERS OF MESH A10 (CHARACTERISTIC STRENGTH $f_y = 485 \text{ N/mm}^2$)
- ⑤ DENOTES 115mm THK. BRICKWALL
- ⑥ DENOTES 0.2mm THK. POLYTHENE SHEET



SECTION 2-2
SCALE 1: 25

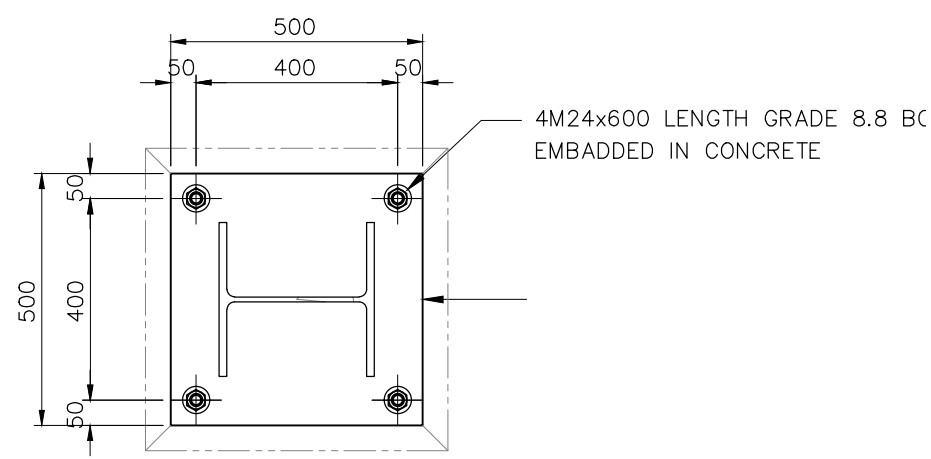


SECTION 4-4
SCALE 1: 25



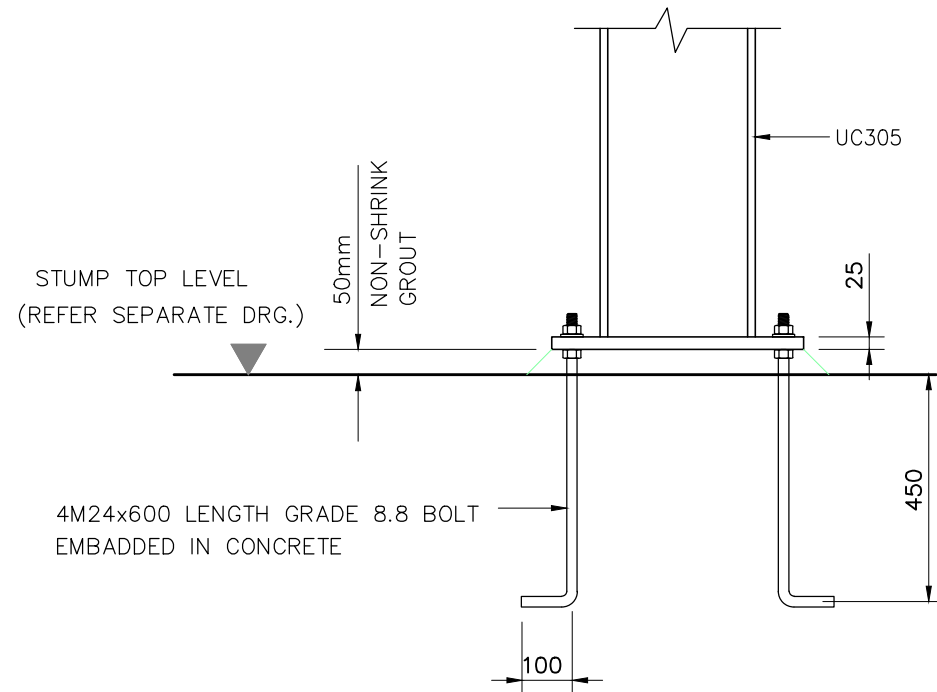
TYPICAL RAMP DETAIL

SCALE 1: 25



PLAN
BASE PLATE DETAIL

SCALE 1: 15



SECTION Y-Y
SCALE 1: 15

NOTA :

TENDER DRAWING
(STRUCTURE)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

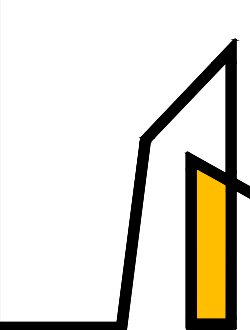
REV.	DATE	DESCRIPTION	BY

PEMLIK :



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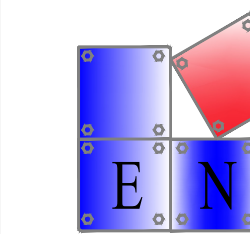
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Jalan Dato' Wira Poh Ah Tiam,
75250 Melaka.

06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :



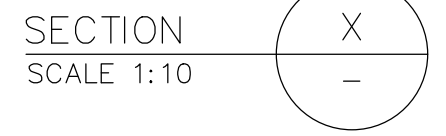
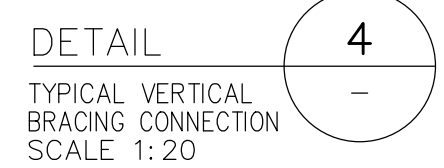
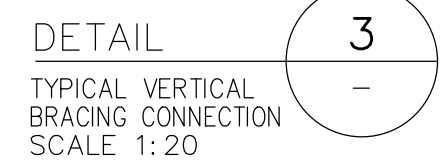
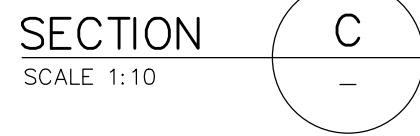
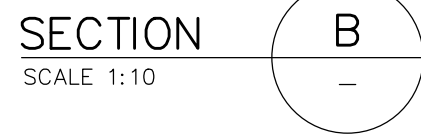
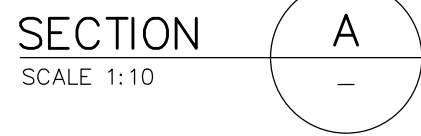
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68000 Ampang, Selangor.

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TAJUK LUKISAN :

GROUND FLOOR PLAN
SECTION & DETAILS

DIREKA OLEH :	AKH	DILUKIS OLEH :	BKT
DISEMAK OLEH :	Ir. Ahmad Khairul Hakimi	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100	NO. LUKISAN :	
NO. LUKISAN:			1/1
AKHP /25-10/IKM/S/GF/LP/01			



MARKING	SIZE
UC305	UC 305 x 305 x 97 kg/m
UB305	UB 305 x 165 x 40 kg/m
UB178	UB 178 x 102 x 19 kg/m
VB1	EA 150 x 150 x 5
VB1	EA 150 x 150 x 5
CH203	LIPPED CHANEL

TENDER DRAWING (STRUCTURE)

CADANGAN KERJA - KERJA MEMBINA DAN
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TEKNOLOGI JENTERA BERAT SERTA KERJA
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PROGRAM SIJIL KE DIPLOMA DALAM
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INSTITUT KEMAHIRAN MARA (IKM) JASIN,
MELAKA.

[illegible]

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75250 Melaka.

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enhillconsultant@gmail.com

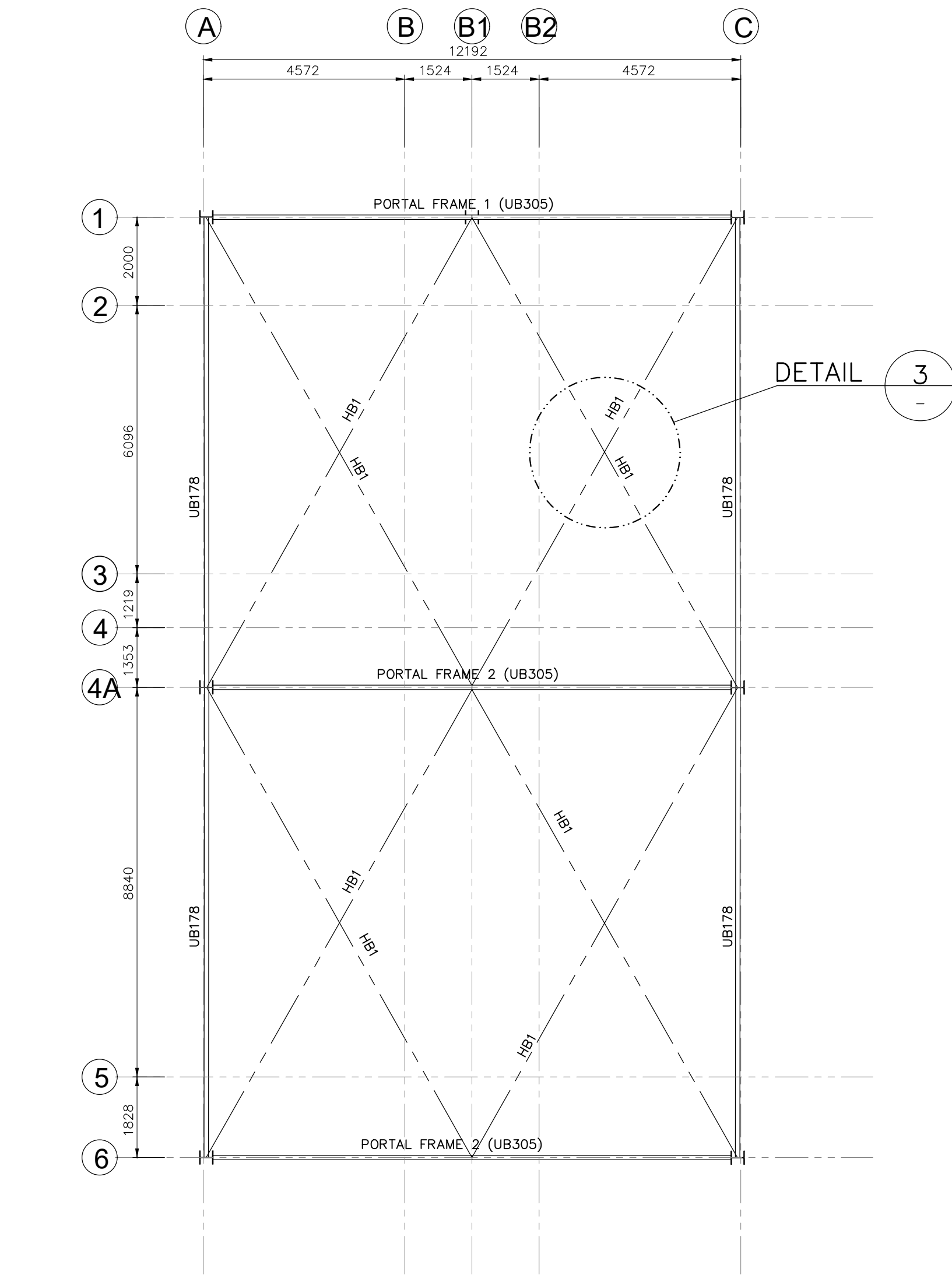
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68000 Ampang, Selangor.

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ROOF PURLIN LAYOUT PLAN

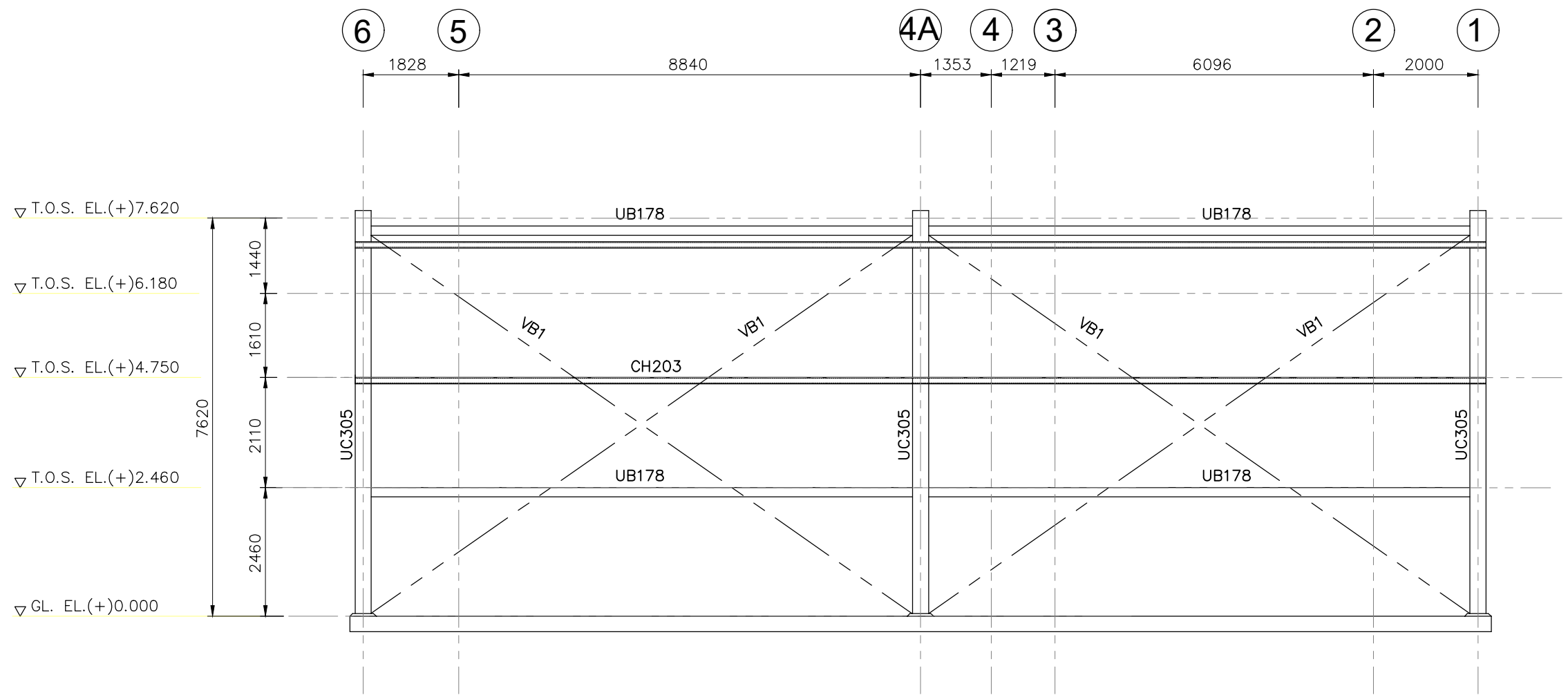
CONNECTION DETAILS

DIREKSA OLEH :	AKH	DILUKIS OLEH :	BKT
DISEMAK OLEH :	Ir. Ahmad Khairul Hakimi	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :		NO. LUKISAN :	
NO. LUKISAN:			1/1
AKHP/25-10/IKM/S/PR/LP/01			



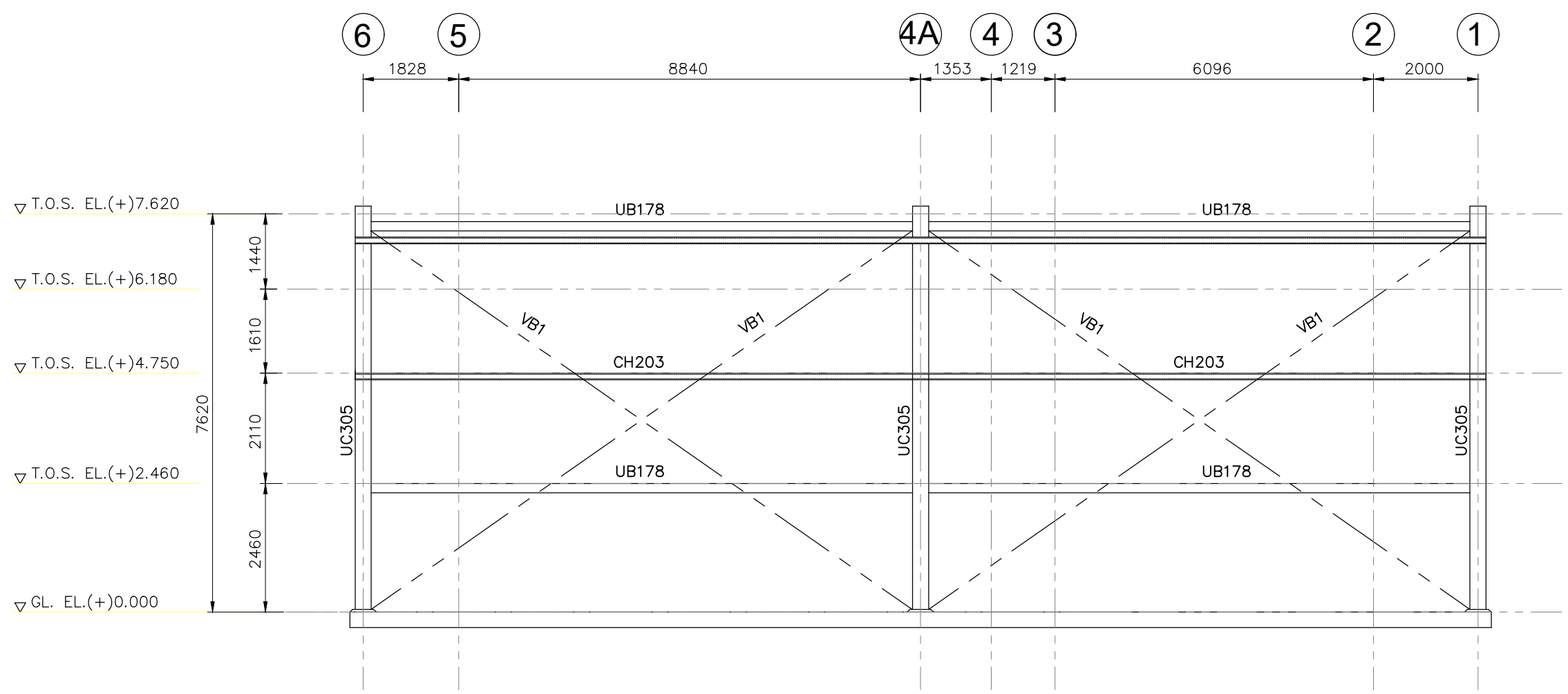
STEEL FRAMING PLAN

SCALE 1 : 200



FRAME AT ROW A/6-1

SCALE 1:100

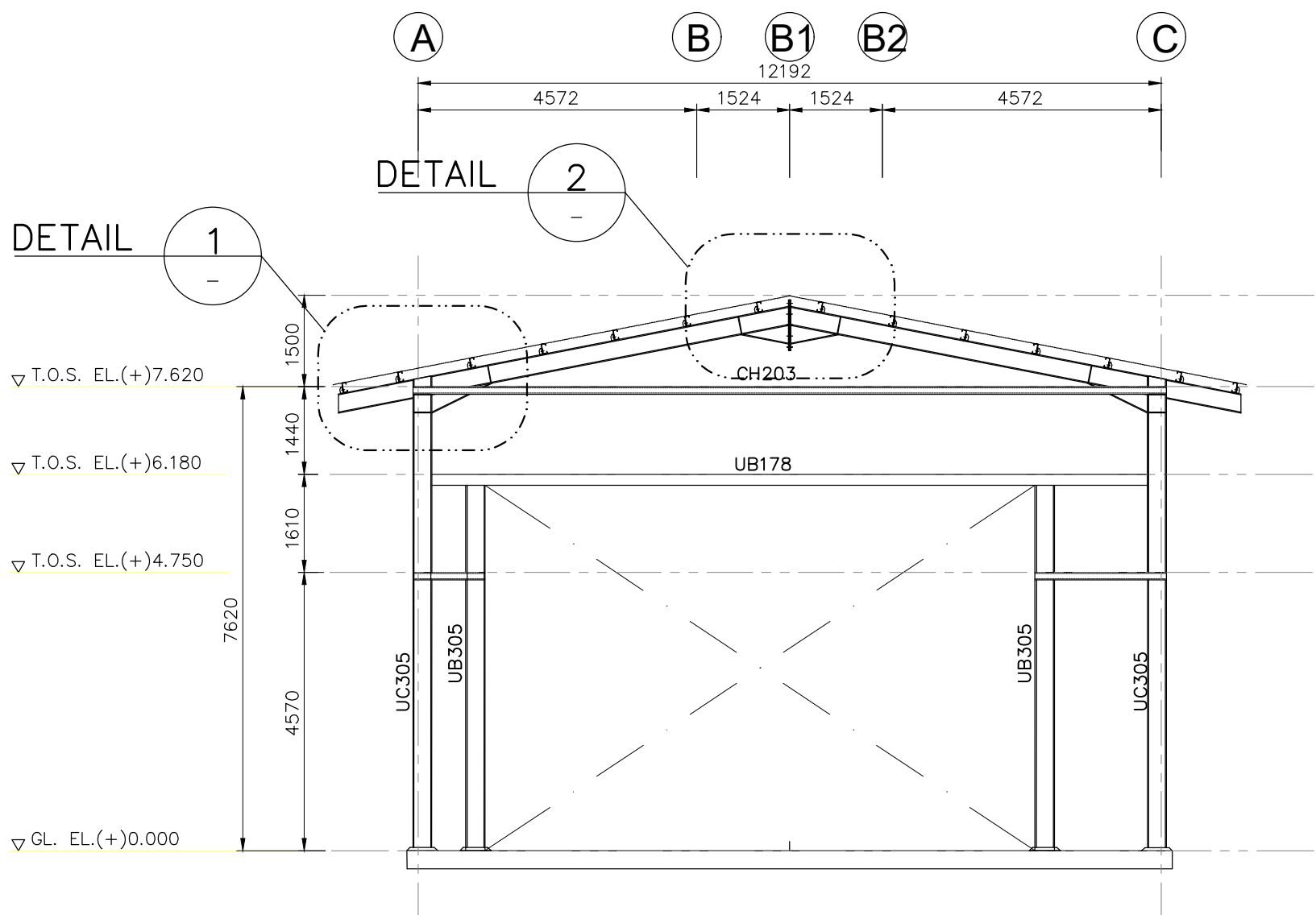


FRAME AT ROW C/6-1

SCALE 1:100

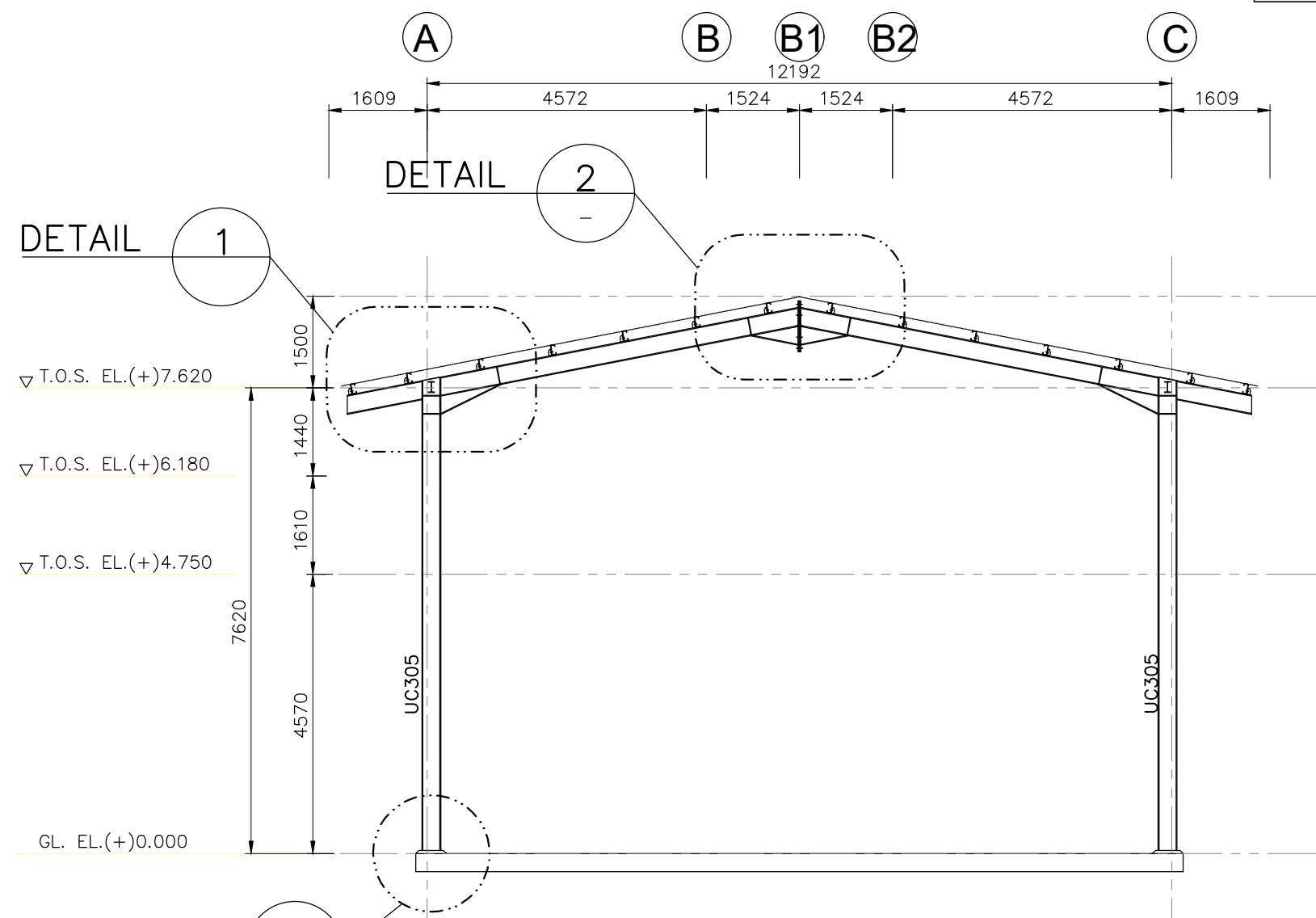
MEMBER SCHEDULE

MARKING	SIZE
UC305	UC 305 x 305 x 97 kg/m
UB305	UB 305 x 165 x 40 kg/m
UB178	UB 178 x 102 x 19 kg/m
HB1	EA 150 x 150 x 5
VB1	EA 150 x 150 x 5
CH203	LIPPED CHANEL



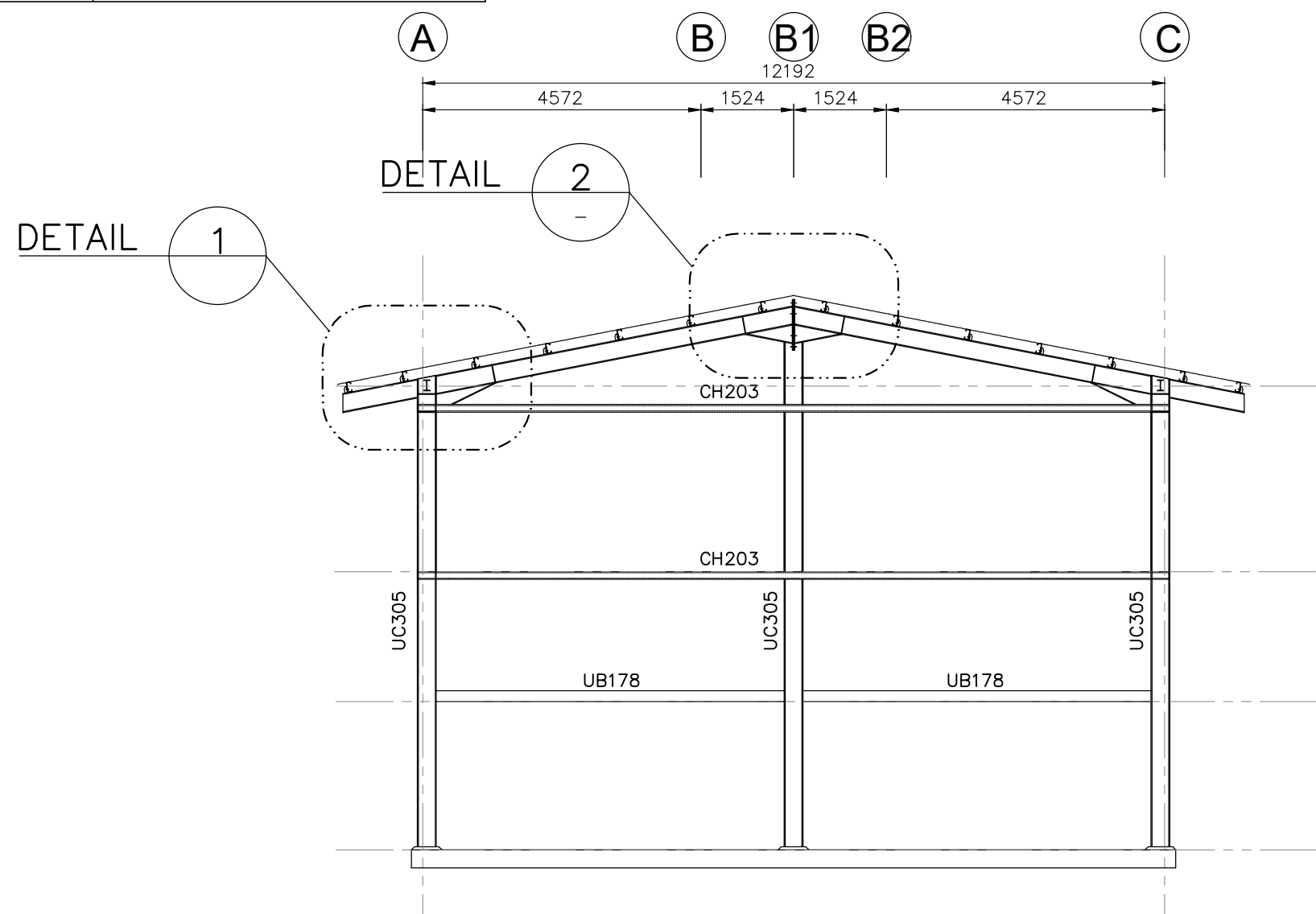
FRAME AT ROW 6/A-C

SCALE 1:100



FRAME AT ROW 4A/A-C

SCALE 1:100



FRAME AT ROW 1/A-C

SCALE 1:100

NOTA :

TENDER DRAWING
(STRUCTURE)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN
MENAIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA
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BIDANG AUTOMOTIF JENTERA BERAT DI
INSTITUT KEMAHIRAN MARA (IKM) JASIN,
MELAKA.

NOTA :

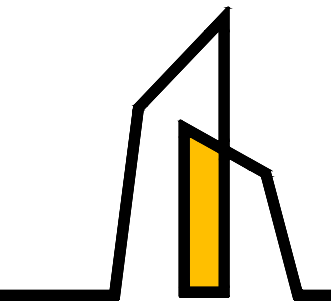
REV.	DATE	DESCRIPTION	BY

PEMLIK :



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Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
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50609 Kuala Lumpur.

ARKITEK :



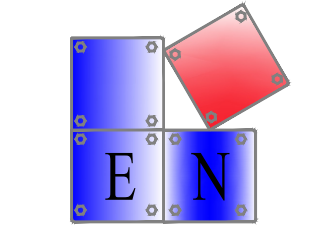
AZIZUL AZWAR ARCHITECT
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JURUKUR BAHAN :

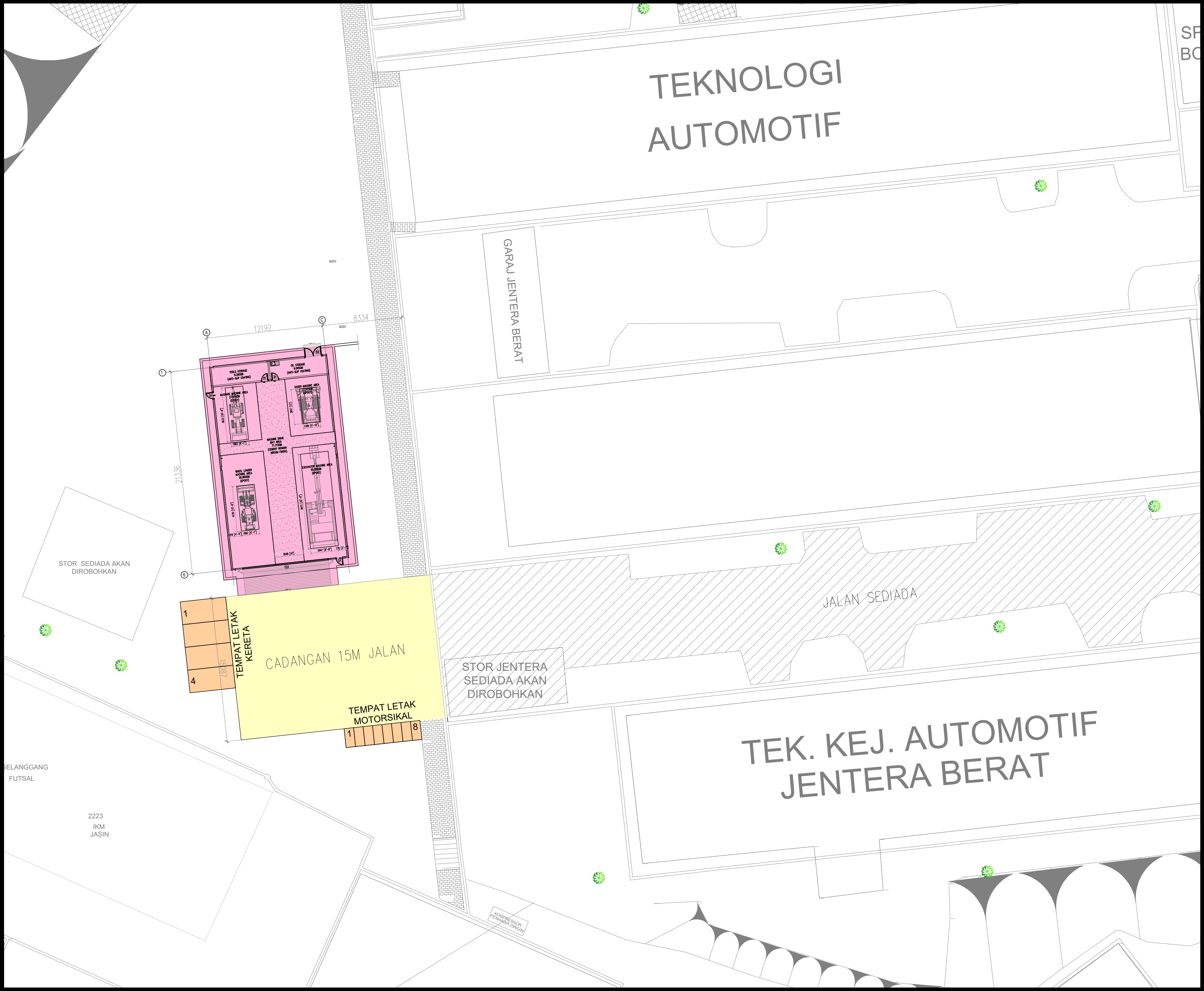


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TAJUK LUKISAN :

STEEL FRAMING PLAN
FRAME ELEVATION

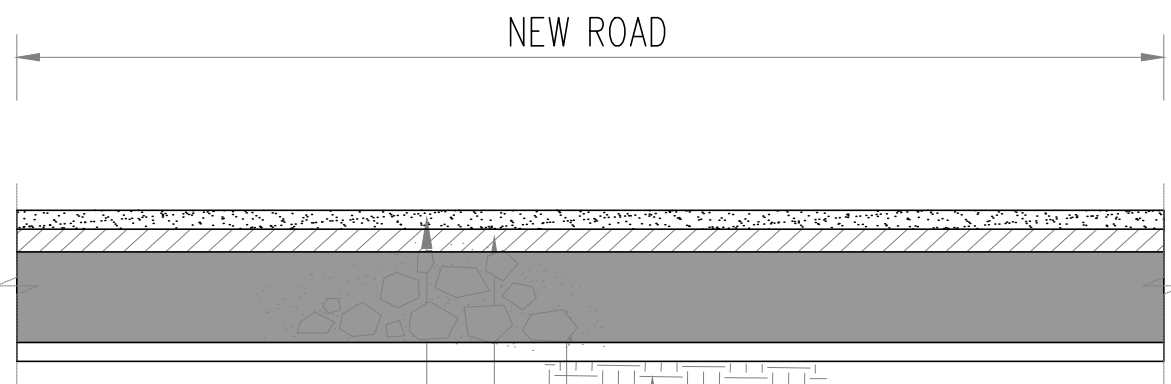
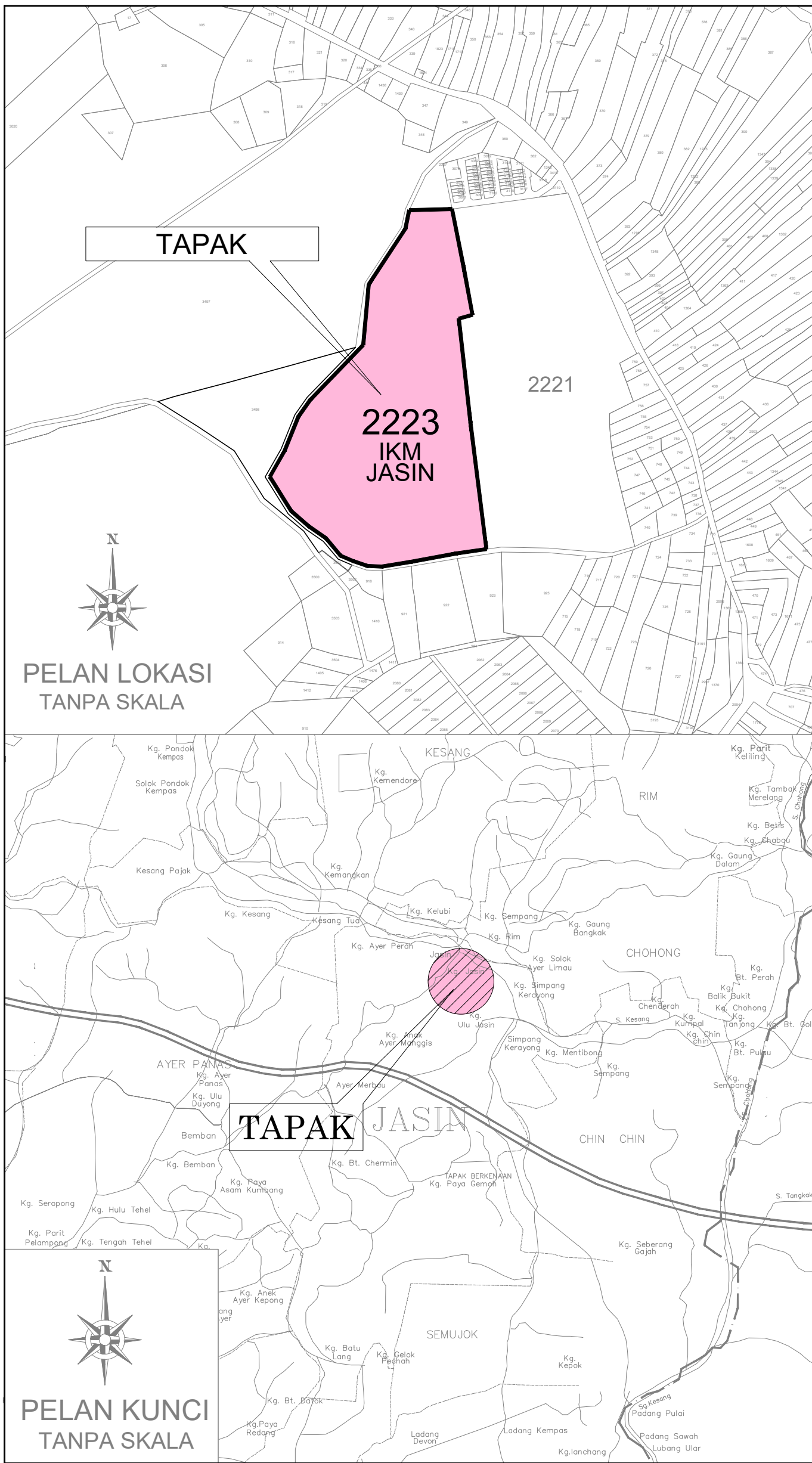
DIREKA OLEH :	AKH	DILUKIS OLEH :	BKT
DISEMAK OLEH :	Ir. Ahmad Khairul Hakimi	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026	NO. LUKISAN :	
SKALA :	1:100		
NO. LUKISAN: AKHP/25-10/IKM/S/FR/LP/01			1/1



LEGENDS:

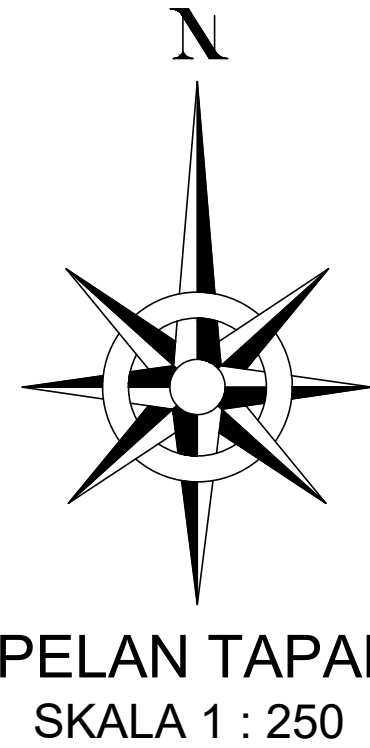
: PROPOSED PREMIX ROAD

: EXISTING ROAD



50mm THK. PREMIX WEARING COURSE
60mm THK. PREMIX BINDER COURSE
300mm THK. CRUSHER RUN
50mm THK. SUB-BASE
GROUND TO BE COMPACTED

TYPICAL SECTION FOR ROAD
SCALE : 1:30



NOTA :
TENDER DRAWING (STRUCTURE)

PROJEK :
CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

REV.	DATE	DESCRIPTION	BY

PEMLIK :

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TAJUK LUKISAN :
ROAD LAYOUT PLAN
AND
TYPICAL SECTION

DIREKA OLEH : AKH	DILUKIS OLEH : BKT
DISEMAK OLEH : Ir. Ahmad Khairul Hakimi	DILULUSKAN OLEH :
TARIKH : 10 MEI 2026	
SKALA : 1:250	NO. LUKISAN :
NO. LUKISAN: AKHP/25-10/IKM/S/RD/LP/01	
1/1	

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

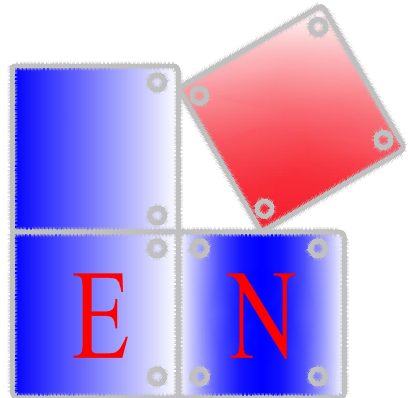


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50609 Kuala Lumpur.

LIST OF DRAWING
MECHANICAL

NO.	DRAWING NO.	DRAWING TITLE
1.	EC/M/IKMJJ/25/CW/LAY-01	<u>COLD WATER SYSTEM</u> PELAN LANTAI PELAN BUMBUNG
2.	EC/M/IKMJJ/25/CW/SCHE-02	<u>COLD WATER SYSTEM</u> PELAN LANTAI PELAN BUMBUNG
3.	EC/M/IKMJJ/25/SNT/LAY-01	<u>SANITARY SYSTEM</u> PELAN LANTAI PELAN BUMBUNG
4.	EC/M/IKMJJ/25/SNT/SCHE-02	<u>SANITARY SYSTEM</u> PELAN LANTAI PELAN BUMBUNG
5.	EC/M/IKMJJ/25/RW/LAY-01	<u>RAINWATER HARVESTING SYSTEM</u> PELAN LANTAI PELAN BUMBUNG
6.	EC/M/IKMJJ/25/FF/LAY-01	<u>FIRE FIGHTING SYSTEM</u> PELAN LANTAI PELAN BUMBUNG

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COLD WATER PIPE SCHEDULE	
FITTINGS	PIPE SIZE (mm)
1. FLUSH VALVE	25ø
2. SHOWER	20ø
3. BASIN	20ø
4. BASIN (2 NOS. ABOVE)	25ø
5. SINK	20ø
6. SINK (2 NOS & ABOVE)	25ø
7. WATER CLOSET	20ø
8. TAP	20ø
9. URINAL	20ø

NOTE : ALL DIMENSION ARE IN - mm

LEGEND :	
WC	WATER CLOSET
B	BASIN
T	TAP
S	SINK
SHW	SHOWER
UR	URINAL
WM	WASHING MACHINE
MATERIAL:	
POB	POLYOLEFINE BLEND PIPE
SS	STAINLESS STEEL PIPE
ABS	Acrylonitrile-Butadiene-Styrene
GV	GATE VALVE
SC	STOP COCK
CV	CHECK VALVE

Lukisan dan maklumat yang tertera adalah hakcipta **ENHILL CONSULTANT** yang mana sebahagian atau keseluruhannya tidak boleh ditiru, dicetak atau diukis semula dalam sebarang bentuk atau isi kandungannya diberitahu kepada pihak ketiga tanpa kebenaran bertulis daripada **ENHILL CONSULTANT**

Semua ukuran mesti disemak di atas tapak binaan. Hanya ukuran-ukuran yang dicatitkan sahaja perlu digunakan. Sebarang selisihan hendaklah dilaporkan dengan segera kepada jurutera.

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

REV.	DATE	DESCRIPTION	BY

PEMILIK :

MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :

AZIZUL AZWAR ARCHITECT
No. 10-2, 2nd Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
016-421 2703
aaarchitect.adm@gmail.com

JURUTERA C&S :

A.KHIR.HAKIM PERUNDING
No. 26, Jalan Pulau Indah
U10/59, Taman Subang Impian,
40170 Shah Alam, Selangor.
019-303 1439
akhakimin@gmail.com

JURUTERA M&E :

ENHILL CONSULTANT
9-1, Jalan PM 1/1, Taman Pandan Mawar,
Jalan Dato' Wira Poh Ah Tiam,
75250 Melaka.
06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :

QUANTICOS SDN. BHD.
1B-2, 2nd Floor, Jalan Wawasan 4/1,
Bandar Baru Ampang,
68000 Ampang, Selangor.
03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :

COLD WATER SYSTEM

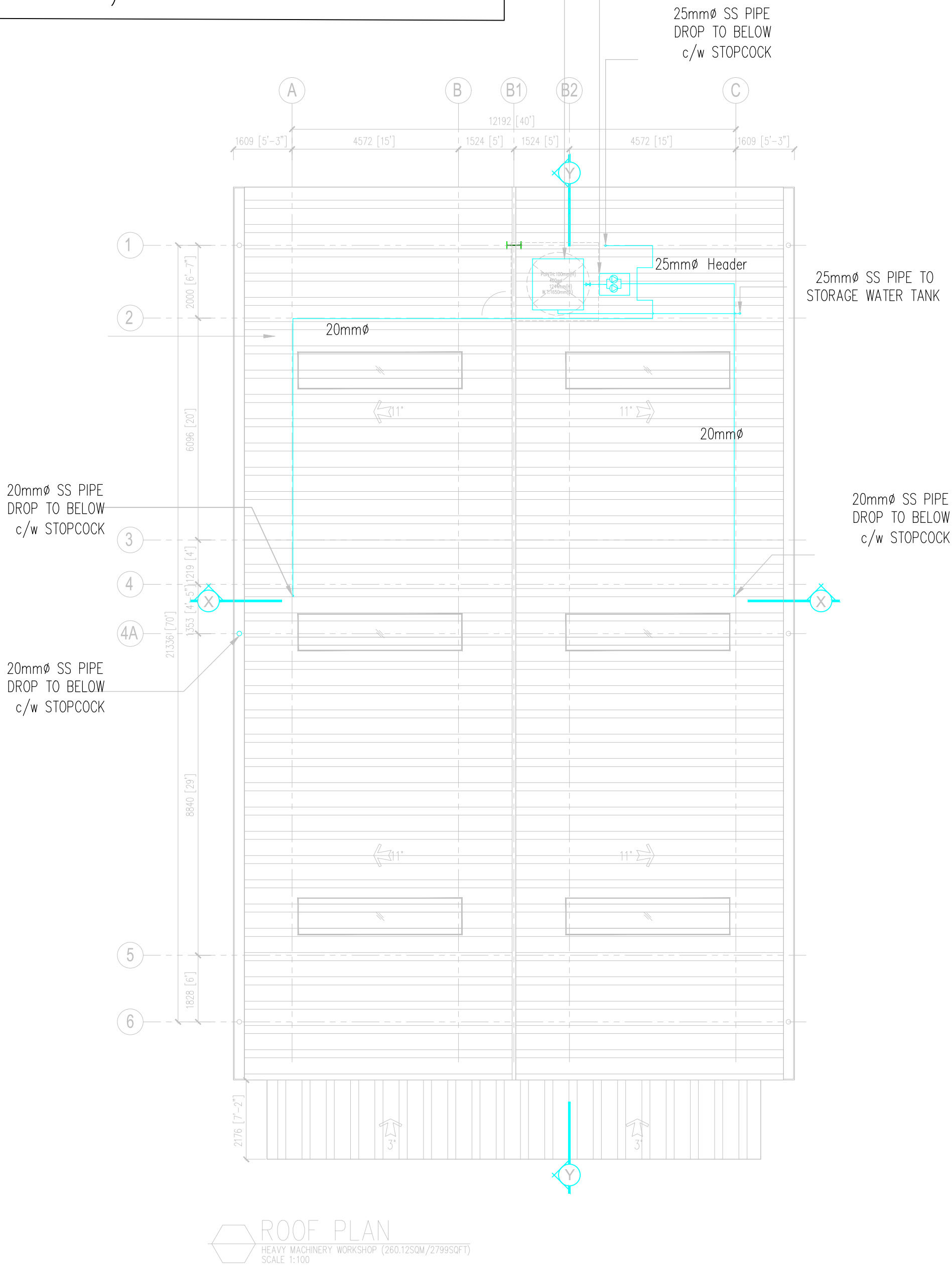
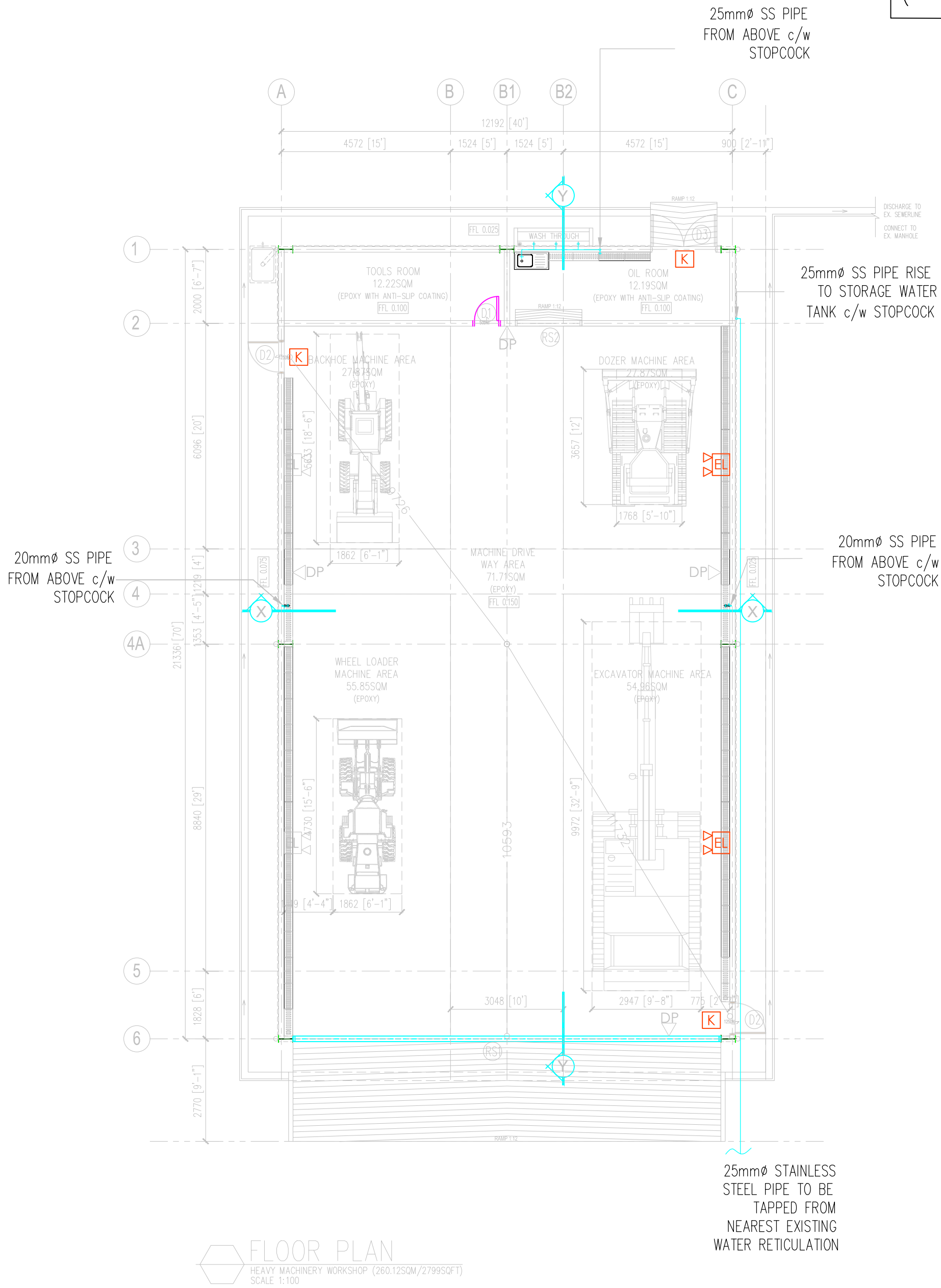
PELAN LANTAI
PELAN BUMBUNG

DIREKA OLEH :	NONONO	DILUKIS OLEH :	NONONO
DISEMAK OLEH :	Ir. Ts. Hj. Mohd Nazri	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100		

NO. LUKISAN:
EC/M/IKMJJ/25/CW/LAY-01

TYPE : POLYETHELYNE SQUARE TYPE WATER STORAGE TANK
CAP.TANK : 220 gall x 1 unit
SIZE : 1400mm(l) x 1400mm(w) x 900mm(h)
MOUNTED ON R.C BEAM/PLINTHS/SLAB (BY OTHERS)
C/W 25ø VENT PIPE,BALL FLOAT VALVE,
32ø OVERFLOW & SCOUR PIPE DISCHARGE TO ROOF DRAIN
(BY PLUMBING CONTRACTOR)

PUMP DATA
PUMP TYPE = CENTRIFUGAL PUMP PUMP FLOW = 10 igpm PUMP HEAD = 15 M



TENDER DRAWING

semua ukuran mesti disemak di atas tapak binaan. Hanya ukuran-ukuran yang dicatitkan sahaja perlu digunakan. Sebarang selisihan hendaklah dilaporkan dengan segera kepada jurutera.

CADANGAN KERJA - KERJA MEMBINA DAN
MEMANIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA
- KERJA BERKAITAN BAGI PENINGKATAN
PROGRAM SUJIL KE DIPLOMA DALAM
BIDANG AUTOMOTIF JENTERA BERAT DI
INSTITUT KEMAHIRAN MARA (IKM) JASIN,
MELAKA.

REV.	DATE	DESCRIPTION	BY

MAJLIS AMANAH RAKYAT
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akhakimin@gmail.com

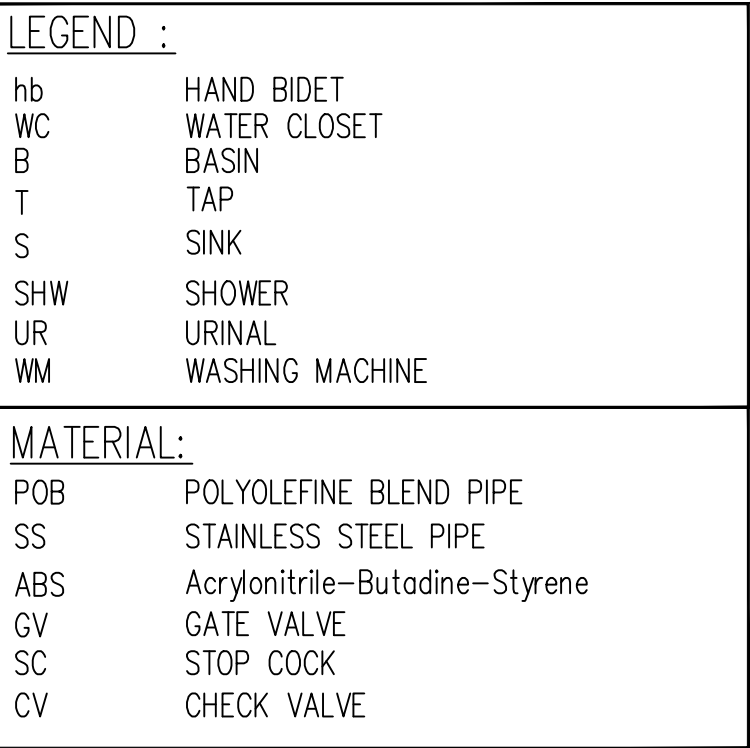
ENHILL CONSULTANT
9-1, Jalan PM 1/1, Taman Pandan Mawar,
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1B-2, 2nd Floor, Jalan Wawasan 4/1,
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68000 Ampang, Selangor.
03-4287 6190
quanticos.qts@gmail.com

PELAN LANTAI
PELAN BUMBUNG

NO. LUKISAN: EC/M/IKMJJ/25/CW/SCHE-02



TENDER DRAWING

INSPECTION CHAMBER PIPE SCHEDULE

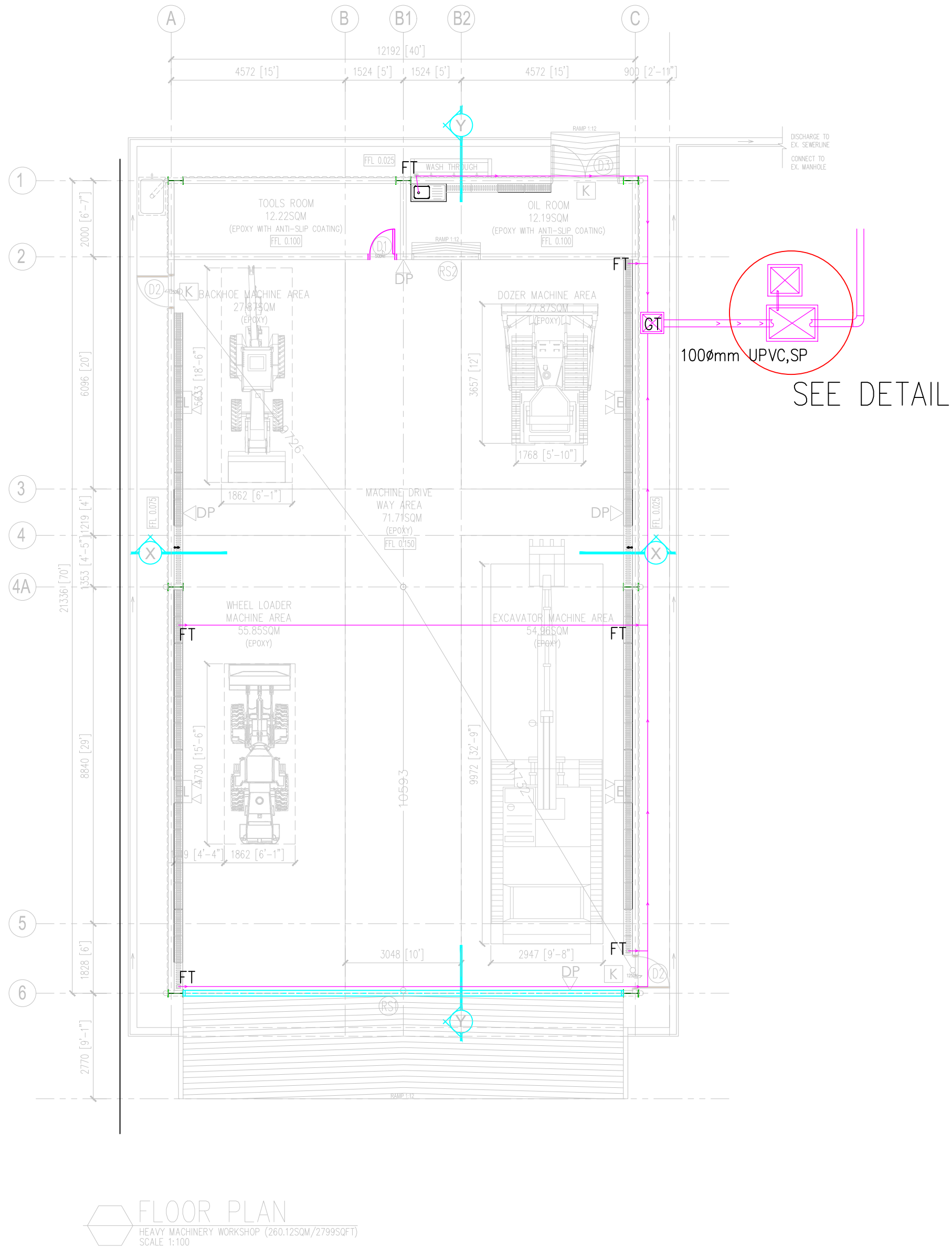
SIZE OF I.C	DEPTH	WALL THICKNESS
610mm x 610mm	NOT EXCEEDING 610mm	110mm
760mm x 610mm	EXCEEDING 610mm UP TO 910mm	230mm
760mm x 1140mm	EXCEEDING 910mm UP TO 1520mm	230mm
910mm x 1140mm	EXCEEDING 1520mm UP TO 2440mm	340mm UP TO 1/3 HEIGHT & 230mm THEREAFTER

SANITARY PIPE SCHEDULE

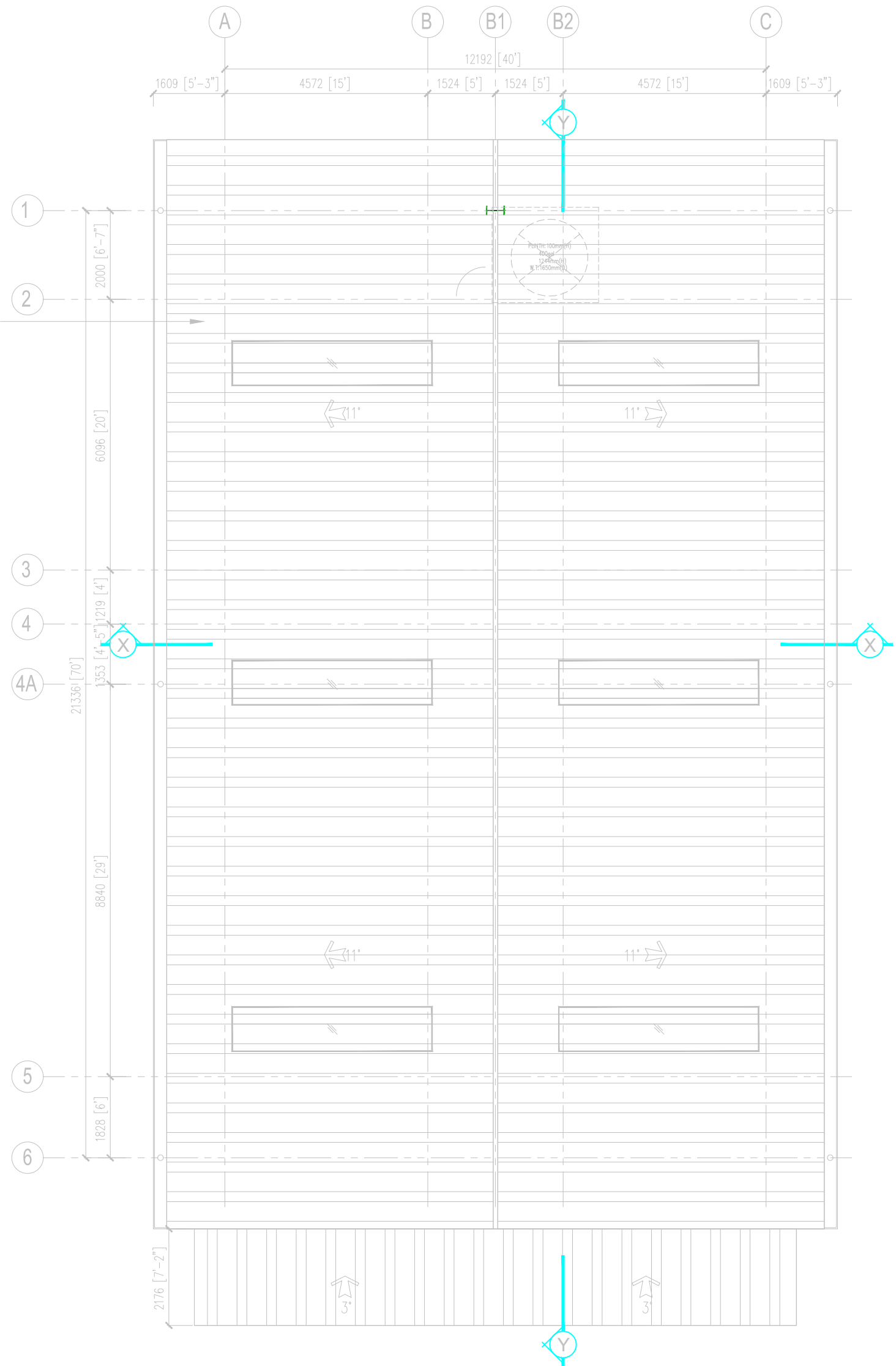
FITTINGS	PIPE SIZE (mm)
1. BASIN	32ø
2. BASIN (2 NOS. ABOVE)	50ø
3. SINK	40ø
4. SINK (2 NOS & ABOVE)	50ø
5. URINAL	50ø
6. FLOOR TRAP	75ø
7. GULLY TRAP	100ø
8. WATER CLOSET	110ø

LAGEND	
T	top
WC	water closet
FT	flow trap
B	basin
S	sink
UPVCSP	unplasticised polyvinyl chloride soil pipe
UPVCWP	unplasticised polyvinyl chloride waste pipe
UPVCVP	unplasticised polyvinyl chloride vent pipe
VCP	vitrified clay pipe-150ø

NOTE : ALL UNIT ARE IN MILIMETER



FLOOR PLAN
HEAVY MACHINERY WORKSHOP (260.1250M/279950FT)
SCALE 1:100



ROOF PLAN
HEAVY MACHINERY WORKSHOP (260.1250M/279950FT)
SCALE 1:100

TENDER DRAWING

Lukisan dan maklumat yang tertera adalah hakcipta **ENHILL CONSULTANT** yang mana sebahagian atau keseluruhannya tidak boleh ditiru, dicetak atau diukis semula dalam sebarang bentuk atau isi kandungannya diertitahu kepada pihak ketiga tanpa kebenaran bertulis daripada **ENHILL CONSULTANT**

Semua ukuran mesti disemak di atas tapak binaan. Hanya ukuran-ukuran yang dicatitkan sahaja perlu digunakan. Sebarang selisihan hendaklah dilaporkan dengan segera kepada jurutera.

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

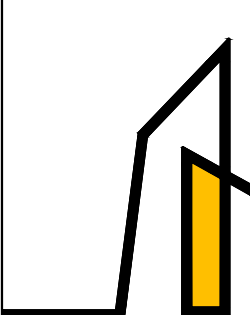
REV.	DATE	DESCRIPTION	BY

PEMILIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :



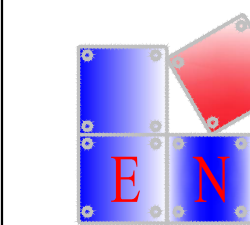
AZIZUL AZWAR ARCHITECT
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06-2888 827
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aaarchitect.adm@gmail.com

JURUTERA C&S :



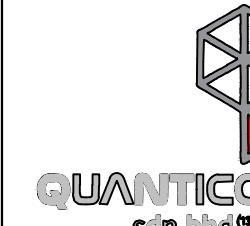
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68000 Ampang, Selangor.
03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :

SANITARY SYSTEM

PELAN LANTAI
PELAN BUMBUNG

DIREKA OLEH :	NONONO	DILUKIS OLEH :	NONONO
DISEMAK OLEH :	Ir. Ts. Hj. Mohd Nazri	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100		

NO. LUKISAN: EC/M/IKMJJ/25/SNT/LAY-01

INSPECTION CHEMBER PIPE SCHEDULE

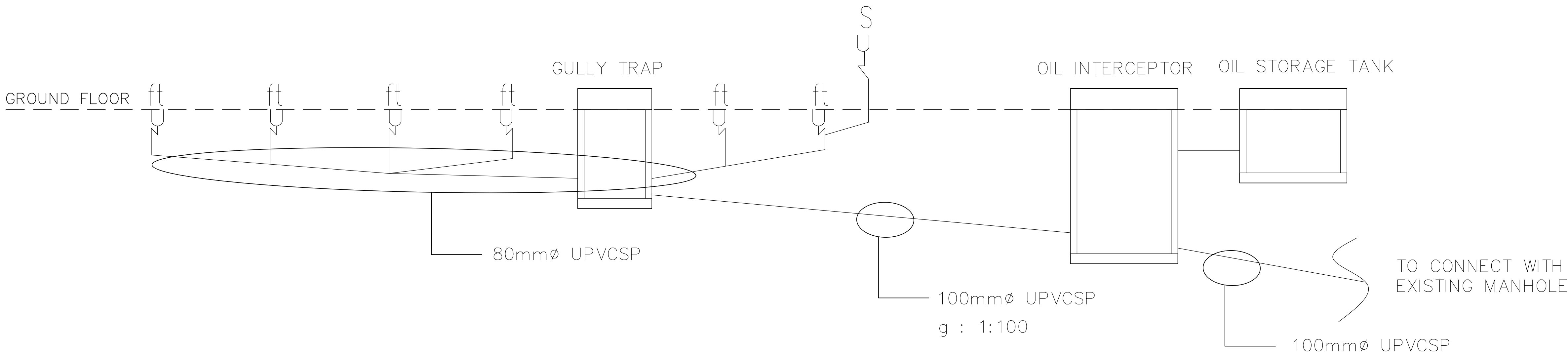
SIZE OF I.C	DEPTH	WALL THICKNESS
610mm x 610mm	NOT EXCEEDING 610mm	110mm
760mm x 610mm	EXCEEDING 610mm UP TO 910mm	230mm
760mm x 1140mm	EXCEEDING 910mm UP TO 1520mm	230mm
910mm x 1140mm	EXCEEDING 1520mm UP TO 2440mm	340mm UP TO 1/3 HEIGHT & 230mm THEREAFTER

SANITARY PIPE SCHEDULE

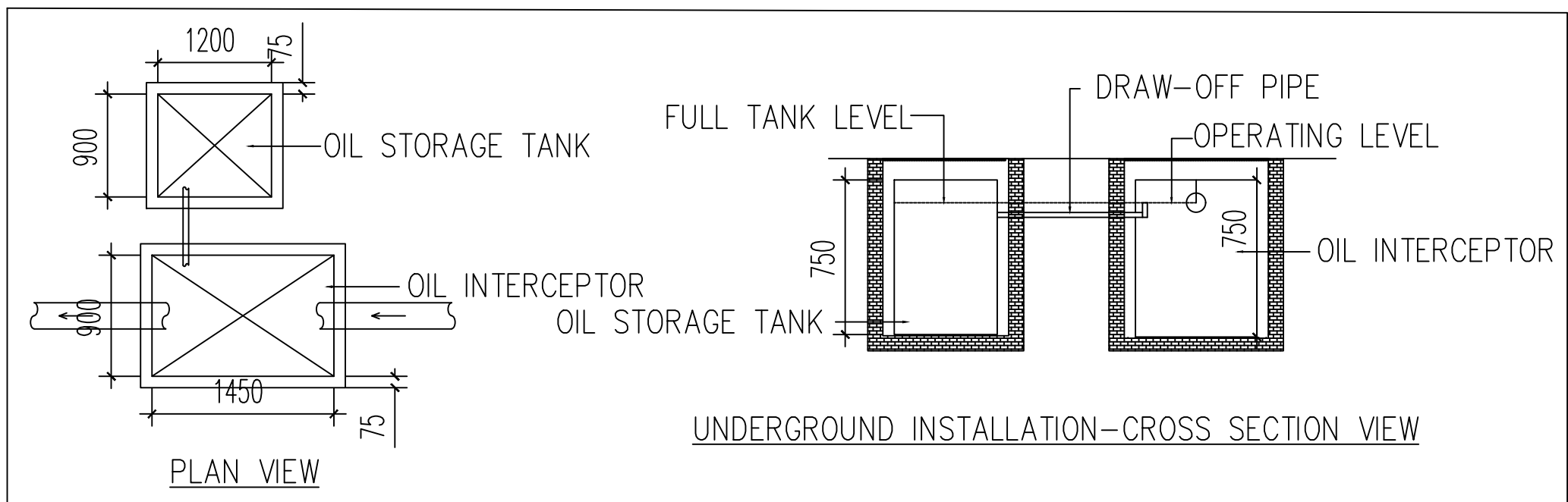
FITTINGS	PIPE SIZE (mm)
1. BASIN	32ø
2. BASIN (2 NOS. ABOVE)	50ø
3. SINK	40ø
4. SINK (2 NOS & ABOVE)	50ø
5. URINAL	50ø
6. FLOOR TRAP	75ø
7. GULLY TRAP	100ø
8. WATER CLOSET	110ø

LAGEND	
T	tap
WC	water closet
FT	flow trap
B	basin
S	sink
UPVCSP	unplasticised polyvinyl chloride soil pipe
UPVCWP	unplasticised polyvinyl chloride waste pipe
UPVCVP	unplasticised polyvinyl chloride vent pipe
VCP	vitrified clay pipe-150ø

NOTE : ALL UNIT ARE IN MILIMETER



DETAIL



OIL Storage Tank Data

Capacity (litres)	Length (mm)	Width (mm)	Height (mm)
800	1220	900	750

OIL Interceptor Data

Flowrate (GPM)	Flowrate (litre/sec)	weight full (kg)	Length A (mm)	Width B (mm)	Height C (mm)	Pipe Size (mm)
100	7.57	1000	1450	900	750	100

TENDER DRAWING

Lukisan dan maklumat yang tertera adalah hakcipta **ENHILL CONSULTANT** yang mana sebahagian atau keseluruhannya tidak boleh ditiru, dicetak atau dilukis semula dalam sebarang bentuk atau isi kandungannya diertahur kepada pihak ketiga tanpa kebenaran bertulis daripada **ENHILL CONSULTANT**

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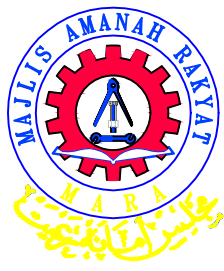
PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

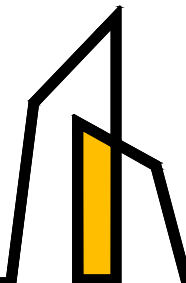
REV.	DATE	DESCRIPTION	BY

PEMILIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :



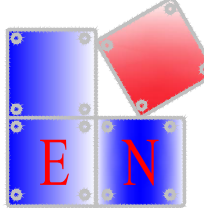
AZIZUL AZWAR ARCHITECT
No. 10-2, 2nd Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
016-421 2703
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JURUTERA C&S :



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019-303 1439
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JURUTERA M&E :



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9-1, Jalan PM 1/1, Taman Pandan Mawar,
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enhillconsultant@gmail.com

JURUKUR BAHAN :



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68000 Ampang, Selangor.
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quanticos.qts@gmail.com

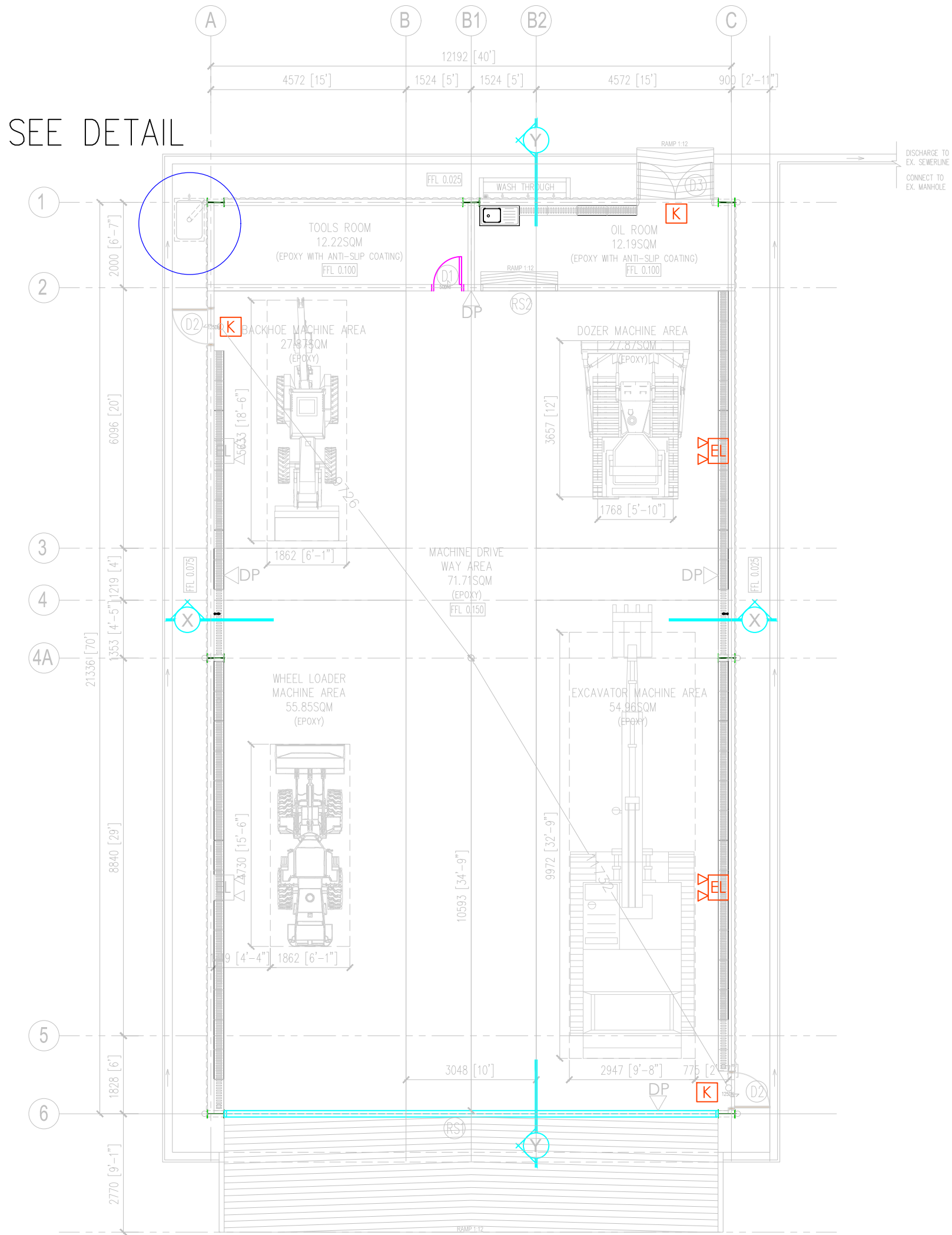
TAJUK LUKISAN :

SANITARY SYSTEM

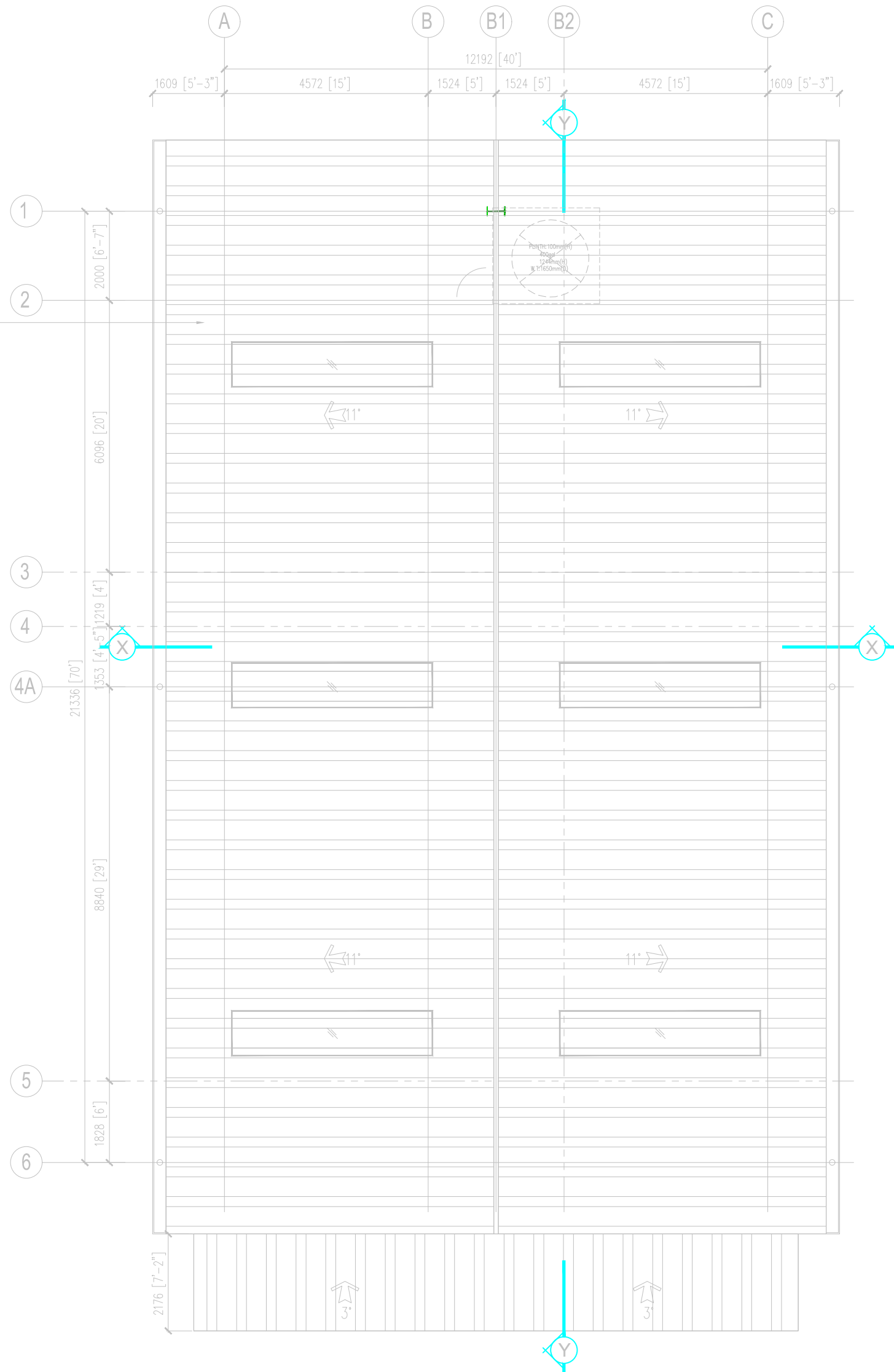
PELAN LANTAI
PELAN BUMBUNG

DIREKA OLEH :	NONONO	DILUKIS OLEH :	NONONO
DISEMAK OLEH :	Ir. Ts. Hj. Mohd Nazri	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100		

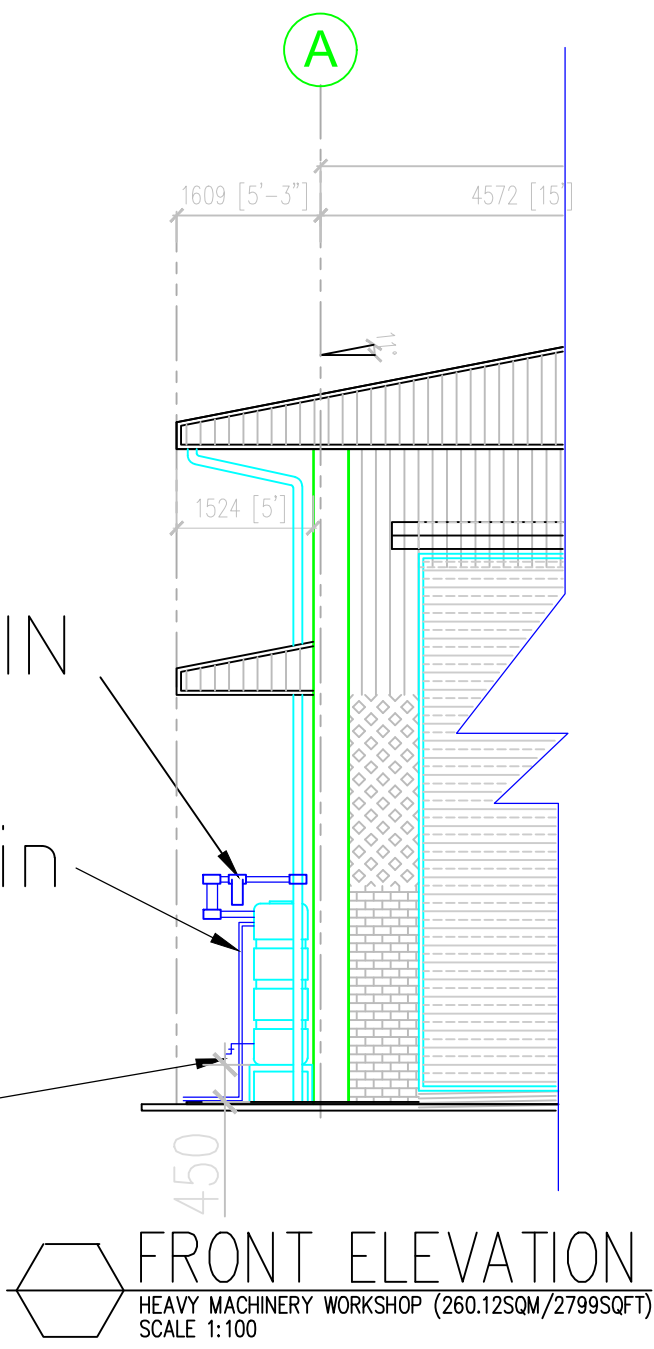
NO. LUKISAN: EC/M/IKMJJ/25/SNT/SCHE-02



FLOOR PLAN
HEAVY MACHINERY WORKSHOP (260.125QM/27995QF1)
SCALE 1:100



ROOF PLAN
HEAVY MACHINERY WORKSHOP (260.125QM/27995QF1)
SCALE 1:100



FRONT ELEVATION
HEAVY MACHINERY WORKSHOP (260.125QM/27995QF1)
SCALE 1:100

RAINWATER HARVESTING TANK
Type : HDPE UV-RESISTANT WALL MOUNTED TANK
Dimension : 1200mm(h) x 750mm(w)
Cap. : 750 L(1 nos)

FIRST FLUSH DIVERTER TO NEAREST DRAIN
& FILTER COLLECTOR
110Ømm UPVC '7' Overflow pipe to nearest drain
20Ømm UPVC '7' Pipe c/w stop cock and tap
SHALL BE CLEARLY MARKED WITH
'NOT SUITABLE FOR DRINKING'

SPAH DETAIL

TENDER DRAWING

Lukisan dan maklumat yang tertera adalah hakcipta **ENHILL CONSULTANT** yang mana sebahagian atau keseluruhannya tidak boleh ditiru, dicetak atau diukis semula dalam sebarang bentuk atau isi kandungannya diertah kepada pihak ketiga tanpa kebenaran bertulis daripada **ENHILL CONSULTANT**

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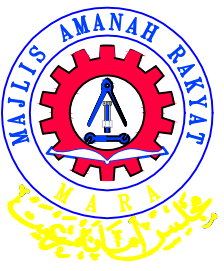
PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

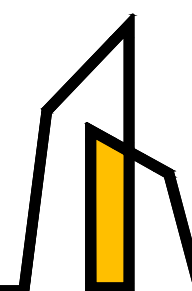
NOTA :

REV.	DATE	DESCRIPTION	BY

PEMILIK :

 **MAJLIS AMANAH RAKYAT**
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

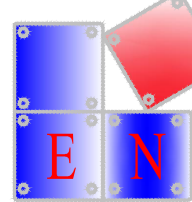
ARKITEK :

 **AZIZUL AZWAR ARCHITECT**
No. 10-2, 2nd Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
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aaarchitect.adm@gmail.com

JURUTERA C&S :

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75250 Melaka.
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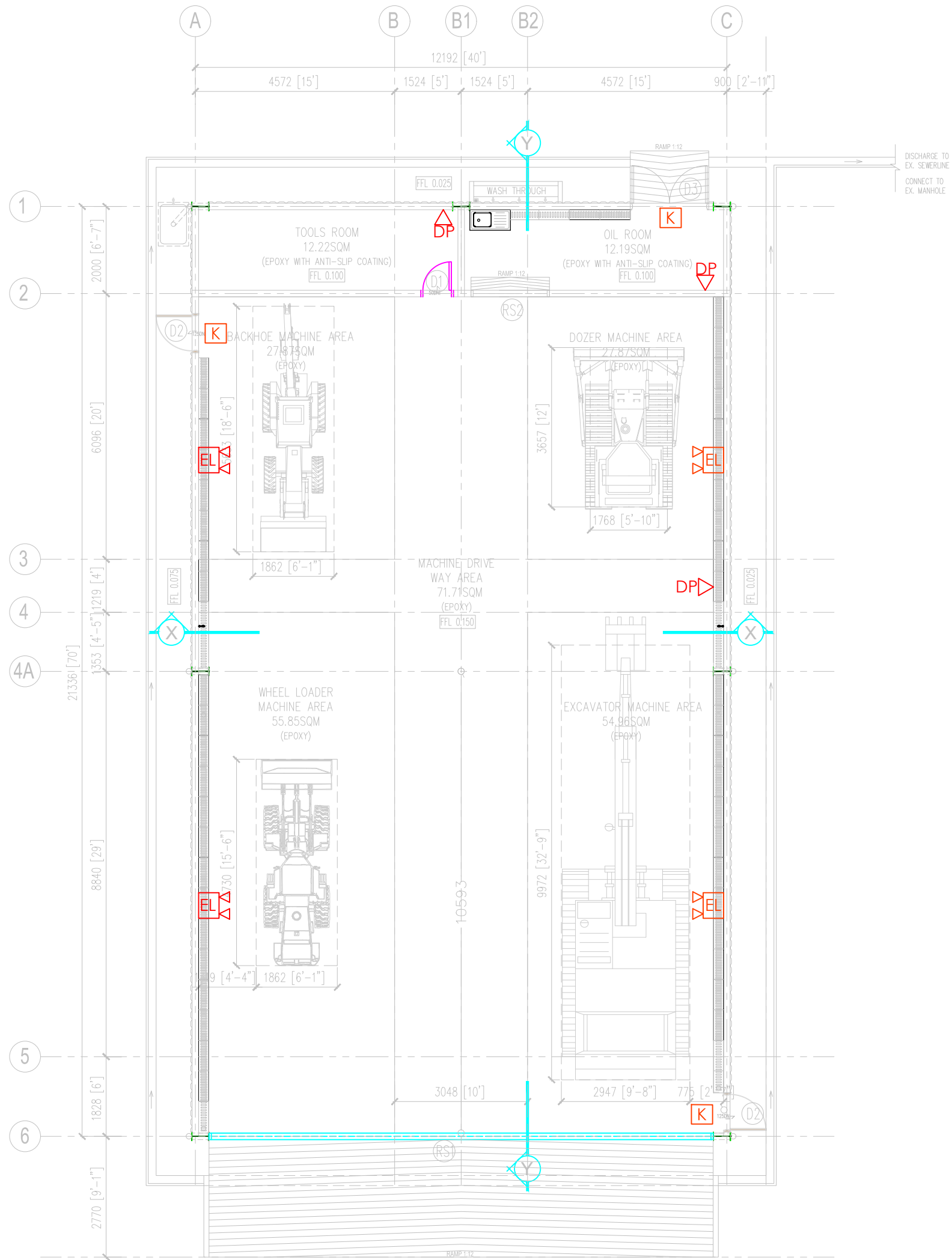
JURUKUR BAHAN :

 **QUANTICOS SDN. BHD.**
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68000 Ampang, Selangor.
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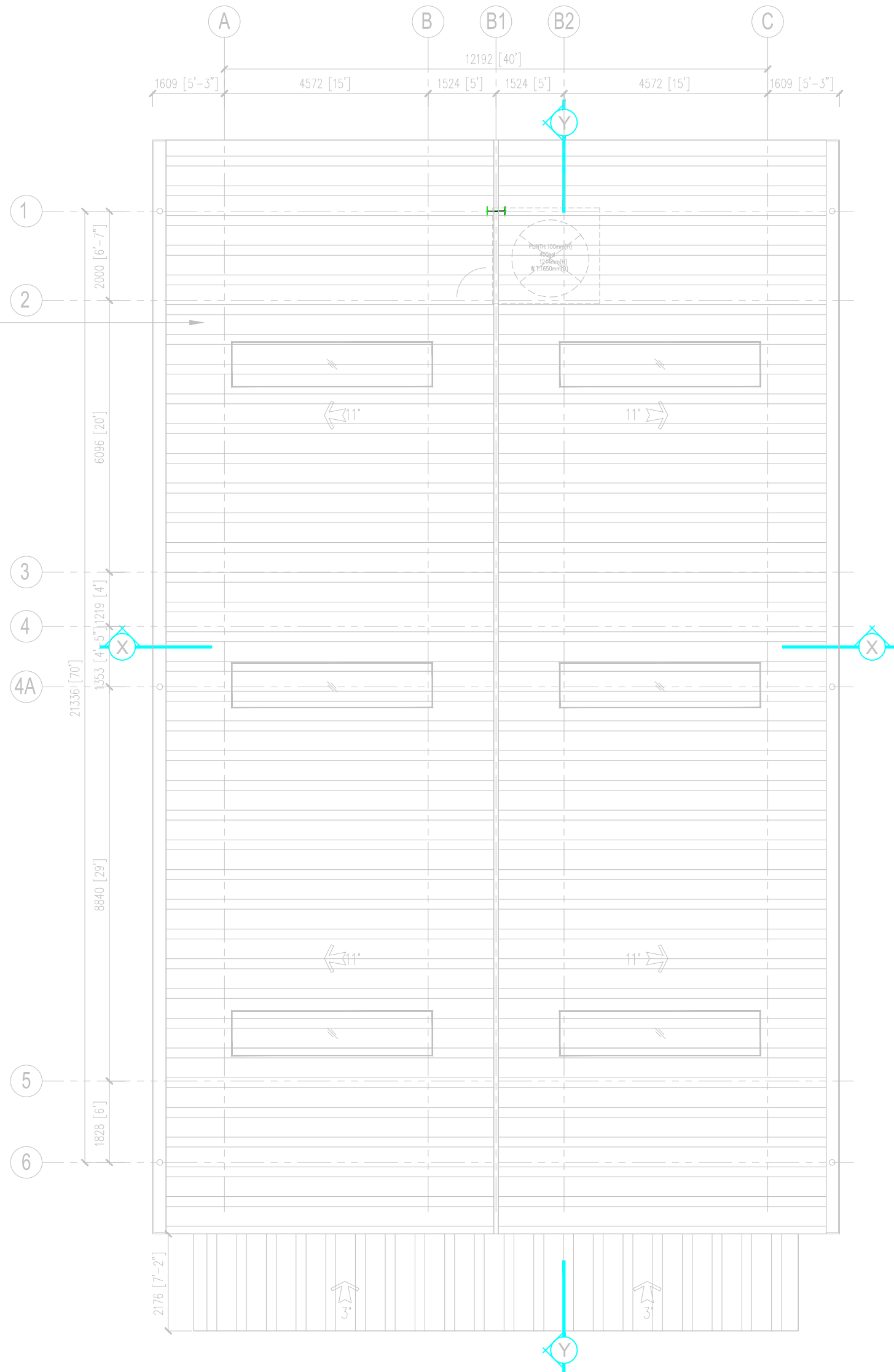
TAJUK LUKISAN :
RAINWATER HARVESTING SYSTEM
PELAN LANTAI
PELAN BUMBUNG

DIREKA OLEH :	NONONO	DILUKIS OLEH :	NONONO
DISEMAK OLEH :	Ir. Ts. Hj. Mohd Nazri	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100		

NO. LUKISAN:
EC/M/IKMJJ/25/RW/LAY-01



FLOOR PLAN
HEAVY MACHINERY WORKSHOP (260,125SQM/279950FT)
SCALE 1:100



ROOF PLAN
HEAVY MACHINERY WORKSHOP (260,125SQM/279950FT)
SCALE 1:100

BOMBA LEGEND:

SYMBOL	DESCRIPTION	TOTAL
	TWIN HEAD EMERGENCY LIGHT	4
	'KELUAR' SIGN	3
	9KG ABC DRY POWDER FIRE EXTINGUISHER	4

Lukisan dan maklumat yang tertera adalah hakcipta **ENHILL CONSULTANT** yang mana sebahagian atau keseluruhannya tidak boleh ditiru, dicetak atau diukis semula dalam sebarang bentuk atau isi kandungannya diertah kepada pihak ketiga tanpa kebenaran bertulis daripada **ENHILL CONSULTANT**

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NOTA :

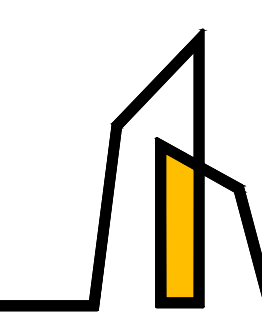
REV.	DATE	DESCRIPTION	BY

PEMILIK :



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ARKITEK :



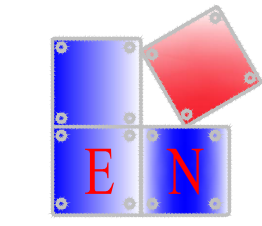
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JURUTERA C&S :



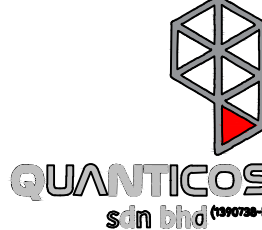
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JURUKUR BAHAN :



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03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :
FIRE FIGHTING SYSTEM

PELAN LANTAI
PELAN BUMBUNG

DIREKA OLEH :	NONONO	DILUKIS OLEH :	NONONO
DISEMAK OLEH :	Ir. Ts. Hj. Mohd Nazri	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100		

NO. LUKISAN:
EC/M/IKMJJ/25/FF/LAY-01

TENDER DRAWING

PERMOHONAN PELAN BANGUNAN DI BAWAH AKTA 133, BAGI CADANGAN MEMBINA SEBUAH BENGKEL JENTERA BERAT DI ATAS LOT 2223, MUKIM JASIN, DAERAH JASIN, MELAKA.

UNTUK TETUAN:
MAJLIS AMANAH RAKYAT (MARA)

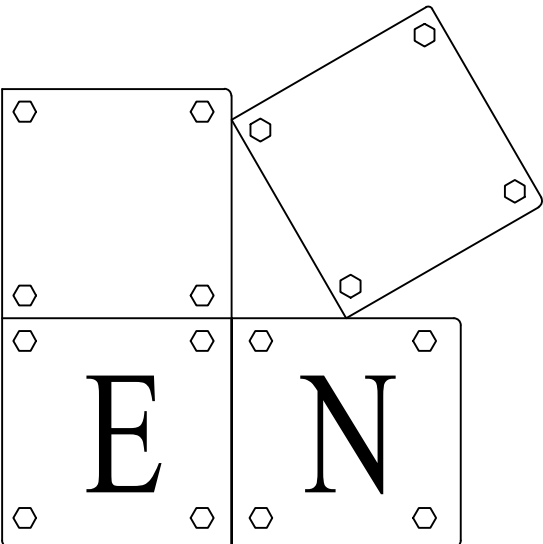
LIST OF DRAWINGS
ELECTRICAL SERVICES

NO	DRAWING NO	DRAWING TITLE
	LAYOUT	LIST OF DRAWINGS
1	EC/M/IKMJ/LV/LAY-01	LV SYSTEM - INFRASTRUCTURE CABLE ROUTING
2	EC/M/IKMJ/LV/LAY-02	LV SYSTEM - COMPOUND LIGHTING ARRANGEMENT LAYOUT - LIGHTING LAYOUT
3	EC/M/IKMJ/LV/LAY-03	LV SYSTEM - POWER SERVICES
4	EC/M/IKMJ/LV/LAY-04	LV SYSTEM - LIGHTNING PROTECTION SYSTEM (LPS)
5	EC/M/IKMJ/LV/SCH-05	LV SYSTEM - NEW DB SCHEMATIC LINE DIAGRAM



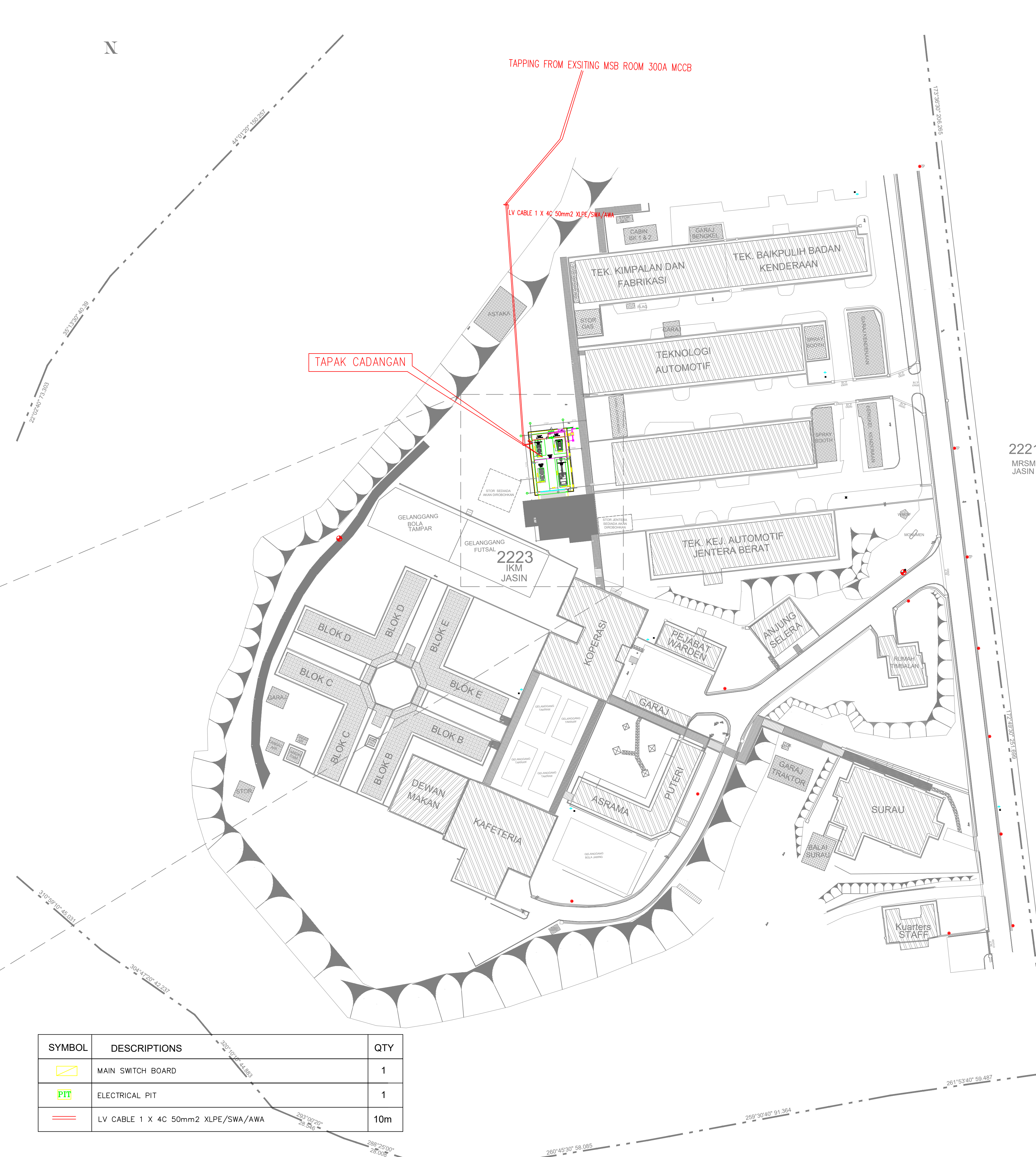
MAJLIS AMANAH RAKYAT,
Alamat : Bahagian Binaan dan Selenggaraan,
Tingkat 11, Ibu Pejabat MARA,
No.21 Jalan MARA,
50609 Kuala Lumpur.

PERUNDING ELEKTRIKAL :



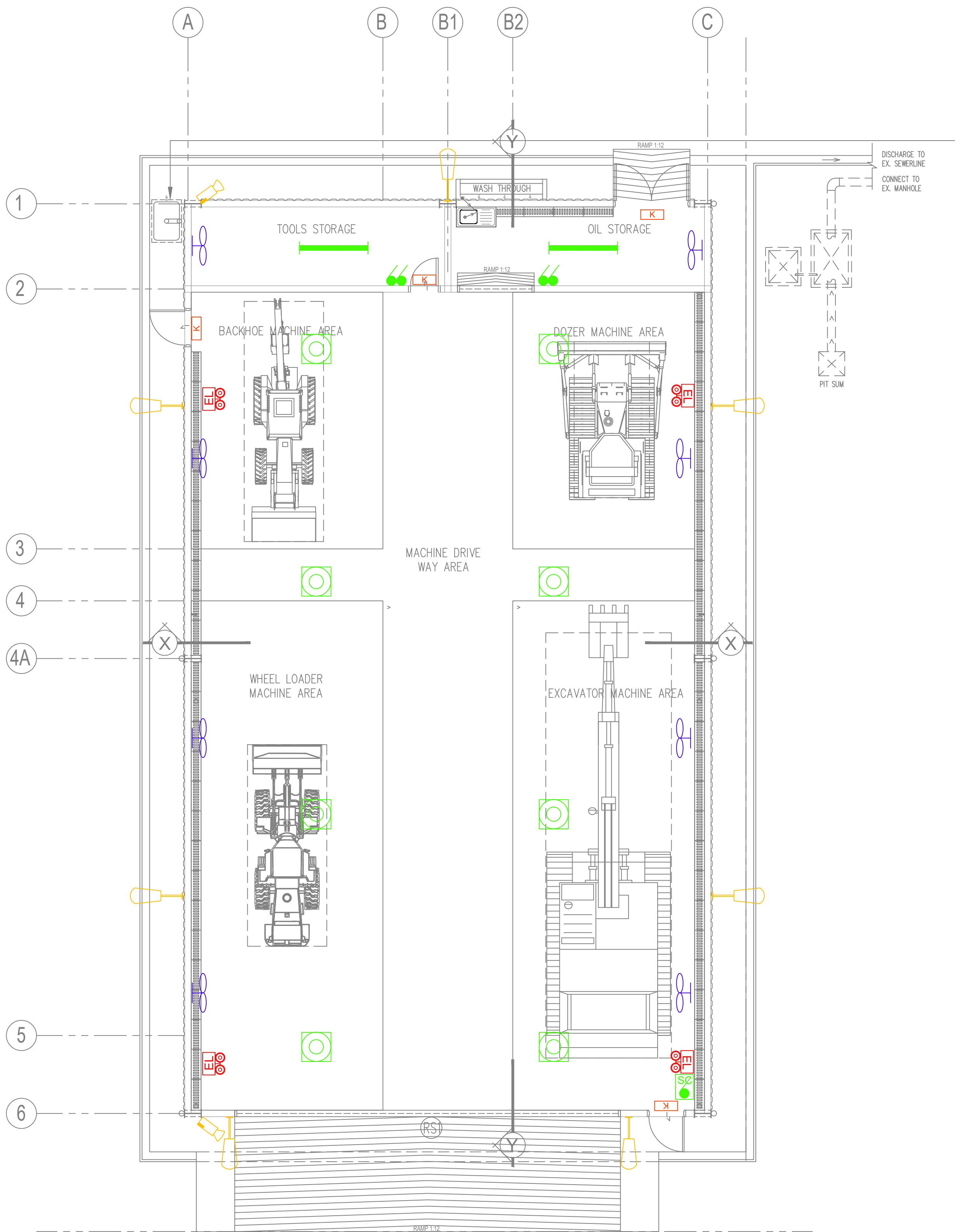
ENHILL CONSULTANT

MAIN OFF : No 9-1, Jalan PM 1/1,
Taman Pandan Mawar,
Jalan Datuk Wira Poh Ah Tiam,
75250 Melaka
Tel : 06 - 3300452
Fax : 06 - 3340041



SYMBOL	DESCRIPTIONS	QTY
	MAIN SWITCH BOARD	1
	ELECTRICAL PIT	1
	LV CABLE 1 X 4C 50mm ² XLPE/SWA/AWA	10m

1 / 3



SYMBOL	DESCRIPTION	QTY
	1 x 36W CHANNEL TYPE FLOURESCENT LUMINAIRE	2
	150W HIGH BAY	6
	KELUAR SIGN	4
	EMERGENCY LIGHT C/W 2X20W HALOGEN (TWIN SPOT)	4
	SWITCH	5
	CCTV	2
	SWITCH CENTRE	1
	24 " WALL FAN	8
	100W SON WALL LIGHT C/w 1.5m BRACKET ARM	7

NOTA :

TENDER DRAWING
(ELECTRICAL)

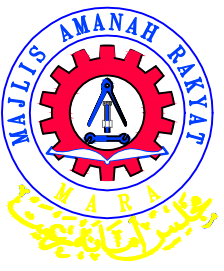
PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

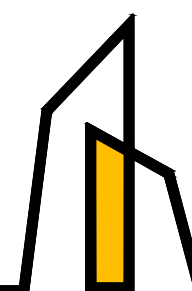
REV.	DATE	DESCRIPTION	BY

PEMLIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :



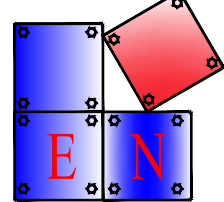
AZIZUL AZWAR ARCHITECT
No. 10-2, 2nd Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
016-421 2703
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40170 Shah Alam, Selangor.
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akhakimin@gmail.com

JURUTERA M&E :



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Jalan Dato' Wira Poh Ah Tiam,
75250 Melaka.
06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :



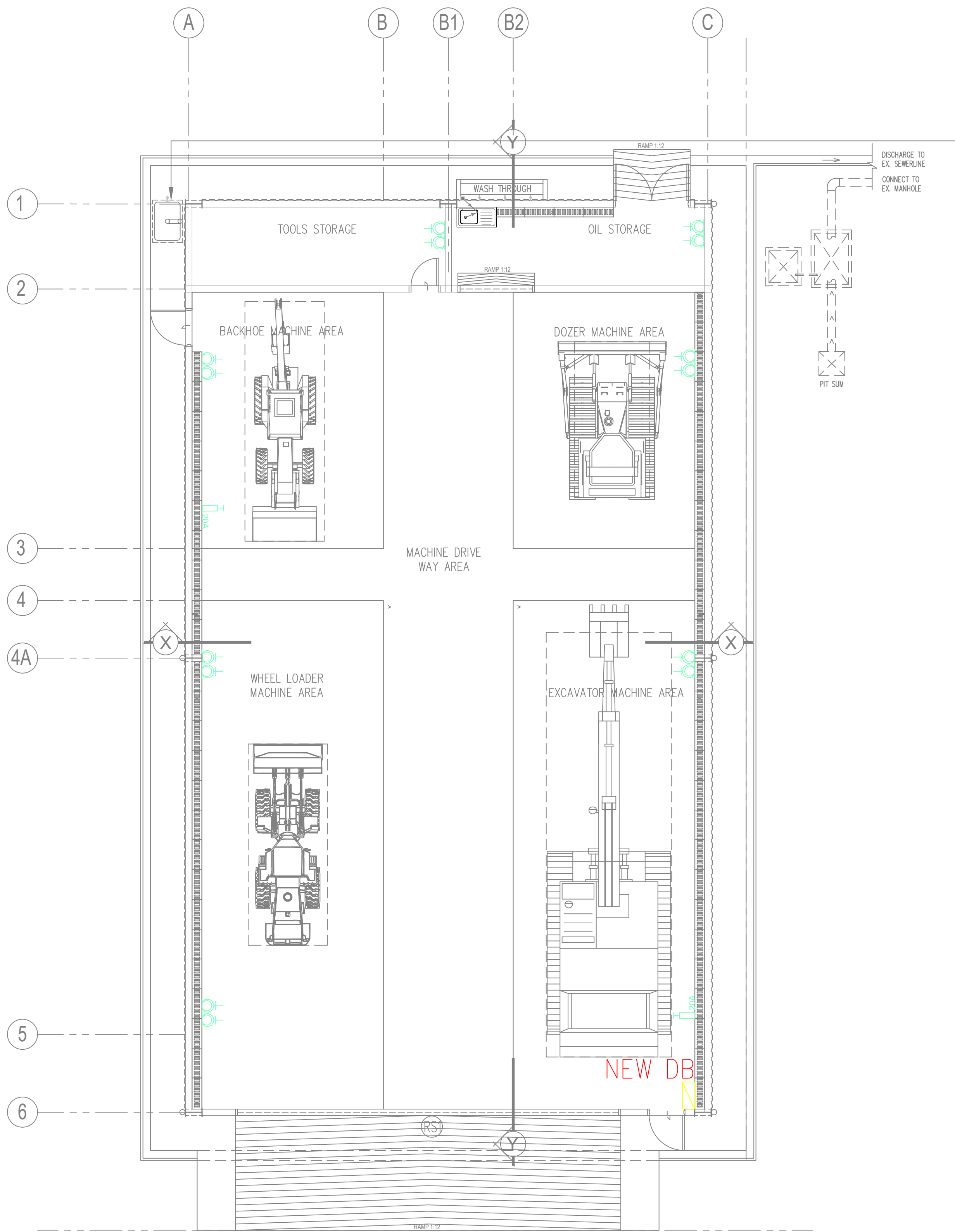
QUANTICOS SDN. BHD.
1B-2, 2nd Floor, Jalan Wawasan 4/1,
Bandar Baru Ampang,
68000 Ampang, Selangor.
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quanticos.qts@gmail.com

TAJUK LUKISAN :

LV SYSTEM
- COMPOUND LIGHTING ARRANGEMENT LAYOUT AND SCHEMATIC DIAGRAM
- MSB AND DB ARRANGEMENT LAYOUT
- INFRA TNB

DIREKA OLEH :	MKK	DILUKIS OLEH :	MMKK
DISEMAK OLEH :	Ir. Effendy Bin Muhammad	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100	NO. LUKISAN :	

NO. LUKISAN: EC/MIKMJ/LV/LAY-021/3



SYMBOL	DESCRIPTION	QTY
	300mm 3 PIN 13A SWITCH SOCKET OUTLET	14
	20A TPN ISOLATOR	2
	DISTRIBUTION BOARD	1

NOTA :

TENDER DRAWING
(ELECTRICAL)

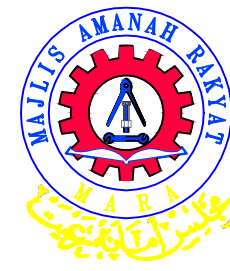
PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

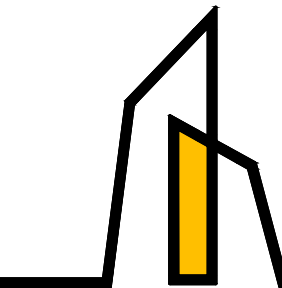
REV.	DATE	DESCRIPTION	BY

PEMILIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :



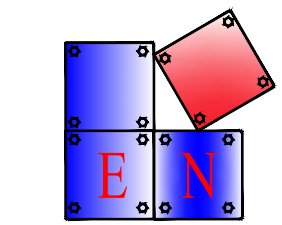
AZIZUL AZWAR ARCHITECT
No. 10-2, 2nd Floor, Jalan SP 6,
Taman Semabok Perdana,
Semabok, 75050 Melaka.
06-2888 827
016-421 2703
aaarchitect.adm@gmail.com

JURUTERA C&S :



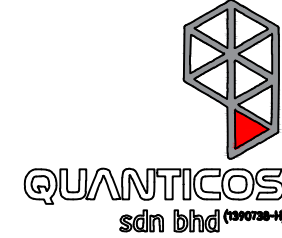
A.KHIR.HAKIM PERUNDING
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40170 Shah Alam, Selangor.
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akhakimin@gmail.com

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Jalan Dato' Wira Poh Ah Tiam,
75250 Melaka.
06-330 0452
enhillconsultant@gmail.com

JURUKUR BAHAN :



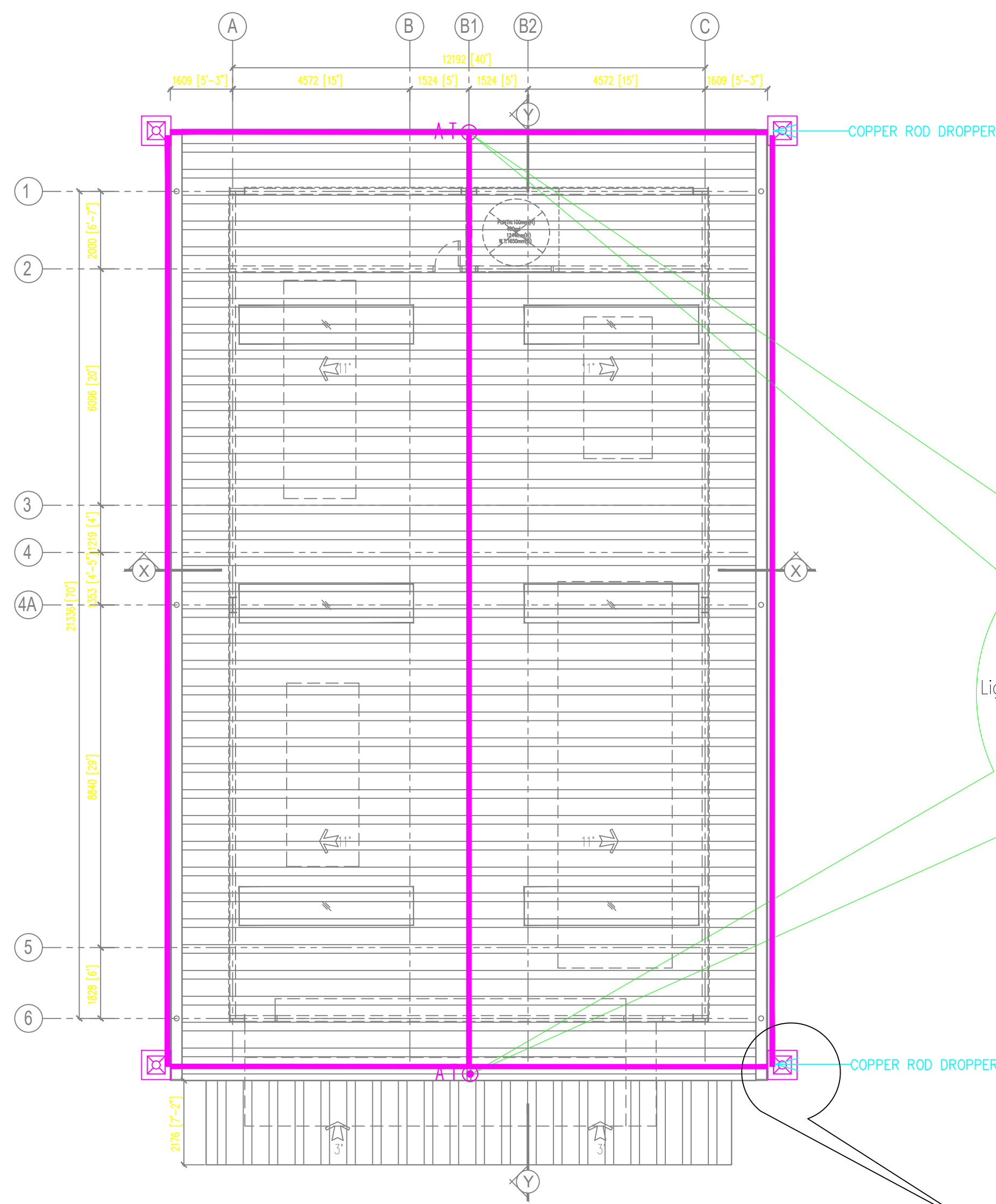
QUANTICOS SDN. BHD.
1B-2, 2nd Floor, Jalan Wawasan 4/1,
Bandar Baru Ampang,
68000 Ampang, Selangor.
03-4287 6190
quanticos.qts@gmail.com

TAJUK LUKISAN :

LV SYSTEM
- COMPOUND LIGHTING ARRANGEMENT LAYOUT AND SCHEMATIC DIAGRAM
- MSB AND DB ARRANGEMENT LAYOUT
- INFRA TNB

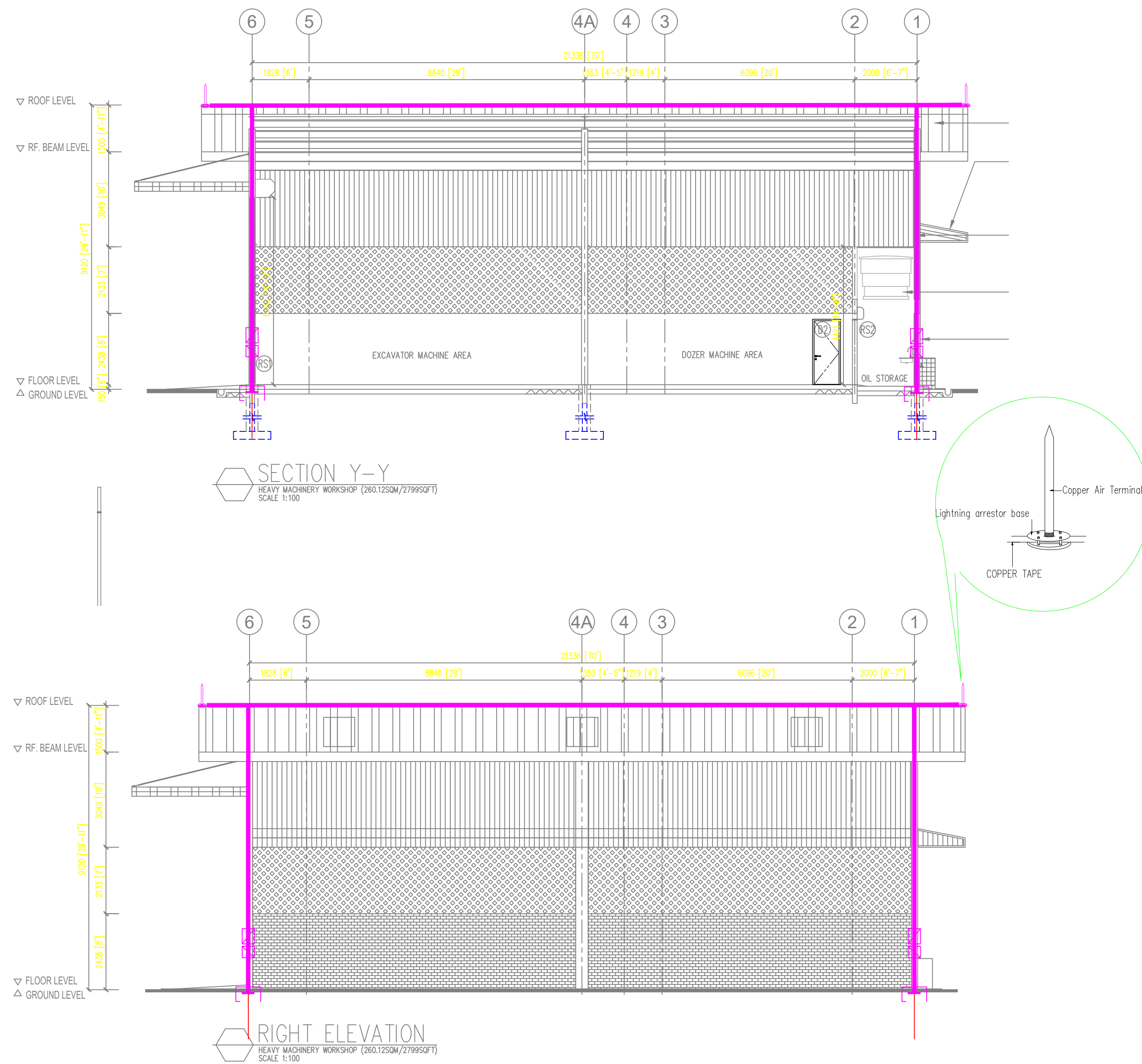
DIREKA OLEH :	MKK	DILUKIS OLEH :	MMKK
DISEMAK OLEH :	Ir. Effendy Bin Muhamad	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026	NO. LUKISAN :	
SKALA :	1:100		

NO. LUKISAN: EC/MIKMJ/LV/LAY-03



ROOF PLAN
HEAVY MACHINERY WORKSHOP (260.1250M/279950FT)
SCALE: 1:100

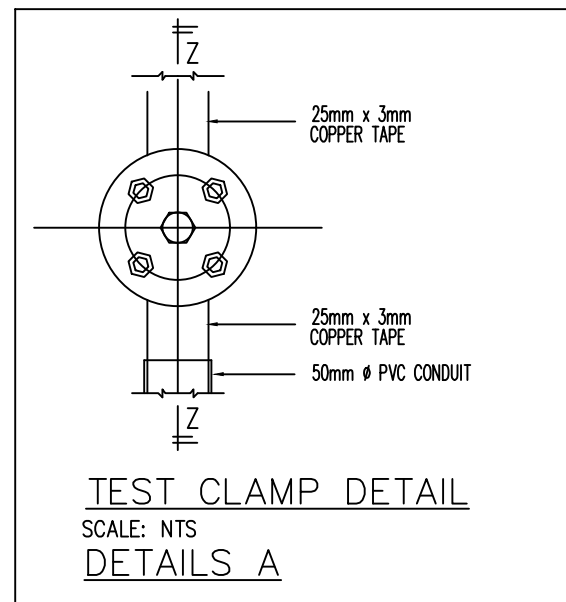
INSPECTION CHAMBER



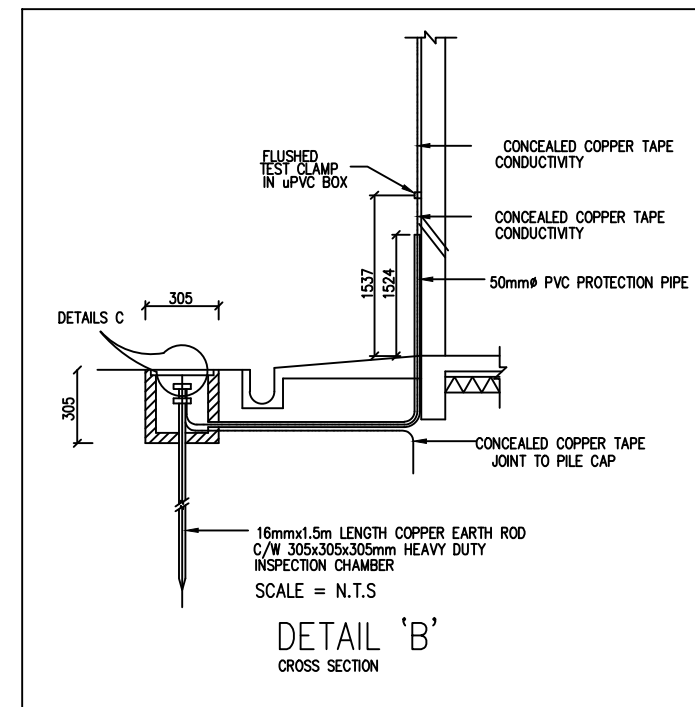
SECTION Y-Y
HEAVY MACHINERY WORKSHOP (260.1250M/279950FT)
SCALE: 1:100

RIGHT ELEVATION
HEAVY MACHINERY WORKSHOP (260.1250M/279950FT)
SCALE: 1:100

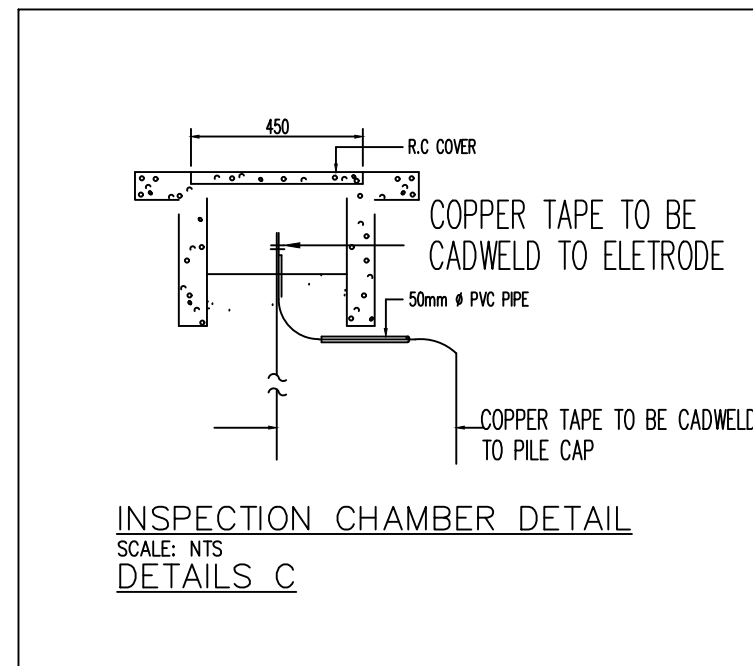
DETAILS LIGHTNING PROTECTION ITEMS



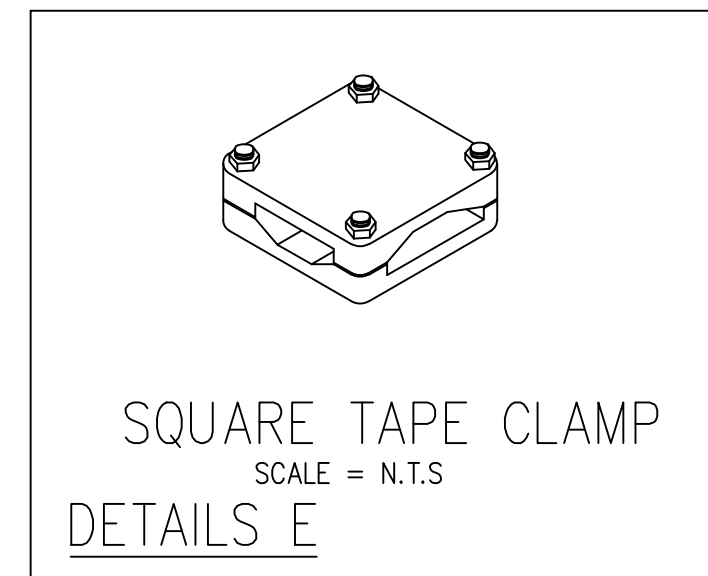
TEST CLAMP DETAIL
SCALE: NTS
DETAILS A



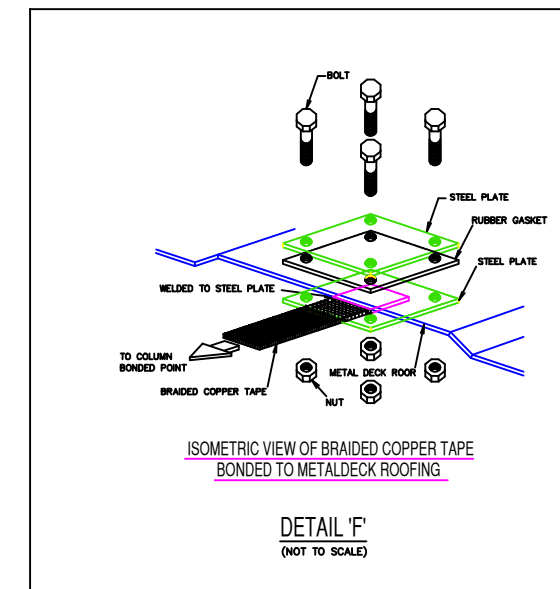
DETAIL 'B'
CROSS SECTION



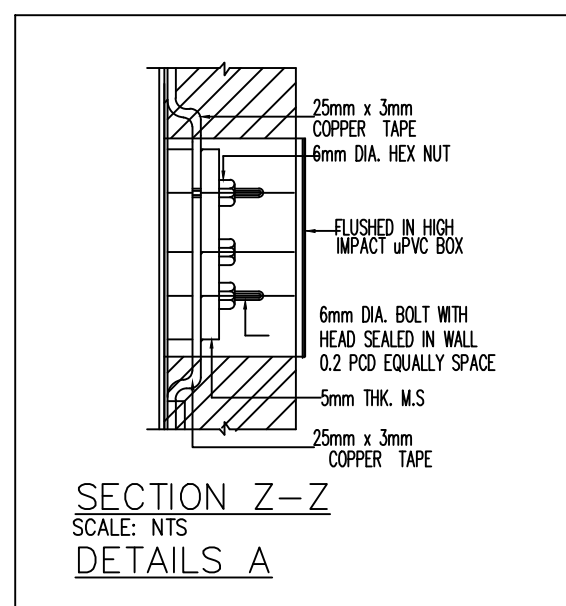
INSPECTION CHAMBER DETAIL
SCALE: NTS
DETAILS C



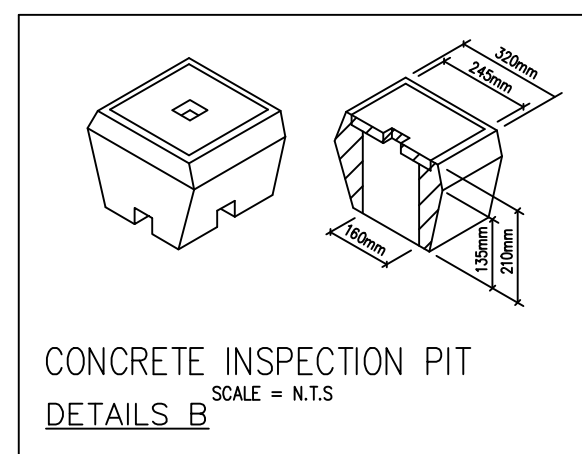
SQUARE TAPE CLAMP
SCALE = N.T.S
DETAILS E



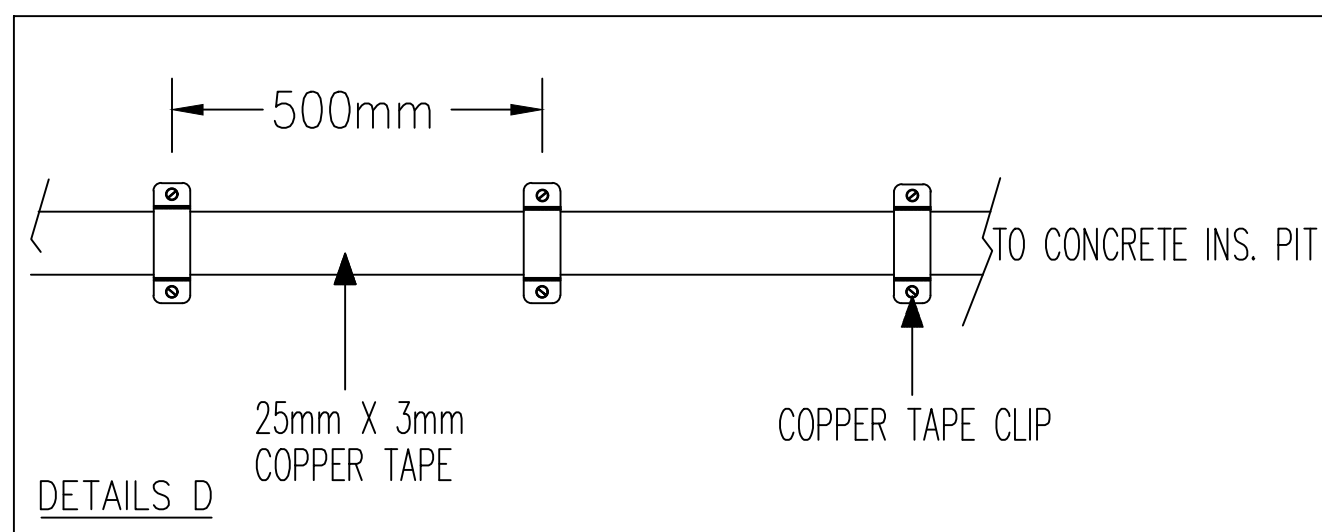
DETAIL 'F'
(NOT TO SCALE)



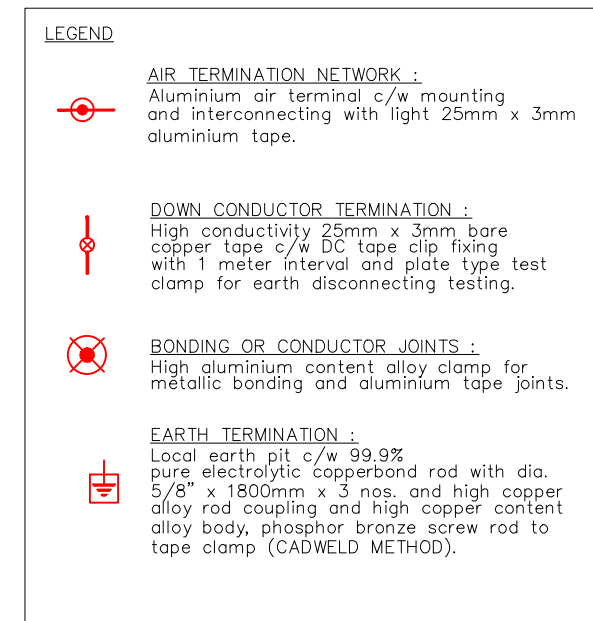
SECTION Z-Z
SCALE: NTS
DETAILS A



CONCRETE INSPECTION PIT
SCALE = N.T.S
DETAILS B



DETAILS D



NOTA :

TENDER DRAWING
(ELECTIRCAL)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN
MENAIKTARAF BANGUNAN DIPLOMA
TEKNOLOGI JENTERA BERAT SERTA KERJA
- KERJA BERKAITAN BAGI PENINGKATAN
PROGRAM SIJIL KE DIPLOMA DALAM
BIDANG AUTOMOTIF JENTERA BERAT DI
INSTITUT KEMAHIRAN MARA (IKM) JASIN,
MELAKA.

NOTA :

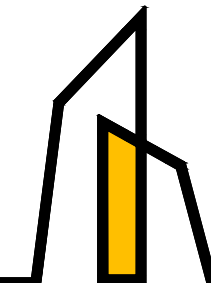
REV.	DATE	DESCRIPTION	BY

PEMILIK :



MAJLIS AMANAH RAKYAT
Bahagian Binaan dan Selenggaraaan,
Tkt 11, Ibu Pejabat MARA,
No. 21 Jalan MARA,
50609 Kuala Lumpur.

ARKITEK :



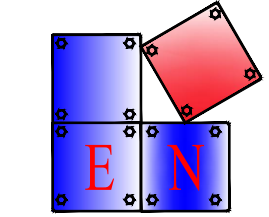
AZIZUL AZWAR ARCHITECT
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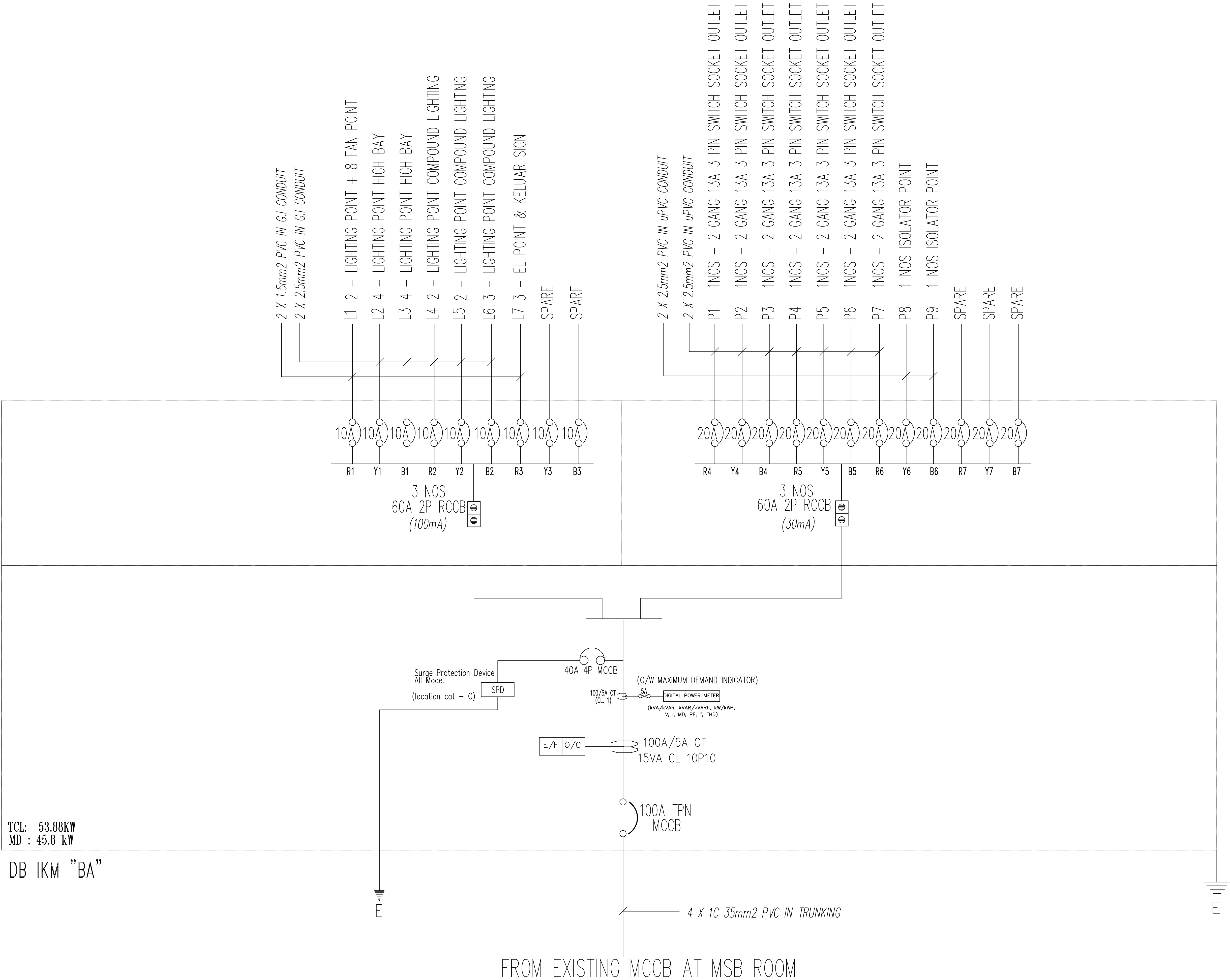
TAJUK LUKISAN :

LV SYSTEM
- LIGHTNING PROTECTION SYSTEM (LPS)

DIREKA OLEH :	MRK	DILUKIS OLEH :	MRKK
DISEMAK OLEH :	Ir. Effendy Bin Muhammad	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100	NO. LUKISAN :	

NO. LUKISAN: EC/M/KMJ/LV/LAY-04

3/3



NOTA :

TENDER DRAWING
(ELECTIRCAL)

PROJEK :

CADANGAN KERJA - KERJA MEMBINA DAN MENAIKTARAF BANGUNAN DIPLOMA TEKNOLOGI JENTERA BERAT SERTA KERJA - KERJA BERKAITAN BAGI PENINGKATAN PROGRAM SIJIL KE DIPLOMA DALAM BIDANG AUTOMOTIF JENTERA BERAT DI INSTITUT KEMAHIRAN MARA (IKM) JASIN, MELAKA.

NOTA :

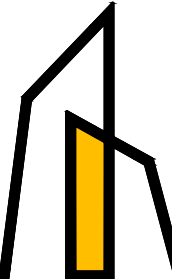
REV.	DATE	DESCRIPTION	BY

PEMILIK :



MAJLIS AMANAH RAKYAT
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50609 Kuala Lumpur.

ARKITEK :



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Semabok, 75050 Melaka.

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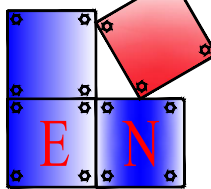
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Bandar Baru Ampang,
68000 Ampang, Selangor.

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quanticos.qts@gmail.com

TAJUK LUKISAN :

LV SYSTEM
- SINGLE LINE DIAGRAM (SLD)

DIREKA OLEH :	MRK	DILUKIS OLEH :	MRKK
DISEMAK OLEH :	Ir. Effendy Bin Muhamad	DILULUSKAN OLEH :	
TARIKH :	10 MEI 2026		
SKALA :	1:100	NO. LUKISAN :	
NO. LUKISAN: EC/M/IKMJ/LV/SCH-05			3/3