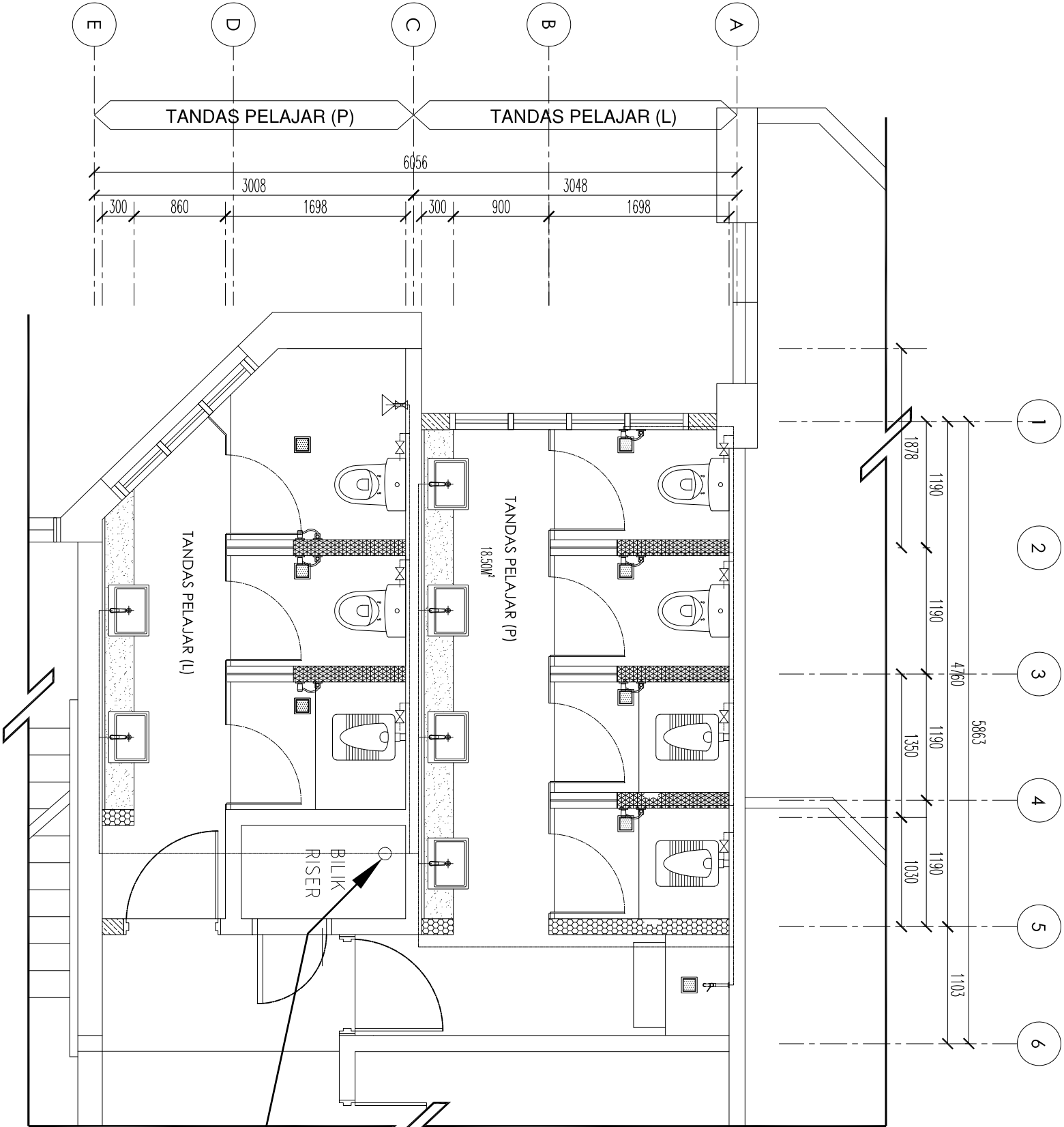


LEGEND FOR PIPING SIZE

FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100



50mmø PVC-u PN15
DROPPER PIPE

INTERNAL COLD WATER PLUMBING LAYOUT

ARAS 2, 4 & 5 - TANDAS PELAJAR

SCALE 1 : 50

PERINGATAN

HANYA DIMENSI BERANGKA SAHAJA DILAKSANAKAN, KONTRAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBENAR DI TAPAK BINA. SEBARANG PERCANGGAHAN MESTI DILAPORKAN DENGAN SEGERA KEPADA PEGAWAI PENGUASA SEBELUM KERJA-KERJA DIMULAKAN.

LUKISAN DOKUMENTASI

PROJEK:

CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KRPSK), UTM SHAH ALAM.



NO. RUJUKAN PROJEK:

200-PP11(BP1.5/3/25) MECHCW

TARIKH:

20 09
24 SEP

TAJUK LUKISAN:

TANDAS PELAJAR ARAS 2, 4 & 5
PELAN LANTAI BAHARU

SKALA:

1:50

NAB CANSELOR

TIMBALAN NAB CANSELOR

PENGARAH LABATAN PEMBANGUNAN & INFRASTRUKTUR

KETUA BAHAGIAN PEMBANGUNAN INFRA:

ARKITEK

DILUKIS OLEH

PENGURUS PROJEK / DISEMAK

DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDIN

PROF. TS. SR. DR MD. YUSOF HAMID

IR. TS. AZMAN SAUBIRAN

TS. MOHAMMED IZRA ABD. RAZAK

ZULFADU MOHAMED SALLEH

MAZIAN SAAD

MUHAMMAD ASYRIF ABD. AZIZ

INDEXS PINDAAN

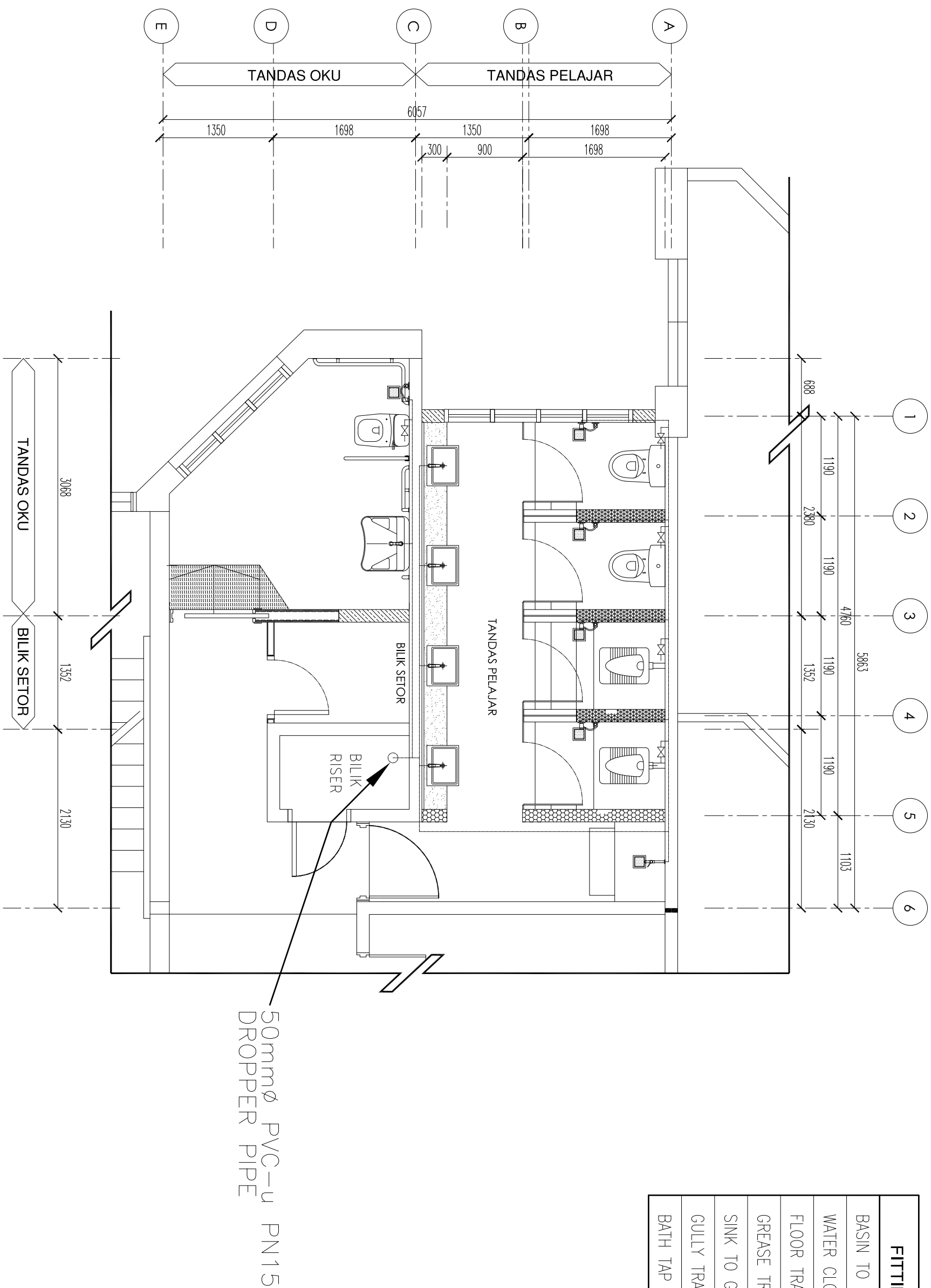
NO

HELAIAN:

01

LEGEND FOR PIPING SIZE

FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100



LUKISAN DOKUMENTASI

PENGANTARAN
HANYA DIMENSI BERANGKA SAHAJA DILAKSANAKAN.
KONTAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBELUM
TAPAK BINA. SEBARANG SERANGAN/SAHAM MESTI DILAPORKAN
DENGAN SEGERA KEPADA PEGAWAI PENGUASA SEBELUM
KERIA-KERJA DIMULAKAN.

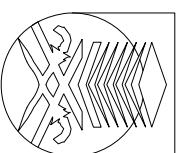
INTERNAL COLD WATER PLUMBING LAYOUT

ARAS 3 - TANDAS PELAJAR & OKU

SCALE 1 : 50

PROJEK:

CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:		TARIKH:		INDEXS PINDAAN	
200-PP11(BP1.5/3/25) MECH-CW		20 09 24 SEP			
TAJUK LUKISAN:		SKALA:			
ARAS 3 - TANDAS PELAJAR & OKU		1:50			
NAIB CANSOLOR		: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN			
TIMBALAN NAIB CANSOLOR		: PROF. TS. SR. DR. MD. YUSOF HAMID			
PENGERAJA LABATAN PEMBANGUNAN & INFRASTRUKTUR		: IR. TS. AZMAN SAUBIRAN			
KEUJA BAHAGIAN PEMBANGUNAN INFRA:		TS. MOHAMMED IERBALABD. RAZAK			
ARKITEK		: ZULFADU MOHAMED SALEH			
DILUKIS OLEH		: MAZIAN SAAD			
PENGURUS PROJEK / DISEMAK		: MUHAMMAD ASYRAF ABD. AZIZ			
NO HELAJAN:		02			

LEGEND FOR PIPING SIZE

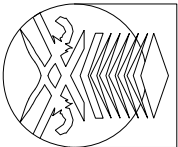
FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100

INTERNAL COLD WATER PLUMBING

ARAS 2, 3, 4 & 5 - TANDAS STAF, PELAJAR & OKU

SCALE 1 : 50

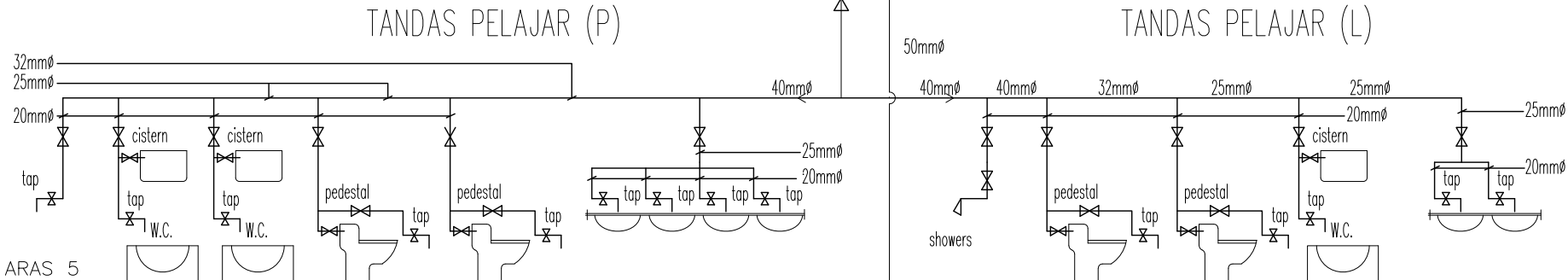
PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2,
3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI
KREATIF (KPSK), UTM SHAH ALAM.



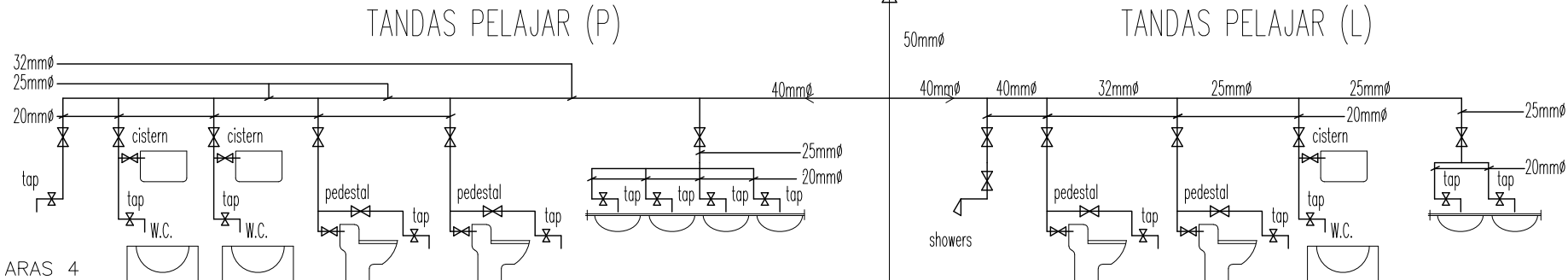
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ARAS BUMBUNG

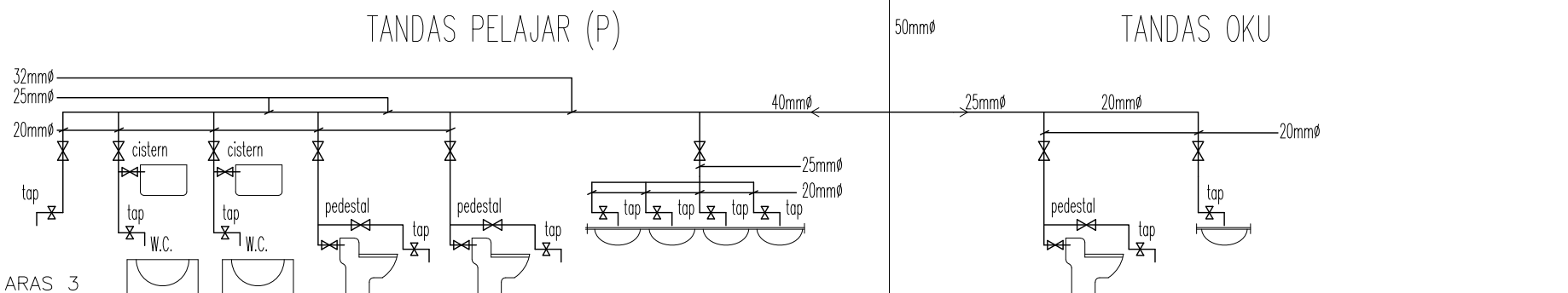
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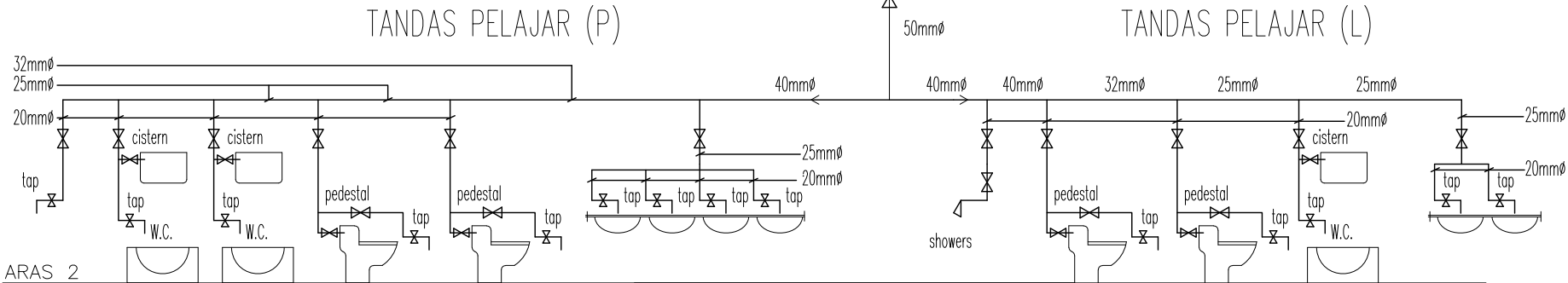
ARAS 5



ARAS 4



ARAS 3



ARAS 2

LUKISAN DOKUMENTASI

PERINGATAN

HANYA DIMENSI BERANGKA SAHAJA DILAKSANAKAN.
KONTRAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBENAR DI
TAPAK BINA. SEBARANG PERCANGGAHAN MESTI DILAPORKAN
DENGAN SEGERA KEPADA PEGAWEI PENGUSAHA SEBELUM
KERJA-KERJA DIMULAKAN.

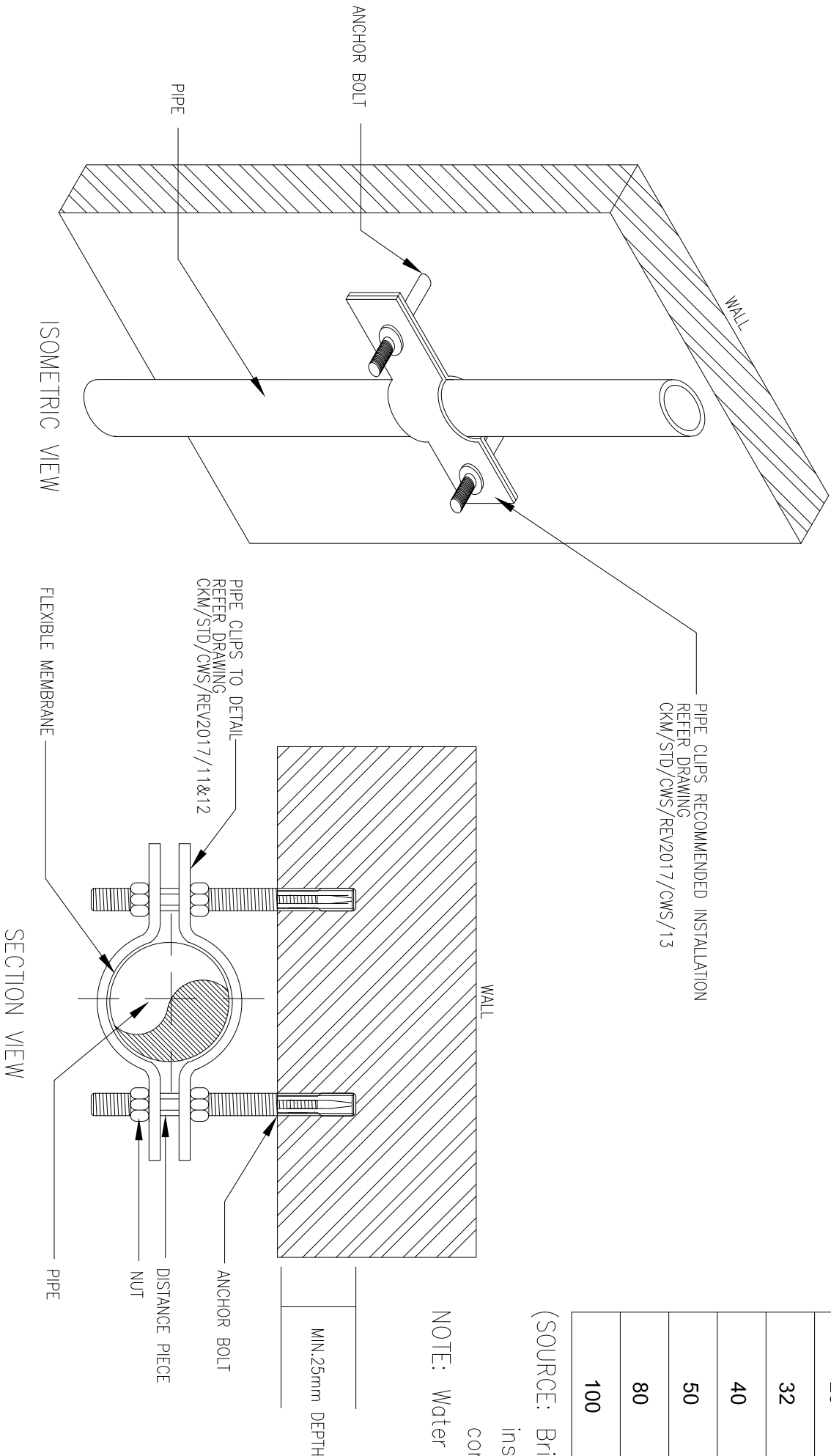
NO. RUJUKAN PROJEK: 200-PP11(BP1.5/3/25) MECHCW	TARIKH: 20 09 24 SEP	NAB CANSEOR				INDEKS PINDAAN
		TIMBALAN NAB CANSEOR				
		: DATUK PROF. TS. DR. SHAHRIN SAMB @ SAHIBUDDIN				
		: PROF. TS. SR. DR. MD. YUSOF HAMID				
		: IR. TS. AZMAN SAIBRAN				
TAJUK LUKISAN: TYPICAL INTERNAL COLD WATER PLUMBING DIAGRAMMATIC LAYOUT	SKALA: 1:50	PENGARAH TABATAN PEMBANGUNAN & INFRASTRUKTUR				
		: IR. TS. AZMAN SAIBRAN				
		KETUA BAHAGIAN PEMBANGUNAN INFRA. TS. MOHAMMED IZAL ABD. RAZAK				
		: ZULFADU MOHAMED SALEH				
		: MAZIAN SAAD				
		PENGURUS PROJEK / DISEMAK				NO HELAJAN: 03
		: MUHAMMAD ASYRAF ABD. AZIZ				

RECOMMENDED MAXIMUM SPACING OF SUPPORT
FOR ALL CLASSES OF PIPE FOR WATER (VERTICAL)

PIPE SIZE (mm)	RECOMMENDED MAXIMUM SPACING OF SUPPORTS (m)	
	NON-METAL	METAL
20	1.0	2.4
25	1.1	2.4
32	1.3	3.0
40	1.3	3.0
50	1.6	3.6
80	2.1	3.6
100	2.5	3.6

(SOURCE: British Standard Institute. (2010). BS EN 806–4: Specifications installations inside buildings conveying water for human consumption. Installation)

NOTE: Water temperature should not exceed 65°C



PIPE CLIPS VERTICAL SUPPORT

ARAS 2, 3, 4 & 5 - TANDAS STAF, PELAJAR & OKU

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2,
3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI
KREATIF (KRPSK), UTM SHAH ALAM.



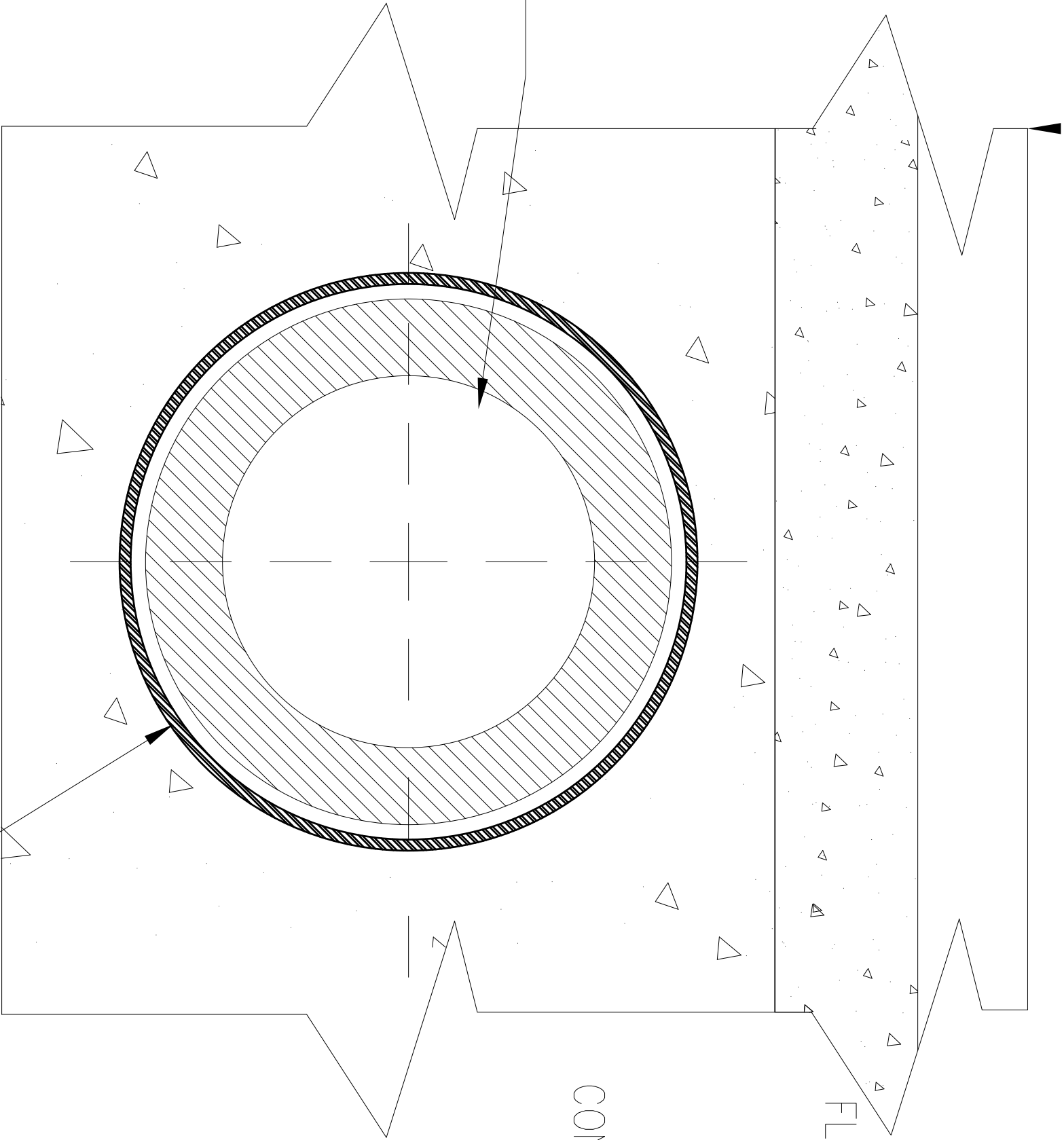
NO. RUJUKAN PROJEK: 200-PP11(BP1.5/3/25) MECHCW		TARIKH: 20 09 24 Sep		NAB CANSEIOR : DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHBUDIN		INDEXS PINDAAN	
TAJUK LUJUSAN: TERATAI BLOCK 2		SKALA:		PENGOJONG NAB CANSEIOR : PROF. TS. SR. DR MD. YUSOF HAMID			
PIPE CLIPS VERTICAL SUPPORT		N.T.S		PENGARAH JABATAN PEMBANGUNAN INFRASTRUKTUR : IR. TS. AZMAN SAUBIRAN			
				KETUA BAHAGIAN PEMBANGUNAN INFRA: TS. MOHAMMED IRRAI ABD. RAZAK			
				ARKITEK : ZULFADLI MOHAMED SALLEH			
				DILUKS OLEH : MAZLAN SAAD			
				PENGURUS PROJEK / DISEMAK : MUHAMMAD ASTYRI ABD. AZIZ		HELAIAN: 04	

FLOOR FINISH

FLOOR RENDERING

CONCRETE

TYPICAL PLASTIC PIPE

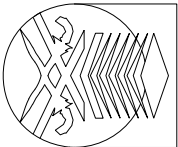


TYPICAL INSTALLATION OF PLASTIC PIPE (ABS/HDPE/PPE/PVC/PPR PIPE) LAY IN CONCRETE

ARAS 2, 3, 4 & 5 - TANDAS STAF, PELAJAR & OKU

PROJEK:

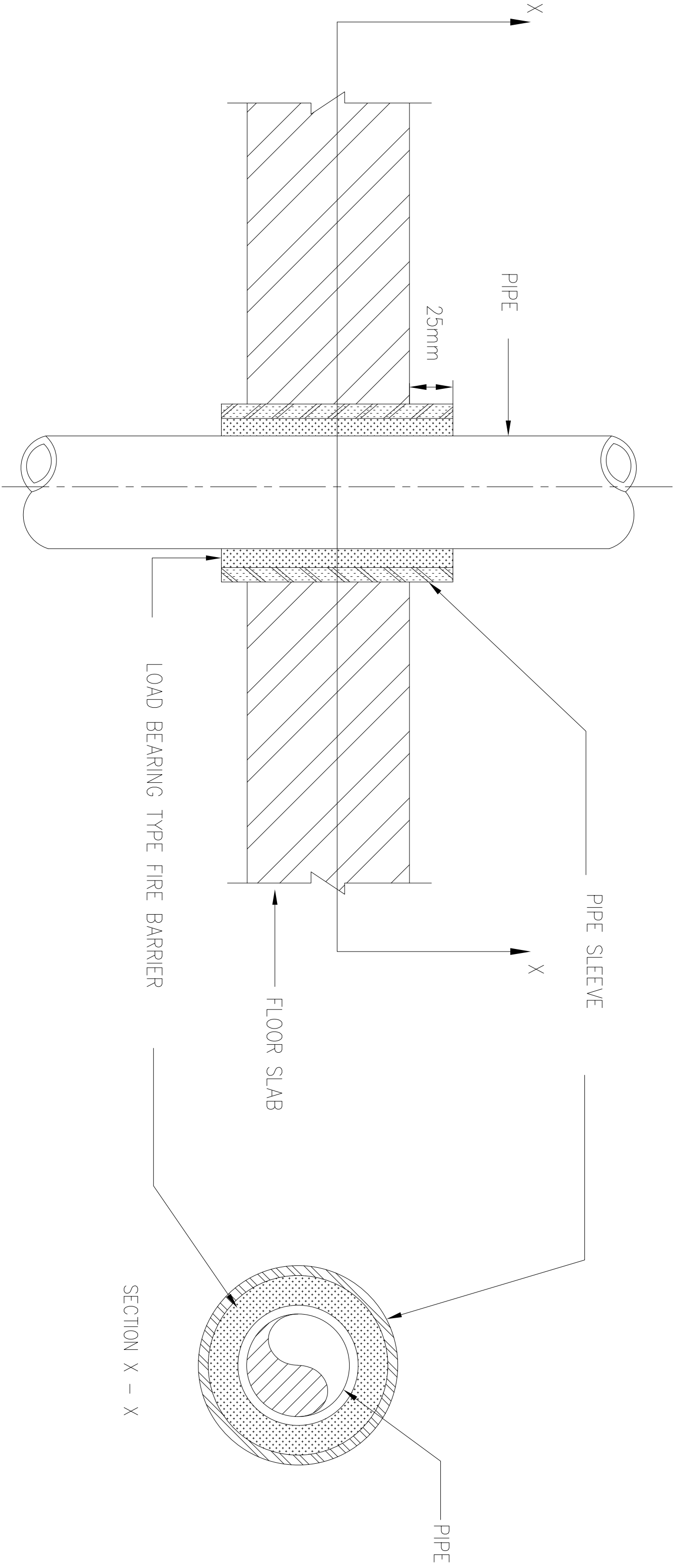
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:		TARIKH:		NAIB CANSelor		INDEXS PINDAAN	
200PPI(BPI.5/3/25) MECHCW		20 09 24 Sep		PENOLONG NAIB CANSelor			
TAJUK LUKSAN: TERATAI BLOCK 2				: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHRUDIN			
TYPICAL INSTALLATION OF PLASTIC PIPE (ABS/HDPE/PPE/PVC/PPR PIPE)				: PROF. TS. SR. DR MD. YUSOF HAMID			
LAY IN CONCRETE				PENGARAH JABATAN PEMBANGUNAN INFRASTRUKTUR			
				: IR. TS. AZMAN SAUBIRAN			
				KEJUA BAHAGIAN PEMBANGUNAN INFRA: TS. MOHAMMED IZRAL ABD. RAZAK			
				ARKITEK			
				: ZULFADU MOHAMED SALLEH			
				DILUKIS OLEH			
				: MAZIAN SAAD			
				PENGURUS PROJEK / DISEMAK			
				: MUHAMMAD ASYRIE ABD. AZIZ			
						HELAIAN:	
						05	

CONDUIT/SLEEVE



FRONT VIEW

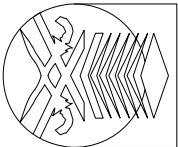
NOTES : SLEEVE SHALL BE SAME MATERIAL OF PIPE

DETAIL OF PIPE SLEEVE THROUGH FLOOR/SLAB



ARAS 2, 3, 4 & 5 - TANDAS STAF, PELAJAR & OKU

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2,
3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN
SENI KREATIF (KPSK), UTM SHAH ALAM.

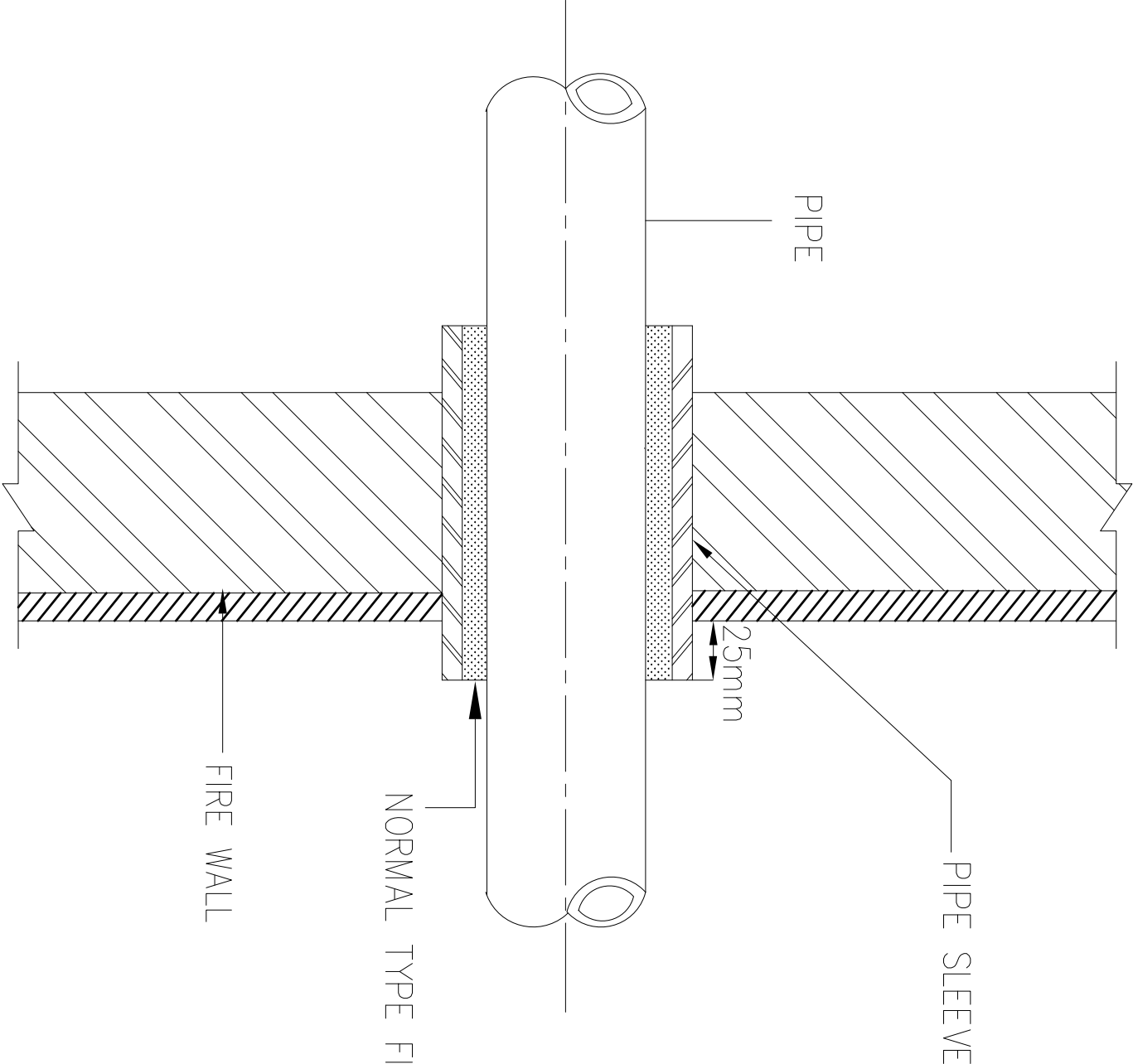


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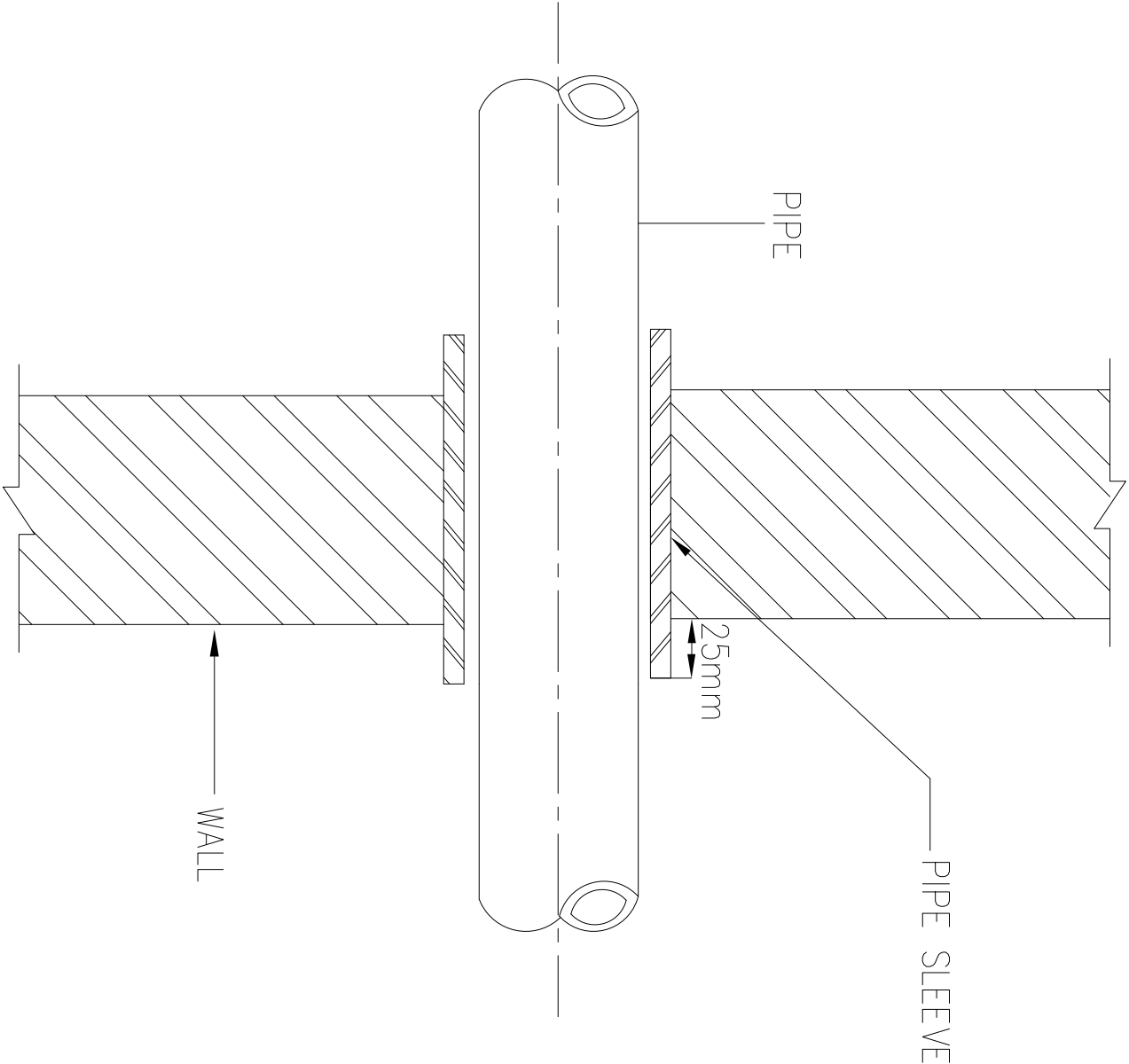
NO. RUJUKAN PROJEK: 200-PP1(BP1.5/3/25) MECHCW		TARIKH: 20 09 24 Sep		NAB CANSELOR : DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN		INDEXS PINDAAN	
TAJUK LUKSAN: TERATAI BLOCK 2		PENGARAH JABATAN PEMBANGUNAN INFRASTRUKTUR : IR. TS. AZMAN SAUBIRAN		PENOLONG NAB CANSELOR : PROF. TS. SR. DR MD. YUSOF HAMID			
DETAIL OF PIPE SLEEVE THROUGH FLOOR/SLAB		KETUA BAHAGIAN PEMBANGUNAN INFRA : TS. MOHAMMED IZZAL ABD. RAZAK		ARKITEK : ZULFADU MOHAMED SALLEH			
SKALA: N.T.S		DILUKS OLEH : MAZIAN SAAD		PENGURUS PROJEK / DISEMAK : MUHAMMAD ASTRIFF ABD. AZIZ			
		HELAIAN: 06					

RECOMMENDED PIPE SLEEVE MATERIAL

PIPE MATERIAL	PIPE SLEEVE MATERIAL
METAL	GALVANIZED IRON
NON-METAL	UPVC (HEAVY DUTY)



PIPE SLEEVE FOR PIPE THROUGH FIRE WALL



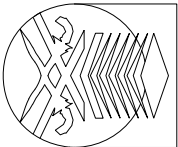
PIPE SLEEVE FOR PIPE THROUGH WALL

DETAIL OF PIPE SLEEVE THROUGH WALL



ARAS 2, 3, 4 & 5 - TANDAS STAF, PELAJAR & OKU

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS
2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN
SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK: 200-PPI(BP1.5/3/25) MECHCW	TARIKH: 20 09 24 Sep	NAIB CANSelor PENOLONG NAIB CANSelor PENGARAH JABATAN PEMBANGUNAN INFRASTRUKTUR KETUA BAHAGIAN PEMBANGUNAN INFRA : TS. MOHAMMED IZRAI ABD. RAZAK ARKITEK : ZULFADU MOHAMMED SALLEH DILUKIS OLEH : MAZIAN SAAD PENGURUS PROJEK / DISWAYK : MUHAMMAD ASTRIFF ABD. AZIZ	INDEXS PINDAAN
TAJUK LUKSAN: TERATAI BLOCK 2 DETAIL OF PIPE SLEEVE THROUGH WALL	SKALA: N.T.S		