

CHAPTER 02: EXCAVATION, FILLING & SITE DEVELOPMENT AND PALISADING						
Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalganj)	Unit Rate (Rajshahi, Rangpur)
02.1	<b>Earth work in excavation</b> in all kinds of soil for foundation trenches including layout, providing center lines, local bench-mark pillars, levelling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer-in-charge, subject to submit method statement of carrying out excavation work to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract.					
02.1.1	<b>Layout and marking for earthwork</b> in excavation in foundation accepted by the Engineer-in-charge. [Plinth area of the structure shall be considered for measurement]	sqm	Tk. 19.00	Tk. 19.00	Tk. 18.00	Tk. 18.00
02.1.2	<b>Earthwork in excavation</b> in foundation trenches up to 1.5 m depth and maximum 10 m lead	cum	Tk. 168.00	Tk. 165.00	Tk. 153.00	Tk. 153.00
02.1.3	Added rate for each additional 0.5 meter depth exceeding 1.5 meter.	cum	Tk. 30.00	Tk. 29.00	Tk. 27.00	Tk. 27.00
02.1.4	Added rate for each 1 m additional lead beyond 10 m.	cum	Tk. 4.00	Tk. 4.00	Tk. 4.00	Tk. 4.00
02.2	<b>Bailing out of trapped water</b> caused by inundation or rain, by pump from foundation trenches.	hour	Tk. 474.00	Tk. 474.00	Tk. 458.00	Tk. 458.00
02.3	Supplying of straight and strong <b>borrak bamboo posts</b> of having minimum 75 mm diameter althrough and driving the same vertically in the ground up to required depth by any means shaping the top of the post, all complete and accepted by the Engineer-in-charge.	meter	Tk. 90.00	Tk. 90.00	Tk. 81.00	Tk. 81.00
02.4	Supplying of <b>wooden ballah</b> having an average diameter not less than 150 mm (without barks) at one third distance from larger end with a minimum end diameter of 100 mm for retaining purpose and driving to a depth as per design and drawing by any method including all arrangement for staging, hoisting, carrying etc. complete and accepted by the Engineer-in-charge.	meter	Tk. 604.00	Tk. 598.00	Tk. 571.00	Tk. 571.00
02.5	<b>Palisading work</b> by supplying of bitumen drum sheet walling tied with 20 BWG G.I. wire fixing the same with already driven borrak bamboo posts with half split borrak bamboo runners @ 450mm c/c horizontally with iron nails, G.I wire etc. all complete and accepted by the Engineer-in-charge. (Rate is excluding the cost of bamboo post).	sqm	Tk. 613.00	Tk. 608.00	Tk. 583.00	Tk. 583.00
02.6	Supplying and fitting-fixing <b>horizontal bracing in palisading with half split wooden ballah</b> having an average diameter not less than 150 mm with a minimum end diameter of 100 mm @ 450 mm including supply of iron nails, gazals etc. complete approved and accepted by the Engineer-in-charge.	meter	Tk. 226.00	Tk. 224.00	Tk. 216.00	Tk. 216.00
02.7.1	<b>Shore protection work</b> during excavation in foundation trenches up to 1.5 m depth to protect loss due to damage of property by palisading accepted by the Engineer-in-charge. [The rate is including the cost of vertical post]	sqm	Tk. 712.00	Tk. 706.00	Tk. 673.00	Tk. 673.00

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02.7.2	<b>Shore protection work</b> during excavation in foundation trenches <b>beyond 1.5 m depth</b> to protect loss due to damage of property by palisading accepted by the Engineer-in-charge, [The rate is including the cost of vertical post]	sqm	Tk. 1,043.00	Tk. 1,045.00	Tk. 992.00	Tk. 992.00
02.8	Supply of 2 mm thick best quality <b>geo-textile</b> from approved manufacturer/origin and laying as per manufacturer's instructions approved and accepted by the Engineer-in-charge. Before commencement of laying of geo-textile, the contractor must submit the method statement for carrying out this work including sample with evidence of origin and compliance certificate from independent testing laboratory for approval.	sqm	Tk. 214.00	Tk. 212.00	Tk. 209.00	Tk. 209.00
02.9	<b>Removing sludge or semi-liquid clay/substances etc</b> not suitable for pumping out or carrying by head load from the bottom of any marshy land, lake, ditch, pond by mixing fine local sand of <b>minimum F.M. 0.8</b> to a proportion such that it can be carried to an intermediate point of disposal and cutting the same including stacking and spreading properly on a suitable place to dry in the sun for a certain days and dispose the dried sludge or clay to a safe distance etc. complete and accepted by Engineer-in-charge subject to submit method statement to the engineer in charge for carrying out the works including ultimate disposal of the sludge under this item for approval. However, engineer's approval shall not relieve the Contractor of his responsibilities and obligations under the contract.	cum	Tk. 1,054.00	Tk. 1,044.00	Tk. 1,002.00	Tk. 1,002.00
02.10.1	<b>Sand filling</b> in foundation trenches and plinth with sand having minimum <b>F.M. 0.5</b> in 150 mm layers including leveling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	cum	Tk. 1,088.00	Tk. 1,093.00	Tk. 1,069.00	Tk. 1,069.00
02.10.2	<b>Sand filling</b> in foundation trenches and plinth with sand having minimum <b>F.M. 0.8</b> in 150 mm layers including leveling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	cum	Tk. 1,167.00	Tk. 1,169.00	Tk. 1,114.00	Tk. 1,114.00
02.10.3	<b>Sand filling</b> in foundation trenches and plinth with sand having min. <b>F.M. 1.2</b> in 150 mm in layers including leveling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	cum	Tk. 1,296.00	Tk. 1,301.00	Tk. 1,246.00	Tk. 1,246.00
02.10.4	<b>Sand filling</b> in foundation trenches and plinth with sand having min. <b>F.M. 2.2</b> in 150 mm layers including leveling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	cum	Tk. 3,257.00	Tk. 3,152.00	Tk. 3,176.00	Tk. 3,142.00

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02.11	50 mm down graded picked <b>jhama khoa consolidation in foundation</b> trenches by mixing the same with best quality local sand (F.M. 1.2) in (2:1) (khoa: sand) proportion to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) including breaking and screening chips, laying and spreading in 150 mm layers uniformly and compacting etc. all complete and accepted by the Engineer-in-charge.	cum	Tk. 5,060.00	Tk. 5,045.00	Tk. 4,892.00	Tk. 4,825.00
02.12	50 mm down graded picked <b>jhama khoa consolidation in foundation</b> trenches by mixing in mixer machine with best quality local sand (F.M. 1.2) and cement in (1:6:12) (cement: sand: khoa) proportion to achieve <b>minimum dry density of 95% with optimum moisture content</b> (Modified proctor test) including breaking and screening chips, laying and spreading in 150 mm layers uniformly and compacting etc. all complete and accepted by Engineer-in-charge.	cum	Tk. 5,795.00	Tk. 5,784.00	Tk. 5,650.00	Tk. 5,584.00
02.13	<b>Earth filling in foundation</b> trenches and plinth in 150 mm layer with earth available <b>within 90 m of the building site</b> to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) including carrying watering, leveling, dressing and compacting to a specified percentage each layer up to finished level etc. all complete and accepted by Engineer-in-charge.	cum	Tk. 207.00	Tk. 202.00	Tk. 189.00	Tk. 189.00
02.14	<b>Cleaning and disposing of excavated earth</b> from the construction site by truck or by any other means to a place within 30 km radius of the city or town area including loading & unloading at both ends, leveling and dressing the carried earth etc. complete and accepted by the Engineer-in-charge.	cum	Tk. 756.00	Tk. 751.00	Tk. 686.00	Tk. 686.00
02.15	<b>Earth filling in foundation trenches</b> and plinth in 150 mm layers <b>with carted earth</b> carried by truck or by any other means including loading and unloading at both ends, leveling, watering and compacting to achieve minimum dry density of 95% with optimum moisture content (modified proctor test) including local carriage each layer up to finished level including cost of water and test (carried from beyond 300 m) etc. all complete and accepted by the Engineer-in-charge	cum	Tk. 709.00	Tk. 706.00	Tk. 689.00	Tk. 689.00
02.16	<b>Site development/improvement by carted earth or dredged sand, sandy silt</b> (free from any organic, foreign, environmental hazardous substances) carried by head or truck or any other means including cost of cutting or by dredging of sand, sandy silt, all; including local carrying, placing the earth/sand, sandy silt in the designated area, maintaining slopes, breaking lumps, levelling and dressing in layers up to finished level etc. all complete as per direction and accepted by the engineer in charge.					
02.16.1	By other method/means than dredging.	cum	Tk. 760.00	Tk. 755.00	Tk. 735.00	Tk. 735.00
02.16.2	By dredging including necessary systems thereof.	cum	Tk. 510.00	Tk. 509.00	Tk. 504.00	Tk. 504.00
02.17	<b>Mechanical compaction of earth beyond plinth area</b> , required for pre-approved specific engineering purpose in 150 mm layers including levelling, watering and consolidation each layer with chain dozer, grader, roller etc. to achieve minimum dry density of 95% with optimum moisture content (modified proctor test) up to finished level all complete and accepted by the engineer-in-charge subjected to submission of the method statement.	cum	Tk. 222.00	Tk. 219.00	Tk. 208.00	Tk. 208.00

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02.18	<b>Earthwork in excavation</b> of pond of any dimension in all kinds of soil including cutting up to required depth including bailing out water and throwing on the embankment, breaking clods, ramming and leveling, dressing in 225 mm layer with maintaining the side slopes and level of both pond and the embankment as per design and accepted by the Engineer-in-charge.					
02.18.1	For initial lead of 30 m and lift of 1.5 m	cum	Tk. 259.00	Tk. 255.00	Tk. 236.00	Tk. 236.00
02.18.2	Added for each additional lift of 0.3 m beyond 1.5 m and up to 3 m	cum	Tk. 9.00	Tk. 9.00	Tk. 8.00	Tk. 8.00
02.18.3	Added for each additional lift of 0.3 m beyond 3 m and up to 4.5 m	cum	Tk. 13.00	Tk. 13.00	Tk. 12.00	Tk. 12.00
02.18.4	Added for each additional lift of 0.3 m beyond 4.5 m and up to 6 m	cum	Tk. 19.00	Tk. 19.00	Tk. 17.00	Tk. 17.00
02.18.5	Added for each additional lead of 30 m or part thereof beyond initial lead 30 meter	cum	Tk. 35.00	Tk. 34.00	Tk. 31.00	Tk. 31.00
02.19.1	Bailing out water by 1 cusec diesel operated pump including hire charge of pump, fuel, operator, spares and maintenance etc. all complete and accepted by the Engineer-in-charge.	per hour	Tk. 677.00	Tk. 670.00	Tk. 644.00	Tk. 644.00
02.19.2	Bailing out water by 1 cusec electricity operated pump including hire charge of pump, fuel, operator, spares and maintenance etc. all complete and accepted by the Engineer-in-charge.	per hour	Tk. 562.00	Tk. 556.00	Tk. 530.00	Tk. 530.00
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