KERAJAAN MALAYSIA

KEMENTERIAN PERUMAHAN DAN KERAJAAN TEMPATAN (KPKT)

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

LAPORAN QAQC BAGI KERJA - KERJA CIVIL & STRUCTURE

APRIL 2021

Disediakan Oleh:

Civil & Structural Consulting Engineer

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SENARAI LUKISAN YANG DIKEMUKAKAN KEPADA PIHAK PBT

No.	Tarikh	Rujukan	Skop Kerja	Maklum Balas Pihak PBT		Nota
				Tarikh	Status	
1	29/11/2019	AFA/P572/2019/006	Laporan dan Pelan MSMA & Perparitan	11/9/2020	Belum dapat diluluskan	- Telah mendapatkan kelulusan daripada pihak JKR berkenaan pembinaan "culvert" dalam kawasan rizab jalan melalui surat ruj: JKR.BFT.600.0/1/21/25 bertarikh 21/04/2021. - Akan dihantar kepada pihak UKAS untuk proses tandatangan pada 05/05/2021
2	20/12/2019	AFA/P572/2019/009	Laporan dan Pelan ESCP	11/9/2020	Belum dapat diluluskan	Dikemukakn semula pada 05/02/2021
	5/2/2021	AFA/P572/2019/071	Laporan dan Pelan ESCP	18/3/2021	Belum dapat diluluskan	Pihak JPS telah memberikan ulasan melalui surat ruj: JPS(BFT): 100-7/217() bertarikh 18/03/2021 dan diterima pada 14/04/2021. Dalam proses melakukan pindaan.
3	13/9/2020	AFA/P572/2019/047	Laporan dan Pelan Sistem Kumbahan	17/9/2020	Diluluskan	
4	20/12/2019	AFA/P572/2019/011	Laporan dan Pelan Sistem Retikulasi	30/4/2021	Diluluskan	Jumlah Contribution Fee = RM101,775.41
5	13/4/2021	AFA/P572/2019/090	Laporan dan Pelan Sistem Jalan Raya			Sedang dalam proses pihak MDB

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SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
1	16/1/2020	AFA/P572/2019/013	Jalan Raya	Rekabentuk	Penambahan laluan masuk khusus untuk kegunaan penduduk kuarters sedia ada	Memenuhi keperluan yang ditetapkan oleh pihak JKR Beaufort	AFA/P572/2019/CW/RD/01			Dikemukakan semula pada 08/09/2020
1a	8/9/2020	AFA/P572/2019/046	Jalan Raya	Rekabentuk	Penambahan laluan masuk khusus untuk kegunaan penduduk kuarters sedia ada	Memenuhi keperluan yang ditetapkan oleh pihak JKR Beaufort	AFA/P572/2019/CW/RD/01	2/10/2020	Pelan Jalan Raya perlu diperbaiki	Dikemukakan semula pada 30/10/2020
1b	30/10/2020	AFA/P572/2019/055	Jalan Raya	Rekabentuk	Penambahan laluan masuk khusus untuk kegunaan penduduk kuarters sedia ada	- Memenuhi keperluan yang ditetapkan oleh pihak JKR Beaufort - Penambah ruang parkir berdasarkan perubahan pelan arkitek - Memenuhi keperluan jentera Bomba selaras dengan ulasan pihak KPKT	AFA/P572/2019/CW/RD/01	16/11/2020	-Pindaan berdasarkan Pindaan pihak arkitek perlu ada pengesahan daripada pihak USB -Keluarkan nama pegawai penguasa pada title blok -perlu tunjukkan nombor Pindaan	Dikemukakan semula pada 09/12/2020
1c	9/12/2020	AFA/P572/2019/064	Jalan Raya	Rekabentuk	Perubahan berdasarkan komen jadual audit pihak KPKT	-Pindaan berdasarkan Pindaan pihak arkitek adalah berdasarkan pengesahan daripada pihak USB -Nama pegawai penguasa pada title blok dikeluarkan -Nombor Pindaan ditunjukkan	AFA/P572/2019/CW/RD/01	5/1/2021	-Sila kemukakan lima (5) set pelan pindaan yang telah ditandatangan berdasarkan ulasan yang telah diberikan diberi	Dikemukakan semula pada 01/02/2021
1d	1/2/2021	AFA/P572/2019/070	Jalan Raya	Rekabentuk	Pihak KPKT meminta lima (5) pelan yang telah dipindah dan ditandatangani	Menyediakan lima (5) pelan pindaan seperti yang diminta oleh pihak KPKT	AFA/P572/2019/CW/RD/01	11/2/2021	Diluluskan	Dikemukakan kepada MDB pada 13/04/2021

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No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
2	29/6/2020	AFA/P572/2019/039	Menara Latihan	Rekabentuk	1. Perubahan tiang & dinding konkrit 2. Perubahan pile cap 3. Perubahan skala keratan tangga 4. Penambahbaikan lukisan terperinci rasuk & keratan tapak	1 & 2. Perubahan rekabentuk struktur berdasarkan pelan pembinaan arkitek 3 & 4. Memenuhi keperluan KPKT berdasarkan ulasan rekod audit rekabentuk (fire rating 2 jam) & menambah baik penerangan lukisan.	AFA/P572/2019/ST/TW/01 AFA/P572/2019/ST/TW/PD/01 AFA/P572/2019/ST/TW/COL/01 AFA/P572/2019/ST/TW/GB/01 AFA/P572/2019/ST/TW/GS/01 AFA/P572/2019/ST/TW/1ST-4TH/SS/01 AFA/P572/2019/ST/TW/1ST-4TH/BM/01 AFA/P572/2019/ST/TW/RB/01 AFA/P572/2019/ST/TW/RS/01 AFA/P572/2019/ST/TW/02	28/7/2020	Disemak oleh KPKT	Dikemukakan semula pada 20/10/2020
2a	20/10/2020	AFA/P572/2019/052	Menara Latihan	Rekabentuk	1. Perubahan tiang & dinding konkrit 2. Perubahan pile cap 3. Perubahan skala keratan tangga 4. Penambahbaikan lukisan terperinci rasuk & keratan tapak	1 & 2. Perubahan rekabentuk struktur berdasarkan pelan pembinaan arkitek 3 & 4. Memenuhi keperluan KPKT berdasarkan ulasan rekod audit rekabentuk (fire rating 2 jam) & menambah baik penerangan lukisan.	AFA/P572/2019/ST/TW/01 AFA/P572/2019/ST/TW/PD/01 AFA/P572/2019/ST/TW/COL/01 AFA/P572/2019/ST/TW/GB/01 AFA/P572/2019/ST/TW/GS/01 AFA/P572/2019/ST/TW/1ST-4TH/SS/01 AFA/P572/2019/ST/TW/1ST-4TH/BM/01 AFA/P572/2019/ST/TW/RB/01 AFA/P572/2019/ST/TW/RS/01 AFA/P572/2019/ST/TW/02	26/11/2020	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan pada 26/11/2020
2b	26/11/2020	AFA/P572/2019/060	Menara Latihan	Rekabentuk	- Sila hantar semula borang perubahan rekabentuk - Sila kemukakan borang rekod audit rekabentuk	Dikemukakan berdasarkan komen KPKT		19/1/2021	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan pada 31/01/2021
2c	31/1/2021	AFA/P572/2019/069	Menara Latihan	Rekabentuk	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan berdasarkan komen KPKT	AFA/P572/2019/ST/TW/01 AFA/P572/2019/ST/TW/PD/01 AFA/P572/2019/ST/TW/COL/01 AFA/P572/2019/ST/TW/GB/01 AFA/P572/2019/ST/TW/GS/01 AFA/P572/2019/ST/TW/1ST-4TH/SS/01 AFA/P572/2019/ST/TW/1ST-4TH/BM/01 AFA/P572/2019/ST/TW/RB/01 AFA/P572/2019/ST/TW/RS/01 AFA/P572/2019/ST/TW/02	10/2/2021	Diluluskan	

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SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
3	29/6/2020	AFA/P572/2019/039	Rumah Pam	Rekabentuk	Perubahan rekabentuk rasuk dan keratan tapak	Memenuhi keperluan KPKT berdasarkan ulasan rekod audit rekabentuk (fire rating 2 jam) / penambahbaikan lukisan	AFA/P572/2019/ST/PH/01 AFA/P572/2019/ST/PH/02 AFA/P572/2019/ST/PH/03	28/7/2020	Disemak oleh KPKT	Dikemukakan semula pada 20/10/2020
3a	20/10/2020	AFA/P572/2019/052	Rumah Pam	Rekabentuk	Perubahan rekabentuk rasuk dan keratan tapak	Memenuhi keperluan KPKT berdasarkan ulasan rekod audit rekabentuk (fire rating 2 jam) / penambahbaikan lukisan	AFA/P572/2019/ST/PH/01 AFA/P572/2019/ST/PH/02 AFA/P572/2019/ST/PH/03			
3b	26/11/2020	AFA/P572/2019/060	Rumah Pam	Rekabentuk	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan berdasarkan komen KPKT		19/1/2021	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan pada 31/01/2021
3c	31/1/2021	AFA/P572/2019/069	Rumah Pam	Rekabentuk	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan berdasarkan komen KPKT	AFA/P572/2019/ST/PH/01 AFA/P572/2019/ST/PH/02 AFA/P572/2019/ST/PH/03	10/2/2021	Diluluskan	
3d	9/3/2021	AFA/P572/2019/089	Rumah Pam	Rekabentuk	Perubahan dilakukan disebabkan pertindihan asas cetek rumah pam dengan asas cetek blok utama.	Keperluan untuk melakukan perubahan berdasarkan perubahan rekabentuk blok utama yang telah diluluskan.	AFA/P572/2019/ST/PH/01 AFA/P572/2019/ST/PH/02 AFA/P572/2019/ST/PH/03	22/4/2021	- Tiada perubahan rekabentuk pada kawasan blok utama seperti yang dinyatakan. - Tiada perubahan "roof fall" pada pelan arkitek atau pindaan rekabentuk sebelum ini.	Justifikasi dikemukakan semula pada 02/05/2021
3e	2/5/2021	AFA/P572/2019/094	Rumah Pam	Rekabentuk	Perubahan dilakukan disebabkan pertindihan asas cetek rumah pam dengan asas cetek blok utama dan penambahan parit 150mm di belakang rumah pam.	Keperluan untuk melakukan perubahan disebabkan oleh pertindihan asas cetek dan keperluan untuk menambah parit 150mm di belakang rumah pam kerana tidak diambil kira sebelum ini.	AFA/P572/2019/ST/PH/01 AFA/P572/2019/ST/PH/02 AFA/P572/2019/ST/PH/03			

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No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
4	29/6/2020	AFA/P572/2019/039	Tempat Letak Kereta Berbumbung	Rekabentuk	Perubahan rekabentuk asas (foundation) dan menambahbaik lukisan terperinci	Penyesuaian tapak untuk asas cetek merujuk kepada pelan pembangunan terkini dan menambahbaik maklumat serta lukisan	AFA/P572/2019/ST/CP/01	28/7/2020	Disemak oleh KPKT	Dikemukakan semula pada 20/10/2020
4a	20/10/2020	AFA/P572/2019/052	Tempat Letak Kereta Berbumbung	Rekabentuk	Perubahan rekabentuk asas (foundation) dan menambahbaik lukisan terperinci	Penyesuaian tapak untuk asas cetek merujuk kepada pelan pembangunan terkini dan menambahbaik maklumat serta lukisan	AFA/P572/2019/ST/CP/01			
4b	26/11/2020	AFA/P572/2019/060	Tempat Letak Kereta Berbumbung	Rekabentuk	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan berdasarkan komen KPKT		19/1/2021	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan pada 31/01/2021
4c	31/1/2021	AFA/P572/2019/069	Tempat Letak Kereta Berbumbung	Rekabentuk	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan berdasarkan komen KPKT	AFA/P572/2019/ST/CP/01	10/2/2021	Diluluskan	

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								Tarikh	Status	
5	29/6/2020	AFA/P572/2019/039	Balai Bomba	Rekabentuk	**Kesemua Aras** 1. Penambahan jarak 250mm antara GL 1 & 2 dan perubahan reka bentuk rasuk / papak yang berkenaan. 2. Penambahan jarak panjang rc wall 1 sebanyak 1050mm dari GL D. **Aras Bawah** 3. Penambahan rasuk 4B / F3-G bagi keperluan parit perkhidmatan. 4. Perubahan reka bentuk rasuk & keratan papak untuk parit. 5. Perubahan reka bentuk rasuk & keratan papak untuk meningkatkan aras bawah sebanyak 150mm. **Aras Satu** 6. Perubahan lebar rasuk 3/A-FA & 3/F7-H daripada 230mm kepada 300mm. 7. Meningkatkan aras rasuk 1/C-G bagi tujuan penyelarasan. **Aras Bumbung (Lower Roof)** 8. Perubahan reka bentuk rasuk mengikut sistem saliran air. 9. Perubahan lebar rasuk 1/C-G daripada 300mm kepada 230mm. 10. Modifikasi rasuk 4/C-G.	a) Perubahan reka bentuk struktur mengikut lukisan pembinaan arkitek (1,2,4,5,6,9,14) b) Penambahbaikan reka bentuk / penjelasan lukisan dan penyelarasan lukisan terperinci (3,7,8,10,11,12,13,15,16)	AFA/P572/2019/ST/BB/GP/01 AFA/P572/2019/ST/BB/FP/01 AFA/P572/2019/ST/BB/SP/01 AFA/P572/2019/ST/BB/RP/01 AFA/P572/2019/ST/BB/RFP/01 AFA/P572/2019/ST/BB/RFP/02 AFA/P572/2019/ST/BB/RFP/03 AFA/P572/2019/ST/BB/GB/01 AFA/P572/2019/ST/BB/GB/02 AFA/P572/2019/ST/BB/GB/03 AFA/P572/2019/ST/BB/GB/04 AFA/P572/2019/ST/BB/GB/05 AFA/P572/2019/ST/BB/GB/06 AFA/P572/2019/ST/BB/GB/07 AFA/P572/2019/ST/BB/GB/08 AFA/P572/2019/ST/BB/FB/01 AFA/P572/2019/ST/BB/FB/02 AFA/P572/2019/ST/BB/FB/03 AFA/P572/2019/ST/BB/FB/04 AFA/P572/2019/ST/BB/FB/05 AFA/P572/2019/ST/BB/SLB/01 AFA/P572/2019/ST/BB/SLB/02 AFA/P572/2019/ST/BB/SLB/03 AFA/P572/2019/ST/BB/SLB/04 AFA/P572/2019/ST/BB/URB/01 AFA/P572/2019/ST/BB/URB/02 AFA/P572/2019/ST/BB/URB/03 AFA/P572/2019/ST/BB/GS/01 AFA/P572/2019/ST/BB/GS/02 AFA/P572/2019/ST/BB/GS/03 AFA/P572/2019/ST/BB/FS/01 AFA/P572/2019/ST/BB/FS/02 AFA/P572/2019/ST/BB/SS/02 AFA/P572/2019/ST/BB/RW/01	28/7/2020	Disemak oleh KPKT	Dikemukakan semula pada 20/10/2020

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								Tarikh	Status	
5	29/6/2020	AFA/P572/2019/039	Balai Bomba	Rekabentuk	**Aras Bumbung (Upper Roof)** 11. Perubahan saiz rasuk F/4-6 daripada 150x970mm kepada 150x1050mm untuk tujuan penyelarasan. 12. Perubahan saiz rasuk 7/F-G2 daripada 150x600mm kepada 230x1100mm bagi mengelakan keperluan dinding parapet 500mm. 13. Perubahan reka bentuk rasuk dan keratan papak mengikut sistem saliran air. **Dinding Konkrit (Wall 1)** 14. Penambahan "link" & lukisan terperinci "opening" **Truss Details** 15. Penambahan lukisan terperinci & penambahbaikan reka bentuk serta mengurangkan jumlah berat besi.	a) Perubahan reka bentuk struktur mengikut lukisan pembinaan arkitek (1,2,4,5,6,9,14) b) Penambahbaikan reka bentuk / penjelasan lukisan dan penyelarasan lukisan terperinci (3,7,8,10,11,12,13,15,16)		28/7/2020	Disemak oleh KPKT	Dikemukakan semula pada 20/10/2020

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No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
5a	20/10/2020	AFA/P572/2019/052	Balai Bomba	Rekabentuk	**Kesemua Aras** 1. Penambahan jarak 250mm antara GL 1 & 2 dan perubahan reka bentuk rasuk / papak yang berkenaan. 2. Penambahan jarak panjang rc wall 1 sebanyak 1050mm dari GL D. **Aras Bawah** 3. Penambahan rasuk 4B / F3-G bagi keperluan parit perkhidmatan. 4. Perubahan reka bentuk rasuk & keratan papak untuk parit. 5. Perubahan reka bentuk rasuk & keratan papak untuk meningkatkan aras bawah sebanyak 150mm. **Aras Satu** 6. Perubahan lebar rasuk 3/A-FA & 3/F7-H daripada 230mm kepada 300mm. 7. Meningkatkan aras rasuk 1/C-G bagi tujuan penyelarasan. **Aras Bumbung (Lower Roof)** 8. Perubahan reka bentuk rasuk mengikut sistem saliran air. 9. Perubahan lebar rasuk 1/C-G daripada 300mm kepada 230mm. 10. Modifikasi rasuk 4/C-G.	a) Perubahan reka bentuk struktur mengikut lukisan pembinaan arkitek (1,2,4,5,6,9,14) b) Penambahbaikan reka bentuk / penjelasan lukisan dan penyelarasan lukisan terperinci (3,7,8,10,11,12,13,15,16)	AFA/P572/2019/ST/BB/GP/01 AFA/P572/2019/ST/BB/FP/01 AFA/P572/2019/ST/BB/SP/01 AFA/P572/2019/ST/BB/RP/01 AFA/P572/2019/ST/BB/RFP/01 AFA/P572/2019/ST/BB/RFP/02 AFA/P572/2019/ST/BB/RFP/03 AFA/P572/2019/ST/BB/GB/01 AFA/P572/2019/ST/BB/GB/02 AFA/P572/2019/ST/BB/GB/03 AFA/P572/2019/ST/BB/GB/04 AFA/P572/2019/ST/BB/GB/05 AFA/P572/2019/ST/BB/GB/06 AFA/P572/2019/ST/BB/GB/07 AFA/P572/2019/ST/BB/GB/08 AFA/P572/2019/ST/BB/FB/01 AFA/P572/2019/ST/BB/FB/02 AFA/P572/2019/ST/BB/FB/03 AFA/P572/2019/ST/BB/FB/04 AFA/P572/2019/ST/BB/FB/05 AFA/P572/2019/ST/BB/SLB/01 AFA/P572/2019/ST/BB/SLB/02 AFA/P572/2019/ST/BB/SLB/03 AFA/P572/2019/ST/BB/SLB/04 AFA/P572/2019/ST/BB/URB/01 AFA/P572/2019/ST/BB/URB/02 AFA/P572/2019/ST/BB/URB/03 AFA/P572/2019/ST/BB/GS/01 AFA/P572/2019/ST/BB/GS/02 AFA/P572/2019/ST/BB/GS/03 AFA/P572/2019/ST/BB/FS/01 AFA/P572/2019/ST/BB/FS/02 AFA/P572/2019/ST/BB/SS/02 AFA/P572/2019/ST/BB/RW/01	26/11/2020	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan pada 26/11/2020

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
5a	20/10/2020	AFA/P572/2019/052	Balai Bomba	Rekabentuk	**Aras Bumbung (Upper Roof)** 11. Perubahan saiz rasuk F/4-6 daripada 150x970mm kepada 150x1050mm untuk tujuan penyelarasan. 12. Perubahan saiz rasuk 7/F-G2 daripada 150x600mm kepada 230x1100mm bagi mengelakan keperluan dinding parapet 500mm. 13. Perubahan reka bentuk rasuk dan keratan papak mengikut sistem saliran air. **Dinding Konkrit (Wall 1)** 14. Penambahan "link" & lukisan terperinci "opening" **Truss Details** 15. Penambahan lukisan terperinci & penambahbaikan reka bentuk serta mengurangkan jumlah berat besi.	a) Perubahan reka bentuk struktur mengikut lukisan pembinaan arkitek (1,2,4,5,6,9,14) b) Penambahbaikan reka bentuk / penjelasan lukisan dan penyelarasan lukisan terperinci (3,7,8,10,11,12,13,15,16)		26/11/2020	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan pada 26/11/2020

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
5b	26/11/2020	AFA/P572/2019/060	Balai Bomba	Rekabentuk	- Sila hantar semula borang perubahan rekabentuk '- Sila kemukakan borang rekod audit rekabentuk	Dikemukakan berdasarkan komen KPKT		19/1/2021	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan pada 31/01/2021
5c	31/1/2021	AFA/P572/2019/069	Balai Bomba	Rekabentuk	-Sila kemukakan lima (5) set lukisan pindaan yang telah ditandatangani	Dikemukakan berdasarkan komen KPKT	AFA/P572/2019/ST/BB/GP/01 AFA/P572/2019/ST/BB/FP/01 AFA/P572/2019/ST/BB/SP/01 AFA/P572/2019/ST/BB/RP/01 AFA/P572/2019/ST/BB/RFP/01 AFA/P572/2019/ST/BB/RFP/02 AFA/P572/2019/ST/BB/RFP/03 AFA/P572/2019/ST/BB/GB/01 AFA/P572/2019/ST/BB/GB/02 AFA/P572/2019/ST/BB/GB/03 AFA/P572/2019/ST/BB/GB/04 AFA/P572/2019/ST/BB/GB/05 AFA/P572/2019/ST/BB/GB/06 AFA/P572/2019/ST/BB/GB/07 AFA/P572/2019/ST/BB/GB/08 AFA/P572/2019/ST/BB/FB/02 AFA/P572/2019/ST/BB/FB/03 AFA/P572/2019/ST/BB/FB/04 AFA/P572/2019/ST/BB/FB/05 AFA/P572/2019/ST/BB/SLB/01 AFA/P572/2019/ST/BB/SLB/02 AFA/P572/2019/ST/BB/SLB/03 AFA/P572/2019/ST/BB/SLB/04 AFA/P572/2019/ST/BB/URB/01 AFA/P572/2019/ST/BB/URB/02 AFA/P572/2019/ST/BB/URB/03 AFA/P572/2019/ST/BB/GS/01 AFA/P572/2019/ST/BB/GS/02 AFA/P572/2019/ST/BB/GS/03 AFA/P572/2019/ST/BB/FS/01 AFA/P572/2019/ST/BB/FS/02 AFA/P572/2019/ST/BB/SS/02 AFA/P572/2019/ST/BB/RW/01	10/2/2021	Diluluskan	

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
6	30/10/2020	AFA/P572/2019/054	Rumah Sampah	Rekabentuk	1. Perubahan "roof fall". 2. Penambahan "r.c. gutter".	1. Perubahan "roof fall berdasarkan lukisan arkitek. 2. Penambahan "r.c. gutter" - tidak ditunjukkan dalam lukisan tender.	AFA/P572/2019/ST/BIN/01	17/11/2020	-keluarkan nama pegawai penguasa lama '-tunjukkan nombor pindaan '-tunjukkan keupayaan galas tanah dan kriteria/perincian tanah bagi raft foundation '-perbetulkan simbol rasuk A/1-2 (150 x 600); simbol "B" sepatutnya "2" '-semak semula perincian raft foundation untuk pastikan anchorage length mencukupi	Dikemukakan semula pada 09/02/2021 berdasarkan komen KPKT
6a	9/2/2021	AFA/P572/2019/074	Rumah Sampah	Rekabentuk	-keluarkan nama pegawai penguasa lama '-tunjukkan nombor pindaan '-tunjukkan keupayaan galas tanah dan kriteria/perincian tanah bagi raft foundation '-perbetulkan simbol rasuk A/1-2 (150 x 600); simbol "B" sepatutnya "2" '-semak semula perincian raft foundation untuk pastikan anchorage length mencukupi	Berdasarkan komen KPKT	AFA/P572/2019/ST/BIN/01	4/3/2021	Diluluskan	

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI PINDAAN REKABENTUK

No.	Tarikh	Rujukan	Skop Kerja	Kategori Pindaan	Keterangan Perubahan Kerja	Justifikasi Perubahan Kerja	No. Lukisan	Maklum Balas Pihak KPKT		Nota
								Tarikh	Status	
7	19/1/2021	AFA/P572/2019/068	Store Logistik	Rekabentuk	1. Perubahan "roof fall". 2. Penambahan "r.c. gutter".	1. Perubahan "roof fall berdasarkan lukisan arkitek. 2. Penambahan "r.c. gutter" - tidak ditunjukkan dalam lukisan tender.	AFA/P572/2019/ST/STORE/01 AFA/P572/2019/ST/STORE/RB/01	10/2/2021	- Label rasuk perlu dilengkapkan dan selaras dengan lukisan perincian. - Label gridline dalam lukisan perincian perlu selaras dengan lukisan susun atur. - Jumlah perangkai yang diperlukan bagi setiap rasuk perlu selaras dengan pengiraan rekabentuk. - Perlu melakukan pindaan rekabentuk untuk mengambilkira beban r.c. gutter. - Gridline beam perlu dinyatakan dalam pengiraan rekabentuk.	Dikemukakan semula pada 05/03/2021 berdasarkan komen KPKT
7a	5/3/2021	AFA/P572/2019/084	Store Logistik	Rekabentuk	1. Label rasuk dilengkapkan dan selaras dengan lukisan perincian. 2. Label gridline dalam lukisan perincian diselaraskan dengan lukisan susun atur. 3. Jumlah perangkai yang diperlukan bagi setiap rasuk diselaraskan dengan pengiraan rekabentuk. 4. Melakukan pindaan rekabentuk untuk mengambilkira beban r.c. gutter. 5. Gridline beam dinyatakan dalam pengiraan rekabentuk.	Berdasarkan komen KPKT	AFA/P572/2019/ST/STORE/01 AFA/P572/2019/ST/STORE/RB/01			

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI RFI YANG DIKEMUKAKAN

No.	Date	Issued by	Information Requested	Received by	Date	Responses / Remarks
1	14/8/2020	REMT Utama S/B	Main Building Parapet Wall Rebar lapping	ARE/AFK	14/8/2020	Proposed lapping of vertical T16 & T12 rebars as per column construction acceptable. Lap long length shall not be less than 40 x diameters of rebars.
2	22/8/2020	REMT Utama S/B	Please confirm the point or location of re-pile to be tested with the PDA test.	ARE/AFK	22/8/2020	Two additional pile point had been given to the contractor to proceed works. PDA point will be selected once all piling records submitted.
3	30/9/2020	REMT Utama S/B	To enlarge the stump at GL B / 6B & D / 6B.	RE / AFK	11/10/2020	Lukisan kerja pembetulan telah dikemukakan kepada pihak kontraktor.
4	1/10/2020	REMT Utama S/B	Details drawing for rc gutter as shown in architect plan (bin center)	RE / AFK	7/10/2020	Perubahan rekabentuk untuk tambahkan rc gutter telah dikemukakn kepada pihak KPKT dan sedang menunggu maklum balas.
5	12/10/2020	REMT Utama S/B	Construction Joint of ground beam - GL A - H / 3 - 4	RE / AFK	6/10/2020	"Construction joint" pada "ground beam" haruslah pada 1 / 3 daripada panjang "ground beam tersebut dengan syarat disebabkan oleh keadaan yang tidak mengizinkan.
6	27/10/2020	REMT Utama S/B	Request information regarding the number of existing piling point allowed to start work. This is because to purchase pile, supplier only makes production in large quantities.	RE / AFK	27/10/2020	Kerja-kerja cerucuk terutamanya di bahagian parit 2m dihentikan buat sementara waktu menunggu surat kebenaran daripada pihak Mahkahmah. Namun, kerja-kerja cerucuk di tempat lain seperti decorative fencing dan entarnce culvert dibenarkan untuk dilakukan.
7	13/4/2021	REMT Utama S/B	Descripency between Architect drawings and C&S Drawings for Menara Latihan	RE / AFK	13/4/2021	To refere Architect drawings for the opening.
8	19/4/2021	REMT Utama S/B	Soil treatment area - As built site issue - As built PVD on site 1368 points - additional 444 points - PVD design C&S drawings - 924 points only - PVD Proposal	RE / AFK	30/4/2020	Based on C&S drawings, there are 1400 points of PVD, please refer attached drawings for the soil treatment area.
9	23/4/2021	REMT Utama S/B	Descripency for 1st - 4th floor slab reinforcement at staircase	RE / AFK	3/5/2021	Reinforcement details to refer to slab section 2-2 under drawings no. AFA/P572/2019/ST/TW/1st-4th/SS/01.

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SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
1	9/1/2020	REMT Utama S/B	Inspection for survey peg – Setting out main building, logistic store, and Menara Latihan and existing level.	ARE / AFK	10/1/2020	1.Please Stipulate the main contractor's name on RFI 2.Kindly submit the setting out survey plans for the above and plan shall be endorsed by a licensed surveyor.
2	9/1/2020	REMT Utama S/B	Inspection for site cleaning works. To remove all grass, unsuitable material	ARE / AFK	10/1/2020	1.Please Stipulate the main contractor's name on RFI 2.You may proceed with site cleaning works only. 3.Before you do any excavation work to remove unsuitable material, you are required to construct the temporary site drainage and sediment control.
				ARE / AFK	03/02/2020 Reinspection	Earthwork level / platforms to be certified by REMT's surveyor.
3	9/1/2020	REMT Utama S/B	Inspection for temporary access road. To install pipe culvert.	ARE / AFK	13/1/2020	1.Please Stipulate the main contractor's name on RFI 2.If construction of access road not base on approved plan but temporary, please refer to JKR for a wayleave permit requirement.
4	19/2/2020	REMT Utama S/B	Inspection for cut and fill works. Cut area - done	ARE / AFK	19/2/2020	No objection to the cut and fill works but levels subjected to REMT's Surveyor certification on site.
5	24/2/2020	REMT Utama S/B	Inspection for location of wash bay – new location	ARE / AFK	24/2/2020	Work to proceed subjected to JKR's approval on the proposed temporary access road / wayleave approval.
6	24/2/2020	REMT Utama S/B	Preparation and fabrication of formworks. Rebar caging.	ARE / AFK	27/2/2020	Work allowed to proceed.
7	27/2/2020	REMT Utama S/B	Inspection for concreting work @ wash bay. Floor Slab and wall	ARE / AFK	27/2/2020	Work allowed to proceed.
8	8/6/2020	REMT Utama S/B	Inspection for test pile works (Point 2 /D)	ARE / AFK	8/6/2020	1.Due to space constraint for load test on site, test pile point changed to gridline 2/ D on site. 2.REMT to submit piling record of final sets.
9	10/6/2020	REMT Utama S/B	Inspection for mackintosh probes sounding test (4 points)	ARE / AFK	11/6/2020	Mackintosh probes results to be submitted by REMT upon completion of test.
10	18/6/2020	REMT Utama S/B	Inspection for excavation work. Excavation of pad footing base (Gridline 1 – 5 / E – H)	ARE / AFK	19/1/2020	1.Excavation for pad footings can proceed and two water pump on standby. 2.To construct in accordance to approved drawings.
11	19/6/2020	REMT Utama S/B	Inspection for mackintosh probes test (SI)	ARE / AFK	20/6/2020	1.Second set of 4 nos. MP done at REMT's cost. 2.Test at gridline 1 – 9 / E- H are acceptable at excavation to pad footing base can proceed. 3.Official result to submit to us.

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
12	20/6/2020	REMT Utama S/B	Inspection for load test (MLT)	ARE / AFK	20/6/2020	1.Load test of R.C. 150mm sq pile @ max load – 50tons.
						2.To comply to test spec approved.
						3.To submit official test results.
13	23/6/2020	REMT Utama S/B	Inspection of excavation of pad footing (pad footing base). – (Gridline E – G / 6 – 8.	ARE / AFK	23/6/2020	To pump and discharge all stagnant water ponding inside pits
14	23/6/2020	REMT Utama S/B	Inspection for lean concrete work at gridline E - H / 1 – 8.	ARE / AFK	25/6/2020	To keep the area dry at all time.
15	26/6/2020	REMT Utama S/B	Inspection for lean concrete work at gridline E – F / 2 - 4	ARE / AFK	27/6/2020	To keep the area dry at all time.
16	1/7/2020	REMT Utama S/B	Inspection for rebar and formwork at gridline G – H / 4 - 7	ARE / AFK	2/7/2020	To clear lean concrete of mud.
17	2/7/2020	REMT Utama S/B	Inspection for concreting work at gridline G – H / 4 - 7	ARE / AFK	3/7/2020	1.To wash / clean lean concrete base.
						2.Compact concrete properly.
18	2/7/2020	REMT Utama S/B	Inspection for rebar and formwork @ gridline G – H / 1 - 5	ARE / AFK	3/7/2020	1.To clean lean concrete base.
						2.To pump out stagnant water.
19	3/7/2020	REMT Utama S/B	Inspection for concreting works at Gridline G – H / 1 - 5	ARE / AFK	4/7/2020	1.To clean lean concrete base.
						2.To compact concrete properly.
20	3/7/2020	REMT Utama S/B	Inspection for rebar and formwork @ gridline G – H / 2 (1no.)	ARE / AFK	4/7/2020	1.To clean lean concrete before concreting.
						2.To pump out stagnant water.
				ARE / AFK	4/7/2020 Reinspection	Concrete scheduled on 06/07/2020
21	4/7/2020	REMT Utama S/B	Inspection for concreting work @ Gridline G – H / 2 (1no.)	ARE / AFK	6/7/2020	To vibrate / compact properly. To do curing after concrete has set.
22	7/7/2020	REMT Utama S/B	Inspection for load test (MLT). Pile Load Test (Re-Test)	ARE / AFK	28/7/2020	1.Load test allowed to proceed at 3.10pm.
						2.Addition of 6 Hours maintain load at 25ton (Total duration = 12 hours).
						3.To duration – 2 cycle = 47 Hours.
						4.To submit official load test result to us.
23	8/7/2020	REMT Utama S/B	Inspection for rebar and formwork. Gridline E – F / 1 – 8.	ARE / AFK	9/7/2020	1.To reinspect for concreting on 10/07/2020.
						2.Need to wash mud from footing bases.
						3.To pump out water.
						4.To adjust misalignment of side form for F11 footing.
24	9/7/2020	REMT Utama S/B	Inspection for fabrication of rebar and formwork (stump). Gridline G – H / 1 – 8 (11nos.)	ARE / AFK	9/7/2020	1.To check height of stump for floor slab finished level.
						2.To check verticality.
25	9/7/2020	REMT Utama S/B	Inspection for concreting work. Gridline E – F / 1 – 8.	ARE / AFK	10/7/2020	1.Pump mix supply G30P.
						2.To compact properly.

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SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
26	9/7/2020	REMT Utama S/B	Inspection for concreting work (stump). Gridline G – H / 1 – 8 (11nos.)	ARE / AFK	10/7/2020	Blow clean before concreting.
27	14/7/2020	REMT Utama S/B	Inspection for excavation works. Gridline B – D / 1 – 9, E / 9 (1no.)	ARE / AFK	15/7/2020	1.All pad footing base formation level are decided at 1.70m depth from the existing ground level of approx. 9.10 – 9.20m AMSL (B – D / 1 – 9 = 8nos.) + (E / 9 = 1no.). 2.To lean concrete immediately after excavation work.
28	14/7/2020	REMT Utama S/B	Inspection of concrete finishes of pad footing. Gridline E – H / 1 – 8.	ARE / AFK	15/7/2020	No further comment.
29	14/7/2020	REMT Utama S/B	Inspection for backfill works. Gridline E – H / 1 – 8.	ARE / AFK	15/7/2020	No further comment.
30	15/7/2020	REMT Utama S/B	Inspection for lean concrete work. Gridline B – C / 1 – 2 (2nos.)	ARE / AFK	15/7/2020	To keep the pit dry at all time.
31	15/7/2020	REMT Utama S/B	Inspection for lean concrete works. Gridline B – D / 3 – 5 (4nos.)	ARE / AFK	16/7/2020	To pump stagnant water and keep dry.
32	20/7/2020	REMT Utama S/B	Inspection for rebar and formwork. Gridline E – F / 1 – 8. (13nos.)	ARE / AFK	21/7/2020	To remove pieces of woods and cleanse.
33	20/7/2020	REMT Utama S/B	Inspection for concreting work (stump). Gridline E – F / 1 – 8 (13nos.)	ARE / AFK	9/7/2020	Work allowed to proceed.
34	21/7/2020	REMT Utama S/B	Inspection for excavation work. Excavation pad footing base. Gridline D – E / 9, B – D / 6 – 8 (3nos.)	ARE / AFK	10/7/2020	No further comment.
35	23/7/2020	REMT Utama S/B	Inspection for fabrication rebar and formwork. (Fabrication Done)	ARE / AFK	23/7/2020	1.To pump stagnant water. 2.To adjust rebars for sufficient concrete cover.
36	24/7/2020	REMT Utama S/B	Inspection for concrete work. Gridline B – D /1 (1no.)	ARE / AFK	24/7/2020	1.To wash and remove mud. 2.To add bottom concrete covers for rebars.
37	27/7/2020	REMT Utama S/B	Inspection for fabrication rebar and formwork. (Fabrication done). Gridline B – D / 2 (1no.)	ARE / AFK	28/7/2020	1.To wash and remove mud and water. 2.To adjust concrete covers.
38	27/7/2020	REMT Utama S/B	Inspection for concreting work. Gridline B – D / 2 (1no.)	ARE / AFK	28/7/2020	1.To vibrate concrete properly. 2.To adhere to specified slump test.

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
39	5/8/2020	REMT Utama S/B	Inspection for rebar and formwork. Gridline B – D / 3 - 5 (3no.)	ARE / AFK	4/8/2020	No further comment.
40	5/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline B – D / 3 - 5 (3no.)	ARE / AFK	5/8/2020	1. Pour cement powder on lean concrete to absorb excess ponding water. 2. To compact properly
41	5/8/2020	REMT Utama S/B	Inspection for rebar and formwork. Gridline B – D / 1 - 2 (4no.)	ARE / AFK	4/8/2020	Prepare for concreting.
42	5/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline B – D / 1 - 2 (4no.)	ARE / AFK	5/8/2020	1. Slump test @ 100mm 2. To compact properly
43	6/8/2020	REMT Utama S/B	Inspection for rebar and formwork. Gridline D / 4 - 5 (1no.)	ARE / AFK	6/8/2020	1. To clean and removed mud 2. to re-inspect for concreting @ 2.00pm.
44	6/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline D / 4 - 5 (1no.)	ARE / AFK	6/8/2020	1. To remove ponding water 2. Applied dry portland cement powder to base of footing.
45	10/8/2020	REMT Utama S/B	Inspection for concrete finishes. Gridline B – D / 1 - 2, E - F / 1 - 8, G - H / 1 - 7 (28no.)	ARE / AFK	10/8/2020	No further comment.
46	11/8/2020	REMT Utama S/B	Inspection for concrete finishes. Gridline B – D / 1 - 5 (6no.), E / 7 (1no.)	ARE / AFK	11/8/2020	Patching works for minor honecomb on pad footing acceptable.
47	14/8/2020	REMT Utama S/B	Inspection of backfilling works	ARE / AFK	14/8/2020	1. To do compaction as per specification. 2. To carry out soil test at specified location to be determine on site.
48	14/8/2020	REMT Utama S/B	Re-Inspection for pile point - (45points)	ARE / AFK	14/8/2020	1. Setting out points pegged on site as confirmed by your own surveyor. 2. Layout of building location and set back are confirmed and accepted by architect.
49	14/8/2020	REMT Utama S/B	Inspection for material on site - R.C. Pile (150mm x 150mm)	ARE / AFK	14/8/2020	Setting out of pile position to be confirmed by surveyor
50	17/8/2020	REMT Utama S/B	Inspection for rebar and formworks. Gridline B - D / 3 - 5 (6nos), E / 7 (1no.)	ARE / AFK	15/8/2020	1. To adjust rebar cover 2. To wash base of stump
				ARE / AFK	17/08/2020 Reinspection	Sprinkle OPC powder to the base of stump.

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
51	17/8/2020	REMT Utama S/B	Inspection for rebar and formworks. Gridline D - E / 9	ARE / AFK	15/8/2020	1. To wash mud 2. To add concrete cover block to side and base
52	17/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline B - D / 3 - 5 (6no.), E / 7 (1no.)	ARE / AFK	17/8/2020	1. Slump test of concrete to be < 125mm 2. To compact properly
53	17/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline D - E / 9 (2no.)	ARE / AFK	17/8/2020	1. Slump test of concrete to be < 125mm 2. To compact properly
54	17/8/2020	REMT Utama S/B	Inspection for pilling works	ARE / AFK	17/8/2020	Work allow to proceed.
55	18/8/2020	REMT Utama S/B	Inspection for rebar and formworks.	ARE / AFK	17/8/2020	1. To wash clean of mud and pump out water. 2. To add cover block.
56	18/8/2020	REMT Utama S/B	Inspection of concreting works. Gridline B - D / 6 - 8 (1no.)	ARE / AFK	18/8/2020	1. To wash clean and pump out water. 2. Sprinkle OPC powder to concrete surface.
57	19/8/2020	REMT Utama S/B	Inspection of concrete finishes. Gridline B - D / 3 - 5, E / 7 (7nos.)	ARE / AFK	19/8/2020	No further comments
58	19/8/2020	REMT Utama S/B	Inspection for material on site - R.C. Pile (150mm x 150mm)	ARE / AFK	19/8/2020	1. 2nd batch of 150mm x 150mm r.c. sq pile arrived 19/08/2020 @ 8.30am. 2. 21nos of starter and 21nos extention.
59	19/8/2020	REMT Utama S/B	Inspection for rebar and forworks. Gridline B - D /6B - 8, D - E / 9 (6nos.)	ARE / AFK	21/8/2020	No further comments
60	21/8/2020	REMT Utama S/B	Inspection for concreting works. Gridline B - D /6B - 8, D - E / 9 (6nos.)	ARE / AFK	21/8/2020	To sprinkle OPC powder at the base of stump
61	22/8/2020	REMT Utama S/B	Inspection of soil compaction. Gridline B - D / 1 - 3, E - H / 1 - 8	ARE / AFK	22/8/2020	1. Mobile compactor roller of 20tonne capacity. 2. To follow compaction specic=fication.
62	21/Dec/20	REMT Utama S/B	Inspection for rebar and formwork installation completed. Stor logistik - Pad footing GL: A-C/1-3 (9 nos)	ARE / AFK	22/Dec/20	1. To pump out water and clean base of mud. 2. To adjust conc. cover at side of formwork.
63	22/Dec/20	REMT Utama S/B	Inspection for concreting works. Stor logistik - Pad footing GL: 1/A, 1-2/B, 1-3/C (6 nos)	ARE / AFK	22/Dec/20	Work are allowed to proceed
64	21/Dec/20	REMT Utama S/B	Inspection for rebar and formwork installation completed. Rumah sampah - Column GL: A-B/1-2 (4 nos)	ARE / AFK	22/Dec/20	Work are allowed to proceed

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH. UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA

SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
65	22/Dec/20	REMT Utama S/B	Inspection for concreting works. Stor logistik - Pad footing GL: 2-3/A, 3/B (3 nos)	ARE / AFK	23/Dec/20	Work are allowed to proceed
66	26/Dec/20	REMT Utama S/B	Inspection for rebar and formwork installation completed. Main building - Ground slab	ARE / AFK	26/Dec/20	Concreting scheduled on 28/12/20
67	28/Dec/20	REMT Utama S/B	Inspection for concreting works. Main building - Ground slab	ARE / AFK	28/Dec/20	Concreting by pump mix G30P starts at 10.00 am
68	6/Jan/21	REMT Utama S/B	Inspection for concrete finished. Stor logistik - Pad footing GL: 1-3/A-C (9 nos)	ARE / AFK	7/Jan/21	Work are allowed to proceed
69	6/Jan/21	REMT Utama S/B	Inspection for rebar and formwork installation completed. Main building - Column , Re-wall GL: B-H/1-8 (Column), 6/A-D (Re-wall)	ARE / AFK	8/Jan/21	1. To add missing stirrup at the bottoms of columns. 2. To provide / adjust concrete cover at the side.
70	6/Jan/21	REMT Utama S/B	Inspection for rebar and formwork installation completed. Stor logistik - Stump GL: A-C/1-3 (9 nos)	ARE / AFK	8/Jan/21	Work are allowed to proceed
71	9/Jan/21	REMT Utama S/B	Inspection for concreting works. Main building - Column, Re-wall & ground slab - porch area. GL: B-H/4-8, H/3 (Column), A-0/6 (Re-wall), D-E/4-8 (Slab)	ARE / AFK	11/Jan/21	1. To insert vibratory poker into the middle of columns and wall for effective compaction. 2. To erect scaffolding platform for working on concreting and vibration.
72	7/Jan/21	REMT Utama S/B	Inspection for concreting works. Stor logistik - Stump GL: 1-3/A-C (9 nos)	ARE / AFK	11/Jan/21	Work are allowed to proceed
73	7/Jan/21	REMT Utama S/B	Inspection for concreting works. Rumah sampah - Column GL: A-B/1-2 (4 nos)	ARE / AFK	11/Jan/21	Work are allowed to proceed
74	11/Jan/21	REMT Utama S/B	Inspection for concreting works. Main building - Column GL: C-G/1-2, B-G/3 (11 nos)	ARE / AFK	12/Jan/21	Work are allowed to proceed

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SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
75	12/Jan/21	REMT Utama S/B	Inspection for concrete finished. Stor logistik - Stump GL: 1-3/A-C (9 nos)	ARE / AFK	13/Jan/21	Work are allowed to proceed
76	12/Jan/21	REMT Utama S/B	Inspection for concrete finished. Rumah sampah - Column GL: A-B/1-2 (4 nos)	ARE / AFK	13/Jan/21	Work are allowed to proceed
77	14/Jan/21	REMT Utama S/B	Inspection for concrete finished. Main building - Column, Rc wall & ground slab - porch area. Ground floor to 1st floor	ARE / AFK	15/Jan/21	1. Refer remedial method statements by Remt for honeycomb repairs to RC wall and columns. 2. NCR Ref: AFK/REMT/NCR/2021/03 dated 15/01/2021
78	2/Feb/21	REMT Utama S/B	Inspection for rebar and formwork installation completed. Rumah sampah - Roof beam & RC gutter	ARE / AFK	3/Feb/21	Work are allowed to proceed
79	3/Feb/21	REMT Utama S/B	Inspection for concreting works. Rumah sampah - Roof beam & RC gutter	ARE / AFK	4/Feb/21	Work are allowed to proceed
80	15/Feb/21	REMT Utama S/B	Inspection for rebar and formwork installation completed. Rumah sampah - RC gutter wall & Perimeter drain slab GL: A-B/2 (RC gutter), A-B/1-2 (Perimeter drain slab)	ARE / AFK	16/Feb/21	Work are allowed to proceed
81	16/Feb/21	REMT Utama S/B	Inspection for concreting works. Rumah sampah - RC gutter wall & Perimeter drain slab GL: A-B/2 (RC gutter), A-B/1-2 (Perimeter drain slab)	ARE / AFK	17/Feb/21	Work are allowed to proceed
82	26/Feb/21	REMT Utama S/B	Inspection for concrete finished. Rumah sampah - Roof beam & RC gutter	ARE / AFK	1/Mar/21	Work are allowed to proceed
83	14/Mar/21	REMT Utama S/B	Inspection for fabrication rebar and formwork installation completed. Main building - 1st floor	ARE / AFK	17/Mar/21	1. To install vertical stiffeners 125x230mm for parapet wall at gridline A. 2. To add 1 no. Y16 bottom bar at 1st floor beams gridline B2 & E2/8-9 3. Add 1 missing Y16 at top of beam gridline 3/E-F2

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SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
84	16/Mar/21	REMT Utama S/B	Inspection for concreting works. Main building - 1st floor GL: A-H/3-4, A-G/4-7, B-F/7-8 CJ: C/3-2, G/3-2, C-E/8-9	ARE / AFK	17/Mar/21	To provide full time supervision to compaction of concrete during pour.
85	16/Mar/21	REMT Utama S/B	Inspection for fabrication rebar and formwork installation done. Menara latihan - Foundation GL: 1-4/A-E (7 nos)	ARE / AFK	16/Mar/21	Rebars for stumps and footings of C1 and E1 are rectified as per AFA/P572/2019/ST/TW/01 (RFI-107) attached herewith drawing issued by Aktif FA Konsult.
87	17/Mar/21	REMT Utama S/B	Inspection for concreting works. Menara latihan - Pile cap/Footing GL: 1-4/A-E (7 nos)	ARE / AFK	17/Mar/21	1. Stump 120-125mm on site. 2. Pilecap C1 & E1 stumps enlarged and rectified rebars as per drawing. (Refer REMT RFI-107)
88	20/Mar/21	REMT Utama S/B	Inspection for fabrication rebar and formwork installation done. Stor logistik - Ground beam GL: A-C/1-3	ARE / AFK	22/Mar/21	Work are allowed to proceed
89	20/Mar/21	REMT Utama S/B	Inspection for concrete finished. GL: A-E/1-4 (7 nos)	ARE / AFK	20/Mar/21	To patch up some minor honeycomb at 2/D-E & 4/D-E
90	22/Mar/21	REMT Utama S/B	Inspection for concreting works. Stor logistik - Ground beam GL: A-C/1-3	ARE / AFK	23/Mar/21	Stumps 160mm & 140mm (2 trips only) Work are allowed to proceed
91	25/Mar/21	REMT Utama S/B	Inspection for backfill works Menara latihan - Pile cap/Footing GL: A-E/1-4	ARE / AFK	26/Mar/21	Work are allowed to proceed
114	29/Mar/21	REMT Utama S/B	Inspection for fabrication rebar and formwork installation completed. Menara latihan - Ground beam GL: 1-4/A-E	ARE / AFK	29/Mar/21	Work are allowed to proceed
115	29/Mar/21	REMT Utama S/B	Inspection for concreting works. Menara latihan - Ground beam GL: 1-4/A-E	ARE / AFK	30/Mar/21	1.To wash off mud on lean conc. 2.Work are allowed to proceed
116	30/Mar/21	REMT Utama S/B	Inspection for back filling works Setor Logistik	ARE / AFK	30/Mar/21	Acceptable
117	3/Apr/21	REMT Utama S/B	Inspection for concreting finishes works. Menara latihan - Ground beam GL: 1-4/A-E	ARE / AFK	3/Apr/21	Acceptable

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SENARAI RFWI YANG DIKEMUKAKAN

No.	Date	Issued by	Description of Works	Received by	Date	Responses / Remarks
118	3/Apr/21	REMT Utama S/B	Inspection for rebar and formworks. Main building - 1st & grnd column GL: D-G/4-5, RC Wall B-G/6-8 (18nos.)	ARE / AFK	3/Apr/21	Acceptable
119	3/Apr/21	REMT Utama S/B	Inspection for concreting works. Main building - 1st & grnd column GL: D-G/4-5, RC Wall B-G/6-8 (20nos.)	ARE / AFK	5/Apr/21	Acceptable
120	5/Apr/21	REMT Utama S/B	Inspection for back filling works. Menara Latihan Ground	ARE / AFK	5/Apr/21	Acceptable
121	5/Apr/21	REMT Utama S/B	Inspection for material on site Menara Latihan - Rebar	ARE / AFK	5/Apr/21	Acceptable Need to submit certificate
122	8/Apr/21	REMT Utama S/B	Inspection for rebar and formworks. Menara Latihan - GF Slab	ARE / AFK	8/Apr/21	Acceptable
123	8/Apr/21	REMT Utama S/B	Inspection for concreting works. Menara Latihan - GF Slab	ARE / AFK	8/Apr/21	Acceptable
124	9/Apr/21	REMT Utama S/B	Inspection for material on site Store Logistic - BRC	ARE / AFK		

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SENARAI BAHAN BINAAN YANG PERLU KELULUSAN

No.	Tarikh	Rujukan	Bahan			Maklum Balas Perunding		Status dikemukakan kepada KPKT		Maklum Balas KPKT		Nota
			Penerangan	Sumber / Dibekal oleh	Lokasi	Status	Tarikh	Rujukan	Tarikh	Status	Tarikh	
1	10/12/2019	RUSB/AD/C-AKT (BOMBA.BFORT) (las)/1.1.2/19-00	Precast Reinforced Concrete Pile	Uni-Mix Concrete Product Sdn. Bhd.	Kota Kinabalu, Sabah.	No Further Comment	13/12/2019	AFA/P572/2019/008	13/12/2019	Tiada Halangan (HQ)	15/5/2020	
2	28/2/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Concrete Trial Mix G25N	Kota Mix Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Borang Tidak Lengkap	10/9/2020	Dikemukakn semula pada28/9/2020
2a	28/9/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Concrete Trial Mix G25N	Kota Mix Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Tiada Halangan (W6)	9/11/2020	
3	28/2/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Concrete Trial Mix G30N	Kota Mix Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Borang Tidak Lengkap	10/9/2020	Dikemukakn semula pada28/9/2020
3a	28/9/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Concrete Trial Mix G30N	Kota Mix Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Tiada Halangan (W6)	9/11/2020	
4	28/2/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Geotextile Separator	Ten Cate	Kota Kinabalu, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Borang Tidak Lengkap	10/9/2020	Dikemukakn semula pada28/9/2020
4a	28/9/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	Geotextile Separator	Ten Cate	Kota Kinabalu, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Tiada Halangan (W6)	9/11/2020	
5	28/2/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	PVD	Tang Piling Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Borang Tidak Lengkap	10/9/2020	Dikemukakn semula pada28/9/2020
5a	28/9/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-009	PVD	Tang Piling Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	28/2/2020	AFA/P572/2019/019	28/2/2020	Tiada Halangan (W6)	9/11/2020	
6	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Concrete Trial Mix G15N	Jesselton Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	29/5/2020	AFA/P572/2019/029	29/5/2020	Tiada Halangan	10/9/2020	
7	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Concrete Trial Mix G20N	Jesselton Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	29/5/2020	AFA/P572/2019/029	29/5/2020	Tiada Halangan	10/9/2020	

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SENARAI BAHAN BINAAN YANG PERLU KELULUSAN

No.	Tarikh	Rujukan	Bahan			Maklum Balas Perunding		Status dikemukakan kepada KPKT		Maklum Balas KPKT		Nota
			Penerangan	Sumber / Dibekal oleh	Lokasi	Status	Tarikh	Rujukan	Tarikh	Status	Tarikh	
8	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Concrete Trial Mix G25N	Jesselton Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	29/5/2020	AFA/P572/2019/029	29/5/2020	Tiada Halangan	10/9/2020	
9	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Concrete Trial Mix G30N	Jesselton Concrete Sdn. Bhd.	Beaufort, Sabah.	Acceptable	29/5/2020	AFA/P572/2019/029	29/5/2020	Tiada Halangan	10/9/2020	
10	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Steel Mill Certificate - T10	Sabah Wire Mesh Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	2/6/2020	AFA/P572/2019/031	2/6/2020	Tiada Halangan	10/9/2020	
11	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Steel Mill Certificate - T12	Sabah Wire Mesh Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	2/6/2020	AFA/P572/2019/031	2/6/2020	Tiada Halangan	10/9/2020	
12	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Steel Mill Certificate - T16	Sabah Wire Mesh Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	2/6/2020	AFA/P572/2019/031	2/6/2020	Tiada Halangan	10/9/2020	
13	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Steel Mill Certificate - T20	Sabah Wire Mesh Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	2/6/2020	AFA/P572/2019/031	2/6/2020	Tiada Halangan	10/9/2020	
14	16/3/2020	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-014	Steel Mill Certificate - T25	Sabah Wire Mesh Sdn. Bhd.	Kota Kinabalu, Sabah.	Acceptable	2/6/2020	AFA/P572/2019/031	2/6/2020	Tiada Halangan	10/9/2020	
15	15/9/2020	RUSB/AD/C-AKT (BOMBA.BFORT) (las)/1.1.2/20-039	Precast Reinforced Concrete Pile	Hume Concrete Product Sdn. Bhd.	Kota Kinabalu, Sabah.	No Further Comment	28/9/2020	AFA/P572/2019/049	28/9/2020	Tiada Halangan (HQ)	9/10/2020	
16	20/10/2020	RUSB/BOMBA/SST/033	Precast Reinforced Concrete Pile	SEDCO Precast Sdn. Bhd.	Kota Kinabalu, Sabah.	No Further Comment	30/10/2020	AFA/P572/2019/053	30/10/2020	Tiada Halangan (HQ)	4/11/2020	
17	30/12/2020 (27/01/2021)	RUSB/AD.C-AKT (BOMBA.BFORT) (las)/1.1.2/20-05	Roofing	Teck Guan	Kota Kinabalu, Sabah.	Request 2yrs test result validity	8/2/2021	AFA/P572/2019/073	8/2/2021	Tiada Halangan (HQ)	17/3/2021	REMT perlu kemukakan 5set pelan pembinaan bersaiz A1

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
21/07/20	Balai Bomba Stump GL: G - H / 1 - 8	G30N	-	1	29/07/20	29.33	28.74	1	19/08/20	39.11	38.81	Kotamix	Ok
				2	29/07/20	28.88		2	19/08/20	39.55			
				3	29/07/20	28.00		3	19/08/20	37.77			
28/07/20	Balai Bomba Stump GL: B - D / 2	G30N	-	1	04/08/20	31.11	31.40	1	26/08/20	43.55	40.29	Kotamix	Ok
				2	04/08/20	31.55		2	26/08/20	38.22			
				3	04/08/20	31.55		3	26/08/20	39.11			
17/08/20	Balai Bomba Pad Footing (2nos) D-E/9, Stump (7nos) B-D/3-5, E17	G30N	-	1	26/08/20	29.33	29.70	1	14/09/20	36.44	35.06	Kotamix	Ok
				2	26/08/20	30.00		2	14/09/20	35.40			
				3	26/08/20	29.77		3	14/09/20	33.33			
18/08/20	Balai Bomba Pad Footing (1no.) B-D/6-8	G30P	-	1	26/08/20	29.77	29.55	1	15/09/20	38.22	38.29	Kotamix	Ok
				2	26/08/20	29.33		2	15/09/20	38.00			
				3	26/08/20	29.55		3	15/09/20	38.66			
18/08/20	Balai Bomba Pad Footing (1no.) B-D/6-8	G30P	-	1	26/08/20	30.22	30.52	1	15/09/20	38.44	38.96	Kotamix	Ok
				2	26/08/20	31.11		2	15/09/20	40.00			
				3	26/08/20	30.22		3	15/09/20	38.44			
18/08/20	Balai Bomba Pad Footing (1no.) B-D/6-8	G30P	-	1	26/08/20	30.00	29.63	1	15/09/20	39.55	39.18	Kotamix	Ok
				2	26/08/20	29.77		2	15/09/20	39.11			
				3	26/08/20	29.11		3	15/09/20	38.88			
18/08/20	Balai Bomba Pad Footing (1no.) B-D/6-8	G30P	-	1	26/08/20	30.00	30.22	1	15/09/20	39.77	39.03	Kotamix	Ok
				2	26/08/20	31.33		2	15/09/20	38.66			
				3	26/08/20	29.33		3	15/09/20	38.66			
18/08/20	Balai Bomba Pad Footing (1no.) B-D/6-8	G30P	-	1	26/08/20	30.66	30.51	1	15/09/20	39.77	38.88	Kotamix	Ok
				2	26/08/20	29.77		2	15/09/20	38.22			
				3	26/08/20	31.11		3	15/09/20	38.66			
24/08/20	Balai Bomba Parapet Wall B-D/6	G30N	-	1	01/09/20	32.44	31.92	1	21/09/20	39.55	39.44	Kotamix	Ok
				2	01/09/20	31.33		2	21/09/20	39.00			
				3	01/09/20	32.00		3	21/09/20	39.77			
20/10/20	Balai Bomba Ground Beam A-H/1-3	G30N	-	1	27/10/20	29.55	29.70	1	17/11/20	38.00	38.22	Kotamix	Ok
				2	27/10/20	30.44		2	17/11/20	38.88			
				3	27/10/20	29.11		3	17/11/20	37.77			
20/10/20	Balai Bomba Ground Beam A-H/1-3	G30N	-	1	27/10/20	28.88	29.70	1	21/09/20	39.11	38.88	Kotamix	Ok
				2	27/10/20	30.00		2	21/09/20	38.88			
				3	27/10/20	30.22		3	21/09/20	38.66			

For Grade 30N Concrete Normal

Average Strength, fm = 38.45 MPa
Standard Deviation, S = 2.07 MPa
Actual Characteristic Strength, fcu = 35.05 MPa

For Grade 30N Concrete Normal

Average Strength, fm = 38.87 MPa
Standard Deviation, S = 0.63 MPa
Actual Characteristic Strength, fcu = 37.84 MPa

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
03/07/20	Balai Bomba Footing GL: G - H / 4 - 7	G30N	125	1	10/07/20	31.56	31.56	1	03/08/20	45.56	45.63	Expogaya / Jesselton Concrete	Ok
					10/07/20	32.22			03/08/20	45.78			
					10/07/20	30.89			03/08/20	45.56			
04/07/20	Balai Bomba Footing GL: G - H / 1 - 5	G30N	115	1	11/07/20	31.11	32.07	1	03/08/20	41.11	41.04	Expogaya / Jesselton Concrete	Ok
					11/07/20	32.89			03/08/20	42.22			
					11/07/20	32.22			03/08/20	39.78			
04/07/20	Balai Bomba Footing GL: G - H / 1 - 5	G30N	130	2	11/07/20	32.22	32.07	2	03/08/20	42.22	41.11	Expogaya / Jesselton Concrete	Ok
					11/07/20	31.56			03/08/20	41.11			
					11/07/20	32.44			03/08/20	40.00			
04/07/20	Balai Bomba Footing GL: G - H / 1 - 5	G30N	130	3	11/07/20	32.22	32.96	3	03/08/20	44.44	43.18	Expogaya / Jesselton Concrete	Ok
					11/07/20	32.89			03/08/20	41.11			
					11/07/20	33.78			03/08/20	44.00			
06/07/20	Balai Bomba Footing GL: G - H / 2	G30N	135	1	13/07/20	32.00	31.56	1	03/08/20	44.44	44.29	Expogaya / Jesselton Concrete	Ok
					13/07/20	31.11			03/08/20	44.00			
					13/07/20	31.56			03/08/20	44.44			
10/07/20	Balai Bomba Footing GL: G - H / 1 - 8	G30P	160	1	17/07/20	32.22	32.59	1	07/08/20	36.67	38.15	Expogaya / Jesselton Concrete	Ok
					17/07/20	33.33			07/08/20	38.89			
					17/07/20	32.22			07/08/20	38.89			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	135	1	17/07/20	31.11	32.25	1	07/08/20	43.33	41.04	Expogaya / Jesselton Concrete	Ok
					17/07/20	33.42			07/08/20	39.78			
					17/07/20	32.22			07/08/20	40.00			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	155	2	17/07/20	31.11	30.89	2	07/08/20	36.67	37.04	Expogaya / Jesselton Concrete	Ok
					17/07/20	31.11			07/08/20	37.78			
					17/07/20	30.44			07/08/20	36.67			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	150	3	17/07/20	36.80	37.01	3	07/08/20	43.33	42.96	Expogaya / Jesselton Concrete	Ok
					17/07/20	34.22			07/08/20	43.33			
					17/07/20	40.00			07/08/20	42.22			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	150	4	17/07/20	41.11	40.00	4	07/08/20	47.78	47.04	Expogaya / Jesselton Concrete	Ok
					17/07/20	41.11			07/08/20	45.56			
					17/07/20	37.78			07/08/20	47.78			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	145	5	17/07/20	32.22	32.52	5	07/08/20	42.22	41.85	Expogaya / Jesselton Concrete	Ok
					17/07/20	31.11			07/08/20	41.11			
					17/07/20	34.22			07/08/20	42.22			
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	150	6	17/07/20	37.78	39.26	6	07/08/20	43.33	44.07	Expogaya / Jesselton Concrete	Ok
					17/07/20	40.00			07/08/20	44.44			
					17/07/20	40.00			07/08/20	44.44			
	Balai Bomba Footing GL: E - F / 1 -				17/07/20	41.11			07/08/20	47.78		Expogaya /	

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
10/07/20	Balai Bomba Footing GL: E - F / 1 - 8	G30P	150	7	17/07/20	42.22	40.74	7	07/08/20	45.56	46.30	Jesselton Concrete	Ok
					17/07/20	38.89			07/08/20	45.56			
24/07/20	Balai Bomba Footing GL: B - D / 1	G30N	120	1	03/08/20	31.11	31.41	1	21/08/20	34.44	35.18	Expogaya / Jesselton Concrete	Ok
					03/08/20	30.89			21/08/20	36.67			
					03/08/20	32.22			21/08/20	34.44			
05/08/20	Balai Bomba Footing GL: B - D / 3 - 5	G30N	100	1	12/08/20	43.33	41.85	1	02/09/20	46.67	47.04	Expogaya / Jesselton Concrete	Ok
					12/08/20	38.89			02/09/20	45.56			
					12/08/20	43.33			02/09/20	48.89			
05/08/20	Balai Bomba Footing GL: B - D / 3 - 5	G30N	100	2	12/08/20	30.00	33.22	2	02/09/20	38.89	40.00	Expogaya / Jesselton Concrete	Ok
					12/08/20	36.67			02/09/20	40.00			
					12/08/20	33.00			02/09/20	41.11			
05/08/20	Balai Bomba Stump GL: B - C / 1 - 2	G30N	100	1	12/08/20	36.67	37.04	1	02/09/20	44.44	45.18	Expogaya / Jesselton Concrete	Ok
					12/08/20	36.67			02/09/20	43.33			
					12/08/20	37.78			02/09/20	47.78			
06/08/20	Balai Bomba Footing GL: D / 4 - 5, E / 7	G30N	120	1	13/08/20	31.11	31.48	1	03/09/20	38.89	38.15	Expogaya / Jesselton Concrete	Ok
					13/08/20	32.22			03/09/20	37.78			
					13/08/20	31.11			03/09/20	37.78			
21/08/20	Balai Bomba Stump B-D/6B-5, D-E/9	G30N		1	28/08/20	40.00	32.96	1	18/09/20	33.33	35.19	Expogaya / Jesselton Concrete	Ok
					28/08/20	30.00			18/09/20	36.67			
					28/08/20	28.89			18/09/20	35.56			
20/10/20	Balai Bomba Grd Beam GL A-H / 1-3-4	G30N		1	27/10/20	30.00	30.37	1	17/11/20	33.33	34.37	Expogaya / Jesselton Concrete	Ok
					27/10/20	30.00			17/11/20	32.00			
					27/10/20	31.11			17/11/20	37.78			
21/10/20	Bin Center Grd Beam A-B / 1-2	G30N		1	28/10/20	29.11	29.70	1	18/11/20	33.33	32.15	Expogaya / Jesselton Concrete	Ok
					28/10/20	30.00			18/11/20	29.78			
					28/10/20	30.00			18/11/20	33.33			
30/10/20	Balai Bomba Stump B-D / 6B	G30N		1	06/11/20	38.44	38.74	1	27/11/20	46.67	45.33	Expogaya / Jesselton Concrete	Ok
					06/11/20	37.78			27/11/20	44.44			
					06/11/20	40.00			27/11/20	44.89			
07/11/20	Balai Bomba Grd Beam A0-H1/3-4/7-8	G30N		1	14/11/20	27.11	30.52	1	05/12/20	45.33	46.37	Expogaya / Jesselton Concrete	Ok
					14/11/20	31.11			05/12/20	44.44			
					14/11/20	33.33			05/12/20	49.33			
07/11/20	Balai Bomba Grd Beam A0-H1/3-4/7-8	G30N		2	14/11/20	32.00	30.52	2	05/12/20	42.22	42.07	Expogaya / Jesselton Concrete	Ok
					14/11/20	28.89			05/12/20	41.78			
					14/11/20	30.67			05/12/20	42.22			
13/11/20	Balai Bomba Grd Beam A-F 1/7-8(CJ)/8-9	G30N		1	20/11/20	32.00	31.71	1	11/12/20	44.44	44.44	Expogaya / Jesselton	Ok
					20/11/20	31.56			11/12/20	42.22			

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
	[illegible]				20/11/20	31.56			11/12/20	46.67		Concrete	
22/12/20	Stor Logistik Pad Footing GL 1/C, 2/B-C, 3/A, B, C	G30N			29/12/20	36.44	35.70	1	19/01/21	43.33	41.11	Expogaya / Jesselton Concrete	Ok
					29/12/20	35.11			19/01/21	40.00			
					29/12/20	35.56			19/01/21	40.00			
23/12/20	Stor Logistik Pad Footing GL 1/A-B, 2/A	G30N			30/12/20	32.00	31.11	1	20/01/21	48.89	45.41	Expogaya / Jesselton Concrete	Ok
					30/12/20	31.11			20/01/21	43.33			
					30/12/20	30.22			20/01/21	44.00			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	37.33	36.37	1	25/01/21	45.56	45.11	Expogaya / Jesselton Concrete	Ok
					04/01/21	35.11			25/01/21	44.44			
					04/01/21	36.67			25/01/21	45.33			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	34.67	35.93	1	25/01/21	45.56	45.04	Expogaya / Jesselton Concrete	Ok
					04/01/21	36.67			25/01/21	45.56			
					04/01/21	36.44			25/01/21	44.00			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	34.44	35.11	1	25/01/21	42.22	42.96	Expogaya / Jesselton Concrete	Ok
					04/01/21	34.22			25/01/21	42.22			
					04/01/21	36.67			25/01/21	44.44			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	22.67	30.37	1	25/01/21	43.33	43.11	Expogaya / Jesselton Concrete	Ok
					04/01/21	35.11			25/01/21	42.67			
					04/01/21	33.33			25/01/21	43.33			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	37.33	36.66	1	25/01/21	45.56	45.11	Expogaya / Jesselton Concrete	Ok
					04/01/21	34.44			25/01/21	45.33			
					04/01/21	38.22			25/01/21	44.44			
28/12/20	Gnd Slab B1 - G3 / 1° - 2a. A° - H1 / 2a - 4a. A - G1 / 4a - 7	G30P			04/01/21	36.67	36.08	1	25/01/21	44.44	44.96	Expogaya / Jesselton Concrete	Ok
					04/01/21	35.56			25/01/21	44.89			
					04/01/21	36.00			25/01/21	45.56			
11/01/21	Balai Bomba Grd Floor Slab D-E / 8-9	G30N		1	18/01/21	40.00	39.63		08/02/21		0.00	Expogaya / Jesselton Concrete	Ok
					18/01/21	38.89			08/02/21				
					18/01/21	40.00			08/02/21				
11/01/21	Balai Bomba Column B-H / 4-8, H/3	G30N		1	18/01/21	41.11	40.22		08/02/21		0.00	Expogaya / Jesselton Concrete	Ok
					18/01/21	40.00			08/02/21				
					18/01/21	39.56			08/02/21				
11/01/21	Balai Bomba RC Wall A-D / 6	G30N		1	18/01/21	34.44	33.33		08/02/21		0.00	Expogaya / Jesselton Concrete	Ok
					18/01/21	34.44			08/02/21				
					18/01/21	31.11			08/02/21				
12/01/21	Balai Bomba Column C - G / 1 - 2, B - G /3	G30N		1	19/01/21	26.22	27.04		09/02/21		0.00	Expogaya / Jesselton Concrete	Ok
					19/01/21	27.78			09/02/21				
					19/01/21	27.11			09/02/21				

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
04/02/21	Rumah Sampah Roof Beam & RC Gutter Slab	G30N		1	15/02/21	36.89	37.48		04/03/21		0.00	Expogaya / Jesselton Concrete	Ok
					15/02/21	38.22			04/03/21				
					15/02/21	37.33			04/03/21				
17/02/21	Rumah Sampah RC Gutter Wall & Parameter Drain Slab	G30N		1	24/02/21	32.22	31.63		17/03/21		0.00	Expogaya / Jesselton Concrete	Ok
					24/02/21	31.56			17/03/21				
					24/02/21	31.11			17/03/21				
17/03/21	Block Utama 1st Floor Slab	G30P		1	24/03/21		0.00		14/04/21	33.33	34.44	Expogaya / Jesselton Concrete	Ok
					24/03/21				14/04/21	35.56			
					24/03/21				14/04/21	34.44			
17/03/21	Block Utama 1st Floor Slab	G30P		2	24/03/21		0.00		14/04/21	34.44	34.81	Expogaya / Jesselton Concrete	Ok
					24/03/21				14/04/21	34.44			
					24/03/21				14/04/21	35.56			
17/03/21	Block Utama 1st Floor Slab	G30P		3	24/03/21		0.00		14/04/21	37.78	38.89	Expogaya / Jesselton Concrete	Ok
					24/03/21				14/04/21	40.00			
					24/03/21				14/04/21	38.89			
17/03/21	Block Utama 1st Floor Slab	G30P		4	24/03/21		0.00		14/04/21	38.89	39.48	Expogaya / Jesselton Concrete	Ok
					24/03/21				14/04/21	39.56			
					24/03/21				14/04/21	40.00			
18/03/21	Menara Latihan - Footing	G30N		1	25/03/21		0.00		15/04/21	36.00	36.08	Expogaya / Jesselton Concrete	Ok
					25/03/21				15/04/21	35.56			
					25/03/21				15/04/21	36.67			
23/03/21	Setor Logistik - Grnd Beam	G30N		1	30/03/21		0.00		20/04/21	40.89	40.44	Expogaya / Jesselton Concrete	Ok
					30/03/21				20/04/21	41.11			
					30/03/21				20/04/21	39.33			
05/04/21	Main Building - 1st Floor to Service Level Column D-G/4-9 & Tank Plint	G30N		1	12/04/21	35.56	34.44		03/05/21		0.00	Expogaya / Jesselton Concrete	Ok
					12/04/21	34.44			03/05/21				
					12/04/21	33.33			03/05/21				
08/04/21	Menara Latihan - Grnd Slab	G30N		1	15/04/21	31.11	30.96		06/05/21		0.00	Expogaya / Jesselton Concrete	Ok
					15/04/21	31.11			06/05/21				
					15/04/21	30.67			06/05/21				
13/04/21	Setor Logistik - Grnd Slab	G30N		1	20/04/21	32.22	34.07		11/05/21		0.00	Expogaya / Jesselton Concrete	Ok
					20/04/21	35.56			11/05/21				
					20/04/21	34.44			11/05/21				

For Grade 30N Concrete Normal

Average Strength, fm = 41.85 MPa

Standard Deviation, S = 4.30 MPa

For Grade 30P Concrete Normal

Average Strength, fm = 41.80 MPa

Standard Deviation, S = 3.87 MPa

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CONCRETE TEST CUBE RECORD SUMMARY

Date of Casting	Structure Cast	Concrete Grade	Slump (mm)	7 DAYS				28 DAYS				Concrete Supplier	Remarks
				SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH	SAMPLE REF.	DATE TEST	STRENGTH (N/mm2)	AVERAGE STRENGTH		
	Actual Characteristic Strength, fcu =	34.81	MPa		Actual Characteristic Strength, fcu =	35.45	MPa						

CADANGAN PEMBINAAN PROJEK BALAI BOMBA DAN PENYELAMAT BEAUFORT BERSERTA KEMUDAHAN TAMBAHAN MENARA LATIHAN, SETOR LOGISTIK, KOLAH AIR, PADANG KAWAD, RUMAH SAMPAH DAN PENCAWANG ELEKTRIK SESB DI ATAS LOT NO. 175331227, JALAN KOMPLEKS SUKAN, DAERAH BEAUFORT, 89800 PEKAN BEAUFORT, SABAH UNTUK TETUAN: JABATAN BOMBA DAN PENYELAMAT MALAYSIA.

SENARAI NCR YANG DIKELUARKAN

No.	Date	Issued by	NCR	Received by	Date	Status
1	29/8/2020	ARE/ Aktif FA Konsult S/B	2nd pile at GL A/1 No. 7 broken for Menara Latihan	REMT Utama S/B	29/8/2020	Rectified
2	21/9/2020	ARE/ Aktif FA Konsult S/B	Stump GL B/6b & D/6b @ pad footing F14 of main building deviated 600mm from center line	REMT Utama S/B	21/9/2020	Rectified
3	15/1/2021	ARE/ Aktif FA Konsult S/B	Severe honeycomb defect affecting the intergrity of the rc structure of main building at grd floor for 4nos. Of column - E/4, F/3, H/3 and rc wall at 6 / A-B (top to bottom)	REMT Utama S/B	18/1/2021	REMT submitted method of rectification on the 20th Jan 2021. AFK commented and replied via letter ref: AFA/P572/2019/076 dated 10th Feb 2021
4	29/1/2021	RE/ Aktif FA Konsult S/B	There are 3 pile points deviated from the original proposal. 2 points at pile cap E/1 and 1 point at pile cap C/1.	REMT Utama S/B	2/2/2021	REMT to adopt AFK proposal