मध्यप्रदेश ग्रामीण सड़क विकास प्राधिकरण

(म.प्र.शासन, पंचायत एवं ग्रामीण विकास विभाग के अधीन) खण्ड-2, पंचम तल, पर्यावास भवन, अरेरा हिल्स भोपाल

頭13372/22/旬-12/Tech/QC/T-4/ /15 प्रति.

भोपाल, दिनांक। (/ 07 / 2015

महाप्रबधंक (समस्त) म.प्र. ग्रामीण सडक विकास प्राधिकरण परियोजना क्रियान्वयन इकाई मध्यप्रदेश

विषय:- सीमेन्ट कांक्रीट कार्य के लिए क्वालिटी कन्ट्रोल रजिस्टर संधारित करने विषयक।

जैसा कि आपको विदित है प्रधानमंत्री ग्राम सडक योजना के निर्माणाधीन सडकों में खासकर आबादी क्षेत्र में वृहद लम्बाई में सीमेन्ट कांक्रीट पेवमेंट का कार्य किया जा रहा है। साथ ही योजना में अब पूलों का निर्माण भी काफी संख्या में किया जा रहा है। जिनमें मुख्य काम सीमेन्ट कांक्रीट संबंधी है। सीमेन्ट कांक्रीट कार्य के लिए क्वालिटी एश्योरेंस हैंडबुक में गुणवत्ता संबंधी दिशा निर्देश दिये गये हैं तथा गुणवत्ता के लिए आई.एस. कोड द्वारा निर्धारित मानक उपलब्ध है। परन्तु कार्य स्थल पर सीमेन्ट कांक्रीट का कार्य पूर्व निर्धारित गुणवत्ता अनुसार हो यह सुनिश्चित करने के उददेश्य से किये जाने वाले सामग्री परीक्षण के रिकार्ड हेतू वर्तमान में क्वालिटी कन्ट्रोल रजिस्टर निर्धारित नहीं हैं। जिससे यह देखा गया है कि कार्यस्थल पर किये जा रहे परीक्षण परिणाम समुचित रूप से संधारित नहीं हो पाते हैं।

उपरोक्त के दृष्टिगत सीमेन्ट कांक्रीट के कार्य के लिए किए जाने वाले परीक्षणों तथा उन्हें संधारित करने के उददेश्य से सीमेन्ट कांक्रीट के कार्य हेतू भी क्वालिटी कन्ट्रोल रजिस्टर संधारित किए जाना आवश्यक है। इस हेतु रजिस्टर के प्रपन्नों की प्रतियां संलग्न कर प्रेषित है। कृपया सीमेन्ट कांक्रीट कार्यों के लिए उपरोक्तानुसार क्वालिटी कन्ट्रोल रजिस्टर संधारित किए जाना सुनिश्चित करे।

> (अलका उपाध्याय) मुख्य कार्यपालन अधिकारी म.प्र. ग्रामीण सडक विकास प्राधिकरण, भोपाल

पृ.क्र.13373 / 22 / वि—12 / Tech / QC / T-4 / 15 भोपाल, दिनांक 🖔 / 07 / 2015

प्रमुख अभियंता, म.प्र. ग्रामीण सडक विकास प्राधिकरण मुख्यालय की ओर सूचनार्थ।

मुख्य महाप्रबंधक I,II III,IV,V,VI भोपाल, इन्दौर, जबलपुर, रीवा, म.प्र. ग्रामीण सड़क विकास प्राधिकरण की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेत्।

मुख्य महाप्रबधंक (वित्त) म.प्र. ग्रामीण सड़क विकास प्राधिकरण मुख्यालय की ओर 3.

महाप्रबंधक (समस्त) म.प्र. ग्रामीण सड़क विकास प्राधिकरण मुख्यालय भोपाल।

मुख्य कार्यपालन अधिकारी म.प्र. ग्रामीण सडक विकास प्राधिकरण, भोपाल



Pradhan Mantri Gram Sadak Yojana

Quality Control Register Part 1

FOR CC WORK

Record of Tests

State	: Madhya Pradesh
District	:

Programme Implementation Unit:

Package Number

Name of Road

Register

From km. to km. km

MP Rural Roads Development Authority Project Implementation Unit

Quality Control Register Part 1

Record of Tests

Fly Sheet

Name of Road : Length (km) : Contract Amount (Rs.) : Construction Contractor (Name & Address) Date of Commencement of Work : Stipulated Date of Completion (a) As per Agreement (b) As Revised & Agreed : Project Implementation Unit (Address) Laboratory In charge (Name) : This Register : From km to km	Package Number:	
Contract Amount (Rs.) : Construction Contractor (Name & Address) Date of Commencement of Work : Stipulated Date of Completion (a) As per Agreement (b) As Revised & Agreed : Project Implementation Unit (Address) Laboratory In charge (Name) :	Name of Road	:
Construction Contractor (Name & Address) Date of Commencement of Work Stipulated Date of Completion (a) As per Agreement (b) As Revised & Agreed Project Implementation Unit (Address) Laboratory In charge (Name)	Length (km)	:
(Name & Address) Date of Commencement of Work : Stipulated Date of Completion (a) As per Agreement : (b) As Revised & Agreed : Project Implementation Unit : (Address) Laboratory In charge (Name) :	Contract Amount (Rs.)	:
Work Stipulated Date of Completion (a) As per Agreement (b) As Revised & Agreed Project Implementation Unit (Address) Laboratory In charge (Name)		:
Stipulated Date of Completion (a) As per Agreement (b) As Revised & Agreed : Project Implementation Unit (Address) Laboratory In charge (Name) :		
(a) As per Agreement : (b) As Revised & Agreed : Project Implementation Unit : (Address) Laboratory In charge (Name) :		•
(b) As Revised & Agreed : Project Implementation Unit : (Address) Laboratory In charge (Name) :		:
(Address) Laboratory In charge (Name) :		:
(Address) Laboratory In charge (Name) :		
		:
This Register : From km to km	Laboratory In charge (Name)	:
	This Register	: From km to km

Certificate :- certified that this register contain from pages 0 to = pages

only + separate sheet pages only.

State: MP District: Block:

General Manager
MP Rural Road Development Authority

PIU –

Quality control tests prior to construction

FFREQUENCY OF TEST

Ref.:- Table 800.13 of QAH Vol. -1 (Page 145)

	Ref.:- Table 800.13 of QAH Vol.		
Sr. No.	Material / Work	Test / Check	Frequency
1.	Cement	a) Setting Time (IS:4031 Part 5)	One test for 10 tonnes of cement (same brand & grade)
		b) Soundness (IS:4031 Part 3)	- do –
		c) Compressive strength of mortar cube (IS:4031 Part 6) (Table 800.3 of QAH VolI Page 142)	3 specimens for each lot
2.	Coarse Aggregates	a) Gradation for PCC or RCC works (IS:2386 (Part I) and Table 800.4 of QAH VolI Page 142)	3 samples for each quarry source
		b) Flakiness index (IS:2386 part 1)	- do -
		c) Deleterious constituents (IS:2386 part 2)	If in doubt
		d) Water absorption / content (IS:2386 part 3)	Once for each source of supply
		e) Aggregate Impact value (IS:2386 part 4)	One test per source of supply
		f) Soundness (IS:2386 part 5) [if water absorption exceeds 2%]	- do –
		g) Alkali Silica reactivity (IS:2386 part 7)	If in doubt one test at approved test house
3.	Fine Aggregates	a) Gradation (IS:2386 part 1) (Table 800.5 of QAH VolI Page 142)	3 samples for each source of Supply
		b) Deleterious Constituents (IS:2386 part 2)	If in doubt, one test
		c) Alkali silicate reactivity (IS:2386 part 7)	If in doubt, one test
4.	Water	Normally potable water is good enough for making concrete Determination of Impurities - Suspended matterIS:3025 (Part 17) - OrganicIS:3025 (Part 16) - Inorganic IS:3025 (Part 19) - Sulphates (as SO ₃)IS:3025 (Part 24) - Chlorides (as Cl)IS:3025(Part 32) (Table 800.6 of QAH VolI Page 143) for limits)	For large works If the quality is in doubt Samples taken from each source and tested at an approved test house
5.	Concrete	Mix Design (for each work)	To be approved by EE for cement content, W/C ratio and use of plasticizers, if any.

4.2 Tests / checks during construction

Sr. No.	Material / Work	Test / Check	Ref.:- Table 800.14 of QAH Vol1 (Frequency
1.	Fine and coarse aggregate	Moisture content (IS:2386 part 3)	Once before commencement of work – each day
2.	Cement (consumption)	Minimum quantity (Kg/m ₃)	Daily
3.	Concrete	a) Workability – slump cone test (IS:1199)	2 tests/ day
		b) Cube Strength (IS:516)	Minimum of 6 cubes (3 each to determine 7 days and 28 days strength) to be cast every day)
4.	Construction Joints	Fixing location before concreting and resumption of work	As and when work demands
5.	Formwork	For stability, leakage of slurry, bulging etc	Throughout concreting
6.	Concreting	a) Transporting / placing segregation of concrete	Random check in each member
		b) Precautions for hot weather or cold weather concreting	Once check before commencement of work
		c) Compaction with vibrators	Regularly
7.	Curing of concrete	Regular (till 28 days after casting) inspection	Daily

4.3 Quality Control Checks by AE / EE

QUALITY CONTROL CHECKS BY AE/EE

Ref.:- Table 800.15 of QAH Vol. -1 (Page 146)

	her Table 800.13 Of QAIT VOI1 (Fage I			
Sr. No.	Material / Work	Test / Check	Frequency	Designation of Inspecting Officer
1.	All concrete components	a) Soundness of concrete - Sounding Test by strikingwith a ½ Kg hammer - Schimdt's Rebound hammer test (if quality is in doubt)	After hardening of concrete	AE
		b) Honey Combing and Finishing	Before acceptance of work	AE
		c) Tolerances	As per drawings	AE
		d) Workmanship	As and when inspected	EE
2.	Cube Strength	Review of Cube strength	Random	EE

REQUIREMENTS OF CEMENT

Ref.:- Table 800.3 of QAH Vol. -1 (Page 142)

		1101.1- Table 000.5 01 QAIT VOI1 (1 age 142)
Property	Permissible Value	Tested as per
Fineness	Specific surface not less than 225 m ₂ /kg	IS: 4031 (Part 1,2 & 15)
Setting Time	Initial set > 30 minutes Final Set < 600 minutes	IS: 4031 (Part 1)
Soundness	Not to exceed 10 mm in Lechatelier IS:4031 (Part 3) mould	(IS:4031:Part 3)
Compressive Strength At 3 days At 7 days At 14 days	33 Grade 43 Grade 16 Mpa 23 Mpa 22 Mpa 33 Mpa 33 Mpa 43 Mpa	(IS:4031:Part 6)

^{*} The initial setting of test blocks shall not differ by ± 30 minutes from the initial setting of control test blocks prepared with the same cement and distilled water.

LIMITS FOR SOLIDS IN WATER

Ref.:- Table 800.6 of QAH Vol. -1 (Page 143)

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	Maximum permissible limit
Organic	200 mg/litre (IS: 3025)
Inorganic	3000 mg/litre (IS: 3025)
Sulphates (as SO ₄)	400 mg/litre (IS: 3025)
Chlorides (as Cl)	2000 mg/litre (For Plain Concrete) (IS: 3025) 500 mg/litre (For Reinforced Concrete
Suspended matter	2000 mg/litre (IS: 3025)

FREQUENCY OF SAMPLING

Ref.:- Table 800.8 of QAH Vol. -1 (Page 143)

Quantity of concrete in work (m ₃)	No. of samples
1 -5	1
6 -15	2
16 – 30	3
31 -50	4

STEEL REINFORCEMENT: QUALITY CONTROL REQUIR EMENTS

Material :-

(i) The Steel reinforcement used in works executed shall conform to the requirements given in following table:-

Table 1000.1(QAH-Vol.-I Page 158): REQUIREMENTS OF REBARS

Grade Designation	Bar type conforming to governing BIS Specification	Characteristic Strength (f _y) MPa	Elastic Modulus GPa
Fe 240	IS:432 Part I Mild Steel	240	200
Fe 415	IS:1786 High Strength Deformed Bars (HYSD) or Thermotechnically Treated (TMT) bars	415	200

(ii) The workmanship for welding of steel reinforcements shall conform to the specifications given in following table:-

Table~1000.2 (QAH-Vol.-I~Page~158): WORKMANSHIP~FOR~WELDING

Welding of Mild Steel	IS:432
Welding Method	IS:2751 and is:9417
MS Electrodes for welding	IS:814
Inspection of Welds	IS:8222

STEEL REINFORCEMENT : QUALITY CONTROL TESTS PRIOR TO CONSTRUCTION

Ref.:- Table 1000.4 of QAH Vol. -1 (Page 158)

	Tiel Table 1000.4 01 QALI VOI1 (Fage 130		
S. No.	Test	Frequency	
1.	Grade, percentage elongation and ultimate tensile strength	3 samples from each supplier (certificate from an approved test	
	(For culverts and small bridges)* (IS:432 part 1 and IS:1786)	house)	
2.	Pitch of the Ribs and Nominal Diameter (Clause 1002 of	Random checking	
	MoRD Specifications)		
3.	Protection of Steel (Clause 1003 of MoRD Specifications)	Regularly	
4.	Substitution of bar sizes	Approval by AE/EE before execution of work	
5.	Detailing of reinforcement cages	Approval by AE/EE before execution of work	
		Tree in the second second of work	

${\bf STEEL} \ {\bf REINFORCEMENT:} \ {\bf QUALITY} \ {\bf CONTROL} \ {\bf TEST} \ {\bf DURING} \ {\bf CONSTRUCTION}$

Ref.:- Table 1000.5 of QAH Vol. -1 (Page 158)

Sr. No.	Test	Frequency
1.	Bending and placing of reinforcement (Clauses 1004, 1005 of MoRD Specifications or IS:2502	Daily / Regularly
2.	Splicing and welding (Clause 1006 and 1007 of MoRD Specifications)	As and when such work is taken up
3	Tolerance (Spacing and cover)	Before concreting

Quality Control Register Part 1 Record of Tests Section -1: Work of CC Pavement

Abstract of tests Conducted

Test No.	Name of Test	Test No.	Date of Test	Result Qualified/ Not Qualified	If No , Page No and Date of NCR	Page No & Date on which Test Qualified
1	2	3	4	5	6	8
1	Test of Cement	Obtained from	n manufactures	& attached.		
2	Test of Steel	Obtained from	n manufactures	& attached.		
3	Comprehensive strength of concrete	Test 1				
		Test 2				
		Test 3				
		Test4				
		Test5				
		Test6				
		Test 7				
		Test 8				
		Test 9				
4	Workability / slump test	Test 1				
		Test 2				
		Test 3				
5	Grading of course aggregate	Test 1				
		Test 2				
		Test 3				
6	Grading of fine aggregate (Sand)	Test 1				
		Test 2				
		Test 3				
7	Aggregate Impact Value (AIV)	Test 1				
		Test 2				
-	F: M 11 6 1	Test 3 Test 1				
8	Finesse Modulus of sand	Test 1				
		Test 2				
	Flakiness index &					
9	Elongation index	Test 1 Test 2				
		Test 3				
10	W-t Ab C	Test 1				
10	Water Absorption	Test 1				
		Test 3				

Tests for Cement Concrete Pavement GRADATION OF COARSE AGGREGATES

Test No - 1

Package No : Date of Testi				ng :				
Name of Road : Name of source of supply : Chainage Weight of sample taken (gm):								
					IS: 2386 Table 800.4 of C	QAH Vol1 (Page 142)	
I. S. Sieve designation	Weight of sample retained	Percent of Wt. retained	f Wt. percent of Wt.	Percentage of Wt. Passing	Prescribed Lim	Prescribed Limits (Percentage of Wt. Passing/ Retained)		
	(gm)		(//		40 mm	20 mm	12.5 mm	
63 mm					100			
40 mm					95 -100	100		
20 mm					30 – 70	95 -100	100	
12.5 mm							90 – 100	
10.0 mm					10 – 35	25 – 55	40- 85	
4.75 mm					0 – 5	0 - 10	0 - 10	
		Whether C	onfirms to the Pres	scribed Limits (Yes/No)			
				nance Report will be Reports copy preserv		The reference)	
Page No	Date o	of issue						
Checked by:						Tested by:		
				(Date	& Signature)			
					er in charge			

Tests for Cement Concrete Pavement <u>Tests for Flakiness Index of Aggregates</u>

Test No-1

Package No :	Date of Testing :
Name of Road	
Name of Quarry	Weight of sample taken (gm):

Ref.:- IS:2386(Part I) 1963 Test 402.3 of QAH Vol. -II (Page 65 - 66)

		s :-	Size of aggregate
Weight of aggregate in each fraction passing thickness gauge, (g)	Wt. of the fraction consisting of at least 200 pieces (g)	Retained through I.S. Sieve designation	Passing through I.S. Sieve designation
33.90 M1=	W1=	50	63
27.00 M2=	W2=	40	50
21.50 M3=	W3=	31.5	40
16.25 M4=	W4=	25	31.5
13.50 M5=	W5=	20	25
10.80 M6=	W6=	16	20
8.55 M7=	W7=	12.5	16
6.75 M8=	W8=	10	12.5
4.89 M9=	W9=	6.3	10
M =	W=		Total
Permissible Limit ef.:- Clause 1501 B (iii) (d) f QAH Vol1 (Page 199)		(M/W)x100	Flakiness Index (F.I.) =
WAR VOI1 (Page 199)			

Checked by:

Chainage

(Date & Signature)
Officer in charge

Tested by:

Tests for Cement Concrete Pavement Water Absorption of Aggregate & Specific Gravity of Aggregate

Test No -1

Date of Testing:

Package No:

Name of Road

Chainage			Type of Aggregate			
Sample N	No.		Size of Aggregate			
			Ref	.:- IS:2386(Part III) 1963		
S.No	Observation		Test Nos.	Average value		
		1	2	1		
1	Wt of saturated aggregate & basket in Water = W1 (g)					
2	Wt of basket in water = W2 (g)					
	Wt of saturated surface dry aggregate air = W3 (g)					
3	Wt of oven dried aggregate air = W4 (g)					
4	Specific Gravity = W4/W3 - (W1-W2)					
5	Apparent Specific Gravity = W4/W4 - (W1-W2)					
6	Water Absorption = (W3-W4) x100 / W4 %					
	Mean value of Specific Gravity					
	Mean value of apparent Specific Gravity =					
	Mean value of water absorption					
	Layer		Permissible Limit	Whether Confirms to the Prescribed Limits		
	For Cement Concrete work		*Max. 3%	(Yes/No)		
If Result	ts don't conform to the prescribed Limits the page No. of this Register of	s, non conformar on which Non Co	nce Report will be issued by nformance Reports copy p	the PIU. The reference of reserved.		
	Page No	Date of	issue			
	1.50					
Checked	by:					
			Tested by:			

^{*} In case of water absorption more than 3% the aggregate shall be tested for soundness in accordance with IS 2386 Part – 5. After 5 cycles of testing the loss in rate of aggregate shall be not more than 12% if sodium sulphate solution is used or 18% if magnesium Sulphate is used.

Tests for Cement Concrete Pavement Aggregate Impact Value (AIV) of Aggregate

Test No -1

Date of Testing:

Package No:

Name of Road

Sample No.			W	eight of soil s	sample taken(gm):	IS:2386(Part IV) 1963
S. No	Observation		Test Nos.		Average	Remark
		1	2	3	9	
1	Weight of aggregate sample filling in the cylinder = W1 (g)					
2	Weight of aggregate passing 2.36 mm sieve after the test = W2 (g)					
3	AIV = (W2/W1) x 100 %					
	Note : Perm Ref.:- Clause					
	Whether	Confirms to t	he Prescribed	I Limits (Yes/N	No)	
If Results do	on't conform to the prescribed Limits, no this Register on v Page No	vhich Non Co	onformance F		preserved.	erence of the page No. of
	<u>-</u>					
Checked by:					Tested by:	
					resieu by.	
				•	ate & Signature	·)
				Of	fficer in charge	

Tests for Cement Concrete Pavement GRADATION OF FINE AGGREGATES (SAND)

Test No -2
Date of Testing:

Package No : Name of Road Name of quarry Chainage :

Weight of soil sample taken(gm):

Ref.:- IS:2386(Part I) 1963

Table 800.5 of QAH Vol. -1 (Page 142)

I. S. Sieve designation	Weight of sample retained (gm)	Percent of Wt. retained (%)	Cumulative percent of Wt. retained (%)	Percentage of Wt. Passing (%)	Permissible Value (Percentage of Wt. Passing/ Retained)		
					Zone I	Zone II	Zone III
10 mm					100	100	100
4.75 mm					90-100	90-100	90-100
2.36 mm					60-95	75-100	85-100
1.18 mm					30-70	55-90	75-100
600 micron					15-34	35-59	60-79
300 micron					5-20	8-30	12-40
150 micron					0-10	0-10	0-10
Total		W=					
FM = W/100							

Permissible Limit: The fineness modulus of fine aggregate shall be between 2.0 to 3.50 [FM of (i) Fine sand = 2.20 to 2.60, (ii) Medium sand = 2.60 to 2.90 & (iii) Course sand = 2.90 to 3.20]

	Whether Confirms to the Prescribed Limits (Yes/No)
	If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.
Page No	Date of issue
Checked by:	Tested by:

Instruction for Blending

(Date & Signature)
Officer in charge

Tests for Cement Concrete Pavement <u>Tests for Deleterious material & Silt Contents of Fine Aggregate (sand)</u>

Test No -1

Package No: Name of Road	Date of Testing :					
Name of Quarry			Weight of soil samp	le taken(gm):		
			IS:	2386(Part II) 1963		
S.No.	Filled sand height in 200 ml measuring cylinder up to 100 ml mark	Height of silt above settled layer of sand (H) ml (Add water up to 150 ml mark with 1-tea spoon salt in half lit water in cylinder)	Silt Content = [H/(100-H)]x100 %	Remark		
1	100					
2	100					
3	100					
4	100					
5	100					
6	100					
Ag. Silt content						
Permissible Limit	:- Maximum 8 %	- (Clay (Material passing sieve no. 75 Ref.:- Clause 150	– 4%) 5micron – 4%) 01 B (iii) (e) of QAH \	/ol1 (Page 199)		
	Whether	Confirms to the Prescribed Limit	ts (Yes/No)			
		Limits, non conformance Report wi onformance Reports copy preserve		The reference of the		
Page No	Date of issue					
Checked by:				Tested by:		

(Date & Signature) Officer in charge

SETTING TIME OF CEMENT

Ref.:- QAH Vol. -2 (Page 148) & I.S. 4031(Part 5) -1988

S. No.	Starting Time (Stop Watch) T ₀	Time when Initial set has taken place (s) T ₁	Time when Final set has taken place (s) T ₂

Permissible Value - 1. Initial setting time - Not less than 30 minutes.

2. Final setting time - Not greater than 600 minutes.

- T_0 Start a stop watch at the instant when water is added to the cement.
- T_1 The period elapsing between the time when water is added to the cement and the time at which the needle fails to pierce the test block to a point 5.0 +0.5mm measured from the bottom, is called the initial setting time.
- T_2 The cement shall be considered as finally set when, upon applying the needle gently to the surface of the test block, the needle makes an impression, thereon, while the attachment fails to do so. The period elapsing between the time when water is added to the cement and the time when cement is finally set as indicated above, shall be the final setting time.

SOUNDNESS OF CEMENT by LE-CHATELIER METHOD

Ref.:- QAH Vol. -2 (Page 149-50) & I.S. 4031(Part 3) -1988

Specimen No.	Wt. of cement W (g)	Distance Separating	g the Indicator Points (mm)
		Before Submergence	After Submergence

Permissible value – 10mm

The difference between two measurements gives the expansion of cement

Tests for Cement Concrete Pavement

SLUMP TEST OF CEMENT CONCRETE

Test No 1

Package No: Name of Road:-Items of Work: Chain age:

Date of Casting

Ref.:- IS:1199

Test 800.19 of QAH Vol. -II (Page 158)

					• · • · · · · · · · · · · · · · · · · ·	- 9 1
S No	Items of work	Date of Testing	Height of slump vessel (mm) (H1)	Vertical height of settlement of concrete (mm) (H2)	Slump (H1 –	H2) mm
			300			
1			300			
2			300			
3			300			
4			300			

Note : Permissible Limit of slump is 30 \pm mm (Ref.:- Clause 1501 A (8) of QAH Vol. -1 (Page 198)

Whether Confirms to the Prescribed Limits (Yes/No)					
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.					
Page No Date of issue					
Checked by: Tested by:					

(Date & Signature) Officer in charge

Tests for Cement Concrete Pavement COMPRESSIVE STRENGTH OF CEMENT CONCRETE CUBES

Test No -1

Package No :			
Name of Road :-			
Items of Work:			
Chain age :			

Date of Casting

Ref.:- IS:516

Test 800.26 of QAH Vol. -II (Page 164 - 165)

Officer in charge

					QAH VolII (Page 164 - 165)	
Cube No	Items of work	Date of Testing	Area of Cubes mould 150x150mm (A mm ²)	Max. Applied load just before failure W (Newton)	Compressive Strength in Newton mm ² (S = W/A)	
					7 days	28 days
1						
2						
3						
4						
5						
6						
7						
8						
9						
Average strength of concrete at 7days & 28 days						
Compressive strength in N/mm2						
Note: Permissible Limit: at 7days = 70 % & at 28 days = 100 % of grade of concrete						

Whether Confirms to the Prescribed Limits (Yes/No)					
If Results don't conform to the prescribed Limits, non conformance Report will be issued by the PIU. The reference of the page No. of this Register on which Non Conformance Reports copy preserved.					
Page No Date of issue					
Checked by:	Tested by:				
	(Date & Signature)				

Cement Concrete Core Test

Name of Road / Bridge

Package

Chainage / Item

Ref.:- IS 516: 1959

S. No.	Perticulars	
1.	Identification Mark	
2.	Concrete Grade	
3.	Date of Casting	
4.	Date of Testing	
5.	Height of Specimen	
6.	Diameter of Specimen	
7.	Cross Sectional Area of Specimen – mm ²	
8.	Weight of Specimen	
9.	Density of Specimen	
10.	Maximum Load - Newton	
11.	Compressive strength of core - Newton / mm ²	
12.	Correction factor	
	(f = 0.11n + 0.78)	
	n= Height to diameter ratio	
13.	Corresponding Cube strength	
	1.25 X Corrected Core Strength	
	Acceptability Criterion	28 days corrected core strength shall not be less than 100% of 28 days cube strength.