



**RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING &  
TECHNOLOGY(Autonomous): NANDYAL  
DEPARTMENT OF CIVIL ENGINEERING  
EDUCATIONAL SERVICES & CONSULTANCY ( TESTING & DESIGN)  
YEAR WISE**

YEAR	EDUCATIONAL SERVICES	CONSULTANCY	DESIGN	TOTAL
2017-18	21000	1173850	0	1194850
2018-19	9000	280500	0	289500
2019-20	45000	72200	0	117200
2020-21	9000	378580	0	387580
	Rupees Nineteen Lakhs Eighty Nine Thousand One Hundred Thirty			<b>1989130</b>

  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

  
**Dr. T. JAYACHANDRA PRASAD**  
M.E., Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
PRINCIPAL  
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(Autonomous)  
NANDYAL-518 501, Kurnool (Dt), A.P.

  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.

Ref. No: SPCPL/1391/2017-2018/L-013

Date: 09. 09. 2017

To,  
The HOD  
RGM College of Engineering and Technology.  
Nandyala - 518501

Project: NTR Nagar (PMAY) EWS G+3 Housing Scheme – Nandyal, AP-518501

Dear Sir,

**Subject: Mix Design for M30 Normal Mix.**

With reference to the above-mentioned subject, please conduct Mix Design for M30 SCC.

**Panyam Cement OPC 43**

1. 380 Kg's Cement Normal Mix.
2. 370 Kg's Cement Normal Mix.

**Material Description**

Sl. No.	Material	Suppliers Name	Source	Remarks
1	M- Sand	Ch.V.Vinayaka Reddy	Banaganapalle	
2	12.5mm	Ch.V.Vinayaka Reddy	Banaganapalle	

Yours truly,

**For SHAPOORJI PALLONJI & CO.PVT.LTD.**

*HSP*  
**Harendra Singh**

**AGM-Projects**



**SHAPOORJI PALLONJI AND COMPANY PRIVATE LIMITED**

**Registered Office:**  
 70, Nagindas Master Road,  
 Fort, Mumbai - 400023  
 (T) +91-22-22624530  
 (F) +91-22-22604528  
 www.shapoorji.in

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*[Signature]*  
**ENGINEERING & CONSTRUCTION**  
 School of Civil Engineering  
 Rajeev Gandhi Memorial College of  
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 NANDYAL-518 501.

Corporate Identification No (CIN): U45200MH1943PLC003812





## e) Grading Limits for 12.5mm Coarse aggregate IS 383-1970

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	16	100	100
2	12.5	90.0	85-100
3	10	35	0-40
4	4.75	2	0-5

## 3) Fine aggregate (M- Sand)

- Specific gravity: 2.78
- Water absorption: 1.25%
- Bulk Density in Compacted State = 1847 Kg/m<sup>3</sup>
- Sieve analysis fine aggregate

S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1.	4.75mm	100	90-100
2.	2.36mm	81	60-95
3.	1.18mm	50	30-70
4.	600μ	33	15-34
5.	300μ	18.5	5-20
6.	150μ	8.6	0-10

Remarks: Confirming to grading zone I of IS 383-1970

**DESIGN MIX M30**

## 1) Design stipulations

- Characteristic compressive Strength of concrete required in the field at 28 days  
Fck: 30N/mm<sup>2</sup>
- Maximum size of aggregate : 12.5mm
- Degree of workability : Medium
- Degree of quality control : Good
- Type of atmosphere exposure : Moderate

## 2) Target mean compressive strength

$$F_{ck}' = f_{ck} + t \times s$$

S = Standard deviation for good quality control as per IS 10262-2009 is 5.0  
t = 1.65, assuming 5% of results to be below Characteristic compressive Strength (as per IS 456-2000)

$$F_{ck}' = 30 + 1.65 \times 5.0 = 38.25 \text{ MPa}$$

*[Signature]*  
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3) Super Plasticizer :

Master Glenium SKY8630 =0.65%

4) Volume of Coarse aggregate and fine aggregate :

From Table No: 3 of IS10262-2009 for Zone-I Fine aggregate

Volume of coarse aggregate= 0.45

Volume of fine aggregate= 0.55

5) Suggested Mix Proportions for One Cum of Concrete

Mass of Cement in kg/m <sup>3</sup>	380
Mass of Water in kg/m <sup>3</sup>	152
Mass of M-Sand in kg/m <sup>3</sup>	1095.46
Mass of 12.5 mm Coarse Aggregate in kg/m <sup>3</sup>	899.51
Mass of Admixture in kg/m <sup>3</sup>	2.470
Water Cement Ratio	0.40

6) COMPRESSIVE STRENGTH

S.NO	28Days Compressive strength achieved N/mm <sup>2</sup> (ACT)	Compressive strength achieved N/mm <sup>2</sup> (NCT)	
		7Days	28Days
1	39.12	-	-

Remarks : 1) Good control indicates fresh cement from single source and regular tests, weigh batching of all materials, aggregates supplied in single sizes, control of aggregate, grading and moisture content, control of water added, frequent supervision, regular workability and strength tests and field laboratory facilities.

2) Corrections for water absorption of sand and coarse aggregate to be applied at the site.


3) The Mix proportions recommended above should be tried in the field using the proposed materials and finalized by observing the actual performances of the concrete mix. Suitable modifications may be necessary to suite the field conditions in the light of experience as well as for the particular materials used at the site in each case.

  
(Signature of Lab Official)

  
HSCE

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**SRI SRI VIGNESWARA CONSTRUCTIONS**  
SPECIAL CLASS CONTRACTOR

H. No. 25/27, Sanjeevanagar,  
NANDYAL - 518 501



Reg. No. : COT/AP/SP/31/2014 <sup>311</sup>

GSTIN. : 37ABAFS9645N1ZF

PAN No. : ABAFS9645N

08514 - 248399

Cell : 94402 90558, 9490197558  
7660955559

To

Date : 06-11-2017

The Principal,

RGM College of Engineering and Technology,

Nandyal.

Sir

Sub: Nandyal Municipality – Providing Water Supply, House Service Connections, Distribution network, Clear water, Pumping mains and pump sets, ELSR's, RG Filtration plant, Sump well, Watchman Quarters / Administrative Block and Pump house, under AMRUT Scheme – Request for testing Steel. - Regarding.

Sub work: 1. 1000KL ELSR & Watchman Quarters at RDO Office under AMRUT in Nandyal  
2. 1000KL ELSR & Watchman Quarters at Housing Board Colony under AMRUT in Nandyal

We Sri Sri Vigneswara Constructions, Nandyal here by submit the Steel samples for the above said work.

I hereby request you to give the Steel test results for the below said samples.

S No	Item Description	Sample Length (in Mtrs)
1	SUGNA TMT 8MM DIA	1
2	SUGNA TMT 10MM DIA	1
3	SUGNA TMT 12MM DIA	1
4	SUGNA TMT 16MM DIA	1
5	SUGNA TMT 20MM DIA	1
6	JSW NEO STEEL 25MM DIA	1
7	RAMA TMT 16MM DIA	1
8	TIRUMALA TMT 12MM DIA	1

Thanking you sir,

Yours Faithfully

For Sri Sri Vigneswara Constructions

*[Handwritten Signature]*  
Partner

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*[Handwritten Signature]*  
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*[Handwritten Signature]*





# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526

Web : www.rgmnandyal.com | E-mail: principalrgm@gmail.com | principal.9@intua.ac.in  
Dt: 8-11-2017

Test Report No: RGM CET/CED/Consultancy/A062/08-11-2017

To,

Sri Sri Vigneswara Constructions,  
Special Class Contractor,  
Nandyal.

Sub: Test report of Steel for the work - Nandyal Municipality – Providing Water supply, Home service connection, Distribution network, Clear water pumping mains and Pumpsets, ELSR's, RG filtration plant, Sump well, Watchman quarters / Administrative block and pump house under AMRUT scheme

Sub work:

1. 1000KL ELSR & Watchman Quarters at RDO Office under AMRUT in Nandyal.

2. 1000KL ELSR & Watchman Quarters at Housing Board Colony under AMRUT in Nandyal.

Ref: Your Lr.Dt:06/11/2017

Note: The result Corresponds to the sample received at our department only. The Representativeness of the samples is not the responsibility of lab.

SUGNA TMT							
S.NO	Description of Test	Acceptable limit as per IS1786	Diameter of Bar				
			8mm	10mm	12mm	16mm	20mm
1.	Weight Kg/m	Fe500	0.395	0.617	0.888	1.578	2.466
2.	0.2% proof stress/yield stress(N/mm <sup>2</sup> )	>500	504	644	563	520	518
3.	Ultimate Tensile stress(N/mm <sup>2</sup> )	>545	568	744	651	621	628
4.	Elongation %	> 12%	12.20	17.80	13.60	12.50	15.20
5.	Bend Test	No crack/fracture	Pass	Pass	Pass	Pass	Pass
6.	Re-Bend Test	No crack/fracture	Pass	Pass	Pass	Pass	Pass

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Offering B.Tech., M.Tech., M.B.A., M. Programs

Approved by AICTE, New Delhi

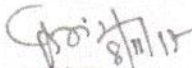
Accredited by NBA of AICTE (B.Tech. in CSE, IT, ECE, EEE, EIE & M)

World Bank Funded Institution

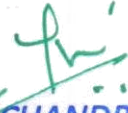
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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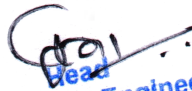
S.NO	Description of Test	Acceptable limit as per IS1786	Bar Dia		Acceptable limit as per IS1786	Diameter of Bar		
			25mm			16mm		12mm
1.	Weight Kg/m	Fe500D	3.853		Fe500	1.578		0.888
2.	0.2% proof stress/yield stress(N/mm <sup>2</sup> )	>500	561		>500	565		525
3.	Ultimate Tensile stress(N/mm <sup>2</sup> )	>565	655		>545	675		646
4.	Elongation %	> 16%	18		> 12%	16		12.2
5.	Bend Test	No crack/fracture	Pass		No crack/fracture	Pass		Pass
6.	Re-Bend Test	No crack/fracture	Pass		No crack/fracture	Pass		Pass

  
Lab In charge

  
HSCE

Head,  
School of Civil Engineering,  
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308

RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)  
NANDYAL-518501



(ESTD-1995)

CONSULTANCY CELL  
(BILL FOR THE SERVICES)

Ref No: RGM CET/CED/Consultancy/A062/08-11-2017

Date:08/11/2017

To  
Sri Sri Vigneswara Constructions,  
Special Class Contractor,  
Nandyal.

Client Ref. No:Your Lr. Dt. 06-11-2017

SNO	Name of the test	Item	Number of Samples	Rate, Rs	Amount
1	Weight/ m run	25mm, 20mm, 16 mm, 12 mm, 10 & 8 mm	8	250.00	2000.00
2	0.2 % Proof Stress		8	200.00	1600.00
3	Ultimate tensile stress		8	650.00	5200.00
4	Elongation		8	150.00	1200.00
5	Bend & Rebend test		8	550.00	4400.00
Total Rupees Fourteen Thosand Four Hundred only					14400.00

*[Signature]*  
HSCE

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*[Signature]*  
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*[Signature]*  
Head  
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NANDYAL-518 501.



# VASCON

UIS

REF:VAS/SPCL/ADONI/QC/006

21<sup>st</sup> Dec 2017

**FROM**

VASCON ENGINEERS LIMITED  
SRIKUMMPA CHECK POST  
EWS HOUSING, ADONI-518301.

**TO**

THE HOD,  
RAJEEV GANDHI MEMMORIAL COLLEGE OF ENGINEERING  
AND TECHNOLOGY,(AUTONOMOUS), NANDYAL,  
KURNOOL DIST, ANDHRAPRADESH-518501.

Dear Sir,

**Sub:-Design Mix M30 SCC Compaction Concrete.**

Ref:-Normal M30 Grade Design Mix

We are sending the following samples to your lab for Design Mix and testing purpose in ACC method:-

SR.NO	DESCRIPTIONS	QTY.	SUPPLIER NAME	SOURCE
1	BHARATHI CEMENT(OPC43 Grade)	3 Bags		
2	Fine Aggregates(M Sand)	5 Bags	Yaggati Mahadevappa	ADONI
3	Coarse Aggregates (20MM)	5 Bags	Sri Sugureswara Stone Crusher	ADONI
4	Coarse Aggregates (12.5 MM)	5 Basgs	Sri Sugureswara Stone Crusher	ADONI
5	GGBS	5 Bags	JSW	
6	Add Mixture (BASF Gelenium sky 8630)	5 Liters		

Kindly send the above materials test reports immediately.

Thanks & Regards

RAMKUMAR R  
DGM PROJECTS

*[Signature]*  
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NANDYAL-518 501.





# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526  
Web : www.rgitnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

Date: 23/12/2017

Test Report No: RGM CET/CEd/Consultancy/A084/23-12-2017

To,  
Vascon Engineers Limited,  
Siriguppa Check Post,  
EWS Housing, Adoni-518301

Sir,

Sub: Test report of Design Mix M30 Grade of concrete, along with testing of materials for the work APTIDCO-PMAY-EWS Housing, Adoni, Kurnool-518301

Ref: Lr.No. VAS/SPCL/ADONI/QD/006 Dt:21/12/2017

As per the reference cited above, the materials supplied by you are tested in S.M lab of this institution and the results are tabulated. The following result corresponds to the samples received at our S.M laboratory only. The representativeness of the samples is not the responsibility of lab. The test report is not valid for evidence in any court of law.

1) Cement used: Bharathi 43 Grade OPC

Sl.No	Description	Particulars of Test	Results	I.S Limits
1	Fineness	Dry sieving by IS.NO.9	2%	<10% (IS-4031 part 2)
2	Initial & Final setting time	Vicat's Apparatus	Intial: 190min. Final: 430min.	>30min. <600min.(IS-4031 Part-5)
3	Soundness	Le Chatelier	2mm	<10mm (IS-4031 Part-3)
4	Consistency	Vicat's Apparatus	28%	IS-4031 Part-4
5	Specific gravity	Lechatelier flask	3.018	IS-4031 Part-11

2) Coarse aggregate (source: sugureswara stone crusher, kondapuram)

- Specific gravity 20mm : 2.67
- Specific gravity 12.5mm : 2.64
- Water absorption(20mm):0.75%
- Water absorption(12.5mm):0.72%
- Bulk Density in Compacted State =1389Kg/m<sup>3</sup>

Received by  
G. Mahamud  
26/12/17

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f) Grading Limits for 20mm Coarse aggregate IS 383-1970

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	40	100	100
2	20	94.3	85-100
3	10	2.8	0-20
4	4.75	0.1	0-5

g) Grading Limits for 12.5mm Coarse aggregate IS 383-1970

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	16	100	100
2	12.5	87.2	85-100
3	10	31.4	0-40
4	4.75	1	0-5

3) Fine aggregate (M- Sand)

- a) Specific gravity:2.78
- b) Water absorption:5%
- c) Bulk Density in Compacted State =1792Kg/m<sup>3</sup>
- d) s/a = Volume ratio of Fine aggregate to total aggregates =0.38
- e) Sieve analysis fine aggregate


S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1.	4.75mm	99.8	90-100
2.	2.36mm	92.8	75-100
3.	1.18mm	56.6	55-90
4.	600μ	38.4	35-59
5.	300μ	26.2	8-30
6.	150μ	8.5	0-10

Remarks: Confirming to grading zone II of IS 383-1970

**DESIGN MIX M30**

1) Design stipulations

- Characteristic compressive Strength of concrete required in the field at 28 days  
F<sub>ck</sub>: 30N/mm<sup>2</sup>
- Maximum size of aggregate : 20mm
- Degree of workability : Medium
- Degree of quality control : Good
- Type of atmosphere exposure : Moderate

  
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2) Target mean compressive strength

$$F_{ck}' = f_{ck} + t \times s$$

S= Standard deviation for good quality control as per IS 10262-2009 is 5.0  
t=1.65, assuming 5% of results to be below Characteristic compressive Strength (as per IS 456-2000)

$$F_{ck}' = 30 + 1.65 \times 5.0 = 38.25 \text{ MPa}$$

3) Super Plasticizer :

Master Glenium SKY8630 = 0.65%

4) Suggested Mix Proportions for One Cum of Concrete

Mass of Cement in kg/m <sup>3</sup>	350
Mass of Water in kg/m <sup>3</sup>	144
Mass of M-Sand in kg/m <sup>3</sup>	742.52
Mass of 20 mm Coarse Aggregate in kg/m <sup>3</sup>	760.68
Mass of 12.5 mm Coarse Aggregate in kg/m <sup>3</sup>	501.42
Mass of Admixture in kg/m <sup>3</sup> (0.65%)	2.275
Water Cement Ratio	0.40

5) COMPRESSIVE STRENGTH

S.NO	28Days Compressive strength achieved N/mm <sup>2</sup> (ACT)	Compressive strength achieved N/mm <sup>2</sup> (NCT)	
		7Days	28Days
1	42.81	-	-


Remarks : 1) Good control indicates fresh cement from single source and regular tests, weigh batching of all materials, aggregates supplied in single sizes, control of aggregate, grading and moisture content, control of water added, frequent supervision, regular workability and strength tests and field laboratory facilities.

2) Corrections for water absorption of sand and coarse aggregate to be applied at the site.

3) The Mix proportions recommended above should be tried in the field using the proposed materials and finalized by observing the actual performances of the concrete mix. Suitable modifications may be necessary to suite the field conditions in the light of experience as well as for the particular materials used at the site in each case.

  
(Signature of Lab Official)

  
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NANDYAL-518 501.

338



# M/s. TARUN CONSTRUCTION COMPANY

## GOVT. CONTRACTORS & SUPPLIERS

PAN No. AAIFT5316J

GST No. 37AAIFT5316J1ZW

PF No. RJ/25009-151

Head Office : Near Bhagat Singh Chowk, Suratgarh - 335 804,  
Sri Ganga Nagar (Raj.)

Mobile: 9413377106, 8003492651, 8003492658

**TCC**

Ref. No.

Date : 19/04/18

To  
The Head of Civil Department  
R G M COLLEGE OF ENGINEERING & Technology.  
Nandyal, Kurnool (AP)

Sub:- construction material testing for 1X 18 MW CPP at JSW Energy Ltd.

Dear Sir,

Kindly arrange to conduct the tests as per the annexure 1 on the material samples submitted at your laboratory the necessary chargeable shall be paid. These material are to be used for the construction the 1 x 18 MW coal based CPP at JSW energy Ltd.  
Gadivelmalu,

*Yes*  
*19/4/18*

*Thanks*  
*19/04/18*  
*TCC Construction Co.*

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
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(Autonomous) Nandyal.  
NANDYAL-518 501, Kurnool (Dt), A.P.

*[Signature]*  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.







# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526

Web : www.rgmnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

Test Report No: RGM CET/CED/Consultancy/A071/24-04-2018

Date: 24/04/2018

To,  
M/s Tarun Constructions Company,  
Gadivemula,  
Kurnool.

Sir

Sub: Test report of Water for the work Construction of 1 x 18 MW coal based CPP at  
JSW Energy Ltd., Gadivemula.

Ref: Lr. Dt:19/4/2018

## WATER Sample Analysis Report

Particulars of Sample Analysed			
Client Name	M/s tarun construction Company	Date of Sampling	20-04-2018
Address	JSW Energy, Gadivemula	Date of Sample receipt in Lab	20-04-2018
Contract person		Date of Analysis	23-04-2018
Collection point	Bore well	Date of Report	24-04-2018
Sample description	Borewell	Sample Drawn by	Client

## Results of Analysis

S.NO	PARAMETER	RESULT	LIMITS AS PER IS 456-2000	Remarks
1	pH	7.5	Not less than 6.00	With in Limits
2	0.02N NaOH Required to Neutralize 100ml of water sample IS 3025-Part-22	0.5	Not more than 5ml	With in Limits
3	0.02N H <sub>2</sub> SO <sub>4</sub> Required to Neutralize 100ml of water sample IS 3025-Part-23	31.5	Not more than 25ml	Not with in Limits
4	Total Organic Solids IS 3025-Part-18	196	Less than 200mg/l	With in Limits
5	Total Inorganic Solids IS 3025-Part-18	280	Less than 3000 mg/l	With in Limits
6	Chlorides as Cl IS 3025-Part 32	99.96	Less than 500 mg/l	With in Limits
7	Suspended Matter IS 3025-Part-17	92	Less than 2000 mg/l	With in Limits

**Conclusion:** Based on the sample supplied to the department and above 07 tests. Only 01 parameter is not with in limits.

Lab Incharge

School of Civil Engineering,  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

Dr. T. JAYACHANDRA PRASAD

PRINCIPAL

RGM College of Engg. & Tech. (Autonomous)

NANDYAL-518 501, Kurnool (Dt), A.P.



Seive Analysis  
20mm

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	40	100	100
2	20	85.2	85-100
3	10	14.8	0-20
4	4.75	0	0-5

12.5mm

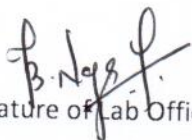
S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	16	100	100
2	12.5	90.0	85-100
3	10	35	0-40
4	4.75	2	0-5

### Fine Aggregate

1. Bulkage : 22%
2. Bulk Density : 1513 Kg/m<sup>3</sup>
3. Water absorption : 1.15%
4. Silt & Clay Content : 2.5%
5. Sieve analysis fine aggregate


S.No	IS. Sieve size	%passing	Limits as per IS383-1970	
1.	4.75mm	98	90-100	ZONE-II
2.	2.36mm	89.2	75-100	
3.	1.18mm	68.5	55-90	
4.	600μ	56.3	35-59	
5.	300μ	21.2	8-30	
6.	150μ	3.5	0-10	

Note: Latest Values may be seen by referring the latest IS a code as amended.

  
Signature of Lab Official

  
HSGE,  
School of Civil Engineering,  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

  
**Dr. T. JAYACHANDRA PRASAD**  
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Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.

From  
Sri.A.Ranga Prasada Rao,  
Deputy Executive Engineer,  
RWS&S Sub Division(P),  
Nandyal.

To  
The Principal,  
RGM College of Engineering and Technology,  
Nandyal.

Lr .No. JTO/SVS to Mitnala/2017-18 dated 15.03.2018

Sir,

Sub:- RWS&S Sub Division(P), Nandyal-Providing drinking water supply to Mitnala(V)  
of Nandyal mandal- Safe Bearing Capacity of the soil to 40KL OHSR @  
Mitnala(V) of Nandyal Mandal- Requested - Regarding.

I here with submit that the work "Providing drinking water supply to Mitnala(V) of  
Nandyal mandal in Kurnool district was administratively sanctioned under NRDWP(Scp) grant.  
The earthwork for construction of 40 KL OHSR @ Mitnala was completed. Hence, I request you  
to kindly send the team for taking soils and testing of safe bearing capacity of the soils at an  
early date so as to proceed for further execution of work.

Yours faithfully,

*Handwritten signature and date: 15/3/18*  
Deputy Executive Engineer,  
RWS&S(P) Sub Division,  
Nandyal.

*Handwritten note: Yes 16/3/18*

*Handwritten signature: Dr. T. Jayachandra Prasad*  
**Dr. T. JAYACHANDRA PRASAD**  
M.E,Ph.D.,FIE,FIETE,MNAFEN,MISTE,MIEEE  
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*Handwritten signature: School of Civil Engineering*  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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286

## TEST REPORT ON SOIL

Lr No:RGM CET/CED/A057/2018

Date: 20/3/2018

Name of the Client Deputy Executive Engineer,  
RWS&S Sub Division (P)  
Nandyal

Client Reference JTO/SVS to Mitnala/2017-18 dt 15-03-2018

Name of the Work : Providing Drinking water supply to Mitnala (v) of Nandyal Mandal.

% Gravel	% Sand	% Fines (Silt & Clay)	Soil Classification	Liquid Limit (%)	Plasticity Index (%)	Natural Water Content, %	Field Dry Density, KN/m <sup>3</sup>	Cohesion, c in KN/m <sup>2</sup>	Angle of Friction, φ in degrees	SBC in KN/m <sup>2</sup> (Depth of Foundation, 2 m)
2.0	16.0	82.0	Clayey of High Compressibility (CH)	61.0	30.0	22.0	16.00	90.0	0.0	150.0

- Note: 1. The test results furnished by the laboratory is valid for the samples tested only.  
The representativeness of the sample is not the responsibility of the department.  
2. The test report is not valid for evidence in any court of law.

*C. / R*  
20/3/18  
(Signature of Lab Official)

*HSCE*  
20/3/18  
HSCE

Received  
20/3/18

**Dr. T. JAYACHANDRA PRASAD**

M.E, P.D, FIE, FIETE, MNAFEN, MISTE, MIEEE

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R G M College of Engg. & Tech. (Autonomous)

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World Bank Funded

# AGA INFRA PROJECTS

120

Date: 10.09.2018

To  
The Head,  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg & Tech (Autonomous)  
Nandyal - 518 501

**Respected Sir,**

**Sub:** Request for Concrete Mix Designs

With reference to the above subject, please arrange to provide the following concrete mix designs for our WHR Project (7MW) - SJCPL, Yanakandla.

- M-25 (80% robo sand + 20% river sand) - PSC Cement
- M-30 (80% robo sand + 20% river sand) - PSC Cement

We request you to kindly provide the above details as early as possible.

Yours Faithfully,

**For AGA Infra Projects**



yes  
10/9/18

**Dr. T. JAYACHANDRA PRASAD**

M.E, Ph.D, FIE, FIETE, MNAFEN, MISTE, MIEEE

**PRINCIPAL**

**R G M College of Engg. & Tech.,**

(Autonomous)

**NANDYAL-518 501, Kurnool (Dt), A.P.**





# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

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119

Date: 16/10/2018

Test Report No: RGM CET/CED/Consultancy/A121/16-10-2018

To,  
AGA INFRA PROJECTS,  
Somajiguda,  
Hyderabad.

Sir,

Sub: Test report of Design Mix M30 Grade of concrete, along with testing of materials for the work WHR Projects (7MW)-SJCPL, Yanakandla

As per the reference cited above, the materials supplied by you are tested in S.M lab of this institution and the results are tabulated. The following result corresponds to the samples received at our S.M laboratory only. The representativeness of the samples is not the responsibility of lab. The test report is not valid for evidence in any court of law.

1) Cement used: Maha-PSC

Sl.No	Description	Particulars of Test	Results	I.S Limits
1	Fineness	Dry sieving by IS.NO.9	2%	<10% (IS-4031 part 2)
2	Initial & Final setting time	Vicat's Apparatus	Initial: 190min. Final: 430min.	>30min. <600min.(IS-4031 Part-5)
3	Soundness	Le Chatelier	2mm	<10mm (IS-4031 Part-3)
4	Consistency	Vicat's Apparatus	33%	IS-4031 Part-4
5	Specific gravity	Lechatelier flask	3.10	IS-4031 Part-11

2) Coarse aggregate

- Specific gravity 20 mm : 2.72
- Specific gravity 12.5mm : 2.71
- Water absorption(20mm):0.50%
- Water absorption(12.5mm):0.50%
- Bulk Density in loosely State =1204g/m<sup>3</sup>
- Bulk Density in Compacted State =1389Kg/m<sup>3</sup>
- Volume ratio of Coarse aggregate to total aggregates =0.63

*Principal*  
*to*

*B. Nagaraj*

Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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World Bank Funded Institution., Recognized by JNTU Kaushal Kendra.

**Dr. T. JAYACHANDRA PRASAD**  
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*Head*  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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NANDYAL-518 501.



118

Grading Limits for 20mm Coarse aggregate IS 383-1970

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	40	100	100
2	20	94.3	85-100
3	10	2.8	0-20
4	4.75	0.1	0-5

Grading Limits for 12.5mm Coarse aggregate IS 383-1970

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	16	100	100
2	12.5	87.2	85-100
3	10	31.4	0-40
4	4.75	1	0-5

3) Fine aggregate (M- Sand)

- a) Specific gravity:2.88
- b) Water absorption:3.5%
- c) Bulk Density in loosely State =1565Kg/m<sup>3</sup>
- d) Bulk Density in compacted State =1792Kg/m<sup>3</sup>
- e) Volume ratio of fine aggregate to total aggregates =0.37
- f) Sieve analysis fine aggregate

S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1.	4.75mm	100	100
2.	2.36mm	100	90-100
3.	1.18mm	93	75-100
4.	600μ	40	35-59
5.	300μ	12	8-30
6.	150μ	2.0	0-10

Remarks: Confirming to grading zone II of IS 383-1970

**DESIGN MIX M30**

1) Design stipulations

- Characteristic compressive Strength of concrete required in the field at 28 days  
Fck: 30N/mm<sup>2</sup>
- Maximum size of aggregate : 20mm
- Degree of workability : Medium
- Degree of quality control : Good
- Type of atmosphere exposure : Moderate

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
 M.E., Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
**PRINCIPAL**  
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 (Autonomous)  
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*[Signature]*  
**School of Civil Engineering**  
**Rajeev Gandhi Memorial College of**  
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2. Target mean compressive strength

$$F_{ck}' = f_{ck} + t \times s$$

S= Standard deviation for good quality control as per IS 10262-2009 is 5.0

t = 1.65, assuming 5% of results to be below Characteristic compressive Strength (as per IS 456-2000)

$$F_{ck}' = 30 + 1.65 \times 5.0 = 38.25 \text{ MPa}$$

2) Suggested Mix Proportions for One Cum of Concrete

Mass of Cement in kg/m <sup>3</sup>	423
Mass of Estimated water for 20mm C.A kg/m <sup>3</sup>	186
Mass of Provided Water in kg/m <sup>3</sup>	208
Mass of M-Sand in kg/m <sup>3</sup>	523
Mass of River Sand in kg/m <sup>3</sup>	125
Mass of 20mm Coarse Aggregate in kg/m <sup>3</sup>	717
Mass of 12.5 mm Coarse Aggregate in kg/m <sup>3</sup>	475
Water Cement Ratio	0.44

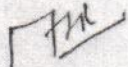
3) COMPRESSIVE STRENGTH

S.NO	28Days Compressive strength achieved N/mm <sup>2</sup> (ACT)	Compressive strength achieved N/mm <sup>2</sup> (NCT)	
		7Days	28Days
1	40.82	-	-

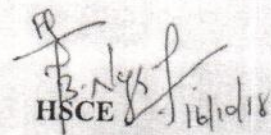
Remarks : 1) Good control indicates fresh cement from single source and regular tests, weigh batching of all materials, aggregates supplied in single sizes, control of aggregate, grading and moisture content, control of water added, frequent supervision, regular workability and strength tests and field laboratory facilities.

2) Corrections for water absorption of sand and coarse aggregate to be applied at the site.

3) The Mix proportions recommended above should be tried in the field using the proposed materials and finalized by observing the actual performances of the concrete mix. Suitable modifications may be necessary to suite the field conditions in the light of experience as well as for the particular materials used at the site in each case.



(Signature of Lab Official)



Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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MANDYAL-518 501.

**Dr. T. JAYACHANDRA PRASAD**  
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**Head**  
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Rajeev Gandhi Memorial College of  
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MANDYAL-518 501.



110

P. Naresh Kumar B.Arch., (Architect)

Registered No:CA/2017/88173

Cell : 9951126114, 8143011122

## PARTI SAPPHIRE

*Architect, Interior and landscape Designer*

Date: 26/09/2018,  
Nandyal.

To  
Dr.G.Sreenivasulu,  
Head of the Civil Engineering Department,  
RGM CET,  
NANDYAL.

Respected sir


SUBJECT: Requesting for the soil test


I m PATTI NARESH KUMAR an ARCHITECT. This letter is to mention the requirements of soil test at site near to Sanjeev Nagar in Nandyal . i need the test of soil barring capacity of the soil as per your requirement i am sending the soil . So please let me know the report as soon as possible

thanking you,

CHEIF ARCHITECT,  
AR.NARESH KUMAR.

9951126114.

  
**Dr. T. JAYACHANDRA PRASAD**  
M.E,Ph.D.,FIE,FIETE,MNAFEN,MISTE,MIEEE  
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109

## TEST REPORT ON SOIL

Lr No:RGMCE/CE/D/A0119/2018

Date: 1/10/2018

Name of the Client P Naresh Kumar Architect  
Nandyal

Client Reference Lr Dt 26/09/2018

Name of the Work Multi storied Building In Sanjeeva Nagar, Nandyal.

% Gravel	% Sand	% Fines (Silt & Clay)	Soil Classification	Liquid Limit (%)	Plasticity Index (%)	Natural Water Content, %	Field Dry Density, KN/m <sup>3</sup>	Cohesion, c in KN/m <sup>2</sup>	Angle of Friction, φ in degrees	SBC in KN/m <sup>2</sup> (Depth of Foundation, 4 m)
1.2	11.4	87.4	Clay of High Compressibility (CH)	56.0	33.0	20.0	17.00	70.0	5.0	140.0

- Note
- The test results furnished by the laboratory is valid for the samples tested only  
The representativeness of the sample is not the responsibility of the department
  - The test report is not valid for evidence in any court of law

*C/K* 1/10/18  
(Signature of Lab Official)

*[Signature]*  
HSCE

School of Civil Engineering,  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

Received  
T. Jayachandra Prasad  
9957126114

**Dr. T. JAYACHANDRA PRASAD**

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*[Signature]*  
Dean  
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Rajeev Gandhi Memorial College of  
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142

No: Engg/SSE/W/NDL/2087

Dt: 26-12-2018

To

The Head,

School of Civil Engineering,

RGM College of Engg and Technology,

Nandyal.

Sub: SBC report of soil sample -reg

Ref: Name of work: Augmentation of Running room at Nandyal

LOA No: GNT/W.496/Tender No. 2087,dt. 10/11/2018: Agency: M/s Sai Chandana Constructions

In connection with the above work under reference, safe bearing capacity of the soil is required for construction of Running room at Nandyal.

Hence it is requested please arrange to issue SBC of the enclosed soil for taking further action from this end. Necessary fees will be remitted by the Agency.

Encl: Soil sample

*Ch. Ramesh*  
SSE/W/NDL

*26/12/18*

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
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*[Signature]*  
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## TEST REPORT ON SOIL

Lr No:RGM CET/CED/GT/A001/7-1-2019

Date: 7/1/2019


Name of the Client SSE Works  
 SCR  
 Nandyal

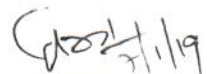
Client Reference Engg/SSE/W/NDL/2087 Dt:26-12-2018

Name of the Work Augmentation of Running Room At Nandyal  
 LOA No GNT/W.496/Tender No.2087, dt.10/11/2018  
 Agency M/S. Sai Chandana Constructions

% Gravel	% Sand	% Fines (Silt & Clay)	Soil Classification	Liquid Limit (%)	Plasticity Index (%)	Natural Water Content, %	Field Dry Density, KN/m <sup>3</sup>	Cohesion, c in KN/m <sup>2</sup>	Angle of Friction, φ in degrees	SBC in KN/m <sup>2</sup> (Depth of Foundation, 3.25 m)
11.3	15.0	73.7	CLAY of High Compressibility (CH)	77.0	42.0	24.0	16.00	50.0	10.0	140.0

Note: 1. The test results furnished by the laboratory is valid for the samples tested only.  
 The representativeness of the sample is not the responsibility of the department.

  
 (Signature of Lab Official)

  
 HSCE

**Dr. T. JAYACHANDRA PRASAD**

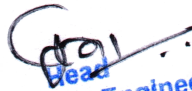
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134

# Santhiram Medical College & General Hospital

NH-18, Nandyal - 518501, Kurnool Dt., A.P.

Phone : 08514-222480, 222012, 222206 (O), Fax : 08514-222818. Email : smc@rgitnandyal.com

Date: 25-11-2018

To  
Head of the Department,  
School of Civil Engineering,  
RGM College of Engineering & Technology,  
Nandyal , Kurnool (dt).

Dear Sir,

Sub: Testing of water from Effluent treatment plant in SRMC, Nandyal.

With respect to above subject I request you to test the water of Effluent treatment plant in Santhiram Medical College, Nandyal every 15 days in your Department laboratory and send us the reports,

Regards

**Dr. T. JAYACHANDRA PRASAD**  
M.E., Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE,  
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R G M College of Engg. & Tech.,  
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NANDYAL-518 501, Kurnool (Dt), A.P.

Sponsored by : Shafa Educational Society, Regd. No. 35/2013, Nandyal - 518501, Kurnool Dt., A.P.

**Dr. T. Jayachandra Prasad**  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.





## School of Civil Engineering

Rajeev Gandhi Memorial College of Engineering & Technology  
(Autonomous), Nandyal-518501.



133

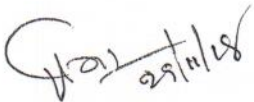
### ENVIRONMENTAL ENGINEERING LABOURATORY

#### WATER & WASTE WATER Sample Analysis Report


Particulars of Sample Analysed			
Client Name	Santhiram Medical College	Date of Sampling	24.11.2018
Address	NANDYAL	Date of Sample receipt in Lab	24.11.2018
Contract person	Er. M. Ramesh	Date of Analysis	26.11.2018
Collection point	Santhiram Medical college	Date of Report	29.11.2018
Sample description	Treated Water from Sewage Treatment Plant(STP)	Sample Drawn by	Client

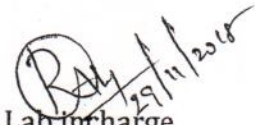
#### Results of Analysis


S.No	Characteristics (Parameter)	Unit	Analysis Result	DRINKING WATER-SPECIFICATION	
				BIS 2012	IS 10500:2012
				Acceptable Limit	Permissible Limit(in the Absence of Alternate Source)
1	pH	-----	7.86	6.5 to 8.5	No relaxation
2	Total Dissolved Solids	mg/l	846.3	500	2000
3	BOD	mg/l	5.8	30	-----
4	COD	mg/l	19.6	250	-----
5	Total Suspended Solids	mg/l	200	100	-----

  
Authorised Signatory  
Professor & Head of the Department  
Dr.G.Sreenivasulu

Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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NANDYAL-518 501.

  
**Dr. T. JAYACHANDRA PRASAD**  
M.E,Ph.D.,FIE,FIETE,MNAFEN,MISTE,MIEEE  
PRINCIPAL  
R G M College of Engg. & Tech.,  
(Autonomous)  
NANDYAL-518 501, Kurnool (Dt), A.P.

  
Lab Incharge  
Assistant Professor  
Sri.C.Ramanjaneyulu

  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.

39

**Government of Andhra Pradesh  
Public Health and Municipal Engineering Department**

From  
G.Victor Babu B.tech,  
Asst Executive Engineer,  
Public Health,  
Nandyal.

To  
The Head of the Department,  
Civil Department,  
RGM CET,  
Nandyal.

Letter No. <sup>M</sup> /NDL Mty / SCSP Grant/Dated 29.08.2019

Sir,

Sub:- Nandyal Municipality –Providing Water Supply facility including Constuction of @Nos ELSRS and laying of connecting mains in SC Locality inNandyal Municipality Under SCSp Grant -Proposal submitted for conduct a tests on coarse aggregates and Fine aggregates used for RCC M30 concrete works– Requested - Regarding.  
Ref:- Superintending Engineer(PH),ATP Agt.No.12/2017-18 Dated:30.10.2017

###

I am to inform that the above works are entrusted to M/s Sri Sri Vigneswara Constructions,, Nandyal.

In this connection I request you to kindly conduct the following tests for coarse aggregates and fine aggregates.

Test to be conducted on Coarse Aggregates:-

- Specific gravity, Sieve Analysis, Bulk Density, Flakiness Index, Elongation Index, Water Absorption & Moisture content, Impact test, Crushing Strength and soundness of aggregates.

Test to be conducted on Fine Aggregates:-

- Specific gravity, Sieve Analysis and Zoning, Bulking of fine aggregates, Bulk density and Silt content.

Hence I request you kindly conducted the tests and Necessary testing charges for testing of samples will be remitted after hearing from your side.

Yours faithfully

*G.V. Babu*  
29/08/2019  
Asst Executive Engineer,  
Public Health, Nandyal.

yes  
29/08/2019

*Dr. T. Jayachandra Prasad*  
**Dr. T. JAYACHANDRA PRASAD**  
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*Dr. T. Jayachandra Prasad*  
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NANDYAL-518 501.**





**RGM COLLEGE OF ENGINEERING AND TECHNOLOGY**  
(AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526

Web : www.rgmnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

38

Date:09-09-2019

Test Report No: RGM CET/CED/Consultancy/CA/A047/09-09-2019

TO  
G.Victor Babu, B.Tech.,  
Asst.Excutive Engineer,  
Public Health,  
Nandyal.

Sir,

Sub: Test report of Coarse and Fine Aggreagtes for the work Nandyal Municipality- Providing Water Supply Facility Including Construction of ELSRS and Laying Connecting mains in SC Locality of Nandyal Municipality Under SCSP Grant. Ref: Superintending Engineer(PH), ATP Agt.No.12/2017-18 dated 30-10-2017

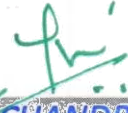
Client Ref: Lr.No.M/NDL Mty/SCSP Grant/Dt:29-08-2019

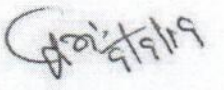
**Material Testing report**  
**Coarse & Fine Aggregate**

As per the reference cited above, the materials supplied by you are tested in S.M lab of this institution and the results are tabulated. The following result corresponds to the samples received at our S.M laboratory only. The representativeness of the samples is not the responsibility of lab. The test report is not valid for evidence in any court of law.

**1. Coarse Aggregate**

S.No.	Description of Test	Acceptable Limits As per IS 383, IS2386.	
		Limit	Test Result
1	Flakiness Index	25% Max	12.42%
2	Elongation Index	25% Max	5.35%
3	Impact Value	45% Max	12.72%
4	Crushing Value	45% Max	10.37%
5	Water Absorption	-	0.61%

  
**Dr. T. JAYACHANDRA PRASAD**  
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**School of Civil Engineering**  
**Rajeev Gandhi Memorial College of**  
**Engg. & Tech. (Autonomous)**  
**NANDYAL-518 501.**



6	Specific gravity	-	2.81
7	Bulk density	-	
	Loose		1511 kg/m <sup>3</sup>
	Compacted		1601 kg/m <sup>3</sup>

2) Sieve Analysis for 20mm Coarse Aggregate

S.No	IS. Sieve(mm)	%passing	Limits for singly sized aggregate
1	40	100	100
2	20	88.93	85-100
3	10	0	0-20
4	4.75	0	0-5

3) Fine Aggregate

S.No.	Description of Test	Acceptable Limits As per IS 383, IS2386.	
		Limit	Test Result
1	Specific Gravity	-	2.64%
2	Bulk Density		
	Loose	-	1488 kg/m <sup>3</sup>
	Compacted		1602 kg/m <sup>3</sup>
3	Bulking	-	22.72%
4	Silt Content	-	0.22%

*Handwritten signature*  
9/9/19

*Handwritten signature*  
**Dr. T. JAYACHANDRA PRASAD**  
M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
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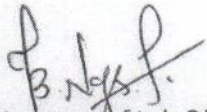
*Handwritten signature*  
**School of Civil Engineering**  
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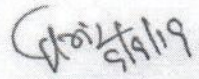


4) Sieve analysis Fine Aggregate

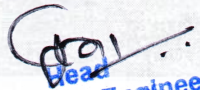
S.No	IS. Sieve size	%passing	Limits as per IS383-1970	
1.	4.75mm	98.5	90-100	ZONE-II
2.	2.36mm	95.6	75-100	
3.	1.18mm	77.1	55-90	
4.	600 $\mu$	46.0	35-59	
5.	300 $\mu$	14.1	8-30	
6.	150 $\mu$	1.45	0-10	

Note: Latest Values may be seen by referring the latest IS a code as amended

  
(Signature of Lab Official)

  
HSCE  
Head,  
School of Civil Engineering,  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

  
**Dr. T. JAYACHANDRA PRASAD**  
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Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.





+91 9885666314

# VEDA INFRA PROJECTS

Head Office : # 6-314, Azad Nagar, Kalyandurg Road, ANANTAPUR. A.P. 515001  
Branch Office: # 107, First Floor, Ramsai Enclave, TTD Road, NANDYALA - 518 501.

Date:03-02-2020

To,  
The Principal,  
RGM College,  
Nandyal.

Sir,

**Sub: Request for Test Report of Design Mix M 20 grade for the work "Construction of Housing project" at Venkateswarapuram.**

It is to inform that, we M/s. **SUSHANTH CONSTRUCTIONS / VEDAINFRA PROJECTS**, Nandyal has been doing Housing project at Venkateswarapuram, Nandyal (M).

The required sample quantity of metal and Cement (Zuari Grade PPC), Robosand, River sand, collected and Submitted

I request you kindly to furnish Design mix M 20 grade (Robosand and River sand mixing ratio 50:50) of Concrete at the earliest.

Regards,

**VEDA INFRA PROJECTS**  
# 107, First Floor, Ramsai Enclave,  
Beside Bhimas Hotel, TTD Road,  
Srinivasa Nagar, NANDYAL-518501

[www.vedainfra.com](http://www.vedainfra.com)

Veda Infra Projects Veda Infra Projects

**Dr. T. JAYACHANDRA PRASAD**  
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**School of Civil Engineering**  
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NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526

Web : www.rgitnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

110

Dt.11/02/2020

Test Report No: RGM CET/CED/Consultancy/CC/A015/11-02-2020

To,  
M/s Sushanth Constructions/Veda Infra Projects  
Nandyal.  
Sir,

Sub: Test report of Design Mix M30 Grade of concrete, along with testing of materials for the work "Housing Project Near Venkateswarapuram, Nandyal".

As per the reference cited above, the materials supplied by you are tested in S.M lab of this institution and the results are tabulated. The following result corresponds to the samples received at our S.M laboratory only. The representativeness of the samples is not the responsibility of lab. The test report is not valid for evidence in any court of law.

1) Cement :Zuari, PPC

Sl.No	Description	Particulars of Test	Results	I.S Limits
1	Fineness	Dry sieving by IS.NO.9	2%	<10% (IS-4031 part 2)
2	Initial setting time	Vicat's Apparatus	Initial: 106min.	>30min. (IS-4031 Part-5)
3	Soundness	Le Chatelier	2mm	<10mm (IS-4031 Part-3)
4	Consistency	Vicat's Apparatus	32%	IS-4031 Part-4
5	Specific gravity	Lechatelier flask	2.86	IS-4031 Part-11

2) Coarse aggregate

a) Specific gravity 20mm :2.78

b) Sieve analysis Coarse aggregate Grading Limits for Coarse aggregate IS 383-1970

S.No	IS Sieve(mm)	%passing	Limits for singly sized aggregate
1	40	100	100
2	20	83.6	85-100
3	10	2.8	0-20
4	4.75	0.1	0-5

10/2

Offering B.Tech., M.Tech., M.B.A., M.C.A. and Ph.D. Programs.  
Approved by AICTE, New Delhi; Affiliated to JNTUA, Ananthapuramu.  
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World Bank Funded Institution., Recognized by UGC DDU Kaushal Kendra.

**Dr. T. JAYACHANDRA PRASAD**  
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Rajeev Gandhi Memorial College of  
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NANDYAL-518 501.



3) Fine aggregate

i) Sand

a) Specific gravity: 2.65

b) Sieve analysis fine aggregate

S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1.	4.75mm	100.00	90-100
2.	2.36mm	81.80	75-100
3.	1.18mm	40.40	55-90
4.	600μ	24.00	35-59
5.	300μ	14.20	8-30
6.	150μ	7.40	0-10

Remarks: Confirming to grading zone II of IS 383-1970

ii) Manufactured Sand ( RoboSand)

a) Specific gravity: 2.76

b) Sieve analysis fine aggregate

S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1.	4.75mm	96.40	90-100
2.	2.36mm	90.00	75-100
3.	1.18mm	61.00	55-90
4.	600μ	26.60	35-59
5.	300μ	5.40	8-30
6.	150μ	0.80	0-10

Remarks: Confirming to grading zone II of IS 383-1970

DESIGN MIX M20 AS PER IS: 10262-2009

1) Design stipulations

- Characteristic compressive Strength of concrete required in the field at 28 days

$f_{ck}$ : 20 N/mm<sup>2</sup>

- Maximum size of aggregate

: 20mm

- Degree of workability

: Medium

- Degree of quality control

: Good

2) Target mean compressive strength

$$f_{ck}' = f_{ck} + t \times s$$

S= Standard deviation for good quality control as per IS 10262-2009 is 4.0

t=1.65, assuming 5% of results to be below Characteristic compressive Strength (as per IS 456-2000)

$$f_{ck}' = 20 + 1.65 \times 4.0 = 26.6 \text{ MPa}$$

*Handwritten signature*

*Handwritten signature*  
**Dr. T. JAYACHANDRA PRASAD**  
 M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
**PRINCIPAL**  
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*Handwritten signature*  
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**Rajeev Gandhi Memorial College of**  
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3) Water /Cement ratio:

W/C ratio is fixed as 0.5 According to IS456-2000 Table.No: 5

- 4) Volume of Coarse aggregate =0.60
- 5) Volume of Fine aggregate = 0.40
- 6) Suggested Design Mix Proportions

Mass of Cement in kg/m <sup>3</sup>	372
Mass of the Sand	363
Mass of Robo Sand in kg/m <sup>3</sup>	377
Mass of Coarse Aggregate in kg/m <sup>3</sup>	1144
Mass of Water in kg/m <sup>3</sup>	186 to 195
Water-Cement ratio	0.5

7) COMPRESSIVE STRENGTH

S.NO	Compressive strength achieved N/mm <sup>2</sup>		
	3 Days	7 Days	28 Days
1	11.26	-	-

Remarks : 1) Good control indicates fresh cement from single source and regular tests, weigh batching of all materials, aggregates supplied in single sizes, control of aggregate, grading and moisture content, control of water added, frequent supervision, regular workability and strength tests and field laboratory facilities.

2) Corrections for water absorption of sand and coarse aggregate to be applied at the site.

3) The Mix proportions recommended above should be tried in the field using the proposed materials and finalized by observing the actual performances of the concrete mix. Suitable modifications may be necessary to suite the field conditions in the light of experience as well as for the particular materials used at the site in each case.

*C. N. Sankar*  
Lab in charge

*[Signature]*  
Head HSCE  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
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*[Signature]*  
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118



# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

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Web : www.rgitnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

## TEST REPORT ON SOIL

Lr No:RGM CET/Consultancy/CED/GT/A018/2020

Date: 12/6/2020

Name of the Client: Sri.K.Subbarayudu  
Deputy Executive Engineer  
R&B Sub-Division  
Nandyal

Client Reference: Lr.No.86/ C.M. Road / Soil Testing / DEE / R&B / NDL / 2020-21 Dt08-06-2020

Name of the Work: "Widening and Strengthening of Chagallamarri - Mahadevapuram Road from Km 24/870 to 55/290 in Kurnool District."

Description of Sample	% Gravel	% Sand	% Fines (Silt & Clay)	Soil Classification	Liquid Limit (%)	Plasticity Index (%)	Natural Water Content, %	Field Dry Density, KN/m <sup>3</sup>	Cohesion, c in KN/m <sup>2</sup>	Angle of Friction, $\phi$ in degrees	SBC in KN/m <sup>2</sup> (Depth of foundation, 1.5 m)
Stone type below 1m to 2.30m from km44/2	22.4	28.1	49.5	Clayey SAND - GRAVEL Mixture (SC)	26.0	11.0	10.0	16.50	10.0	20.0	140.0
Red Soil mix with pebbles below 1m From km42/2-8	1.4	30.6	68.0	Sandy CLAY of Medium Compressibility (CI)	36.0	19.0	13.0	15.50	35.0	6.0	105.0

Note: 1. The test results furnished by the laboratory is valid for the samples tested only. The representativeness of the sample is not the responsibility of the department.

*(Signature)*  
12/6/20  
(Signature of Lab Official)

*(Signature)*  
12/6/20  
HSCE  
read,

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World Bank Funded Institution. Recognized by UGC for award of Ph.D. Degree.

**Dr. T. JAYACHANDRA PRASAD**  
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*(Signature)*  
12/6/20  
School of Civil Engineering  
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NANDYAL-518 501.





# M/s. TARUN CONSTRUCTION COMPANY

GOVT. CONTRACTORS & SUPPLIERS

17

PAN No. AAIFT5316J

GST No. 37AAIFT5316J1ZW

PF No. RJ/25009-151

Head Office : Near Bhagat Singh Chowk, Suratgarh - 335 804,  
Sri Ganga Nagar (Raj.)

Mobile: 9413377106, 8003492651, 8003492658

TCC

Ref. No.

Date : 22/07/19

To,  
The H.O.D  
R.G.M INSTITUTE & TECHNOLOGY  
Nandayal (A.P)

Sub: Civil & structural work for 1\*18MW CPP structures for JSW Energy ltd. At  
Nandyal.  
(Reg.-M-Sand & River Sand Sieve Analysis Report)

Ref :- Work Order no. NAND-ENGY/0017-18/5960000015.

Respected Sir,

This is with reference to the above mentioned subject We need Sieve Analysis  
Report for Submit to JSW ENERGY Nandayal for Ready-mix concrete .

Kindly Provide Test Report immediately to complete this project.

Thanking You

Regards

M/s Tarun Construction Company  
Sy.No: 27/18/0000000015  
Gadivemula (M. Kurnool), Andhra Pradesh - 515508

To, The HOD,  
Sir, Kindly visit  
the test report for  
this work,  
for JSW energy Ltd  
Dr. T. JAYACHANDRA PRASAD  
M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
PRINCIPAL  
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School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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NANDYAL-518 501.

Yes  
22/7/19





# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

Phone : 08514-275201, 275203, 275204. Fax : 08514-275123, 275526

Web : www.rgmnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

16

## TEST REPORT

Dt:25/07/2019

Test Report Ref No: RGM CET/CED/FA/A040/25/07/2019

Name of the Client: M/S Tarun constructions  
Gadivemula  
Kurnool(dt)

Client Reference: Lr. Dt: 22/07/2019

Name of the Work: Civil & Structural work for 1\*18MW CPP Structures for JSW Energy ltd. At  
Nandyal.

### M- Sand

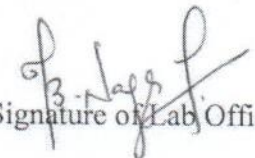
1. Sieve Analysis Classification - Zone II

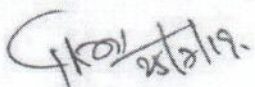
S.No	IS. Sieve size	%passing	Limits as per IS383-1970
1	4.75mm	94.8	90-100
2	2.36mm	88.6	75-100
3	1.18mm	56.8	55-90
4	600 $\mu$	23	35-59
5	300 $\mu$	5.4	8-30
6	150 $\mu$	0.2	0-10

2. Silt Content 4.68%


3. Water absorption : 8.55

- Note: 1. The test results furnished by the laboratory are valid for the samples tested only. The representativeness of the samples is the responsibility of the Client only.  
2. The test report is not valid for the evidence in any court of law

  
(Signature of Lab Official)

  
Head SCE  
School of Civil Engineering,  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501

  
**Dr. T. JAYACHANDRA PRASAD**  
M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEE  
PRINCIPAL  
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(Autonomous)  
NANDYAL-518 501, Kurnool (Dt), A.P.

  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.





44  
द.म.रेलवे S.C.RAILWAY  
सीनियर सेक्शन इंजीनियर (रेलपथ) का कार्यालय  
OFFICE OF THE SENIOR SECTION ENGINEER (P.WAY)  
दोनकांडा DONAKONDA

सं. No. 50/Soil Test/DKD/2020

दि Dt.17.08.2020

TO  
THE MANAGER  
RAJIV GANDHI MEMORIAL COLLEGE OF ENGINEERING & TECH  
NADYAL.



विषय Sub : Testing of soil -Reg.

संदर्भ Ref : 1) Lr. No.GNT-Engg/340/2298 of Dt. 21.07.2020

Agency: T.SARABIAH, KURNOOL

In connection with the above reference, Agency: Sri.T.SARABIAH Supplied the Soil for Laying of PQRS siding Work in SSE/P.WAY/DKD Section from the Quarry of YERRABALEM Village, Donakonda mandal of Prakasam District. A.P., Hence it is requested to you Test the Soil and sand results as early as possible.

सीनियर सेक्शन इंजीनियर (रे.प.)  
SR. SECTION ENGINEER (P.W.)  
द.म.रेलवे, दोनकांडा  
Donakonda  
S.C.Rly Donakonda

TO  
CFR  
17/08/2020

Dr. T. JAYACHANDRA PRASAD  
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# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

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Web : www.rgtnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

43

## TEST REPORT ON SOIL SAMPLES

Dt:28/08/2020

Test Report Ref No: RGM CET/CED/Consultancy/GT/A031/28/08/2020

To  
Senior Section Engineer (P.W)  
S.C.Railway  
Dhonakonda

Name of the Agency : T,Sarabhaiah, Kurnool

Quarry Name: Yerrabalem (V), Donakonda (M), Prakasam (D)

Name of the Work Laying of PQRS siding in SSE/P.WAY/DKD Section  
Ref: Lr.No. GNT-Engg./340/2298 Dt.21.07.2020

Client Reference Lr. No.50/ Soil Test/DKD/2020 Dt: 17/08/2020

Sl.No	Sample No.	1	Remarks
1	% Gravel	54.0	
2	% Sand	32.4	
3	% Silt & Clay	13.6	
4	Liquid Limit	34	
5	Plastic Limit	21	
6	Plasticity Index, $I_p$	13	
7	Soil Classification	GC - Clayey Gravel	
8	OMC %	5.50%	
9	MDD(Heavy)	2.10	

- Note: 1. The test results furnished by the laboratory are valid for the samples tested only. The representativeness of the samples is the responsibility of the Client only.  
2. The test report is not valid for the evidence in any court of law

*[Signature]*  
28/8/20  
Lab Incharge

*[Signature]*  
28/8/2020  
HSCE

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World Bank Funded Institution., Recognized UGC DDU Kaushal Kendra.

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*[Signature]*  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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NANDYAL-518 501.

From  
Sri K.Prabhakar,,  
Assistant Engineer,  
PRI Sub Division,  
Nandyal.

To  
The Head of the Civil Engineering Department  
College of Engineering,  
~~Yogi Vemana University,~~ RGM Eng college  
~~Proddutur.~~ Nandyal

Rc No: AE/Upgradation of MGNREGS grant/2017-2018 Dt : 0 -0 -2017

Sir,

**Subject:** - PRI Sub Division Nandyal-Upgradation of MGNREGS Grant- Providing BT road from N.L Road to PBG Road via Rmmurthy Ngar of Nandyal Mandal - Conducting tests for wet mix macadam – Report- Requested - Requested-

② provide BT road from S. Nagaravan to M. Chintakula in gospedu mandal  
-----x-----

I am here with sending the course aggregates of 40-45mm, 25-27mm, 19-22mm, 12-14mm, 9.50-11.20mm, 5-7mm, 2.36-5mm & 2.36 mm to 75 micron for construction of Wet mix macadam for road work and conduct the required tests as per IS codes and send test reports to the below address for taking further action and testing charges will pay the bearer of this letter.

Enclosures: Enclosures as above

Yours faithfully

*[Signature]*  
Assistant Engineer  
PRI Sub Division,  
Nandyal(Mandal).  
11/10/2017

TO  
B. Naga Kiran  
*[Signature]* 3/7/2017

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
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(AUTONOMOUS)

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13

## TEST REPORT FOR WET MIX MACADAM

Dt:10/07/2020

Test Report Ref No: RGM CET/CED/CA/A022/10/07/2020

To  
Executive Engineer  
PRI Division  
Nandyal.

Sub: Test report for Wet Mix Macadam along with testing of materials for the work  
**Providing BT road from N.L.Road to PBG Road via Ramammurthy Nagar of Nandyal(M)**

Ref:Rc No. AE/ Upgradation of MGNREGS grant / 2017-18 Dt:0-0-2017

As per the reference cited above, the materials supplied by you are tested in laboratory of this institution and the results are tabulated. The following result corresponds to the samples received at our laboratory only. The representativeness of the samples is not the responsibility of lab. The test report is not valid for evidence in any court of law.

### **Materials Supplied:**

1. 40 mm aggregate
2. 2 m m aggregate
3. 12 mm aggregate
4. 6 mm Chips
5. Stone dust.

### **Job Mix for Wet Mix Macadam :**

1. 45 mm to 22.4 mm aggregate : 30%
2. 22.4 mm to 2.36 mm aggregate : 40%
2. 2.36mm and below stone dust : 30%

**Combined Grading :** Combined grading has been obtained with 30% 40 mm aggregate 20% of 25mm aggregate, 10% of 12mm aggregate , 10% of 6mm chips, 30% of stone dust.

*(Signature)*

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**Gradation Particulars For Wet Mix Macadam**

S. No	Is Sieve Designation	% Passing by weight				Design mix		Limits as per Gradation III in Table 400-12 of MORD Specification 406
		40 mm aggregate	25 mm aggregate	12mm aggregate	6mm chips	2.36mm and below	(40mm aggregate 30%, +2.5mm aggregate 20% +12mm aggregate 10% + 6mm chips 10% + ,stone dust 30%)	
1	53 mm	30%	100	100	100	100	100	100
2	45 mm	96.1	100	100	100	100	98.83	95-100
3	26.5 mm	1.5	100	100	100	100	70.45	-
4	22.4	0	77.4	100	100	100	65.48	60 - 80
5	9.5 mm	0	1.16	42.13	100	100	44.44	40 - 60
6	4.75 mm	0	0	0	27.27	99.83	32.67	25 - 40
7	2.36 mm	0	0	0	2.72	93.12	28.20	15-30
8	600 Microns	0	0	0	0	22.95	6.89	8 - 22
9	75 Microns	0	0	0	0	0.52	0.16	0 - 5

*Handwritten signature*

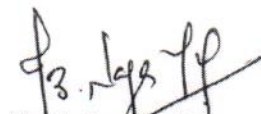
**Dr. T. JAYACHANDRA PRASAD**  
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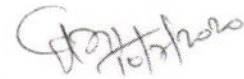
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Properties of Mix Proportions :


S.no.	Description	value
1	% Gravel	67.33
2	% Sand	32.51
3	% Silt + Clay	0.16
4	Liquid Limit	-
5	Plastic Limit	-
6	Plasticity Index	-
7	Specific Gravity	2.64
8	Maximum Dry Density (g/cc) from Modified Proctor test as per IS 2720 Part -8, 1983	2.26
9	Optimum Moisture Content (5) from Modified Proctor test as per IS 2720 Part -8, 1983	5.96
10	Laboratory CBR value % @ OMC (4Day Soaking test) as per IS -2720 Part 13 -1979	48.3
11	Impact Value	11.84
12	Flakiness index	23.97

  
(Lab Incharge)

  
HSCE

Head,  
School of Civil Engineering,  
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208

MUNICIPAL ADMINISTRATION DEPARTMENT

From  
Smt N. Radha,  
Commissioner,  
Proddatur Municipality,  
PRODDATUR.

To  
The Principal,  
R.G.M. College of Engineering,  
NANDYAL.

Sir,

Sub : Proddatur Municipality - Engineering Section - "Construction of Municipal Complex at Puttaparthi Circle" - Soundness Test Report - Requested - Regarding.

Ref: Orders of Executive Authority, dt: 02.11.2020.

\*\*\* \*\*

The Proddatur Municipality has taken up the work "Construction of Municipal Complex at Puttaparthi Circle" in place of existing vegetable market. As the existing vegetable market constructed a long time ago, the physical and structural conditions of the market rooms are in dilapidated condition.

Hence, it is requested the Principal, R.G.M. College of Engineering, to conduct the Soundness Test and investigate the structural strength of the market rooms. Necessary payment will be made after receipt of bill.

Thanking you,

Yours faithfully,

*N. Radha*  
Commissioner,  
Proddatur Municipality

Encl:

1) Plan of Market Shop Rooms.

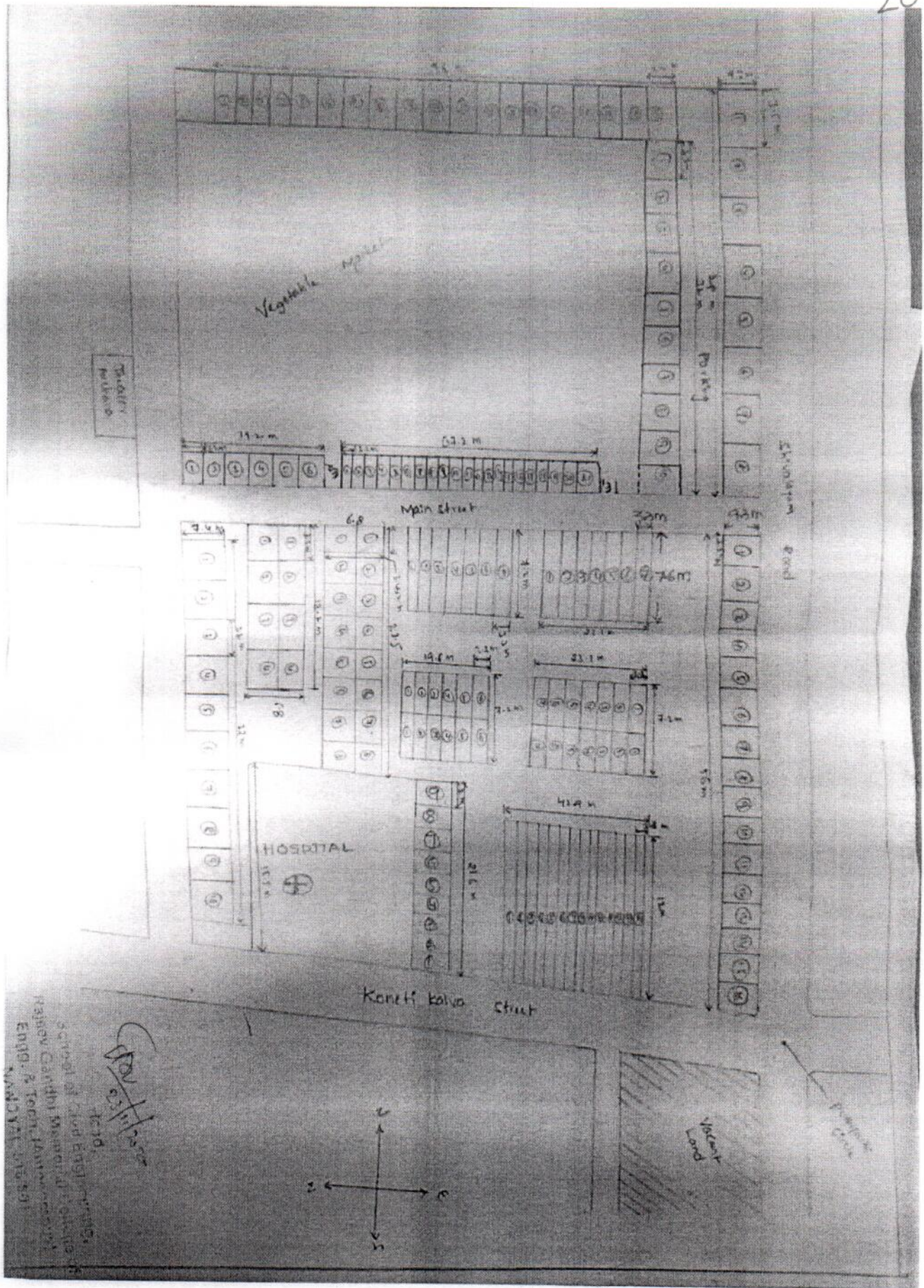
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2/11/20  
02/11/2020

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
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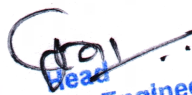




15/01/2021  
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**Dr. T. JAYACHANDRA PRASAD**  
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206.



# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

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Web : www.rgtnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

Dt:23-11-2020

Test Report Ref No: RGM CET/CED/Consultancy/CC/A084/23/11/2020

To  
The Commissioner,  
Proddatur Municipality,  
Proddatur.

Ref: Lr.Dt. 02-11-2020

## STRUCTURAL SOUNDNESS CERTIFICATE

The Commissioner, Proddatur Municipality, Proddatur has requested in her letter No: Nil, dated 02.11.2020, the principal, R.G.M College of Engineering and Technology, Nandyal, to investigate the structural soundness of the shop rooms in Municipal Vegetable Market, Sivalayam road, Proddatur, YSR district.

The following observations were made on inspecting the shop rooms located in vegetable market, Sivalayam road, Proddatur.

1. As per the given plan, vegetable market building is divided into number of blocks from I to XV.
2. The structure of the vegetable market is load bearing structure and the slab is made with RCC.
3. Appearance of water patches to the underside of the slab indicates that there is a leakage of water during the rainy season.
4. The steel reinforcement for slab is exposed in some parts of the rooms.
5. Due to leakage of slabs, some parts of the underside of the slab area is with formation of rust to steel and spalling of concrete takes place.
6. In some places walls of the rooms also damaged.
7. Roofs of some rooms are covered by roof sheets indicates that the RCC slab of that rooms are fully damaged.

*[Signature]*  
23/11/2020  
Page 1 of 7

Offering B.Tech., M.Tech., M.B.A., M.C.A. and Ph.D. Programs.  
Approved by AICTE, New Delhi, India.

*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
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The results of Rebound hammer test conducted at site as per IS:13311(part 2)-1992 for various portions of structural members along with the corresponding compressive strength is shown in table. Rebound hammer test is carried out for the slabs. Out of 150 places tested for shop rooms, 60 places satisfying compressive strength requirement of 20 MPa as per Indian standards and in the remaining 90 places, the compressive strength is less than 20 MPa. Hence, in some portion of the slabs of the shop rooms is not satisfying the minimum prescribed compressive strength of 20 MPa as per the IS:456-2000.

**Table: Results of Rebound Hammer Test**

S.No	Name of the Block	Member	Rebound Hammer Direction	Average Rebound Value	Compressive Strength, N/mm <sup>2</sup>	Remarks
1	Block I	Slab	90 <sup>0</sup>	22.4	18.5	Not Satisfied
2		Slab	90 <sup>0</sup>	23.0	20.0	Not Satisfied
3		Slab	90 <sup>0</sup>	24.8	22.4	Satisfied
4		Slab	90 <sup>0</sup>	23.3	20.4	Not Satisfied
5		Slab	90 <sup>0</sup>	23.2	20.0	Not Satisfied
6		Slab	90 <sup>0</sup>	21.4	18.0	Not Satisfied
7		Slab	90 <sup>0</sup>	21.0	17.0	Not Satisfied
8		Slab	90 <sup>0</sup>	20.0	16.0	Not Satisfied
9		Slab	90 <sup>0</sup>	26.8	26.0	Satisfied
10		Slab	90 <sup>0</sup>	20.6	16.0	Not Satisfied
11		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
12		Slab	90 <sup>0</sup>	21.2	17.0	Not Satisfied
13		Slab	90 <sup>0</sup>	22.3	18.2	Not Satisfied
14		Slab	90 <sup>0</sup>	24.0	22.0	Satisfied
15		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied
16		Slab	90 <sup>0</sup>	27.6	26.2	Satisfied
17		Slab	90 <sup>0</sup>	21.4	17.8	Not Satisfied

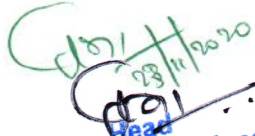
  
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204


18	Block II	Slab	90 <sup>0</sup>	24.0	22.0	Satisfied
19		Slab	90 <sup>0</sup>	22.6	19.8	Not Satisfied
20		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied
21		Slab	90 <sup>0</sup>	27.2	26.0	Satisfied
22		Slab	90 <sup>0</sup>	21.4	17.8	Not Satisfied
23		Slab	90 <sup>0</sup>	24.0	22.0	Satisfied
24	Block III	Slab	90 <sup>0</sup>	23.3	20.4	Not Satisfied
25		Slab	90 <sup>0</sup>	28.1	28.0	Satisfied
26		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
27		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
28		Slab	90 <sup>0</sup>	27.6	26.2	Satisfied
29		Slab	90 <sup>0</sup>	21.4	17.8	Not Satisfied
30		Slab	90 <sup>0</sup>	24.0	22.0	Satisfied
31		Slab	90 <sup>0</sup>	23.6	21.2	Satisfied
32		Slab	90 <sup>0</sup>	22.2	18.8	Not Satisfied
33		Block IV	Slab	90 <sup>0</sup>	30.2	31.0
34	Slab		90 <sup>0</sup>	23.2	20.1	Not Satisfied
35	Slab		90 <sup>0</sup>	32.4	35.5	Satisfied
36	Slab		90 <sup>0</sup>	20.8	16.8	Not Satisfied
37	Slab		90 <sup>0</sup>	22.8	20.0	Not Satisfied
38	Slab		90 <sup>0</sup>	22.6	19.8	Not Satisfied
39	Slab		90 <sup>0</sup>	25.6	23.0	Satisfied
40	Slab		90 <sup>0</sup>	24.8	22.4	Satisfied
41	Slab		90 <sup>0</sup>	21.0	17.0	Not Satisfied
42	Slab		90 <sup>0</sup>	20.0	16.0	Not Satisfied
43	Slab		90 <sup>0</sup>	28.4	28.5	Satisfied
44	Slab		90 <sup>0</sup>	22.6	19.8	Not Satisfied
45	Slab		90 <sup>0</sup>	22.8	20.0	Not Satisfied

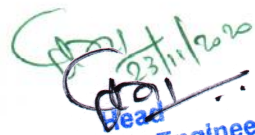
  
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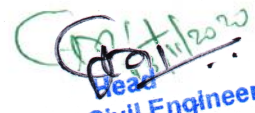
46		Slab	90 <sup>0</sup>	28.8	29.5	Satisfied
47		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
48		Slab	90 <sup>0</sup>	21.2	17.0	Not Satisfied
49	Block V	Slab	90 <sup>0</sup>	26.6	25.8	Satisfied
50		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
51		Slab	90 <sup>0</sup>	28.4	28.5	Satisfied
52		Slab	90 <sup>0</sup>	21.0	17.0	Not Satisfied
53		Slab	90 <sup>0</sup>	20.0	16.0	Not Satisfied
54		Slab	90 <sup>0</sup>	24.2	21.8	Satisfied
55		Block VI	Slab	90 <sup>0</sup>	26.6	25.8
56	Slab		90 <sup>0</sup>	21.4	17.6	Not Satisfied
57	Slab		90 <sup>0</sup>	22.4	18.4	Not Satisfied
58	Slab		90 <sup>0</sup>	26.4	24.8	Satisfied
59	Slab		90 <sup>0</sup>	28.4	28.5	Satisfied
60	Slab		90 <sup>0</sup>	22.2	18.0	Not Satisfied
61	Block VII	Slab	90 <sup>0</sup>	20.6	15.8	Not Satisfied
62		Slab	90 <sup>0</sup>	21.4	17.6	Not Satisfied
63		Slab	90 <sup>0</sup>	25.6	24.2	Satisfied
64		Slab	90 <sup>0</sup>	24.2	22.0	Satisfied
65		Slab	90 <sup>0</sup>	22.4	18.4	Not Satisfied
66		Slab	90 <sup>0</sup>	23.6	21.4	Satisfied
67		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
68	Block VIII	Slab	90 <sup>0</sup>	31.0	30.4	Satisfied
69		Slab	90 <sup>0</sup>	20.2	16.0	Not Satisfied
70		Slab	90 <sup>0</sup>	24.9	23.0	Satisfied
71		Slab	90 <sup>0</sup>	24.6	22.8	Satisfied
72		Slab	90 <sup>0</sup>	22.6	19.2	Not Satisfied
73		Slab	90 <sup>0</sup>	23.6	21.0	Satisfied

  
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 23/11/2020  
 Head  
 School of Civil Engineering  
 Rajeev Gandhi Memorial College of  
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 NANDYAL-518 501.

74		Slab	90 <sup>0</sup>	27.6	27.4	Satisfied	
75	Block IX East facing rooms	Slab	90 <sup>0</sup>	20.8	16.8	Not Satisfied	
76		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied	
77		Slab	90 <sup>0</sup>	22.6	19.8	Not Satisfied	
78		Slab	90 <sup>0</sup>	26.8	26.0	Satisfied	
79		Slab	90 <sup>0</sup>	26.2	24.4	Satisfied	
80		Slab	90 <sup>0</sup>	23.0	20.0	Not Satisfied	
81		Slab	90 <sup>0</sup>	25.0	23.0	Satisfied	
82		Slab	-	Covered by Roof Sheet			
83		Block IX West facing rooms	Slab	90 <sup>0</sup>	22.4	19.5	Not Satisfied
84	Slab		90 <sup>0</sup>	23.0	20.0	Not Satisfied	
85	Slab		90 <sup>0</sup>	29.8	31.0	Satisfied	
86	Slab		90 <sup>0</sup>	26.8	26.0	Satisfied	
87	Slab		90 <sup>0</sup>	26.1	24.0	Satisfied	
88	Slab		-	Covered by roof sheet			
89	Slab		-	Covered by roof sheet			
90	Block X East facing rooms	Slab	90 <sup>0</sup>	22.4	19.5	Not Satisfied	
91		Slab	90 <sup>0</sup>	26.4	24.8	Satisfied	
92		Slab	90 <sup>0</sup>	21.4	17.8	Not Satisfied	
93		Slab	90 <sup>0</sup>	23.0	20.0	Not Satisfied	
94	Block X West facing rooms	Slab	90 <sup>0</sup>	28.2	28.0	Satisfied	
95		Slab	90 <sup>0</sup>	27.4	27.0	Satisfied	
96		Slab	90 <sup>0</sup>	20.8	17.0	Not Satisfied	
97		Slab	90 <sup>0</sup>	24.8	23.0	Satisfied	
98	Block XI	Slab	90 <sup>0</sup>	22.6	19.8	Not Satisfied	
99		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied	
100		Slab	90 <sup>0</sup>	24.2	21.4	Satisfied	
101		Slab	90 <sup>0</sup>	26.2	24.4	Satisfied	
102		Slab	90 <sup>0</sup>	22.2	19.2	Not Satisfied	

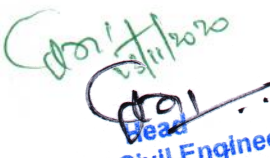
  
**Dr. T. JAYACHANDRA PRASAD**  
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 NANDYAL-518 501.



103		Slab	90 <sup>0</sup>	24.6	22.8	Satisfied
104	Block XII South facing rooms	Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied
105		Slab	90 <sup>0</sup>	23.3	20.4	Not Satisfied
106		Slab	90 <sup>0</sup>	26.8	26.0	Satisfied
107		Slab	90 <sup>0</sup>	21.4	17.8	Not Satisfied
108		Slab	90 <sup>0</sup>	23.0	20.0	Not Satisfied
109		Slab	90 <sup>0</sup>	28.2	28.0	Satisfied
110		Block XII North facing rooms	Slab	90 <sup>0</sup>	22.4	19.6
111	Slab		90 <sup>0</sup>	22.6	19.8	Not Satisfied
112	Slab		90 <sup>0</sup>	22.8	20.0	Not Satisfied
113	Slab		90 <sup>0</sup>	22.6	19.8	Not Satisfied
114	Slab		90 <sup>0</sup>	24.2	22.0	Satisfied
115	Slab		90 <sup>0</sup>	23.3	20.4	Not Satisfied
116	Block XIII South facing rooms		Slab	90 <sup>0</sup>	23.0	20.0
117		Slab	90 <sup>0</sup>	24.3	21.8	Satisfied
118		Slab	90 <sup>0</sup>	21.0	17.0	Not Satisfied
119		Slab	90 <sup>0</sup>	26.4	24.2	Satisfied
120		Slab	90 <sup>0</sup>	20.8	16.8	Not Satisfied
121		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied
122		Slab	90 <sup>0</sup>	22.6	19.8	Not Satisfied
123	Block XIII North facing rooms	Slab	90 <sup>0</sup>	23.4	20.2	Not Satisfied
124		Slab	90 <sup>0</sup>	21.2	18.5	Not Satisfied
125		Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
126		Slab	90 <sup>0</sup>	23.4	20.2	Not Satisfied
127		Slab	90 <sup>0</sup>	25.8	24.2	Satisfied
128		Slab	90 <sup>0</sup>	28.4	28.4	Satisfied
129		Slab	90 <sup>0</sup>	20.8	16.8	Not Satisfied
130	Block XIV	Slab	90 <sup>0</sup>	28.4	28.4	Satisfied

  
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131	Block XV	Slab	90 <sup>0</sup>	23.2	20.1	Not Satisfied
132		Slab	90 <sup>0</sup>	28.4	28.4	Satisfied
133		Slab	90 <sup>0</sup>	22.4	19.4	Not Satisfied
134		Slab	90 <sup>0</sup>	25.8	24.2	Satisfied
135		Slab	90 <sup>0</sup>	22.6	19.8	Not Satisfied
136		Slab	90 <sup>0</sup>	22.8	20.0	Not Satisfied
137		Slab	90 <sup>0</sup>	28.2	28.2	Satisfied
138		Slab	90 <sup>0</sup>	22.0	18.1	Not Satisfied
139		Slab	90 <sup>0</sup>	26.3	24.3	Satisfied
140		Slab	90 <sup>0</sup>	24.0	21.8	Satisfied
141		Slab	90 <sup>0</sup>	20.2	10.2	Not Satisfied
142		Slab	90 <sup>0</sup>	22.4	19.0	Not Satisfied
143		Slab	90 <sup>0</sup>	29.2	31.0	Satisfied
144		Slab	90 <sup>0</sup>	24.6	22.0	Satisfied
145		Slab	90 <sup>0</sup>	22.4	19.0	Not Satisfied
146		Slab	90 <sup>0</sup>	29.2	31.0	Satisfied
147		Slab	90 <sup>0</sup>	21.2	18.5	Not Satisfied
148		Slab	90 <sup>0</sup>	20.0	10.0	Not Satisfied
149		Slab	90 <sup>0</sup>	20.2	10.2	Not Satisfied
150		Slab	90 <sup>0</sup>	22.4	19.0	Not Satisfied

**Conclusion :** Based on the results of the rebound hammer test observations and detailed study, the existing shop rooms has not satisfied the requirements as per the standards and are not structurally sound for use.

(Signature of Lab Official)

*(Signature)* 23/11/2020

**HSCE**  
Head,

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ON GOVT. APPROVED LIST

279.



# D.E.C. INFRASTRUCTURE & PROJECTS (INDIA) PRIVATE LIMITED



(FORMERLY KNOWN AS M/s. DAS ENGINEERING CO.)

Regd. Off. : # 2-1-434/1, Street No. 4, Nallakunta, Hyderabad - 500 044, Telangana

Ph : 040-27666305, 66682513. e-mail : dasenggco@yahoo.co.in

**ENGINEERS ♦ CONTRACTORS**

(Certified by ISO 9001:2015)

To  
HEAD OF DEPARTMENT,  
RGM College,  
Nandyal.

Sir,

Sub:- Works – APTIDCO – Balance Work of “ Investigation, Survey, planning, Design, construction and handing over of EWSDUs/flats (each of super built up area of 300sft) in G+3 pattern with Monolithic concrete construction (Shear Wall Technology and with suitable foundations as per soil conditions including Internal Infrastructure facilities such as water supply, sanitary, electrification under PMAY(HFA) Phase II/III with 2 years defect liability period under EPC system ) Construction of 1008 WESDUS/flats (each of super built up area of 300sft) at Yemmiganur ULB in Kurnool District (Phase-II) and - Reg.

Ref:-1) Agreement No.03/DCTO/APTIDCO/KNL/2020-21, Dt. 06-04-2020

--ooOoo--

Regarding this project the water sample shall be tested for SCC Concrete of grade M30 at construction purpose . The required water sample is sent for necessary testing.

Hence, The Head Of Department, RGM College Nandyal is requested to conduct above tests and send the Results to Executive Engineer and Necessary Payments will be paid by the agency.

Yours faithfully

*P. G. Reddy*

Dy. PROJECT MANAGER,  
DEC Infrastructure,  
Yemmiganur.

TO  
PLKR  
*Prasanna*

*Dr. T. Jayachandra Prasad*

BANGALORE - 560 020. Ph : 080-26477493, 02466493

No. 9/9, Industrial Suburb, Ward 11, Lakshmi Layout,

BANGALORE - 560 020. Ph : 080-26477493, 02466493

NANDYAL-518 501, Kurnool (Dt), A.P.

*Dr. T. Jayachandra Prasad*  
9  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
Engg. & Tech. (Autonomous)  
NANDYAL-518 501.





# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

NANDYAL-518501, KURNOOL (DIST), A.P., INDIA

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Web : www.rgmnandyal.com | E-mail: principalrgm@gmail.com | principal.9@jntua.ac.in

278.

Date:09/02/2021

Test Report Ref No: RGM CET/CED/Consultancy/ENV/A009/09/02/2021

TO  
The Executive Engineer,  
APTIDCO,  
Kurnool.

Sir,

Sub: Test Report of Water Sample

Name of the Client: D.E.C. Infrastructure&Projects (India) Pvt.Ltd.,

Name of Work: APTIDCO- Balance Work of "Investigation, Survey, Planning, Design, Construction and handing over of EWSDUs / Flats (each of super built up area of 330 sf) in G+3 pattern with Monolithic Concrete construction (Shear Wall Technology and with suitable foundation as per soil condition including internal infrastructure facilities such as water supply, sanitary, electrification under PMAY(HFA) Phase II/III with 2 years defect Liability period under EPC format), Construction of 1008 WESDUS / flats (each of super built up area of 330 sft) at Yemmiganur ULB in Kurnool district (Phase - II) and (ii) Construction of 1536 WESDUS / flats (each of super built up area of 330 sft) at Dhone and Allagadda ULBs in Kurnool District.

Client Reference : DEC/APTIDCO-KNL/20/1/2021

## WATER Sample Analysis Report

Particulars of Sample Analysed			
Client Name	APTIDCO	Date of Sampling	4/5/2021
Address	Yemmiganur	Date of Sample receipt in Lab	4/2/2021
Contact person		Date of Analysis	5/2/2021
Collection point	Bore well at site, Yemmiganur	Date of Report	6/2/2021
Sample description	Water for Construction	Sample Drawn by	Client

Page 1 of 2

*(Signature)*  
Head  
School of Civil Engineering  
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World Bank Funded Institution., Recognized by JNTU Kurnool Kuvva.

*(Signature)*  
Dr. T. JAYACHANDRA PRASAD  
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### Results of Analysis

S.NO	PARAMETER	RESULT	LIMITS AS PER IS 456-2000	Remarks
1	pH	7.38	Not less than 6.00	With in Limits
2	0.02N NaOH Required to Neutralize 100ml of water sample IS 3025-Part-22	0.038	Not more than 5ml	With in Limits
3	0.02N H <sub>2</sub> SO <sub>4</sub> Required to Neutralize 100ml of water sample IS 3025-Part-23	0.54	Not more than 25ml	with in Limits
4	Total Organic Solids IS 3025-Part-18	3500	Less than 200mg/l	Not with in Limits
5	Total Inorganic Solids IS 3025-Part-18	500	Less than 3000 mg/l	With in Limits
6	Chlorides as Cl IS 3025-Part 32	2254.30	1000 mg/l for RCC Work 2000 mg/l for PCC Work	Not With in Limits
7	Suspended Matter IS 3025-Part-17	1000	Less than 2000 mg/l	With in Limits

**Conclusion:** Based on the sample supplied to the department and above 07 tests. Only 02 parameter are not with in limits.

*[Signature]*  
9/10/2021  
Lab Incharge

*[Signature]*  
HSCE  
Head  
School of Civil Engineering  
Rajeev Gandhi Memorial College of  
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*[Signature]*  
**Dr. T. JAYACHANDRA PRASAD**  
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*[Signature]*  
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GOVERNMENT OF ANDHRA PRADESH  
WATER RESOURCES DEPARTMENT

300

From  
**Sri N.C.Subbarayudu,**  
Executive Engineer,  
T.G.P. Division No.1,  
**VELGODE.**

To  
The Head of the Department,  
Civil Engineering Department,  
R.G.M. College of Engineering  
& Technology, Nandyal.

Letter No.EE/TGP/VLD/DB/TO/

83<sup>M</sup>

Dated: 15-03-2021.

Sir,

**Sub:--** TGP Division No.1, Velgode - work of "Providing CC Lining to TGP main canal from Km 0.000 to KM 18.200 & balance work in between KM 18.200 to KM 42.566 including shortcrete side lining and CC bed lining for link channel from Km 0.000 to KM 7.830 (Balance work) i.e., from BCR complex to Velugode Balancing Reservoir"- Request for conduct soil Penetration Test (SPT) results from 14.300 km to 15.000 km of TGP Main canal - Requested - Reg.

**Ref:--** Superintending Engineer, TGP Circle, Nandyal Agt No.03/2020-21,  
Dated:15-07-2020.

-@-@-@-

It is to inform that, the captioned work is awarded to M/S Raghava Constructions Ltd, Hyderabad vide reference cited above, in the said work it is proposed to construct a C.C. Side wall on R/S of canal was from Km.14.300 to Km.15.000 of TGP main canal (i.e.,) at single bund portion to minimize losses through rocky strata in water spread area on left side. In order to execute the above work Soil bearing capacity (S.B.C.) below foundation of C.C wall is required.

Hence, I request the Head of the Department, Civil Engineering Department kindly conduct Soil Penetration Test (SPT) for Soil bearing capacity (S.B.C.) and communicate the results at the earliest. Required testing charges will be arranged as per the demand notice.

Yours faithfully,

  
**Dr. T. JAYACHANDRA PRASAD** Executive Engineer

M.E, Ph.D., FIE, FIETE, MNAFEN, MISTE, MIEEET

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School of Civil Engineering  
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299.



# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NANDYAL-518501, KURNOOL (Dt.), A.P., INDIA

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Web: www.rgmcet.edu.in | E-mail: principal.9@jntua.ac.in | E-mail: principal@rgmcet.edu.in

## TEST REPORT ON SOIL SAMPLES

Dt:17/03/2021

Test Report Ref No: RGM CET/CED/Consultancy/GT/A014/17/03/2021

To  
Sri.N.C.Subbarayudu,  
Executive Engineer,  
T.G.P.Division No.1  
Velogode.

Client Reference : Letter No.EE/TGP/VLD/DB/TO/83M Dt.15-03-2021

Name of the Work: Providing CC lining to TGP main canal from Km 0.000 to Km 18.200 & balance work in between Km 18.200 to Km 42.566 including ahortcrete side lining and CC bed lining for link channel from Km 0.000 to Km 7.830 (Balance Work) i.e., from BCR comples to Velogode Balancing Reservoir.

Sl.No	Test Property	Remarks
1	Locattion (GPS Instrument= Etrex 30 x, GARMIN)	
a	Latitude	15°35.434' N
b	Longitude	78°37.375' E
2	SBC of Soil Based on Settlement Criteria (For a settlement of 25 mm) as per IS 6403	
a	Recorded N (Blows/30 cm) Value= (n <sub>2</sub> +n <sub>3</sub> ) (n <sub>1</sub> =7, n <sub>2</sub> =8, n <sub>3</sub> =12)	20
b	Corrected N Value after Hammer Efficiency(Assumed 70%) = η <sub>h</sub> N = 0.7 x 20	14
c	Safe Bearing Capacity (SBC) for 25 mm settlement with assumed B <sub>f</sub> =1 m and D <sub>f</sub> =20mis,	230 kN/m <sup>2</sup>
		23 t/m <sup>2</sup>

- Note: 1. The test results furnished by the laboratory are valid for the samples tested only. the representativeness of the samples is the responsibility of the Client only.  
2. The test report is not valid for the evidence in any court of law

*ck* 17/3/21  
Lab Incharge

*G* 17/3/21  
HSCE

Head  
School of Civil Engineering

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NANDYAL-518 501.



306.

Nandyal,

Date:- 17/04/2021

To,  
The HoD,  
RGM College of Engineering & Tech,  
Nandyal,  
Kurnool (District)

Respected sir,

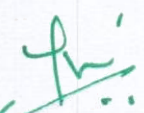
We are from "SKANDHANSHI INFRA PROJECTS INDIA PVT LTD". We are giving a soil sample for SBC test from "AAKRUTI" SITE (Near Shinavaram) to your college laboratory. Please do the SBC test and provide results of giving soil sample.

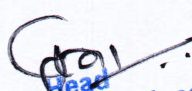
Thanking you sir,

Yours faithfully,

TO CRK  
17/4/21



  
Dr. T. JAYACHANDRA PRASAD  
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# RGM COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

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## TEST REPORT ON SOIL

Date: 22/4/2021

Test Report No: RGM CET/CED/Consultancy/GT/A016/22/04/2021

Name of the Client Skandanshi Infra Projects India Pvt. Ltd.  
Nandyal.

Client Reference Lr.Dt.17/04/2021

Name of the Work Construction of OHT at "Aakruti" Site.

Sample	% Gravel	% Sand	% Fines (Silt & Clay)	Soil Classification	Liquid Limit (%)	Plasticity Index (%)	Natural Water Content, %	Field Dry Density, KN/m <sup>3</sup>	Cohesion, c in KN/m <sup>2</sup>	Angle of Friction, $\phi$ in degrees	SBC in KN/m <sup>2</sup> ( Depth of Foundation, = 2 m)
A	1.2	7.4	91.4	Clay of High Compressibility (CH)	65.0	40.0	24.0	16.00	40.0	5.0	90.0
B	0.2	6.6	93.2	Clay of High Compressibility (CH)	62.0	35.0	18.0	17.00	60.0	5.0	130.0

Note: 1. The test results furnished by the laboratory is valid for the samples tested only.  
The representativeness of the sample is not the responsibility of the department.

*CP* 22/4/21  
(Signature of Lab Official)

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