Unmitigated Plant Inventory (No mitigation measures)

Activity		PME	Reference Code	No. of unit	SWL of Single PME dB(A)	Total SWL dB(A)	Total SWL of construction equipments dB(A)	Horzontial Distance to the Noise Sensitive Recivers (m)		Distance Attentuation dB(A)		Façade Correction dB(A)	SPL at Noise Sensitive Receivers dB(A)			
					Unmitigated	Unmitigated		NSR1	NSR2	NSR1	NSR2		NSR1		NSR2	
A	Assess road upgrade*	Excavator/loader, wheeled/tracked	CNP 081	2	112	115	116	2900	1900	77	74	3	42	46	46	49
		Roller, vibratory	CNP 186	2	108	111											
B1	Fill import and handling*	Excavator/loader, wheeled/tracked	CNP 081	4	112	118	118	3025	2455	78	76	3	43		45	
B2	Backfilling	Excavator/loader, wheeled/tracked	CNP 081	4	112	118	119	3025	2455	78	76	3	45		47	
		Road roller	CNP 185	4	108	114											
B3	Levelling works	Excavator/loader, wheeled/tracked	CNP 081	4	112	118	120	3025	2455	78	76	3	45		47	
		Bulldozer	CNP 030	1	115	115											

Note:

A, denotes construction works that will be carried out at the access road

B, denotes construction works that will be carried out at the Subject Site

* Fill import and handling and assess road upgrade will be carried out concurrently.

** SWL reduction due to distance is applied using the formula:

$$SPL = SWL - DC + FC \ [1]$$

Where

SPL – Sound pressure level

SWL – Sound power level

DC – Distance attenuation, which is equal to 20LOG(D) + 8 (where D refers to distance in meters)

FC – Façade Correction, in dB(A) = 3 dB(A)

[1] Postema Michiel, Fundamentals of Medical Ultrasonics, P.74 – 75, 2011, New York, Spon Press