To,

The Principal Sapthagiri College of Engineering Bangalore-560057

Through HOD & RDECI

From

Pramod K R Department of Civil Engineering Sapthagiri College of Engineering Bangalore-560057

Respected Sir,

Subject: Requisition for the financial assistance for research project

With respect to above subject, I request your kind self to provide finical assistance to carry out the project entitled "ANALYSIS AND DESIGN SOF MULTY STOREYD PARKING BUILDING". The research proposal and budget split up has enclosed along with this letter. Kindly consider the requisition and do the need full.

Thanking you

RDECI

yours sincerely

PRAMOD K.B)

forward to principal Sapthagiri College of Engineering Chiklesendra, Hesaraghatta Road,

Bangalore-560 057

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

Principal

Sapthagiri College of Engineering 14/6, Chikkesandra, Hesaragheite Kerin Road Bengaluru - 560 057

RESEARCH PROPOSAL

A. GENERAL INFORMATION

1	About the project		
Α	Title of the project	:	ANALYSIS AND DESIGN SOF MULTY STOREYD PARKING BUILDING
В	Subject area as per instruction	:	Structural engineering
2	Details of Principal Investigator		
Α	Name	:	Pramod K R
В	Qualification	:	B.E,M.Tech, (Ph.D)
С	Designation	:	Assistant Professor
D	Department	:	Civil
E	Years of teaching/research experience		8
F	Email ID	:	pramodkr@sapthagiri.edu.in
G	Cell Number	:	7829470474
Н	Details of the Head of the Department	:	
ı	Name of the Head of the Department		Mss. Suvarna P
J	Email ID	;	hodcivil@sapthagiri.edu.in
К	Cell Number	:	9035885409

Signature of the Investigator

Signature of Head of the Department

Principal
Septhagiri College of Engineering
126, Chikkesendre, Heseraghette Maintenal
Bengaluru - 550 057

Sapthagiri College of Engineering
Sapthagiri College of Engineering
Main Road
14/5, Chikkesandra, Hesaraghatta Main Road
14/5, Chikkesandra, Hesaraghatta
Bengaluru - 560 057



B. DETAILS OF THE PROJECT PROPOSAL

			TOREWS BARKING
	Title of the	1:	ANALYSIS AND DESIGN SOF MULTY STOREYD PARKING
	Project		BUILDING
	Proposal		1 1 11 11 mag Ag
	Objectives of the proposal	1:	To propose a multi storeyed building near Jalahalli cross. As
	(Not more than six points)	1	space, congestion on streets may arise. To overcome this
			problem we are suggesting to provide the parking complex.
			2.To reduce the parking area by providing multi-storeyed
			parking building. multi-storey car parks are located where
			land costs are so high, e.g. in or about the central areas of
			large towns, that it is more economical to build vertical
			facilities rather than purchase additional land for surface
			parking.
			3.To provide the safety and secured environment for the
			parked vehicles. The facility will provide a suitable parking
			environment for citizens and visitors to the commercial
			area.
			4. To reduce the traffic congestion.
4.	Background of the project	- S	: Now-a-day there is an increase in the number of vehicles on
75.7			road. It is very easy to park vehicle on road or when vehicle
			are moving. But, when the vehicle stops, we cannot leave
			vehicle on road or unsafe place. For proper storage of vehicle
			when not in use "parking space" is needed. When the person
			has to stop on route for some purpose other than traffic
			related, the vehicle needs some halting facility, without
			disturbing traffic flow otherwise on the street. Such a facilit
			is called parking. Due to increase in population there
			increase in vehicle demand and we require more parking
			space thus in control by constructing multi-storeyed parking
	2 2 4		building. Parking building is used for safe-guarding the use
			vehicle. Successful parking structures meet the use
	*		demands. It includes feeling safe and also knowing that the

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore-560 057



		un p un n	rehicles are in a secure environment. Where parking area is implanned, there is a need to make an improvement in the parking area by constructing multi-storeyed parking building. Parking structures has been an important element in today's purban and suburban environments. Multi-storey parking will help in larger capacity parking. The parking floors, the ramp, the entrance and the exits should be well lighted by using solar panels.
	Methodology (Please include flow sheet, if required)	3	 Investigate the area where parking congestion is high, study of SBC of the soil Planning for multi storey parking. analysis and design of multi storey parking building using ETABS-2016 Estimation and costing of building.
6.	Milestones with time schedule &	:	Project started in Jan 2018 and ended in July 10, 2018
8.	List of equipment required for Phase-I & Phase-II for Project Implementation (as per the instruction SI.No.27 under		ETABS -2016 Software Rs.2,80,000 apprx
9.	Annexure-II) Relevance, importance & application of the project	:	Reducing traffic by proving parking building at Jalahalli cross, Bengaluru.
10.	f the project	:	Multi storey parking building.

(PRAMOD K.R)

Principal

Principal

Sapthagiri College of Engineering

14/6, Chikkasandra, Hesaraghatta Main Hoad

Bengaluru - 560 057

HOD, Dept. of Civil Engr

Sapthagirl College of Engineering
Hesaraghetta Main Road

Sapthagirl College of Engineering
Hesaraghetta
Bangaluru - 860 057

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Date: 28/11/2017

From,

Research and Development cell,

Sapthagiri College of Engineering

Bangalore-560057

Through: HOD

To,

Principal investigator Sapthagiri College of Engineering Bangalore-560057

Subject: Sanction of research grants Reg.,

The committee hereby informed that following projects have been approved for the academic year. The report and the outcome of the project as to be submitted to the committee after the completion of the project. The utilization certificate shall be given along with the final report.

Sl. No	Principal Investigator	Department	Project entitled	Amount Sanctioned	
1 g ₋₁₀	Pramod K R	Civil	Analysis And Design of Multi Storey Parking Building	2,80,000/-	

Convener

Karr

Copy To,

Principal

All Departments

IQAC

College of Engineering 14/6, Chikkasandra, Hesaraghana Main Islad Bengaluru - 560 057

Lettel Received Krahar K.K.

> Sapthagiri College of Engineering 146, Chikkasandra, Hesaraghatta Main Road

Date: 12/02/2018

To,

Principal,

Sapthagiri College of Engineering

Bangalore-560057

Through HOD

From,

Pramod K R

Department of Civil engineering,

Sapthagiri College of Engineering

Bangalore-560057

Through HOD

Sub: Procurement of Instruments Reg.,

With reference to the letter received from R& D committee regarding approval of research project, we are here by requesting the procurement of the following equipment's/Instruments for the research project entitled "Analysis And Design of Multi Storey Parking Building" to carry out. Kindly considered and do the need full.

Thanking you,

Yours Faithfully,

ITRAMOD K.R

HOD, Dept. O. DES 560 057

Principal
Sapthagirl Collage of Engineering
14/5, Chikkasandra, Hesaraghaita Main Row J
Bengaluru - 580 057

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057



Date: 17/07/2018

To,

R and D

Sapthagiri College of Engineering

Bangalore-560057

Through HOD

From

Pramod K R,

Department of Civil engineering

Sapthagiri College of Engineering

Bangalore-560057

Sub: Submission of report and utilization details

Sapthagil College of Engineering 14/6, Chikkasandra, Hasaraghatta Main Roud Bengaluru - 560 057

With reference above cited subjected I am hereby enclosing project report entitled "Analysis and Design of Multi Storey Parking Building" and utilization certificate. This for your kind information, please.

Sl No	Particulars	Quantity	Amount	Remarks
1	ETABS Software	1	277300/-	Software
				purchased

Thanking You,

Copy,

Principal

PRAMOD K.R.

HOD, Dept. of Civil Engg. S.C.E, Bangalore-560 057

Sapthagiri College of Engineering 146, Chikkasandra, Hesaraghatta Main Road Bangaluru - 860 057

TAX INVOICE

Invoice No: 033 Sree Technologies Date: 16-03-2018 Mode/Terms of Payment: 100% Against Delivery # 479, 3rd 'A' Cross, 2nd Block, 3rd Phase, Other Ref: Banashankari 3rd Stage, Buyer Order No: 5445(2):2018 Bangalore - 560 085 Ref Date: 03-03-2018 Email: info@sreetechnologies.com Despatched Through: By Hand Phone No: 98456 99108 Destination: Bangalore GSTIN-29CGPPS8926J1ZA Terms of Delivery Buyer, 2-3 Weeks Sapthagiri College Of Engineering 14/5, Hesaraghatta Main Road, Chikkasandra Bengaluru, Karnataka 560057

			Unit Price	Total Price
SI No	Description	Qty	Rs	Rs
1	ETABS Ultimate v-2016 user license for Education/Research (10 users)	1	235000.00	235000.00
	Total			235000.00
	CGST @ 9% on item SGST @ 9% on item			21150.00 21150.00 2,77,300
	Grand Total	all		E. & O.E.

Amount chargable in words

Indian Rupees Two Lakh SeventySeven Thousand Three Hundred Only

Sa thagiri College of En Sapfhagiri College of Engineering 144, Chikkasandra, Hesaraghar Chikkasandra, Hesaraghatta Road,

Declaration:

We declare that this invoice shows the actual price of the goods

described and the particulars are true & correct.

, ...

For Sree Technologies

Authorised Signatory

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI-590018 KARNATAKA



PROJECT ON

" ANALYSIS AND DESIGN OF MULTI STOREYED PARKING

BUILDING"

Submitted in partial fulfillment of the requirements for the award of

BACHELORE OF ENGINEERING IN CIVIL ENGINEERING

Submitted by

GAJENDRA D R (USN: 1SG15CV404)

PAWAN R (USN: 1SG15CV413)

PRAVEENKUMAR M B (USN: 1SG15CV414)

VENKATESH K (USN: 1SG15CV419)

Under the Guidance of Mr. PRAMOD K R.

Assistant Professor Dept. of Civil Engineering Sce,Bangalore



Principal
Sapthegiri College of Engineeri
Chikkasandra, Hesaraghatta Ross
Bangalore-560 057

DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

BANGALORE-560057

2017-2018

SAPTHAGIRI COLLEGE OF ENGINEERING

BANGALORE-560057 Karnataka

2017-2018

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the project work entitled "ANALYSIS AND DESIGN OF LITI-STOREYED PARKING BUILDING" is carried out by Mr. PAWAN R, Mr. EENKUMAR M B, Mr. GAJENDRA D R and Mr. VENKATESH K a bonafide of Sapthagiri college of Engineering in partial fulfillment for the award of Bachelor Engineering of the Visvesvaraya Technological University, Belagavi during the year 12018. It is certified that all corrections and suggestions indicated for internal have been incorporated in the report deposited in the department. The project has been approved as it satisfies the academic requirements in respect of project work for the said degree.

The Guide

FRAMOD.K.R

Town Engineering

Fift, Bungalore

Signature of the HOD

Mrs. SUVARNA.P Professor & Head

Dept. of Civil Engineering

SCE, Bangalore

Signature of the Principal

Dr. K.L. SHIVABASAPPA

Principal

SCE, Bangalore

External Viva Voce

the Examiners:

Signature with Date:

Sapthagiri College of Engine

13/6/18

Q. Nagara

13/6/18



SRI SRINIVASA EDUCATIONAL & CHARITABLE TRUST (R)

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visveswaraya Technological University, Belgaum & Approved by AICTE - New Delhi)

UTILIZATION CERTIFICATE

Sl No	Particulars	Quantity	Amount
1	ETABS software	1	2,77,300
		Total	2,77,300

Certified that Sapthagiri college of Engineering has provided partial financial support of RS 2,77,300/-(Two lakh seventy seven thousand three hundred only) towardsAnalysis And Design Of Multi-storeyed Parking Building Proposed At Jalahalli Crossproject conducted by CivilDepartment of Sapthagiri college of Engineering.

Certified that I have satisfied myself that condition on which the grant in aid sanctioned has been duly fulfilled and that I have excised the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of check exercised

1. Bills

Signature of the Principal with seal

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 550 057 PEDACCO

Signature of Auditor with seal

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Heseraghana Main Road
Bengaluru - 560 657