

TPWODL TP WESTERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha government Joint Venture)		FIELD QUALITY ASSURANCE PLAN					DOC NO: TPWODL/CIVIL/QA&QC/FQP/R0)	
		Project: Civil work for new construction and Renovation of existing structures under TPWODL					Date: 30.09.2022	
Sl.No	Tests		Type of Check	Extent of Check	Reference Standard	Format of Record	Remarks	Site Inspection Checklist
A	Incoming Materials							
1.01	Cement	Physical & Chemical Tests	Visual	Each Lot/Batch	CPWD Spec./IS	MTC	-	1. Physical condition including lumps, moisture in the cement. 2. Whether of Approved Make. 3. Type of Cement. 4. Week of Manufacturing. 5. Adequate & proper storage arrangements at site. 6. Review of test results in MTC.
1.02	Coarse Aggregate	Flakiness Index & Elongation Index Sieve analysis Impact & crushing Deleterious Material & Bulk Density	Lab Test	One per source Each Lot	CPWD Spec./IS	TC	Initial test to be done in external approved lab. Sampling to be done jointly with TPWODL EIC.	1. Source. 2. Colour. 3. Shape (whether round or irregular). 4. Adequate & proper storage arrangements at site.
1.03	Fine Aggregate	Sieve analysis Dry loose bulk density % silt/Clay content Deleterious Material.	Lab Test	Each Lot One per source	CPWD Spec./IS	TC	Initial test to be done in external approved lab. Sampling to be done jointly with TPWODL EIC.	1. Source. 2. Colour. 3. Adequate & proper storage arrangements at site.
1.04	Reinforcement Steel	Physical and Chemical Tests	Visual / Measurement	Each Lot/ Batch	CPWD Spec./IS	MTC	-	1. Physical condition. 2. Whether of Approved Make. 3. Adequate & proper storage arrangements at site. 4. Review of test results in MTC. 5. Rolling Margin and Size.
1.05	Water Supply works (Pipes)	Physical Test	Visual / Measurement	Each Lot	Dwg. / CPWD Spec. / IS	Checklist	-	1. Physical condition. 2. Whether of Approved Make. 4. Size, Gauge, Colour, Coating. 5. Dia. & wall thickness.
1.06	Floor Tiles	Physical Test	Visual / Measurement	Each Lot	Dwg. / CPWD Spec. / IS	Invoice	-	1. Physical condition. 2. Whether of Approved Make. 3. Review of test results in MTC. 4. Type, Size, Thickness Colour & Packing. 5. Adequate & proper storage arrangements at site.
1.07	Bricks	Compressive Strength Water Absorption Dimensional Tolerance Colour Efflorescence	Lab Test / Visual / Measurement	40,000 nos. Or Change of source	CPWD Spec. / IS / Dwgs.	TC	-	1. Physical condition. 2. Brand to be approved. 3. Type, Size, Colour.
1.08	Glass	Physical Test	Visual / Measurement	Each Lot	Dwg. / CPWD Spec. / IS	Invoice	-	1. Physical condition. 2. Whether of Approved Make. 3. Type, Size, Colour & Packing. 4. Adequate & proper storage arrangements at site.

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1.09	Paints	Physical Test	Visual	-	-	Invoice	Required paint qty. shall be calculated from PO qty. and same shall be made available at site one time only before start of painting work.	1. Whether of Approved Make. 2. Type, Colour, Packing & Qty. 3. Adequate & proper storage arrangements at site.
B	Activity/Description							
2.00	Earth Work							
2.01	Excavtion	-	Visual / Measurement	100%	Dwg./CPWD Spec./IS	Site log book		Marking. Side Slope. Elevation-Initial & Final. Step Cutting and Shoring after 1.5M Test Pit. Proper & Safe Access.
2.02	Backfilling	-	Visual / Measurement	100%	CPWD Spec./IS	Site log Book		Layer Thickness as per specifications. Moisture. Compaction.
2.03	Filling	Optimum Moisture Content & Dry Density Test	Lab Test	One test per 4000CuM	CPWD Spec./IS	Site log Book		Layer Thickness as per specifications. Moisture. Compaction.
3.00	Concrete							
3.01	Before placing concrete	-	Visual	100%	Dwg./ CPWD Spec. Bar bending schedule	F01(EHC-P – 02)_Pour card)		Form work-Dimenions, Vertical & Horizontal alignment, Shuttering Oil. Concreting Arrangement-Cover blocks, Vibrators. Reinforcement-Fixing, Spacing, Chairs Inserts/Embedments.
3.02	Fresh concrete Test	Cube Test	Lab Test	One set for every 20 CuM for Column,beams, slab or other works. Incase of RMC- One set of every mixer or Two sets for single casting.	CPWD Spec./ Design Mix	F01(EHC-P – 02)_Pour card)		Incase of RMC-Delivery receipts, Batch reports. Shear key. SlumpTest
4.00	Brick Work	-	Visual	100%	CPWD Spec. / IS / Dwgs.	F04(EHC-P – 02)_Masonry)		Type of bond. Soaking of bricks. Hacking of concrete surface. Motar-Mix Proportion. Line & Level. Steel reinforcement 6MM 2 nos every third layer. Corner surface rebaring at cols. Thickness of joints.

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5.00	Plastering	-	Visual	100%	Dwg / CPWD Spec. / IS Codes	F05(EHC-P – 02)_Plastering)		Surface preparation. Bull marking. Sand screening. Mortar-Mix Proportion. Thickness. Final surface finish.
6.00	Painting	-	Visual	100%	Dwg / CPWD Spec. / IS Codes	F07(EHC-P – 02)_Painting)		Base preparation. No. of coats. Final shade. Curing.
7.00	Flooring	-	Visual	100%	Dwg / CPWD Spec. / IS Codes	F06(EHC-P – 02)_Flooring)		Mortar-Mix Proportion, Thickness. Embedments. Flooring-Layout, Slope, Joints.
8.00	Installation of Doors & Windows	-	Visual	100%	CPWD Spec. / IS / Dwg.	Site log Book		Alignment. Position.

NOTE:

All tolerances shall be as per the IS standards.