

Design of RRM retaining wall for AWP cold storage

Designing RRM wall with surcharge load

Height of the wall=5m

Taking safe bearing capacity of the soil=150kN/m²

Base width=2.65m

Top width=0.8m

Depth of foundation below ground level=500mm

Provide weep holes of 100mmx100mm or 100 mm dia HDPE at 1.5m intervals staggered.

Provide separation gap of 50-100mm at an interval of 10m length of the wall.

RETAINING WALL FOR COLD STORAGE AT THIMPHU-AWP							
item no	item code	description	unit	length	quantity/m	rate(BSR2021)	amount
1	EW0105	Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10 sq.m on plan, including dressing & ramming, disposal of surplus soil within 50m lead & 1.5m lift-ordinary soil	cum	75	3.19325	172.83	41391.7
2	EW0195	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc. within lead 50 m & lift 1.5m	cum	75	1.2635	111.32	10548.96
3	SM0072	Providing and laying Hand packed stone filling or soling with stones	cum	75	0.4182	1697.03	53227.35
4	CW0005	Providing and laying in position plain cement concrete 1:3:6 (1 cement : 3 sand : 6 graded crushed rock 20 mm nominal size) excluding the cost of centering and shuttering - All work upto plinth level	cum	75	0.3188	5195.85	124232.8

5	SM0005	Providing & laying Random Rubble Masonry with hard stone in foundation & plinth-In cement mortar 1:4	cum	75	9.22	4970.7	3437239
6	RC0090	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork-Foundation and plinth etc.	sqm	75	0.697	376.13	19662.2
7	RW0035	Providing and laying filter material (600mm wide) in trenches, sides of foundations, walls etc. with 100 to 200 mm stones wherever applicable.	cum	75	2.75	1539.14	4232.635
8	OHS001	Incorporation of Occupational Health and Safety measures at construction sites as per the attached requirements list. The standards and specifications for the Insurance, OHS materials and (or) equipment shall be in compliance with the Labour and Employment Act - 2007, Regulation on Occupational Health, Safety and Welfare - 2012, and other relevant national documents. All OHS items will remain as the property of the bidder upon completion of the project.	lump sum	75	1	15000	15000
			TOTAL amount				37,05,535