

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

A Construction of Barrage Scheme

A1 Construction of E&M Control Room

A1.1 Site Clearance & Mobilisation

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| Total | | | | | | 99 |

A1.2 Excavation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 4 | 98 | 50% | -5 | 96 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| Total | | | | | | 100 |

A1.3 Piling Works for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Piling, large diameter bored, reverse circulation drill | CNP166 | 4 | 100 | 50% | -5 | 98 |
| Drill rig, rotary type (diesel) | CNP 072 | 4 | 110 | 50% | -10 | 103 |
| Crane, mobile | EPD-09096 | 4 | 103 | 50% | -5 | 101 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| Total | | | | | | 106 |

A1.4 Superstructure for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 2 | 103 | 50% | -5 | 98 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| Total | | | | | | 103 |

A1.5 Construction of Access Road for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| Poker, vibratory, hand-held | CNP 170 | 1 | 113 | 50% | -10 | 100 |
| Generator, standard | EPD-07189 | 1 | 92 | 100% | -10 | 82 |
| Total | | | | | | 104 |

A1.6 E&M Installation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 1 | 103 | 50% | -5 | 95 |
| Total | | | | | | 95 |

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

A2 Construction of Pumping Station A

A2.1 Site Clearance & Mobilisation

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 99 |

A2.2 Excavation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 4 | 98 | 50% | -5 | 96 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 100 |

A2.3 Piling Works for Pumping Station A

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Piling, large diameter bored, reverse circulation drill | CNP166 | 4 | 100 | 50% | -5 | 98 |
| Drill rig, rotary type (diesel) | CNP 072 | 4 | 110 | 50% | -10 | 103 |
| Crane, mobile | EPD-09096 | 4 | 103 | 50% | -5 | 101 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| | | | | | Total | 106 |

A2.4 Concreting Works for Deepened Area for Pump Inlet A

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| | | | | | Total | 101 |

A2.5 Superstructure for Pumping Station A

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 2 | 103 | 50% | -5 | 98 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| | | | | | Total | 103 |

A2.6 E&M Installation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 1 | 103 | 50% | -5 | 95 |
| | | | | | Total | 95 |

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

A3 Construction of Pumping Station B

A3.1 Site Clearance & Mobilisation

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 99 |

A3.2 Excavation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 4 | 98 | 50% | -5 | 96 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 100 |

A3.3 Piling Works for Pumping Station B

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Piling, large diameter bored, reverse circulation drill | CNP166 | 4 | 100 | 50% | -5 | 98 |
| Drill rig, rotary type (diesel) | CNP 072 | 4 | 110 | 50% | -10 | 103 |
| Crane, mobile | EPD-09096 | 4 | 103 | 50% | -5 | 101 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| | | | | | Total | 106 |

A3.4 Concreting Works for Deepened Area for Pump Inlet B

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| | | | | | Total | 101 |

A3.5 Superstructure for Pumping Station B

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 2 | 103 | 50% | -5 | 98 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| | | | | | Total | 103 |

A3.6 E&M Installation for E&M Control Room

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 1 | 103 | 50% | -5 | 95 |
| | | | | | Total | 95 |

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

A4 Construction of Tidal Barrier & Deepened Area C

A4.1 Construct Cofferdam across Yuen Long Nullah (& isolation from upstream flows)

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 99 |

A4.2 Excavation for Centre Section of Yuen Long Nullah

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 4 | 98 | 50% | -5 | 96 |
| Breaker, mini-robot mounted | EPD/PME/6 | 4 | 115 | 50% | -5 | 113 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 113 |

A4.3 Piling Works for Centre Section of Yuen Long Nullah

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Piling, large diameter bored, reverse circulation drill | CNP166 | 4 | 100 | 50% | -5 | 98 |
| Drill rig, rotary type (diesel) | CNP 072 | 4 | 110 | 50% | -10 | 103 |
| Crane, mobile | EPD-09096 | 4 | 103 | 50% | -5 | 101 |
| Water pump (electric) | CNP 281 | 4 | 88 | 100% | -10 | 84 |
| Generator, standard | EPD-07189 | 4 | 92 | 100% | -10 | 88 |
| | | | | | Total | 106 |

A4.4 Concreting Works for Tidal Barrier & Deepened Area C

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 2 | 103 | 50% | -5 | 98 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| | | | | | Total | 103 |

A4.5 Delivery and E&M Installations of Tidal Barriers

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 2 | 103 | 50% | -5 | 98 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| | | | | | Total | 98 |

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

B Modification of Flow Diversion Structures in the intersection of YLN and YLBF

B1.1 Demolition of Existing Structure

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A)# | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|----------------|-----------------|
| Concrete crusher, hand-held | CNP 053 | 2 | 97 | 100% | -5 | 95 |
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| Total | | | | | | 100 |

B1.2 Excavation for Proposed Flow Diversion Structure

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| Total | | | | | | 99 |

B1.3 Concreting Works for Proposed Flow Diversion Structure

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 1 | 103 | 50% | -5 | 95 |
| Generator, standard | EPD-07189 | 1 | 92 | 100% | -10 | 82 |
| Concrete lorry mixer | CNP 044 | 1 | 109 | 50% | -5 | 101 |
| Total | | | | | | 102 |

C Modification of Parapet Wall along YLN, SCR and KTR

C1.1 Parapet Wall along Yuen Long Nullah (Kung Um Road Section)

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A)# | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|----------------|-----------------|
| Hand-held Percussive Breaker | EPD-07316 | 2 | 99 | 50% | -10 | 89 |
| Total | | | | | | 89 |

C1.2 Parapet Wall along Sham Chung River

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A)# | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|----------------|-----------------|
| Hand-held Percussive Breaker | EPD-07316 | 2 | 99 | 50% | -10 | 89 |
| Total | | | | | | 89 |

C1.3 Parapat Wall along Kam Tin River

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A)# | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|----------------|-----------------|
| Hand-held Percussive Breaker | EPD-07316 | 2 | 99 | 50% | -10 | 89 |
| Total | | | | | | 89 |

Appendix 4.4 Powered Mechanical Equipment (Mitigated)

D Revitalisation Works in YLN

D1.1 Temporary Flow Diversion Works

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A)# | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|----------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| | | | | | Total | 94 |

D1.2 Surface Breaking along Yuen Long Nullah

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|---|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| Hand-held Percussive Breaker | EPD-07316 | 2 | 99 | 50% | -10 | 89 |
| Generator, standard | EPD-07189 | 2 | 92 | 100% | -10 | 85 |
| Water pump (electric) | CNP 281 | 2 | 88 | 100% | -10 | 81 |
| Dump truck , 5.5 tonne < gross vehicle weight \leq 38 tonne | EPD/PME/38 | 1 | 105 | 50% | -5 | 97 |
| | | | | | Total | 99 |

D1.3 Softscape & Hardscape Works

| Powered Mechanical Equipment (PME) | TM Ref./ other Ref. | No. of Items | SWL/Item dB(A) | On-time % | Barrier dB(A) | Total SWL dB(A) |
|------------------------------------|---------------------|--------------|----------------|-----------|---------------|-----------------|
| Crane, mobile | EPD-09096 | 1 | 103 | 50% | -5 | 95 |
| Generator, standard | EPD-07189 | 1 | 92 | 100% | -10 | 82 |
| Excavator, wheeled/tracked | EPD-07612 | 2 | 98 | 50% | -5 | 93 |
| | | | | | Total | 97 |