

QUALITY CONTROL GUIDE

FOR

FIELD ENGINEERS

6.3.0 QUALITY CONTROL REGISTERS PROFORMAE

FORM NO. 1

REGISTER OF BENCH MARKS

NAME OF WORK :-

Location	Description	Value	Verified by AE/AEE (C) on Date	checked by DEE (C) on Date	Reference to L.F.Book	Remarks	Signature of AE/AEE/DEE (Construction)	Signature of Q C Staff
1	2	3	4	5	6	7	8	9

FORM NO. 2

MARK OUT REGISTER

NAME OF WORK :-

Date	Description of Structure	L.S.	Elevation	Location	Signature of AE/AEE (Constn)	Signature of DEE (Constn)	Signature of EE (Constn)	Signature of Q.C. Staff	Remarks
1	2	3	4	5	6	7	8	9	10

FORM NO. 3
MATERIAL O.K. REGISTER

NAME OF WORK :-

Date	Description of Material	Approximate Quantity	Location	Whether the material is as per specification with result of the analysis with reference to sample in Lab Test Register	Remarks of QC Staff if any when the material is not as per specifications	Compliance of Construction Staff	Signature of AE/AEE DEE (Constn)
1	2	3	4	5	6	7	8

Signature of AE/AEE/DEE (QC Staff)	Remarks
9	10

FORM NO. 4
REGISTER OF FOUNDATIONS

NAME OF WORK :-

Date	Details of area where foundation are proposed				Nature of soilmet with at foundation level	Details of clay layers if any	Details of foundation treatment if any	Details of measuring instruments installed
	L.S.	C.S.		Foundation level				
		U/S	D/S					
1	2	3	4	5	6	7	8	9

Deviations from approved drawings (OR) Specifications if any with authority	SIGNATURES				REMARKS
	AE/AEE DEE (C)	EE (C)	AE/AEE/ DEE (C) EE/QC	SE (C& QC)	
10	11	12	13	14	15

FORM NO. 5

REGISTER OF PLACEMENT FOR CONCRETE

NAME OF WORK :-

Date	Description of C.C.Mix	LOCATION			Foundation level		REFERENCE TO		Whether Final level are as per approved drawings
		L.S.	U.S.	D/S	From	To	Approved drawings	Foundation register	
1	2	3	4	5	6	7	8	9	10

Whether foundation concrete Surface/ C.S., is cleared and kept ready as per specifications for receiving	Deviations from approved drawings (OR) specification etc, if any with authority	REFERENCE TO		REMARKS OF	
		Reinforcement Register	Item No. 1 in material stack file O.K.Register	AE/AEE/DEE OC	EE (Constn)
11	12	13	14	15	16

Compliance reported
by AE/AEE/DEE
(Constn)

Remarks of S.E. (G C)

REMARKS OF

17

18

19

FORM NO. 6
REGISTER OF PLACEMENT FOR MASONRY

NAME OF WORK :-

Date	Location of Masonry Work	Elevation		Reference to material to stock file O.K.Register	SIGNATURES OF		Remarks of QC Staff	Compliance report of Construc- tion Staff	Remarks of SE Construc- tion/ Se QC	REMARKS
		From	To		AE/DEE (C)	EE (C)				
1	2	3	4	5	6	7	8	9	10	11

FORM NO. 7
REGISTER OF PLACEMENT FOR REINFORCEMENT

NAME OF WORK :-

SL. No.	Description	Details of RCC Work			Signatures of Construction Staff	REMARKS
1	2	1	2	3	4	5
I.	<u>MAIN REINFORCEMENT</u>					
a)	Bar No.					
b)	Dia of Bar					
c)	No. of Bars with spacing.					
d)	No. of welded joints.					
e)	Whether qualified welders have been employed and quality welding work test checked.					
II.	<u>DISTRIBUTION REINFORCEMENT</u>					
a)	Bar No.					
b)	Dia of Bar.					
c)	No. of Bars with spacing					
III.	Whether overlaps are as per specifications.					
IV.	Whether cover is as per specifications.					

FORM NO. 8

REGISTER OF TEST REPORT OF COMPRESSIVE STRENGTH OF CONCRETE SPECIMENS

NAME OF WORK :-

PARTICULARS OF SPECIMEN	Mix Proportion	W.C. Slump Ratio	Date of casting	Date of testing	Age in Days	COMPRESSIVE STRENGTH Kg/CM ²		Required 28 days strength Kg/CM2	REMARKS		
						Indi- vidual	Average				
Id. NO.	BATCH NO.										
1	2	3	4	5	6	7	8	9	10	11	12

FORM NO. 9
PLACEMENT REGISTER FOR EMBANKMENT

NAME OF WORK :-

Date	ELEVATION		Casing OR Hearting	Location U/S OR D/S	Whether the previous layer is Passed OR not	Reference to embankment test results	OMC FMC	% of Clearance	Whether this layer is passed OR not
	From	To							
1	2	3	4	5	6	7	8	9	10

SIGNATURES OF		REMARKS
Construction Staff	QC Staff	
11	12	13

FORM NO. 10

GENERAL PLACEMENT REGISTER FOR OTHER ITEMS

NAME OF WORK :-

Date	Chainage		Description of Work	Signatures of Construction Staff.		Signatures of Quality Control staff		Remarks
	From	To		A.E/AEE	Dy.EE	E.E.	A.E/AEE	

FORM NO. 11

ROLLER PASSES CONTROL REGISTER

NAME OF WORK :-

Date	Chainage		Total length to be rolled	No. of passes required with D R R	Roller No.	TIME		SIGNATURE OF		REMARKS	
	From	To				From	To	Construction Staff	QC Staff		
1	2	3	4	5	6	7	8	9	10	11	12

FORM NO. 12
MOISTURE CONTROL REGISTER

NAME OF WORK :-

Date	Chainage		Total length	Quantity of loose earth	In place moisture	O M C	Moisture to be supplemented	% of moisture content before rolling	SIGNATURE OF		REMARKS
	From	To							Construction Staff	G C Staff	
1	2	3	4	5	6	7	8	9	10	11	12

FORM NO. 13

EMBANKMENT TEST RESULTS REGISTER

NAME OF WORK :-

Date	LOCATION OF TEST PIT			LAB RESULTS			Core cutter No. and weight	Weight of sample with cutter	Netweight of sample
	Chainage	Elevation	Coordinates	OMC	MDD	Lab references			
1	2	3	4	5	6	7	8	9	10
Volume of Core cutter	Wet density	Weight of sample taken for drying	Weight of dry sample	Weight of water content	% of moisture content	Field dry density	% of compac- tion		
11	12	13	14	15	16	17	18		
Type of Roller		SIGNATURE OF		REMARKS					
No. of Passes		AE/AEE (C) DEE (C)							
19	20	21	22	23					

FORM NO. 14
SITE ORDER BOOK

NAME OF WORK :-

INSTRUCTIONS OF THE INSPECTING OFFICER	
Date	
1	2

FORM NO. 15
CEMENT DAY BOOK

NAME OF WORK :-

Sl.No.	Date	Opening Balance	Receipts	Total Receipt	Issues Consumption	Balance	Remarks
1	2	3	4	5	6	7	8

O.K.CARD FOR CAST - INSITU CONCRETE LINING

S. No.	Description	Signatures of			Remarks
		Contractor	GOAP	GOAP	
1.	DATE :				
2.	LOCATION FROM KM. _____ TO KM. _____ BED SIDE SLOPE LEFT/RIGHT _____				
3.	PROPORTIONS OF THE MIX.				
4.	MATERIALS : (A) COARSE AGGREGATE UNDER/ OVER SIZE, 40M, 20MM, AND 10 MM. (B) FINE AGGREGATE F.M OF SAND (C) CEMENT MAKE/DATE OF Manufacture AND PERCENTAGE USED.				
5.	METHOD OF CONCRETE MIX : (A) MIX-VOL/WEIGHT. (B) BATCHING PLANT BY VOL. WEIGHT.				
6.	TRANSPORT : (A) BY TRANSIT MIXER (B) TEMPERATURE OF CONCRETE SPECIFIED (C) TEMPERATURE OF CONCRETE PLACED				
7.	SLUMPS :- (A) DESIGNING SLUMP (B) AT THE BATCHING PLANT (C) AT THE SITE OF PLACEMENT				
8.	WATER CEMENT RATIO				
9.	METHOD OF CONSOLIDATION SLIP/MECHANICAL VIBRATOR/ SCREENED VIBRATOR.				
10.	WHETHER CONTRCTION/CONSTRUCTION JOINTS ARE PROVIDED AS PER AP- PROVED DESIGN				
11.	Treatment OF COLD JOINT/JOINTS.				
12.	CURINGS :- WATER CURING/CURING COMPUTE.				
13.	QUALITY OF CONCRETE LAID				
14.	NO. OF C.C. CUBES CASTED.				
15.	ANY OTHER REMARKS				

Sign. of Contractor Sign. of GOAP (CS) Sign. of GOAP (QCS)

O.K. CARD FOR EARTH WORK EMBANKMENT

S. No.	Description	Signatures of			Remarks
		Contractor	G.O.A.P. (C.S)	G.O.A.P. (Q.C.S)	
1.	DATE				
2.	LOCATION OF WORK FROM KM. _____ TO KM. _____				
3.	ELEVATION (R.L)				
4.	SURFACE PREPARATION, WHETHER AS PER SPECIFICATION.				
5.	TYPE OF ROLLER USED.				
6.	LOCATION OF TEST AT KM. _____				
7.	THICKNESS OF LOOSE LAYER				
8.	INITIAL MOISTURE CONTENT.				
9.	REMOVAL OF OVER SIZE.				
10.	TOP LEVEL AFTER COMPACTION OF LAYER.				
11.	WET DENSITY				
12.	MOISTURE CONTENT IN ROLLED FILL				
13.	DRY DENSITY.				
14.	LABORATORY O.M.C. AND M.D.D.				
15.	COMPACTION EFFICIENCY.				
16.	EMBANKMENT OF INSTRUMENTS DEVICES (IN CASE OF EARCH DAM).				
17.	METHODOLOGY OF ADDITION OF MOISTURE (WHETER THROUGH SPRAY FROM SPRINKLER TANKER)				
18.	MANUAL COMPACTION IF ANY.				
19.	LAYER PASSED.				
20.	ANY OTHER REMARKS				

Sign. of
Contractor

Sign. of
GOAP (CS)

Sign. of
GOAP (QCS)

O.K. CARD FOR GROUTING

Contract No. _____ Chainage of Structure : _____

Name of contractor : _____

S. No.	Description	Dated Signatures of		Remarks
		Contractor	GOAP (C.S) GOAP (QCS)	

GENERAL :

1. R.L. AND AREA OF SURFACE TO BE GROUTED.
2. CLASSIFICATION OF THE ROCK STRATA.
3. SALIENT FEATURES OF THE STRATA SUCH AS A FAULT ZONE, CAVITIES, FISSURES ETC.
4. PERMEABILITY VALUE OF THE STRATA BEFORE GROUT.

GROUP :

5. PATTERN OF GROUT ADOPTED
6. DEPTH AND DIAMETER OF THE HOLE.
7. PRESSURE ADOPTED FOR GROUT.
8. PROPORTION OF GROUTING MIX.
9. INTAKE OF SLURRY MORTAR PER UNIT AREA PER UNIT TIME
10. TOTAL QUANTITY OF INTAKE
11. FINAL PERMEABILITY VALUE OF THE STRATA, AFTER GROUT.
12. WHETHER THE GROUT STRATA IS O.K.

Sign. of
Contractor

Sign. of
GOAP (CS)
DEE/EE

Sign. of
GOAP (QCS)
AE/AEE
DEE / FE.

O.K.CARD FOR STRUCTURAL CONCRETE WORK

S. No.	Description	Signatures of			Remarks
		Contractor	G.O.A.P. (CS)	G.O.A.P. (QCS)	
1.	DATE				
2.	GRADE OF MIX				
3.	LOCATION OF WORK :				
	(A) FOUNDATION (WITH ELEVATION)				
	(B) SUPER STRUCTURE (WITH ELEVATION).				
4.	METHODOLOGY OF PREPARATION OF SURFACE :				
	(A) GREEN CUTTING.				
	(B) SAND BLASTING.				
	(C) HIGH PRESSURE WATER BLASTING.				
5.	MATERIALS :				
	(A) COARSE AGGREGATE UNDER SIZE/OVER SIZE GRADED ANALYSIS.				
	(B) F.M. OF SAND.				
	(C) CEMENT MAKE/DATE.				
	(D) WATER.				
6.	TOOLS AND PLANTS :				
	(A) FORM WORK DETAILS OF SHUTTERING SHOULD BE CHECKED WITH DIMENSION.				
	(B) MIXER				
	(C) VIBRATOR.				
7.	BATCHING				
8.	TEMP. OF CONCRETE SPECIFIED IN TECHNICAL SPECIFICATION.				
9.	TEMP. OF CONCRETE AS PLACED.				
10.	SLUMP :				
	(A) DESIGN SLUMP				
	(B) AT THE BATCHING & MIXING PLANT				
11.	METHOD OF PLACING				
12.	METHOD OF CONSOLIDATION				
13.	WATER CEMENT RATIO				
14.	TREATMENT OF CONSTRUCTION JOINTS.				
15.	EMBEDMENTS				
16.	WATER STOPPER				
17.	CONCRETE FINISH (WOOD FLOAT/STEEL TROWEL)				
18.	QUANTITY OF CONCRETE LAYED.				
19.	NO. OF C.C CUBES CASTED				
20.	CHECKING OF REINFORCEMENT.				
21.	CURING ARRANGEMENTS				
• 22.	ANY OTHER REMARKS				

Sign. of Contractor Sign. of GOAP (CS) Sign. of GOAP (QCS)