

# COMPLIANCE STATEMENT AS PER QCS 2014

Project Name: MILAT Civil Installation Works

Subject: **Precast Concrete Foundation & Precast Concrete Manhole**

Ref. Submittal No: 20211117/01

Rev. No. Date: 16 November 2021

SL No	Ref. Document (QCS 2014 Standards)	Section No./ Clause No.	QCS 2014 Requirement	Contractor Proposal	Compliance
1	QCS 2014 Section 5 Part 6 (Property Requirements)	6.1.4 (1)	The contractor shall submit details of mix designs to Engineer for approval.		
2	QCS 2014 Section 5 Part 2 (FINE AGGREGATE)	2.4.1	Fine aggregate consists of natural clean sand, stone screenings or a combination and can be produced from natural disintegration of rock or gravel and/or by the crushing of rock or gravel or processing of manufactured aggregates or artificial, conforming to the requirements of physical and chemical properties complying with table 2.1 and subject to Engineers acceptance		
		2.4.2	The gradation of the aggregate for concrete and mortar shall be in accordance with the gradation designations in EN 12620 with BS PD 6682, EN 13139, EN 998-1, EN 998-2, relevant ACI and ASTM standards and codes of practice and subject to Engineers acceptance.		
		2.4.3	Each batch of aggregate delivered to the site shall be kept separate from previous batched and shall be stored to allow for inspection and test to be carried out.		
		2.4.4	The contractor shall mechanically be the aggregate to remove salts and other impurities in order to meet the specified requirements.		
		2.4.5	The storage area for the clean washed sand shall be shaded from the direct rays of the sun and shall be screened for protection from dust. The area about stockpile/mixing plant shall be watered as necessary, to reduce as far as possible the rising of dust.		

3	QCS 2014 Section 5 Part 2 (COARSE AGGREGATE S)	2.5.1	The coarse aggregate shall consist of clean crushed rock and free from deleterious matter, conforming to the requirements of physical and chemical properties requirements complying with table 2.1 as a minimum requirement and subject to Engineers acceptance within BS EN 12620, BS PD 6682 and ASTM C33.		
		2.5.2	For other type of concrete mixes subject to Engineers acceptance, coarse aggregate shall be complying with the relevant EN, ACI and ASTM standards and codes such as EN guideline and ACI 237 for Self-Consolidating Concrete (SCC) and ACI for shot Crete.		
		2.5.3	Aggregate that are deleteriously reactive with the alkalis in cement shall not be used.		
		2.5.4	Exception: Aggregates that have been shown by test or actual service to produce concrete of adequate strength and durability and approved by the building official.		
		2.5.5	Nominal maximum size of coarse aggregate shall be not larger than: (a) 1/5 the narrowest dimension between sides of forms, nor (b) 1/3 the depth of slabs, nor (c) ¾ the minimum clear spacing between individual reinforcing bars or wires, bundles of bars, individual tendons, bundled tendons, or ducts.		
		2.5.6	This limitation shall not apply if, in the judgment of the licensed design professional, workability and methods of consolidation are such that concrete can be placed without honeycombs or voids.		
		2.5.7	The contractor shall mechanically wash the aggregates to remove salts and other impurities to meet the requirements specified.		
3	QCS 2014 Section 5 Part 3 (CEMENT)	3.4	The cement shall fully comply with relevant GSO, EN and ASTM specification with intended use. With minimum requirement stated in below table Specification Requirements for the Chemical Composition of Portland Cements Made to GSO, EN and ASTM Standard Specification.		
4	QCS 2014 Section 5 Part 4 (WATER)	4.1 and 4.2	Acceptance Criteria and Physical Test for Mixing Water Chemical Limitations for Mixing Water		