

**BOQ & PRICE BID FORMAT****Name of the Work : "Construction of Bottom Ash slurry tank for Unit # 3 & 4 at OPGC".**

SI	Description of item	Quantity	Unit	Rate	Amount
1	Excavation of earth by mechanical means for construction of ash slurry tank up to a depth of 4M from ground level including levelling of the bottom surface, sloping the bottom surface as per drawing, trimming of slopes and depositing the excavated materials away from site within an initial lead of 1 Km as per drawing and as per direction of EIC, including all charges for dewatering from excavated pit, clearing of pit for PCC/RCC work, shoring, strutting as per site requirement and instruction of EIC .	315.06	Cum		
2	Back filling in foundation and along the sides of ash slurry tank with excavated materials in layers including watering & ramming with rammers including all cost of labour,T&P, taxes etc. complete as per direction of Engineer-in-charge.	94.52	Cum		
3	Supplying and Filling of sand in foundation and plinth, watering and ramming including all cost, conveyance, T& P, taxes & duties of all materials and labour charges etc. complete as per direction of Engineer-in-charge.	23.18	Cum		
4	Providing and laying PCC (1:3:6) using 25-40 mm size h.g. crusher broken metal of approved quality including all cost, conveyance, royalty, taxes of all the materials and labour charges required for the work complete in all respects as per direction of EIC.	28.03	Cum		
5	Providing and laying reinforced cement concrete R.C.C (1:1.5:3) using 12 mm size hard granite crusher broken chips including watering, curing, cost, conveyance, royalties, taxes of all materials required for the work etc. complete as per direction of Engineer -in-charge.	492.71	Cum		
6	Rigid and smooth centering and shuttering for R.C.C works including false works and dismantling them after casting including cost of materials complete as per direction of EIC.	910.82	Sqm		
7	Supplying, cutting, bending & binding and placing in position uncoated HYSD TMTreinforcement complete as per drawing and technical specification as per direction of EIC .	282.00	Ontl		
8	Supply fitting and fixing MS Steel structural steel works for concrete embeddments, insert plates, hand railings etc including all costs of material, conveyance, manpower, tools equipments etc comaplete as per direction of EIC.	600.00	KG		

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9	<p>Supplying and installing waterproofing treatment for "Raft Slab" by using "Mapei's MapeProof AL S" 1.2mm thick fully bonded HDPE sheet membrane on the Raft slab. Membrane shall be installed in strict accordance with the manufacturer's instructions and shall provide an intimate bond to resist water migration. The fully bonded HDPE sheet membrane shall consist of a multi layer composite film which consists of highly resilient HDPE film, self adhesive polymer layer and a trafficable particulate layer.</p> <p>The fully bonded HDPE sheet waterproofing membrane shall have following typical properties :</p> <ol style="list-style-type: none"><li>1) Hydrostatic Head Resistance at laps - 70 m head of water (ASTM D5385)</li><li>2) Peel adhesion to concrete: &gt; 1100N/m (ASTM D 903 Modified)</li><li>3) Puncture Resistance : &gt; 1100N (as per ASTM E154)</li><li>4) Elongation : &gt; 700%</li><li>5) Tensile Strength : &gt; 21Mpa</li><li>6) UV exposure Test : No cracks, No bleeding</li></ol> <p>The fully bonded HDPE sheet membrane shall be installed with standard 75mm seldedge laps, and end laps executed with Tape, applied as per manufacturer's instructions. Membrane shall be laid over the entire area and returned on to a vertical slab formwork. Hot applied materials or protective screed shall NOT be permitted. All systems to be installed as per manufacturer's recommendations, etc. complete with all lead and lift for all materials and labour and as directed by Engineer in-charge. The membrane shall be applied as per following procedure. a) Clean the RCC surface free from dust with brush. Remove any sharp protrusions on the RCC wall by chipping and local repairs. b) Roll out membrane, cut it to manageable lengths and stick it to the surface by peeling off the release paper on the back of the membrane. Press membrane in place. Adjacent rolls to come on 75 mm overlaps lines on the membrane. Roll the laps and joints by hand roller. c) Continue applying the membrane till entire area is covered.</p>	174.79	Sqm		

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10	<p>Supplying and installing 2mm thick using "Mapei's Elastoflex SA P Self Adhesive Membrane", properly sealing the joints &amp; maintaining 75mm Overlap between the membrane &amp; on the end joints of the membrane etc., complete and all as per Manufacturer's specifications and approved by consultants. The Self Adhesive HDPE sheet waterproofing membrane shall have following typical properties :</p> <ul style="list-style-type: none"><li>i) Thickness (mm): 2</li><li>ii) Peel Adhesion to Concrete : &gt;20 N / 10mm</li><li>iii) Resistance to impact : &gt; 400</li><li>iv) Elongation @ Break: 35 % initial value</li><li>v) Low Temperature Flexibility: -20°C</li><li>vi) Resistance to Hydrostatic Head: 5 Bar</li></ul> <p>The fully bonded HDPE sheet membrane shall be installed with standard 75mm selvedge laps, and end laps executed with double sided Tape, applied as per manufacturer's instructions. Membrane shall be laid over the entire area. All systems to be installed as per manufacturer's recommendations, etc. complete with all lead and lift for all materials and labour and as directed by Engineer in-charge. The membrane shall be applied as per following procedure. a) Clean the RCC surface free from dust with brush. Remove any sharp protrusions on the RCC wall by chipping and local repairs. ( Client's / Civil Contractor's scope ). b) Primer has to be applied on the cleaned surface and let it dry for min 2 hrs. b) Roll out membrane, cut it to manageable lengths and stick it to the surface by peeling off the release paper on the back of the membrane. Press membrane in place. Adjacent rolls to come on 75 mm overlaps lines on the membrane. Roll the laps and joints by hand roller. c) Continue applying the membrane till entire area is covered.</p>	295.8	Sqm		
11	<p>Supply and applying the Idrocrete XT is a powder admixture made from special hydrophilic components which, when added to a concrete mix, reduces the permeability of hardened concrete etc including all costs of material, conveyance, manpower, tools equipments etc complete as per direction of EIC.</p>	1880.00	KG		
<b>TOTAL VALUE IN INR (EXCLUDING GST)</b>					
GST SHALL BE EXTRA AT ACTUAL (APPLICABLE GST% ALONG WITH SAC CODE TO BE INDICATED IN YOUR BID)					