

A Thesis on
**FLOAT TIME REDUCTION POTENTIAL IN CONSTRUCTION
PROJECT AND IT'S IMPACT**

Submitted for partial fulfillment of award of

MASTER OF TECHNOLOGY
Degree in

CONSTRUCTION TECHNOLOGY & MANAGEMENT

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DECLARATION

I declare that the research thesis entitled “**FLOAT TIME REDUCTION POTENTIAL IN CONSTRUCTION PROJECT AND IT’S IMPACT**” is a bonafide research carried out by me under the guidance of **Mr.Sarthak Singh Rajput,Assistant Professor,Department of Civil Engineering,Integral University,Lucknow**.Further I declare tthat this has not previously formed the basis of award of any degree,diploma,associate-ship or other similar degree or diplomas,and has not been submitted anywhere else.

Date:

Place:Lucknow

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CERTIFICATE

*Certified that the thesis entitled “**FLOAT TIME REDUCTION POTENTIAL IN CONSTRUCTION PROJECT AND IT’S IMPACT**” is being submitted by **Mr.Shubhendra Kumar Mishra(1800100084)** in partial fulfilment of the requirement for award of degree of Master of Technology(Construction Technology and Management) of Integral University,Lucknow,is a record’s of candidate’s own work carried out by him/her under my supervision and guidance.*

The results presented in this thesis have not been submitted to any other university or institute for the award of any other degree or diploma.

Mr. SARTHAK SINGH RAJPUT

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ACKNOWLEDGEMENT

In the sense of great pleasure and satisfaction, I present this thesis entitled “**FLOAT TIME REDUCTION POTENTIAL IN CONSTRUCTION PROJECT AND IT’S IMPACT**”.The Completion of this thesis is no doubt a product of invaluable support and contribution of no. of people.

I would like to express my sincere thanks to my guide Mr. Sarthak Singh Rajput(Assistant Professor,Department of Civil Engineering) for his continuous help and valuable suggestions regarding the thesis work.

I am also grateful to our Head of Department of Civil engineering for providing valuable suggestion,encouragement and inspiration.

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TABLE OF CONTENTS

Contents	Page No.
Title Page.....	(i)
Declaration.....	(ii)
Certificate.....	(iii)
Acknowledgement.....	(iv)
List of Tables.....	(vi)
List of Figures.....	(vi)
Abstract.....	(vii)
Chapter-1 Introduction	
1.1 Introduction.....	1-5
1.2 Objective and Scope.....	6
Chapter-2 Literature Review	
2.1 Literature reviews.....	7-10
2.2 Summary of Literatures.....	11-14
Chapter-3 Research Methodology	
3.1 Methodology.....	15
3.2 Site visited and Personal Discussion.....	15-17
3.3 Data collection and Analysis.....	18-48
Chapter-4 Result.....	49-50
Chapter-5 Conclusion.....	51-52
5.1 Conclusion.....	51-52
5.2 Suggestions for future research.....	52
References.....	53-54
Paper Publications	

LIST OF TABLES :-

	Pg.no
1.1 Impact of using precast concrete slab(hollow) instead of traditional concrete slab in construction project.....	43
1.2 Impact of using precast concrete slab(solid) instead of traditional concrete slab in construction project.....	43

LIST OF FIGURES:-

1.1 Research methodology flow chart.....	14
1.2 Site visited for personal discussion.....	15
1.3 A graph showing comparison of %Float time reduction,%Duration reduction and in case of construction with solid precast concrete slab & construction with hollow precast Concrete slab v/s construction with Traditional concrete slab.....	45
1.4 A graph showing comparison of %Cost reduction in case of construction with solid precast concrete slab & construction with hollow precast concrete slab v/s Construction with Traditional concrete slab.....	45

ABSTRACT

The emphasis of this research is focussed on the float time reduction potential in construction project & its impact on project. In order to accelerate the project or to manage delays or to shorten the duration of the project ,so as to complete the project faster in order to employ their resources on some other project ,project crashing is generally performed. During project crashing process, total float can be loss or consumed and chances of non critical activities to become critical. Therefore, it is better to use some innovative construction techniques like Precast structures etc in order to reduce float time in construction project and completing the project faster.. This research work will provide the idea of the factors that affect float time and amount of float that can be reduced by using some innovative techniques like precast structure and it's impact on the project.

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

- ❖ **Project management** is the application of processes ,methods, skills, knowledge and experience to achieve specific project objectives according to the project acceptance criteria within agreed parameters.The primary goal of the project management is to achieve all of the project goals within the given constraints.An importance aspect of the ptoject management is the management of risk. There are various types of risk that are associated with project
- ❖ **The emphasis of this research** will be focussed on the factors affecting float time & to find out float reduction potential in construction project and its impact on project. In order to accelerate the project to manage delays or to shorten duration of the project to complete the project faster in order to employ their resources on some other project , project crashing is generally performed. In the crashing process, indirect cost will decrease by decreasing the project duration as indirect cost are almost the linear function of the project duration and on the other hand direct cost of the project get increase.
- ❖ Float losses can have significant effect over the project cost and schedule which may lead to delay of activities that are in path resulting in negative impact over project quality.During crashing process total float can be loss or consumed and chances of non critical activities to become critical..

Theoretical Background:

- ❖ Float denotes the flexibility range within which an activity start time or finish time may fluctuate without affecting the completion of the project. In other words it is the amount of time that a task can be delayed without affecting the deadlines of other subsequent tasks, or the project final delivery date. The former is called Free float and the latter is called total float.
- ❖ The term float is associated with the activity times. It is analogous to the term slack which is associated with the event times. Slack is the difference between the earliest event time and the latest occurrence time. Just as the float denotes the flexibility range within which an event can occur , float denotes the range within which an activity start time or its finish may fluctuate without affecting the completion of the project.

There are four types of floats. They are:

- 1) Total float
- 2) Free float
- 3) Independent float

4) Interfering float

1) **Total float:** The time span by which starting or finishing of an activity can be delayed without delaying the completion of the project.

It is the maximum available time in excess of the activity completion time.

Total float is given by $F_T = LFT - EFT$ or $LST - EST$

Total float of an activity affects total float of succeeding as well as preceding activities.

2.) **Free float:** The delay which can be made without delaying succeeding activities. It affects only preceding activities. It is denoted by $F_F = F_T - S_j$, where S_j is head event slack.

In free float, preceding activity is not allowed to occur at its latest time and hence total float of preceding activity is affected. However the succeeding activity can start at its earliest start time and hence its total float is not affected.

3.) **Independent float:** It is the minimum excess available time which exists without affecting any of succeeding or preceding activities. It is denoted by F_{ID} .

It is the excess of minimum available time over the activity duration.

$$F_{ID} = F_F - S_i, \text{ where } S_i \text{ is tail event slack.}$$

4.) **Interfering float (F_{INT}):** It is similar to head event slack.

$$F_{INT} = S_j = F_T - F_F$$

The total float is the difference between maximum available time and the activity duration. There are three possibilities:

i) Total float may have a negative value, if the time availability is less than activity duration.

ii) Total float may have zero value if the time availability is equal to the activity duration.

iii) Total float may have a positive value if the time availability exceeds the activity duration.

This information about the degree of the total float is very useful for knowing how critical the activity is. From initial event to final event, there are various sequence of activities. These activities can be classified on the basis of the degree of the float as:

- 1) Subcritical Activity : when the float is positive, the activity needs normal attention but allows some flexibility of action.
- 2) Critical Activity: when the float is zero, the activity demands normal attention. There is no freedom of action.
- 3) Super critical activity: when float is negative, such activities require very special attention and action

Critical path can be determined with the help of total float calculations. The activities on critical path have total float equal to zero.

Some of the methods that can reduce the duration of an activity are mentioned below:

- Use of better/more advanced equipments
- Adding additional worker to enlarge the size of crew
- Overtime work
- Effective project management system

Example:

Consider the process of replacing a broken pane of glass in the window of your home. There are various component activities involved in the project as a whole; obtaining the glass and putty, installing the new glass, choosing the paint, obtaining a tin once it has set, wiping the new glass free of finger smears etc.

Some of these activities can run concurrently e.g. obtaining the glass, obtaining the putty, choosing the paint etc., while others are consecutive e.g. the paint cannot be bought until it has been chosen, the new window cannot be painted until the window is installed and the new putty has set. Delaying the acquisition of the glass is likely to delay the entire project- this activity will be on the critical path and have no float, of any sort, attached to it and hence it is a critical activity. A relatively short delay in the purchase of the paint may not automatically hold up the entire project as there is still some waiting time for the new putty to dry before it can be painted anyway there will be some free float attached to the activity of purchasing the paint and hence it is not a critical activity. However a delay in choosing the paint in turn inevitably delays buying the paint which although it may not subsequently mean any delay to the entire project, does not mean that choosing the paint has no free float of its own, the choosing of the paint is involved with a path through the network which does have total float.

Reducing the duration of the project generally results in increase in cost. Such cost can be summarized as:

- Additional labour costs
- Additional equipment cost
- Overtime cost
- Superhead and overhead cost.

❖ PROJECT CRASHING:

It is the method for shortening the project duration by reducing the time of one or more critical activities to less than their normal time. crashing is achieved by devoting more resources. Thus the cost associated with the project increased. The ultimate objective of

crashing a project is to add the appropriate amount of skilled project resources to critical path activities to put your project back on schedule or deliver it faster.

- **Normal time**(t_n): Normal time is the standard time that an estimator would easily allow for an activity.
- **Crash time**(t_c): Crash time is the minimum possible time in which an activity can be completed by employing extra resources. Crash time is that time, beyond which the activity cannot be shortened by any amount of increase in the resources.
- **Normal cost**(C_n): This is direct cost required to complete the activity in normal time duration.
- **Crash cost**(C_c): This is the direct cost corresponding to the completion of the activity within crash time.
- **Cost slope**: The cost slope is the slope of the direct cost curve , approximated as straight line. It is defined as follows:

$$\text{Cost slope} = \frac{\text{Crash cost} - \text{Normal cost}}{\text{Normal time} - \text{Crash time}}$$

NOTE: Crashing of critical activity is started in systematic manner i.e., starting with that activity which has the least cost slope.

❖ **PRECAST CONCRETE SLAB**

- Precast concrete slab is a construction product produced by way of casting concrete in a reusable mould or "form" which is then cured in a managed environment, transported to the construction site and lifted into place.
- A precast slab is the most used element in several construction sites due to the fact it fits any kind of architecture which adopt to the requirements. Moreover, it comes in special types in order to fulfill the expectations of a building project.
- **TYPES:** Some of them consist of hollow core units, double -tee units, strong core slabs and bi axial voided slabs which ultimately help to attain extra advantages. A hollow core slab provides maximum structural effectivity by way of decreasing the dead weight.

Double-tee units are primarily designed for floor purposes and lighter in weight. At the identical time, the depth of units may additionally vary relying on the span.

A solid core slab is a prefabricated one that looks comparable to a solid slab which can assist to meet vital needs in the building process. The biaxial voided slabs are the modern one that are extra efficient than traditional floor structure.

ADVANTAGES OF PRECAST CONCRETE SLAB OVER TRADITIONAL SLAB

a) Quality Assurance The key elements which can affect the quality of construction such as curing, temperature, mix design, formwork, etc. can be monitored for Precast Concrete. So, better quality construction can be performed.

b) Saves Construction Time Precast Concrete construction saves time, the threat of project extend is also less. The precast concrete casting can be carried on concurrently with different works on site such as earthwork, survey, etc. and therefore saves time.

c) Usage of Prestressed Concrete: By the use of pre-stressed precast, structural materials of high strength and load-bearing ability can be achieved, which can end result in increased clear span, decreased size of the cross-section of structural members, etc.

d) Durability: Precast Concrete structure has a longer service time duration and minimal maintenance. The high-density Precast Concrete is extra long lasting to acid attack, corrosion, impact, reduces floor voids and resists the accumulation of dust.

e) Aesthetics: As the structures are prefabricated in a managed manufacturing unit environment, numerous mixtures of colours and textures can be used. A vast range of shapes and sizes are available to select from with smooth finishing and hence the aesthetical value of products are increased.

f) Safe Construction Platform: No raw goods have to be stocked in site for Precast Concrete construction. It reduces the requirement of regular formworks and props, wastage, workers, etc. and therefore offers a secure working platform.

1.2 OBJECTIVE AND SCOPE:-

OBJECTIVE:

- 1.To determine the float reduction potential in a construction project.
- 2.To determine the impact on project due to reduction of float.

SCOPE:

This thesis aims on highlighting the Potential of float time reduction in construction Project using Precast concrete slab instead of traditional concrete slab & its impact on project.

CHAPTER 2

LITERATURE REVIEW

1.1 LITERATURE REVIEWS :-

1. Zafer I.sakka and sameh M.EI-sayegh et.al(2007)

This research paper presents a method to control the risks that are associated with float loss in construction projects. The method uses multiple simulation analysis technique that combines the results of cost range estimates and stochastic scheduling using monte carlo simulation. Least square non linear regression is used to convert the stochastic results into a polynomial function that float loss impact by directly relating with project cost and duration.

2.Khalid S. Al-Gahtani et.al(2009)

This Paper introduces a new approach i.e. “total risk approach” of float allocation that integrates several current approaches for allocation of float among project parties. This approach is based on the concept that the party who has the greatest risk in a project should be entitled to float ownership and deserves compensation from other project parties who increase the risk that are associated with the project by consuming the float. The total risk approach taken into account the changes in float that may occur as a result of actions that delay or accelerate the project schedule.

3.Wail Menesi et.al(2010)

To overcome CPM drawback ,this study presents a CPS(critical path segment) mechanism. The CPS mechanism addresses the problem with CPM in three innovative ways; 1) activity duration is represented as a series of separate time segments 2) representation of the progress of an activity is enhanced 3) Optimization mechanism to incorporate project constraints into the CPS analysis. The CPS technique help project manager to achieve better level of control over project and their corrective actions.

4.Rana Ali Al Haj et.al(2012)

This study uses two new frameworks that are developed to solve the time-cost optimization problem by taking float into consideration: a) stochastic framework b) Non linear integer programming(NLIP) framework. Stochastic framework use Monte carlo simulation simulation technique to determine the effect of float loss on risk and Non linear programming framework uses what's best solver to find an efficient solution to the optimization while incorporating float loss. Results obtained from both the framework confirm the hypothesis that new optimum solution will be at higher cost and duration but with reduce risk. This is because the proposed framework incorporate the effect of float loss on project cast and risk. In

this five examples selected from literature solved via two proposed framework to validate them as valid,time saving and reliable method against float oriented tasks.

5.Adeleke J.S , Ankeli I.A , Buari T.a Esan M.T et.al (2013)

The paper examines the application of project management system by exploring the cost slope graph to reduce project period at minimum cost.The total project duration was reduced starting with activities with least cost slope unit continuously to obtain an optimum cost lesser than the initial cost of the project.A graphical representation of project cost vs time graph was obtained from least cost scheduling table by duration to show the optimum cost.This study recommends that shortening of project duration when delay sets in.

6.Dr. Khalid S. Al-Gahtani et.al(2013)

This paper relates the increase in risk with total float reduction of the non critical activities that have been affected by project acceleration.The paper proposes a method that works with time cost Trade off for estimating increase of project risk in relation to accelerating the project time..This method uses the total float of non critical activities as an indicator for changing the project risk.An illustrative example is used in this paper to demonstrate the proposed method.

7. Komesah Sahu and Meena Sahu et.al(2014)

The emphasis of this thesis is on schedule / time risk and associated costs.It gives an alternative method approach to obtain optimum cost and time and also minimum duration of project with fully crashing in critical path.It is performed by directly critical slope value for shortening of project.It gives better crashing with effective time management.

8.Aftab Hameed Memon, Ismail Abdul Rahman ,Ismail Ismail, Noor Yasmin Zainum et.al(2014)

This paper aims to identify the effectiveness of various techniques and software packages of time management.The paper concluded that most effective method of time management as perceived by the respondents was CPM method and the most commonly adopted is Microsoft project.

9.Hisham M.M.Said et.al(2016)

Previous spatial scheduling models did not provide seamless integration with site logistics planning of material staging and temporary facilities.This paper therefore identifies floats that can exist in spatial scheduling.This paper defines three activity float metrics using singularity functions:shift,rate,and combined floats.This research makes two contributions to construction scheduling.First, activity float metrics expand the capabilities of spatial scheduling models for assessing the criticality of activities,Second , the space float enables a direct integration between scheduling and other project management tasks like material handling ,site layout,and trades coordination.

10.Mr.Bhushan V.Tatar and Prof.Rahul S. Patil et.al(2016)

In this study, it was attempt to establish a non linear integer programming technique using what's best solver version 11: 0 software(added into excel and supports variety of optimization models such as linear ,nonlinear etc) to the project of construction of culvert in order to find out the optimum time and cost value by taking into consideration the effect of total float consumption. This study considered the hypothesis that optimum schedule obtained will be at higher duration and cost but with lower risk. Results obtained are better in comparision with deterministic CPM in terms of schedule flexibility, critical index , criticality ratio and probability of finishing and allow the incharge of project to exercise new trade offs between time cost and overall flexibility.

11.Shifat Ahmed et.al(2016)

In this study , for effective scheduling of time as well as cost optimization of the large project, application of PERT/CPM and Project crashing method is used.At first the project is divided into no. of activities involved and network diagram is prepared to determine the critical path and then the project crashing method is used to minimize the time that is required for successful completion of the project.In addition to this , this study includes new scheduling techniques by using earliest event time that can easily compute the time and cost of the project.

12.Prof. Dr. A.W. Dhawale , Swapnil Naresh Bhardwaj et.al(2016)

This paper aims to identify the factors constraining the activity and quality of construction based on the view of technical persons due to effect of schedule acceleration. The information gathered through the literature review is used in the preparation of questionnaire which is distributed to project engineer, site engineer, construction engineer ,estimation and billing engineer, senior engineer, quality engineer. Survey data is collected from 49 construction practitioners from 7 different sites in Maharashtra(india).

13. Osama Moselhi , Ibrahim Bakry , Adel Alshibani et.al(2016)

In this paper the scheduled acceleration of repetitive construction is done based on cost slope and contractors judgement. It brings two main improvements; it captures uncertainty associated with the acceleration cost and allows accounting for contractors own perspective while creating acceleration plans.

14. Akash Lanke, Dr.D.Venkateswarlu et.al(2016)

This Study concluded that precast concrete system is economical than conventional cast in place method but there are some conditions like type of building,Quantity of construction,site distance from manufacturing unit etc which have to be taken care of.Precast system helps to achieve better concrete quality control and lighter concrete unite.

15. B.Raghavendra, K.Holla,Siddhant Anant,Muzzammil Ali Mohammad et.al(2016)

This study is focussed on reviewing and summarizing the role of time, cost, quality and productivity of the precast system in order to compare with the conventional. In this aspect, Precast concrete construction is considered to produce better productivity and reduce cost completion time and dependency on work force.

16. Adel Francis , Stephane Morin-Pepin et.al(2017)

This paper explains the concept of margin(float) calculation based on the site occupation using the chronographic modelling. This paper considers the impact of resources and working area management on schedule and float computation and by proposing a Forward/Backward graphical process to optimize the schedule , the chronographic logic and margin computations can then simulate the project real conditions.

17. Jyh-Bin Yang et.al(2017)

This paper thoroughly reviewed various float in literature and professional project management systems and discussed five managerial essentials and three proactive strategies on mitigating challenging float-related problems based on the perspective of managing schedules by controlling float. The outcome of this study provide a better understanding of float management to improve the quality of schedule management.

18. Pulidindi venugopal, M.H.V Balaji et.al(2017)

This paper analyze the project acceleration(Fast tracking) in construction project and its impact on quality , cost, wastage of resources etc and techniques for getting profitable profit along with quality maintenance.

19. Sasan Nasiri and Ming lu .et.al(2019)

This study proposes a new computing framework for time cost trade off optimization that takes advantage of path float based technique and integer programming(IP). Duration of the project can be minimized in each crashing cycle based on path float analysis. A case study is used to verify the proposed method and its application.

20. JayaRohindh J, Thamiselvi P et.al(2019)

This paper deals with the analysis of the factors due to cost during project crashing by carrying out questionnaire survey and by process of project crashing using crashing model .A crashing model is designed and configured to perform simulation using MS Excel. Optimum project duration is obtained using time cost trade off. Finally, assessment of risk is done to determine the optimum level of crashing at minimum risk.

2.2 SUMMARY OF LITERATURE REVIEWS

S.NO.	PAPER	AUTHOR	YEAR	RESEARCH WORK
1	Float consumption impact on cost and schedule in the construction industry	Zafer I.sakka and sameh M.El-sayegh et.al	2007	This research paper proposes a method to control the risk that are associated with float loss in construction projects using simulation and least square non linear regression
2	Float allocation using total risk approach	Khalid S. Al-Gahtani et.al	2009	This Paper introduces a new approach i.e. “total risk approach” of float allocation that integrates several current approaches for allocation of float among project parties
3	Construction Scheduling using critical path analysis with separate time segments	Wail Menesi et.al	2010	To overcome CPM drawback ,this study presents a CPS(critical path segment) mechanism.
4	A Framework for project time cost optimization considering float consumption impact	Rana Ali Al Haj et.al	2012	This study uses two new frameworks that are developed to solve the time-cost optimization problem by taking float into consideration:a) stochastic framework b) Non linear integer programming(NLIP) framework
5	Application of project management system in reducing construction time	Adeleke J.S , Ankeli I.A , Buari T.a Esan M.T et.al	2013	The paper examines the application of project management system by exploring the cost slope graph to reduce project period at minimum cost.
6	Risk Assessment for scheduling acceleration	By:-Dr. Khalid S. Al-Gahtani et.al	2013	This paper relates the increase in risk with total float reduction of the non

				critical activities that have been affected by project acceleration. The paper proposes a method that works with time cost
7	Cost and time and also minimum project duration using alternative method	Komesh Sahu and Meena Sahu et.al	2014	The emphasis of this thesis is on schedule / time risk and associated costs. It gives an alternative method approach to obtain optimum cost and time and also minimum duration of project with fully crashing in critical path.
8	Time management practices in large construction projects	Aftab Hameed Memon, Ismail Abdul Rahman, Ismaaini Ismail, Noor Yasmin Zainum et.al	2014	This paper aims to identify the effectiveness of various techniques and software packages of time management.
9	Float types in spatial scheduling	Hisham M.M.Said et.al	2016	Previous spatial scheduling models did not provide seamless integration with site logistics planning of material staging and temporary facilities. This paper therefore identifies floats that can exist in spatial scheduling
10	Time and cost optimization techniques in construction project management	Mr. Bhushan V. Tatar and Prof. Rahul S. Patil et.al	2016	In this study, it was attempted to establish a non-linear integer programming technique using what's best solver version 11:0 software to the project of construction of culvert in order to find out the optimum time and cost value by taking into consideration the effect of total float consumption.

11	Minimize time and cost for successful completion of a Large scale project applying project crashing method	Shifat Ahmed et.al	2016	In this study , for effective scheduling of time as well as cost optimization of the large project, application of PERT/CPM and Project crashing method is used.
12	Effects of schedule acceleration on construction performance	Prof. Dr. A.W. Dhawale , Swapnil Naresh Bhardwaj et.al	2016	This paper aims to identify the factors constraining the activity and quality of construction based on the view of technical persons due to effect of schedule acceleration
13	Accelerating Repititive construction projects with uncertainty and contractors Judgement	Osama Moselhi , Ibrahim Bakry , Adel Alshibani	2016	In this paper the scheduled acceleration of repetitive construction is done based on cost slope and contractors judgement
14.	Design,Cost &Time Analysis of Precast & RCC Building	AkashLanke Dr.D.Venkateswarlu	2016	This Study concluded that precast concrete system is economical than conventional cast in place method but there are some conditions like type of building,site distance from manufacturing unit etc which have to be taken care of.
15	Time,Cost,Productivity and quality analysis of precast concrete system	B.Raghavendra K.Holla,Siddhant Anant,Muzzammil Ali Mohammad	2016	This study is focussed on reviewing and summarizing the role of time,cost,quality and productivity of the precast system in order to compare with the conventional.
16	The concept of float calculation based on the site occupation using the chronological logic	Adel Francis , Stephane Morin-Pepin et.al	2017	This paper explains the concept of margin(float) calculation based on the site occupation using the

				chronographic modelling.
17	Reviewing construction schedule float management	Jyh-Bin Yang et.al	2017	This paper thoroughly reviewed various float in literature and professional project management systems and discussed five managerial essentials and three proactive strategies on mitigating challenging float-related problems based on the perspective of managing schedules by controlling float.
18	Analysis on project acceleration and its impact along with profitable solution	Pulidindi venugopal,M.H.V Balaji et.al	2017	This paper analyze the project acceleration(Fast tracking) in construction project and its impact on quality ,cost, wastage of resources etc and techniques for getting profitable profit along with quality maintenance.
19	Path Float based approach to optimizing time cost trade off in project planning and scheduling	Sasan Nasiri and Ming lu .et.al	2019	This study proposes a new computing framework for time cost trade off optimization that takes advantage of path float based technique and integer programming(IP).
20	Risk assessment of an accelerated project to find the optimal risk point for crashing	JayaRohindh J, Thamiselvi P	2019	This paper deals with the analysis of the factors due to cost during project crashing by carrying out questionnaire survey and by process of project crashing using crashing model

CHAPTER 3

RESEARCH METHODOLOGY

3.1 METHODOLOGY

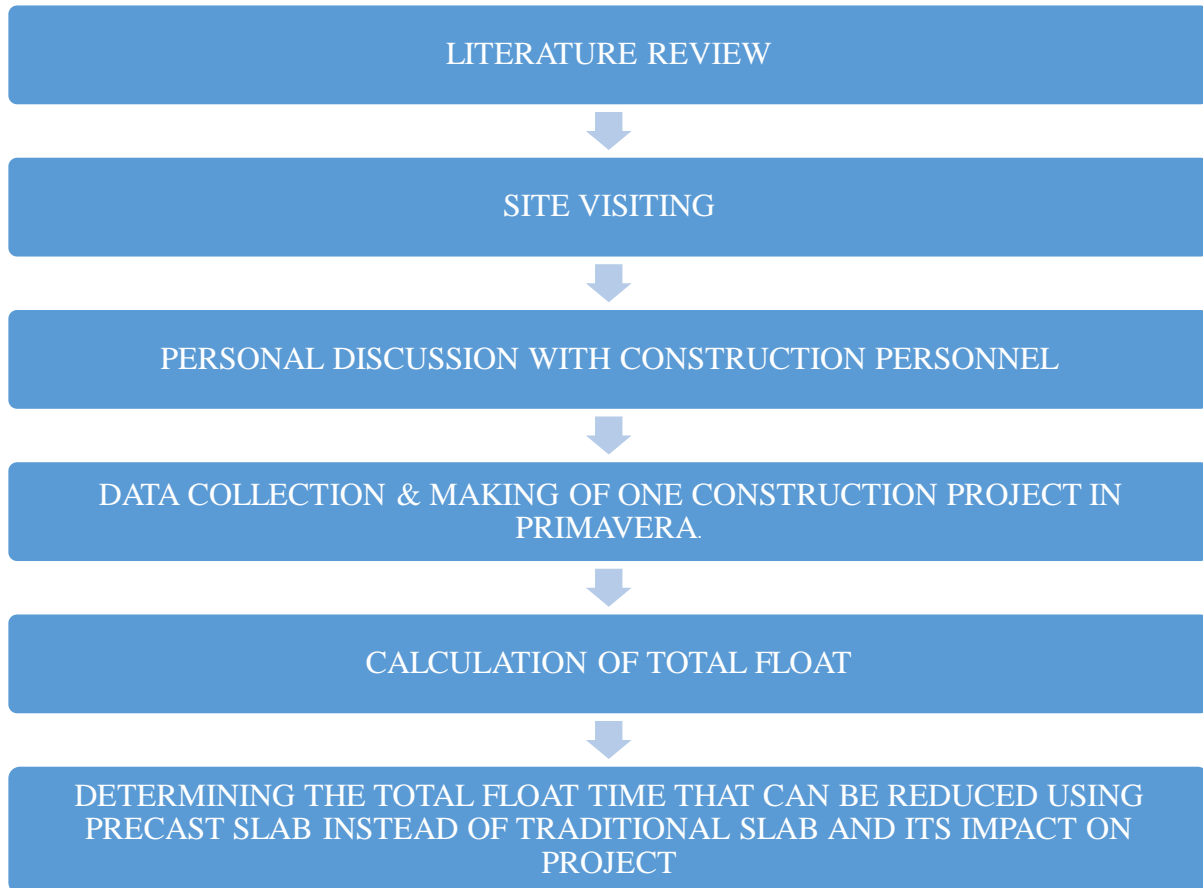


FIG1.1 RESEARCH METHODOLOGY FLOW CHART

3.2 SITE VISITED(Regarding personnel discussion)

1.LULU MALL LUCKNOW

Address-Amar Shaheed Path,Golf City,Lucknow,UP

2.ROHIT GRAND (HIGH RISE BUILDING) BY RS ROHIT GROUP

Address-Shahhed Path,Lucknow

3.AZEA BOTANICA (HIGH RISE BUILDING,11 TOWERS)

Address-GH-8 Sector 11,Vrindavan Yojana,Raebareli Road,Lucknow

4.BBD viraj Tower

Address- Shahhed Path near kamta chauraha



FIG1.2 SITE VISITED FOR PERSONAL DISCUSSION

❖ PERSONAL DISCUSSION

1.What are the factors that affect float time in construction project?

Ans:-Factors are as follows:-

- i. Manpower(skilled,unskilled)
- ii. Machinery,Equipment type used
- iii. Type of material used
- iv. Construction technique

2.What are the construction techniques that can help in reduction of float time?

Ans:- i) Precast members like Precast slab in form of panels,Precast brick panels etc.

ii)Mivan shuttering

iii) AAC blocks

iv) Steel structures etc.

3. Is Precast structures are familiar in Indian construction industry?

Ans:- In present scenario, precast structures are not very familiar in Indian construction industry.

4. What are reasons for unfamiliarity of Precast structures in India?

Ans:- Reasons are as follows:-

- i. Cost
- ii. Lack of adequate skill & knowledge
- iii. Lack of Expertise
- iv. Skilled workmanships are required
- v. use of specific type of equipment like cranes are required to lift panels etc.

NOTE:- 1. Globally, precast structures is very popular. For eg:- China is building 1600 bed hospital for corona virus patients using precast structure with aim of completion in 10 days.

5. In construction of LULU Mall, Lucknow, Katterra construction pvt. Ltd setup their own plant on Shaheed Path near construction site for construction of precast structures. In fact, they are also using precast slab in form of slab panels & then connected it with bolted & other connections.

6. Generally project crashing is used to accelerate the project or to shorten the duration of project in order to complete it faster but it also increases the risk associated with the project and increases cost also.

7. Which type of construction techniques for faster construction used in India are familiar?

Ans:- AAC blocks, Mivan shuttering etc.

8. What are the various software that are used in management of large construction is done for better optimization of time & float time reduction possibility?

Ans:- For this, some of the project management software that are popular in construction industry are as follows:-

- i. PRIMAVERA (widely used)
- ii. MS PROJECT
- iii. ASTA POWER PROJECT etc.

3.2.1 Data Collection And Analysis:- The data collected is of Academic Admin Block(A Six-Storey Building) of Siddhartnagar Medical College,UP.

Medical College academic Admn Exmn Block						
ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
0	0	Medical College academic Admn Exmn Block		0	₹0.00	₹402,519,088.08
1	1	Start of the Project		0	₹0.00	₹0.00
2	2	Site clearance		0	₹0.00	₹0.00
3	3	Setup of machineries		0	₹0.00	₹0.00
4	4	Substructure		0	₹0.00	₹39,143,430.45
5	4.1	Piles	Nos	332	₹0.00	₹7,137,567.58
6	4.1.1	500 mm dia-piling and casting (1-150)	RMT	1075.5	₹5,992.80	₹6,445,256.40
7	4.1.2	Initial Test	Nos	2	₹53,874.48	₹107,748.96
8	4.1.3	Routine Test	Nos	11	₹32,769.02	₹360,459.22
9	4.1.4	excavation	CUM	2037.3	₹110.00	₹224,103.00
10	4.2	Pile Caps		0	₹0.00	₹20,914,632.69
11	4.2.1	Anti-Termite Treatment	SQM	3121	₹266.00	₹830,186.00
12	4.2.2	PCC 1:4:8 in foundation	CUM	226.36	₹5,225.00	₹1,182,731.00
13	4.2.3	Reinforcement	MT	1348.36	₹5,693.16	₹7,676,429.22
14	4.2.4	Shuttering	SQM	1061.12	₹185.49	₹196,827.15
15	4.2.5	RCC-Pilecap	CUM	1717.66	₹6,420.63	₹11,028,459.33
16	4.3	Column Upto Plinth		0	₹0.00	₹3,826,731.96
17	4.3.1	Reinforcement	QTL	491.46	₹5,693.16	₹2,797,960.41
18	4.3.2	Shuttering	SQM	2083.41	₹185.49	₹386,451.72
19	4.3.3	RCC: upto plinth	CUM	100.04	₹6,420.63	₹642,319.83
20	4.4	Brickwork upto plinth	CUM	133.32	₹5,248.75	₹699,763.35
21	4.5	Plaster work : plinth (1:4)	SQM	192.22	₹235.00	₹45,171.70
22	4.6	DPC& Bitumen painting	SQM	474.96	₹251.75	₹119,571.18
23	4.7	Earth filling in Plinth	CUM	3684.38	₹289.75	₹1,067,549.11
24	4.8	Sand filling in Plinth	CUM	439.72	₹826.50	₹363,428.58
25	4.9	Grade Slab/Beam		0	₹0.00	₹4,969,014.30
26	4.9.1	PCC 1:4:8	CUM	278.84	₹5,225.00	₹1,456,939.00
27	4.9.2	Reinforcement in grade slab	QTL	315.1	₹5,693.16	₹1,793,914.72
28	4.9.3	concreting in Grade beam/slab	CUM	267.6	₹6,420.63	₹1,718,160.59
29	5	Super- Structure		0	₹0.00	₹132,604,146.48
30	5.1	Ground Floor		0	₹0.00	₹17,633,786.01
31	5.1.1	column reinforcement- Gf	QTL	417.98	₹5,693.16	₹2,379,627.02
32	5.1.2	column shuttering -GF	SQM	1352.67	₹447.43	₹605,225.14
33	5.1.3	Column casting- Gf	CUM	193.62	₹7,189.16	₹1,391,965.16
34	5.1.4	Slab Part -1- GF		0	₹0.00	₹6,628,484.35
35	5.1.4.1	Beam and slab shuttering-GF	SQM	2503.99	₹365.90	₹916,209.94
36	5.1.4.2	Beam and slab reinforcement-GF	QTL	506.52	₹5,693.16	₹2,883,699.40
37	5.1.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
38	5.1.4.4	inspection	JOB	0	₹0.00	₹0.00
39	5.1.4.5	Beam and Slab Casting- GF	CUM	393.45	₹7,189.16	₹2,828,575.00
40	5.1.5	Slab Part -2		0	₹0.00	₹6,628,484.35
41	5.1.5.1	Beam and slab shuttering-GF(2)	SQM	2503.99	₹365.90	₹916,209.94
42	5.1.5.2	Beam and slab reinforcement-GF(2)	QTL	506.52	₹5,693.16	₹2,883,699.40
43	5.1.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
44	5.1.5.4	Inspection	JOB	0	₹0.00	₹0.00
45	5.1.5.5	Beam and Slab Casting-GF(2)	CUM	393.45	₹7,189.16	₹2,828,575.00
46	5.2	First Floor		0	₹0.00	₹18,095,908.31
47	5.2.1	column reinforcement- 1F	QTL	417.98	₹5,693.16	₹2,379,627.02
48	5.2.2	column shuttering- 1F	SQM	1352.67	₹447.43	₹605,225.14

Medical College academic Admn Exmn Block

ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
49	5.2.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
50	5.2.4	Slab Part -1		0	₹0.00	₹6,859,545.50
51	5.2.4.1	Beam and slab shuttering	SQM	2370.3	₹365.90	₹867,292.77
52	5.2.4.2	Beam and slab reinforcement	MT	549.22	₹5,693.16	₹3,126,797.34
53	5.2.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
54	5.2.4.4	inspection	JOB	0	₹0.00	₹0.00
55	5.2.4.5	Beam and Slab Casting	CUM	398.58	₹7,189.16	₹2,865,455.39
56	5.2.5	Slab Part -2		0	₹0.00	₹6,859,545.50
57	5.2.5.1	Beam and slab shuttering	SQM	2370.3	₹365.90	₹867,292.77
58	5.2.5.2	Beam and slab reinforcement	MT	549.22	₹5,693.16	₹3,126,797.34
59	5.2.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
60	5.2.5.4	Inspection	JOB	0	₹0.00	₹0.00
61	5.2.5.5	Beam and Slab Casting	CUM	398.58	₹7,189.16	₹2,865,455.39
62	5.3	Second Floor		0	₹0.00	₹18,393,675.45
63	5.3.1	column reinforcement	QTL	417.98	₹5,693.16	₹2,379,627.02
64	5.3.2	column shuttering	SQM	1352.67	₹447.43	₹605,225.14
65	5.3.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
66	5.3.4	Slab Part -1		0	₹0.00	₹7,008,429.07
67	5.3.4.1	Beam and slab shuttering	SQM	2527.21	₹365.90	₹924,706.14
68	5.3.4.2	Beam and slab reinforcement	QTL	547.57	₹5,693.16	₹3,117,403.62
69	5.3.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
70	5.3.4.4	inspection	JOB	0	₹0.00	₹0.00
71	5.3.4.5	Beam and Slab Casting	CUM	412.61	₹7,189.16	₹2,966,319.31
72	5.3.5	Slab Part -2		0	₹0.00	₹7,008,429.07
73	5.3.5.1	Beam and slab shuttering	SQM	2527.21	₹365.90	₹924,706.14
74	5.3.5.2	Beam and slab reinforcement	MT	547.57	₹5,693.16	₹3,117,403.62
75	5.3.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
76	5.3.5.4	Inspection	JOB	0	₹0.00	₹0.00
77	5.3.5.5	Beam and Slab Casting	CUM	412.61	₹7,189.16	₹2,966,319.31
78	5.4	Third Floor		0	₹0.00	₹18,830,587.76
79	5.4.1	column reinforcement	QTL	417.98	₹5,693.16	₹2,379,627.02
80	5.4.2	column shuttering	SQM	1352.67	₹447.43	₹605,225.14
81	5.4.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
82	5.4.4	Slab Part -1		0	₹0.00	₹7,226,885.22
83	5.4.4.1	Beam and slab shuttering	SQM	2605.18	₹365.90	₹953,235.36
84	5.4.4.2	Beam and slab reinforcement	QTL	560.36	₹5,693.16	₹3,190,219.14
85	5.4.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
86	5.4.4.4	inspection	JOB	0	₹0.00	₹0.00
87	5.4.4.5	Beam and Slab Casting	CUM	428.9	₹7,189.16	₹3,083,430.72
88	5.4.5	Slab Part -2		0	₹0.00	₹7,226,885.22
89	5.4.5.1	Beam and slab shuttering	SQM	2605.18	₹365.90	₹953,235.36
90	5.4.5.2	Beam and slab reinforcement	QTL	560.36	₹5,693.16	₹3,190,219.14
91	5.4.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
92	5.4.5.4	Inspection	JOB	0	₹0.00	₹0.00
93	5.4.5.5	Beam and Slab Casting	CUM	428.9	₹7,189.16	₹3,083,430.72

Medical College academic Admn Exmn Block

ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
94	5.5	Fourth Floor		0	₹0.00	₹18,990,853.68
95	5.5.1	column reinforcement	QTL	417.98	₹5,693.16	₹2,379,627.02
96	5.5.2	column shuttering	SQM	1352.67	₹447.43	₹605,225.14
97	5.5.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
98	5.5.4	Slab Part -1		0	₹0.00	₹7,307,018.18
99	5.5.4.1	Beam and slab shuttering	SQM	2674.78	₹365.90	₹978,702.00
100	5.5.4.2	Beam and slab reinforcement	QTL	563.08	₹5,693.16	₹3,205,704.53
101	5.5.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
102	5.5.4.4	inspection	JOB	0	₹0.00	₹0.00
103	5.5.4.5	Beam and Slab Casting	CUM	434.35	₹7,189.16	₹3,122,611.65
104	5.5.5	Slab Part -2		0	₹0.00	₹7,307,018.18
105	5.5.5.1	Beam and slab shuttering	SQM	2674.78	₹365.90	₹978,702.00
106	5.5.5.2	Beam and slab reinforcement	QTL	563.08	₹5,693.16	₹3,205,704.53
107	5.5.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
108	5.5.5.4	Inspection	JOB	0	₹0.00	₹0.00
109	5.5.5.5	Beam and Slab Casting	CUM	434.35	₹7,189.16	₹3,122,611.65
110	5.6	Fifth Floor		0	₹0.00	₹19,148,908.95
111	5.6.1	column reinforcement	QTL	417.98	₹5,693.16	₹2,379,627.02
112	5.6.2	column shuttering	SQM	1352.67	₹447.43	₹605,225.14
113	5.6.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
114	5.6.4	Slab Part -1		0	₹0.00	₹7,386,045.82
115	5.6.4.1	Beam and slab shuttering	SQM	2647.86	₹365.90	₹968,851.97
116	5.6.4.2	Beam and slab reinforcement	QTL	574.36	₹5,693.16	₹3,269,923.38
117	5.6.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
118	5.6.4.4	inspection	JOB	0	₹0.00	₹0.00
119	5.6.4.5	Beam and Slab Casting	CUM	437.78	₹7,189.16	₹3,147,270.46
120	5.6.5	Slab Part -2		0	₹0.00	₹7,386,045.82
121	5.6.5.1	Beam and slab shuttering	SQM	2647.86	₹365.90	₹968,851.97
122	5.6.5.2	Beam and slab reinforcement	QTL	574.36	₹5,693.16	₹3,269,923.38
123	5.6.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
124	5.6.5.4	Inspection	JOB	0	₹0.00	₹0.00
125	5.6.5.5	Beam and Slab Casting	CUM	437.78	₹7,189.16	₹3,147,270.46
126	5.7	Sixth Floor		0	₹0.00	₹18,289,800.63
127	5.7.1	column reinforcement	QTL	417.98	₹5,693.16	₹2,379,627.02
128	5.7.2	column shuttering	SQM	1352.67	₹447.43	₹605,225.14
129	5.7.3	column casting	CUM	193.62	₹7,189.16	₹1,391,965.16
130	5.7.4	Slab Part -1		0	₹0.00	₹6,526,937.50
131	5.7.4.1	Beam and slab shuttering	SQM	2239.81	₹365.90	₹819,546.48
132	5.7.4.2	Beam and slab reinforcement	MT	531.89	₹5,693.16	₹3,028,134.87
133	5.7.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
134	5.7.4.4	inspection	JOB	0	₹0.00	₹0.00
135	5.7.4.5	Beam and Slab Casting	CUM	372.68	₹7,189.16	₹2,679,256.15
136	5.7.5	Slab Part -2		0	₹0.00	₹7,386,045.82
137	5.7.5.1	Beam and slab shuttering	SQM	2647.86	₹365.90	₹968,851.97
138	5.7.5.2	Beam and slab reinforcement	QTL	574.36	₹5,693.16	₹3,269,923.38
139	5.7.5.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
140	5.7.5.4	Inspection	JOB	0	₹0.00	₹0.00
141	5.7.5.5	Beam and Slab Casting	CUM	437.78	₹7,189.16	₹3,147,270.46
142	5.8	MUMTY		0	₹0.00	₹3,220,625.70
143	5.8.1	column reinforcement	QTL	38.64	₹5,693.16	₹219,983.70
144	5.8.2	column shuttering	SQM	1596.61	₹447.43	₹714,371.21
145	5.8.3	column casting	CUM	146.26	₹7,189.16	₹1,051,486.54
146	5.8.4	Slab Part -1		0	₹0.00	₹1,234,784.25
147	5.8.4.1	Beam and slab shuttering	SQM	311.24	₹365.90	₹113,882.72
148	5.8.4.2	Beam and slab reinforcement	QTL	93.25	₹5,693.16	₹530,887.17

Medical College academic Admn Exmn Block

ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
149	5.8.4.3	Beam and slab conduit	JOB	0	₹0.00	₹0.00
150	5.8.4.4	inspection	JOB	0	₹0.00	₹0.00
151	5.8.4.5	Beam and Slab Casting	CUM	82.07	₹7,189.16	₹590,014.36
152	6	Brick Work		0	₹0.00	₹30,731,786.13
153	6.1	Ground Floor		0	₹0.00	₹3,334,362.30
154	6.1.1	Brick work 1:6	CUM	488.69	₹5,704.75	₹2,787,854.28
155	6.1.2	Half Brick work 1:4	CUM	91.4	₹5,979.30	₹546,508.02
156	6.2	First Floor		0	₹0.00	₹3,465,378.45
157	6.2.1	Brick work 1:6	CUM	494.5	₹5,761.80	₹2,849,210.10
158	6.2.2	Half Brick work 1:4	CUM	102.03	₹6,039.09	₹616,168.35
159	6.3	Second Floor		0	₹0.00	₹4,387,053.06
160	6.3.1	Brick work 1:6	CUM	658.37	₹5,818.85	₹3,830,956.27
161	6.3.2	Half Brick work 1:4	CUM	91.18	₹6,098.89	₹556,096.79
162	6.4	Third Floor		0	₹0.00	₹4,844,999.02
163	6.4.1	Brick work 1:6	CUM	726.21	₹5,875.89	₹4,267,130.08
164	6.4.2	Half Brick work 1:4	CUM	93.83	₹6,158.68	₹577,868.94
165	6.5	Fourth Floor		0	₹0.00	₹4,793,258.17
166	6.5.1	Brick work 1:6	CUM	709.77	₹5,932.94	₹4,211,022.82
167	6.5.2	Half Brick work 1:4	CUM	93.63	₹6,218.47	₹582,235.35
168	6.6	Fifth Floor		0	₹0.00	₹4,669,716.63
169	6.6.1	Brick work 1:6	CUM	681.22	₹5,989.99	₹4,080,500.99
170	6.6.2	Half Brick work 1:4	CUM	93.85	₹6,278.27	₹589,215.64
171	6.7	Sixth Floor		0	₹0.00	₹3,878,616.53
172	6.7.1	Brick work 1:6	CUM	554.13	₹6,047.04	₹3,350,846.28
173	6.7.2	Half Brick work 1:4	CUM	83.27	₹6,338.06	₹527,770.26
174	6.8	mumty		0	₹0.00	₹1,358,401.96
175	6.8.1	Brick work 1:6	CUM	222.54	₹6,104.08	₹1,358,401.96
176	7	Electrical work-Wall Conduiting		0	₹0.00	₹0.00
177	7.1	Ground Floor	JOB	1	₹0.00	₹0.00
178	7.2	First Floor	JOB	1	₹0.00	₹0.00
179	7.3	Second Floor	JOB	1	₹0.00	₹0.00
180	7.4	Third Floor	JOB	1	₹0.00	₹0.00
181	7.5	Fourth Floor	JOB	1	₹0.00	₹0.00
182	7.6	Fifth Floor	JOB	1	₹0.00	₹0.00
183	7.7	Sixth Floor	JOB	1	₹0.00	₹0.00
184	7.8	mumty	JOB	1	₹0.00	₹0.00
185	8	Water Supply GI Work	RMT	8856	₹0.00	₹8,724,817.90
186	8.1	Ground Floor	RMT	8422.63	₹182.60	₹1,537,972.24
187	8.2	First Floor	RMT	7770.63	₹182.60	₹1,418,917.04
188	8.3	Second Floor	RMT	5732.63	₹182.60	₹1,046,778.24
189	8.4	Third Floor	RMT	5732.63	₹182.60	₹1,046,778.24
190	8.5	Fourth Floor	RMT	5732.63	₹182.60	₹1,046,778.24
191	8.6	Fifth Floor	RMT	4808.63	₹182.60	₹878,055.84
192	8.7	Sixth Floor	RMT	4790.63	₹182.60	₹874,769.04
193	8.8	mumty	RMT	4790.63	₹182.60	₹874,769.04
194	9	Internal Plaster		0	₹0.00	₹13,361,596.30

Medical College academic Admn Exmn Block						
ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
195	9.1	Internal Plaster work :Ceiling		0	₹0.00	₹5,047,860.62
196	9.1.1	Ground Floor	SQM	3302.31	₹235.60	₹778,024.24
197	9.1.2	First Floor	SQM	2014.62	₹237.96	₹479,398.98
198	9.1.3	Second Floor	SQM	3075.72	₹240.31	₹739,126.27
199	9.1.4	Third Floor	SQM	3266.98	₹242.67	₹792,798.04
200	9.1.5	Fourth Floor	SQM	3256.05	₹245.02	₹797,797.37
201	9.1.6	Fifth Floor	SQM	3259.48	₹247.38	₹806,330.16
202	9.1.7	Sixth Floor	SQM	2367.39	₹249.74	₹591,231.98
203	9.1.8	Mumty	SQM	250.52	₹252.09	₹63,153.59
204	9.2	Internal Plaster work : Smooth wall		0	₹0.00	₹3,743,706.52
205	9.2.1	Ground Floor	SQM	1569.06	₹212.00	₹332,640.72
206	9.2.2	First Floor	SQM	1820.2	₹214.12	₹389,741.22
207	9.2.3	Second Floor	SQM	2510.11	₹216.24	₹542,786.19
208	9.2.4	Third Floor	SQM	2945.72	₹218.36	₹643,227.42
209	9.2.5	Fourth Floor	SQM	2824.01	₹220.48	₹622,637.72
210	9.2.6	Fifth Floor	SQM	2658.21	₹222.60	₹591,717.55
211	9.2.7	Sixth Floor	SQM	2027.79	₹224.72	₹455,684.97
212	9.2.8	Mumty	SQM	715.21	₹231.08	₹165,270.73
213	9.3	Internal Plaster work : Rough wall		0	₹0.00	₹4,570,029.17
214	9.3.1	Ground Floor	SQM	1979.47	₹226.00	₹447,360.22
215	9.3.2	First Floor	SQM	2298.71	₹228.26	₹524,703.54
216	9.3.3	Second Floor	SQM	3246.35	₹230.52	₹748,348.60
217	9.3.4	Third Floor	SQM	3390.07	₹232.78	₹789,140.49
218	9.3.5	Fourth Floor	SQM	3268.36	₹235.04	₹768,195.33
219	9.3.6	Fifth Floor	SQM	3102.56	₹237.30	₹736,237.49
220	9.3.7	Sixth Floor	SQM	2248.32	₹239.56	₹538,607.54
221	9.3.8	Mumty	SQM	70.78	₹246.34	₹17,435.95
222	10	Door Window Framing/Panels		0	₹0.00	₹7,700,439.23
223	10.1	Ground Floor	SQM	1986.8	₹367.72	₹730,586.10
224	10.2	First Floor	SQM	3959.52	₹367.72	₹1,455,994.69
225	10.3	Second Floor	SQM	3043.76	₹367.72	₹1,119,251.43
226	10.4	Third Floor	SQM	3689.28	₹367.72	₹1,356,622.04
227	10.5	Fourth Floor	SQM	3287.92	₹367.72	₹1,209,033.94
228	10.6	Fifth Floor	SQM	2881.2	₹367.72	₹1,059,474.86
229	10.7	Sixth Floor	SQM	2032.08	₹367.72	₹747,236.46
230	10.8	Mumty	SQM	60.48	₹367.72	₹22,239.71
231	11	Flooring work/Tiling Work		0	₹0.00	₹29,643,382.69
232	11.1	Ground Floor	SQM	3372.93	₹1,364.07	₹4,600,912.63
233	11.2	First Floor	SQM	2122.44	₹1,364.07	₹2,895,156.73

Medical College academic Admn Exmn Block

ID	Outline Number	Task Name	Unit	TOTAL QUANTITY	RATE	TOTAL AMOUNT
234	11.3	Second Floor	SQM	3347.67	₹1,364.07	₹4,566,456.22
235	11.4	Third Floor	SQM	3487.07	₹1,364.07	₹4,756,607.57
236	11.5	Fourth Floor	SQM	3507.03	₹1,364.07	₹4,783,834.41
237	11.6	Fifth Floor	SQM	3501.98	₹1,364.07	₹4,776,945.86
238	11.7	Sixth Floor	SQM	2392.45	₹1,364.07	₹3,263,469.27
239	12	Internal Putty & Paint work		0	₹0.00	₹4,273,555.18
240	12.1	Ground Floor	SQM	5825.95	₹83.53	₹486,641.60
241	12.2	First Floor	SQM	6224.08	₹83.53	₹519,897.40
242	12.3	Second Floor	SQM	7988.77	₹83.53	₹667,301.96
243	12.4	Third Floor	SQM	8449.48	₹83.53	₹705,785.06
244	12.5	Fourth Floor	SQM	8210.43	₹83.53	₹685,817.22
245	12.6	Fifth Floor	SQM	7933.92	₹83.53	₹662,720.34
246	12.7	Sixth Floor	SQM	6529.29	₹83.53	₹545,391.59
247	13	Door/Window Shutters		0	₹0.00	₹1,096,440.93
248	13.1	Ground Floor	SQM	234.07	₹425.49	₹99,594.44
249	13.2	First Floor	SQM	483.6	₹425.49	₹205,766.96
250	13.3	Second Floor	SQM	365.35	₹425.49	₹155,452.77
251	13.4	Third Floor	SQM	461.16	₹425.49	₹196,218.97
252	13.5	Fourth Floor	SQM	410.99	₹425.49	₹174,872.14
253	13.6	Fifth Floor	SQM	360.15	₹425.49	₹153,240.22
254	13.7	Sixth Floor	SQM	254.01	₹425.49	₹108,078.71
255	13.8	Mumty	SQM	7.56	₹425.49	₹3,216.70
256	14	external Finishing work		0	₹0.00	₹5,134,596.87
257	14.1	10 M TO 13 M	SQM	1321.24	₹38.87	₹51,356.60
258	14.2	13M TO 16 M	SQM	1294.93	₹77.75	₹100,680.81
259	14.3	16M TO 19 M	SQM	1499.31	₹116.63	₹174,864.53
260	14.4	19M TO 22 M	SQM	1298.42	₹155.51	₹201,917.29
261	14.5	22M TO 25 M	SQM	1323.84	₹194.38	₹257,328.02
262	14.6	25 M TO 28 M	SQM	1379.43	₹233.25	₹321,752.05
263	14.7	28 M TO 31 M	SQM	1009.39	₹272.14	₹274,695.39
264	14.8	34M TO 37 M	SQM	329.35	₹311.01	₹102,431.14
265	14.9	External Plaster		7742.09	₹0.00	₹2,405,951.04
266	14.9.1	Ground Floor	SQM	1345.55	₹248.00	₹333,696.40
267	14.9.2	First Floor	SQM	1345.55	₹250.48	₹337,033.36
268	14.9.3	Second Floor	SQM	1345.55	₹252.96	₹340,370.33
269	14.9.4	Third Floor	SQM	1345.55	₹255.44	₹343,707.29
270	14.9.5	Fourth Floor	SQM	1345.55	₹257.92	₹347,044.26
271	14.9.6	Fifth Floor	SQM	1345.55	₹260.40	₹350,381.22
272	14.9.7	Sixth Floor	SQM	1345.55	₹262.88	₹353,718.18
273	14.10	External Paint	SQM	13818	₹90.00	₹1,243,620.00
274	15	Plumbing Fixtures	JOB	1	₹25,127,451.79	₹25,127,451.79
275	16	Electrical fixtures	JOB	1	₹82,161,000.00	₹82,161,000.00
276	17	Metal False-Ceiling		0	₹0.00	₹17,163,175.32
277	17.1	Ground Floor	SQM	1896.34	₹1,460.61	₹2,769,813.17
278	17.2	First Floor	SQM	1003.99	₹1,460.61	₹1,466,437.83
279	17.3	Second Floor	SQM	1751.17	₹1,460.61	₹2,557,776.41
280	17.4	Third Floor	SQM	1999.07	₹1,460.61	₹2,919,861.63
281	17.5	Fourth Floor	SQM	1986.82	₹1,460.61	₹2,901,969.16
282	17.6	Fifth Floor	SQM	1945.5	₹1,460.61	₹2,841,616.76
283	17.7	Sixth Floor	SQM	1167.8	₹1,460.61	₹1,705,700.36
284	18	Expansion Joint Work	RMT	425.53	₹4,200.91	₹1,787,613.23
285	19	SS Railing Works	Kg	8556.5	₹451.78	₹3,865,655.57
286	20	Testing and commissioning		0	₹0.00	₹0.00
287	21	Handed Over		0	₹0.00	₹0.00

ANALYSIS OF FLOAT TIME IN A CONSTRUCTION PROJECT USING PRIMAVERA SOFTWARE WITH CONDITION AS:

A) USING TRADITIONAL CONCRETE SLAB

siddharth nagar copy		Classic Schedule Layout				14-Mar-20 02:01 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
P2-2	siddharth nagar copy	495.00d	0.00d		344436.45	RS107,872,866.02	RS402,519,088.08
A1000	START OF THE PROJECT	0.00d	0.00d		0.00	RS0.00	RS0.00
A1010	SITE CLEARANCE	5.00d	0.00d		0.00	RS0.00	RS0.00
A1020	SETUP OF MACHINERIES	14.00d	0.00d		0.00	RS0.00	RS0.00
P2-2.1	SUBSTRUCTURE	104.00d	0.00d		19061.35	RS147,026.40	RS39,143,430.45
P2-2.1.1	PILES	63.00d	0.00d		3125.80	RS92,746.30	RS7,137,567.58
A100	500 mm dia PILING AND CASTING(1-15C	40.00d	0.00d	RMT	1075.50	RS5,992.80	RS6,445,256.40
A104	INITIAL TEST	30.00d	0.00d	NOs	2.00	RS53,874.48	RS107,748.96
A105	ROUTINE TEST	45.00d	0.00d	NOs	11.00	RS32,769.02	RS360,459.22
A106	EXCAVATION	2.00d	12.00d	CUM	2037.30	RS110.00	RS224,103.00
P2-2.1.2	PILE CAPS	53.00d	0.00d		7474.50	RS17,790.28	RS20,914,632.69
A107	ANTI-TERMITE TREATMENT	45.00d	0.00d	SQM	3121.00	RS266.00	RS830,186.00
A108	PCC 14.8 IN FOUNDATION	45.00d	0.00d	CUM	226.36	RS5,225.00	RS1,182,731.00
A109	REINFORCEMENT	45.00d	0.00d	MT	1348.36	RS5,693.16	RS7,676,429.22
A110	SHUTTERING	45.00d	0.00d	SQM	1061.12	RS185.49	RS196,827.15
A111	RCC PILECAP	45.00d	0.00d	CUM	1717.66	RS6,420.63	RS11,028,459.33
P2-2.1.3	COLOUMN UPTO PLINTH	52.00d	0.00d		2674.91	RS12,299.28	RS3,826,731.96
A112	REINFORCEMENT	45.00d	0.00d	QTL	491.46	RS5,693.16	RS2,797,960.41
A113	SHUTTERING	45.00d	0.00d	SQM	2083.41	RS185.49	RS386,451.72
A114	RCC UPTO PLINTH	45.00d	0.00d	CUM	100.04	RS6,420.63	RS642,319.83
P2-2.1.4	BRICKWORK UPTO PLINTH	10.00d	0.00d		133.32	RS5,248.75	RS699,763.35
A117	BRICKWORK UPTO PLINTH	10.00d	0.00d	CUM	133.32	RS5,248.75	RS699,763.35
P2-2.1.5	PLASTER WORK	10.00d	0.00d		192.22	RS235.00	RS45,171.70
A118	PLASTER WORK(PLINTH(14)	10.00d	0.00d	SQM	192.22	RS235.00	RS45,171.70
P2-2.1.6	DPC & BITUMEN PAINTING	12.00d	0.00d		474.96	RS251.75	RS119,571.18
A119	DPC & BITUMEN PAINTING	12.00d	0.00d	SQM	474.96	RS251.75	RS119,571.18
P2-2.1.7	EARTH FILLING IN PLINTH	12.00d	0.00d		3684.38	RS289.75	RS1,067,549.11
A120	EARTH FILLING IN PLINTH	12.00d	0.00d	CUM	3684.38	RS289.75	RS1,067,549.11
P2-2.1.8	SAND FILLING IN PLINTH	12.00d	0.00d		439.72	RS826.50	RS363,428.58
A121	SAND FILLING IN PLINTH	12.00d	0.00d	CUM	439.72	RS826.50	RS363,428.58
P2-2.1.9	GRADE SLAB/BEAM	20.00d	0.00d		861.54	RS17,338.79	RS4,969,014.30
A122	PCC 14.8	7.00d	0.00d	CUM	278.84	RS5,225.00	RS1,456,939.00
A123	REINFORCEMENT IN GRADE SLAB	7.00d	0.00d	QTL	315.10	RS5,693.16	RS1,793,914.72
A124	CONCRETING IN GRADE BEAM/SLAB	12.00d	0.00d	CUM	267.60	RS6,420.63	RS1,718,160.59
P2-2.1.10	SUPER STRUCTURE	382.00d	0.00d		325375.10	RS107,725,839.62	RS363,375,657.63
P2-2.10.1	GROUND FLOOR	34.00d	148.00d		8772.19	RS39,826.19	RS17,633,786.01
A127	COLOUMN REINFORCEMENT GF	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A128	COLOUMN SHUTTERING GF	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A129	COLOUMN CASTING GF	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.1.2	SLAB PART-1 GF	13.00d	154.00d		3403.96	RS13,248.22	RS6,628,484.35
A	BEAM AND SLAB SHUTTERING GF	7.00d	0.00d	SQM	2503.99	RS365.90	RS916,209.94
A	BEAM AND SLAB REINFORCEMENT GF	5.00d	0.00d	QTL	506.52	RS5,693.16	RS2,883,699.40
A	BEAM AND SLAB CONDUIT	5.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A	INSPECTION	1.00d	155.00d	JOB	0.00	RS0.00	RS0.00
A	BEAM AND SLAB CASTING	2.00d	0.00d	CUM	393.45	RS7,189.16	RS2,828,575.00
P2-2.10.1.3	SLAB PART-2 GF	14.00d	19.00d		3403.96	RS13,248.22	RS6,628,484.35
A	BEAM AND SLAB SHUTTERING GF2	7.00d	19.00d	SQM	2503.99	RS365.90	RS916,209.94
A	BEAM AND SLAB REINFORCEMENT GF	5.00d	19.00d	QTL	506.52	RS5,693.16	RS2,883,699.40
A	BEAM AND SLAB CONDUIT	5.00d	19.00d	JOB	0.00	RS0.00	RS0.00
A	INSPECTION	1.00d	19.00d	JOB	0.00	RS0.00	RS0.00

sidharth nagar copy		Classic Schedule Layout				14-Mar-20 02:01 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A'	BEAM AND SLAB CASTING	2.00d	19.00d	CUM	393.45	RS7,189.16	RS2,828,575.00
P2-2.10.2 FIRST FLOOR		36.00d	19.00d		8600.47	RS39,826.19	RS18,095,908.31
A13E	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A14C	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A141	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.2.1 SLAB PART 1		11.00d	0.00d		3318.10	RS13,248.22	RS6,859,545.50
A'	BEAM AND SLAB SHUTTERING	5.00d	0.00d	SQM	2370.30	RS365.90	RS867,292.77
A'	BEAM AND SLAB REINFORCEMENT	3.00d	0.00d	MT	549.22	RS5,693.16	RS3,126,797.34
A'	BEAM AND SLAB CONDUIT	3.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	2.00d	0.00d	CUM	398.58	RS7,189.16	RS2,865,455.39
P2-2.10.2.2 SLAB PART 2		12.00d	19.00d		3318.10	RS13,248.22	RS6,859,545.50
A'	BEAM AND SLAB SHUTTERING	5.00d	19.00d	SQM	2370.30	RS365.90	RS867,292.77
A'	BEAM AND SLAB REINFORCEMENT	3.00d	19.00d	MT	549.22	RS5,693.16	RS3,126,797.34
A'	BEAM AND SLAB CONDUIT	3.00d	19.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	1.00d	19.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	2.00d	19.00d	CUM	398.58	RS7,189.16	RS2,865,455.39
P2-2.10.3 SECOND FLOOR		46.00d	14.00d		8939.05	RS39,826.19	RS18,393,675.45
A15G	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A15C	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A154	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.3.1 SLAB PART 1		17.00d	0.00d		3487.39	RS13,248.22	RS7,008,429.07
A'	BEAM AND SLAB SHUTTERING	10.00d	0.00d	SQM	2527.21	RS365.90	RS924,708.14
A'	BEAM AND SLAB REINFORCEMENT	7.00d	0.00d	QTL	547.57	RS5,693.16	RS3,117,403.62
A'	BEAM AND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	4.00d	0.00d	CUM	412.61	RS7,189.16	RS2,966,319.31
P2-2.10.3.2 SLAB PART 2		23.00d	14.00d		3487.39	RS13,248.22	RS7,008,429.07
A'	BEAM AND SLAB SHUTTERING	10.00d	14.00d	SQM	2527.21	RS365.90	RS924,708.14
A'	BEAM AND SLAB REINFORCEMENT	10.00d	14.00d	MT	547.57	RS5,693.16	RS3,117,403.62
A'	BEAM AND SLAB CONDUIT	7.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	7.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	4.00d	14.00d	CUM	412.61	RS7,189.16	RS2,966,319.31
P2-2.10.4 THIRD FLOOR		48.00d	34.00d		9153.15	RS39,826.19	RS18,830,587.76
A16E	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A16E	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A167	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.4.1 SLAB PART 1		17.00d	0.00d		3594.44	RS13,248.22	RS7,226,885.22
A'	BEAM AND SLAB SHUTTERING	10.00d	0.00d	SQM	2605.18	RS365.90	RS953,235.36
A'	BEAM AND SLAB REINFORCEMENT	7.00d	0.00d	QTL	560.36	RS5,693.16	RS3,190,219.14
A'	BEAM AND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	4.00d	0.00d	CUM	428.90	RS7,189.16	RS3,083,430.72
P2-2.10.4.2 SLAB PART 2		25.00d	34.00d		3594.44	RS13,248.22	RS7,226,885.22
A'	BEAM AND SLAB SHUTTERING	10.00d	12.00d	SQM	2605.18	RS365.90	RS953,235.36
A'	BEAM AND SLAB REINFORCEMENT	10.00d	12.00d	QTL	560.36	RS5,693.16	RS3,190,219.14
A'	BEAM AND SLAB CONDUIT	7.00d	34.00d	JOB	0.00	RS0.00	RS0.00
A'	INSPECTION	7.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A'	BEAM AND SLAB CASTING	4.00d	12.00d	CUM	428.90	RS7,189.16	RS3,083,430.72
P2-2.10.5 FOURTH FLOOR		46.00d	48.00d		9308.69	RS39,826.19	RS18,990,853.68
A17E	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02

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Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A17E	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A18C	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.5.1 SLAB PART 1		17.00d	0.00d		3672.21	RS13,248.22	RS7,307,018.18
A:	BEAMAND SLAB SHUTTERING	10.00d	0.00d	SQM	2674.78	RS365.90	RS978,702.00
A:	BEAMAND SLAB REINFORCEMENT	7.00d	0.00d	QTL	563.08	RS5,693.16	RS3,205,704.53
A:	BEAMAND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	0.00d	CUM	434.35	RS7,189.16	RS3,122,611.65
P2-2.10.5.2 SLAB PART 2		23.00d	48.00d		3672.21	RS13,248.22	RS7,307,018.18
A:	BEAMAND SLAB SHUTTERING	10.00d	48.00d	SQM	2674.78	RS365.90	RS978,702.00
A:	BEAMAND SLAB REINFORCEMENT	10.00d	48.00d	QTL	563.08	RS5,693.16	RS3,205,704.53
A:	BEAMAND SLAB CONDUIT	7.00d	48.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	7.00d	48.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	48.00d	CUM	434.35	RS7,189.16	RS3,122,611.65
P2-2.10.6 FIFTH FLOOR		40.00d	18.00d		9284.27	RS39,826.19	RS19,148,908.95
A191	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A19G	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A19C	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.6.1 SLAB PART 1		17.00d	0.00d		3660.00	RS13,248.22	RS7,386,045.82
A:	BEAMAND SLAB SHUTTERING	10.00d	0.00d	SQM	2647.86	RS365.90	RS968,851.97
A:	BEAMAND SLAB REINFORCEMENT	7.00d	0.00d	QTL	574.36	RS5,693.16	RS3,269,923.38
A:	BEAMAND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	0.00d	CUM	437.78	RS7,189.16	RS3,147,270.46
P2-2.10.6.2 SLAB PART 2		17.00d	18.00d		3660.00	RS13,248.22	RS7,386,045.82
A1E	BEAMAND SLAB SHUTTERING	10.00d	18.00d	SQM	2647.86	RS365.90	RS968,851.97
A:	BEAMAND SLAB REINFORCEMENT	7.00d	18.00d	QTL	574.36	RS5,693.16	RS3,269,923.38
A:	BEAMAND SLAB CONDUIT	7.00d	18.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	1.00d	18.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	18.00d	CUM	437.78	RS7,189.16	RS3,147,270.46
P2-2.10.7 SIXTH FLOOR		41.00d	143.00d		8768.65	RS39,826.19	RS18,289,800.63
A204	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A20E	COLOUMN SHUTTERING	25.00d	0.00d	SQM	1352.67	RS447.43	RS605,225.14
A20C	COLOUMN CASTING	25.00d	0.00d	CUM	193.62	RS7,189.16	RS1,391,965.16
P2-2.10.7.1 SLAB PART 1		14.00d	157.00d		3144.38	RS13,248.22	RS6,526,937.50
A:	BEAMAND SLAB SHUTTERING	8.00d	0.00d	SQM	2239.81	RS365.90	RS819,546.48
A:	BEAMAND SLAB REINFORCEMENT	7.00d	0.00d	MT	531.89	RS5,693.16	RS3,028,134.87
A:	BEAMAND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	1.00d	161.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	0.00d	CUM	372.68	RS7,189.16	RS2,679,256.15
P2-2.10.7.2 SLAB PART 2		14.00d	0.00d		3660.00	RS13,248.22	RS7,386,045.82
A:	BEAMAND SLAB SHUTTERING	8.00d	0.00d	SQM	2647.86	RS365.90	RS968,851.97
A:	BEAMAND SLAB REINFORCEMENT	7.00d	0.00d	QTL	574.36	RS5,693.16	RS3,269,923.38
A:	BEAMAND SLAB CONDUIT	7.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
A:	BEAMAND SLAB CASTING	4.00d	0.00d	CUM	437.78	RS7,189.16	RS3,147,270.46
P2-2.10.8 MUMTY		18.00d	0.00d		2268.07	RS26,577.97	RS3,220,625.70
A217	COLOUMN REINFORCEMENT	5.00d	0.00d	QTL	38.64	RS5,693.16	RS219,983.70
A21E	COLOUMN SHUTTERING	5.00d	0.00d	SQM	1596.61	RS447.43	RS714,371.21
A21C	COLOUMN CASTING	5.00d	0.00d	CUM	146.26	RS7,189.16	RS1,051,486.54
P2-2.10.8.1 SLAB PART 1		7.00d	0.00d		486.56	RS13,248.22	RS1,234,784.25

siddharth nagar copy		Classic Schedule Layout				14-Mar-20 02:01 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
	A: BEAMANDSLAB SHUTTERING	5.00d	0.00d	SQM	311.24	RS365.90	RS113,882.72
	A: BEAMANDSLAB REINFORCEMENT	5.00d	0.00d	QTL	93.25	RS5,693.16	RS530,887.17
	A: BEAMANDSLAB CONDUIT	2.00d	0.00d	JOB	0.00	RS0.00	RS0.00
	A: INSPECTION	1.00d	0.00d	JOB	0.00	RS0.00	RS0.00
	A: BEAMANDSLAB CASTING	1.00d	0.00d	CUM	82.07	RS7,189.16	RS590,014.36
	P2-2.10.9 BRICKWORK	224.00d	20.00d		5184.62	RS90,346.10	RS30,731,786.13
	P2-2.10.9.1 GROUND FLOOR	20.00d	304.00d		580.09	RS11,684.05	RS3,334,362.30
	A: BRICKWORK 1:6	20.00d	304.00d	CUM	488.69	RS5,704.75	RS2,787,854.28
	A: HALF BRICKWORK 1:4	20.00d	304.00d	CUM	91.40	RS5,979.30	RS546,508.02
	P2-2.10.9.2 FIRST FLOOR	21.00d	172.00d		596.53	RS11,800.89	RS3,465,378.45
	A: BRICKWORK 1:6	21.00d	172.00d	CUM	494.50	RS5,761.80	RS2,849,210.10
	A: HALF BRICKWORK 1:4	21.00d	172.00d	CUM	102.03	RS6,039.09	RS616,168.35
	P2-2.10.9.3 SECOND FLOOR	23.00d	133.00d		749.55	RS11,917.74	RS4,367,053.06
	A: BRICKWORK 1:6	23.00d	133.00d	CUM	658.37	RS5,618.85	RS3,630,956.27
	A: HALF BRICKWORK 1:4	23.00d	133.00d	CUM	91.18	RS6,098.89	RS556,096.79
	P2-2.10.9.4 THRD FLOOR	25.00d	71.00d		820.04	RS12,034.57	RS4,844,999.02
	A: BRICKWORK 1:6	25.00d	71.00d	CUM	726.21	RS5,875.89	RS4,267,130.08
	A: HALF BRICKWORK 1:4	25.00d	71.00d	CUM	93.83	RS6,158.68	RS577,868.94
	P2-2.10.9.5 FOURTH FLOOR	25.00d	48.00d		803.40	RS12,151.41	RS4,793,258.17
	A: BRICKWORK 1:6	25.00d	48.00d	CUM	709.77	RS5,932.94	RS4,211,022.82
	A: HALF BRICKWORK 1:4	25.00d	48.00d	CUM	93.63	RS6,218.47	RS582,235.35
	P2-2.10.9.6 FIFTH FLOOR	23.00d	61.00d		775.07	RS12,268.26	RS4,669,716.63
	A: BRICKWORK 1:6	23.00d	61.00d	CUM	681.22	RS5,969.99	RS4,080,500.99
	A: HALF BRICKWORK 1:4	23.00d	61.00d	CUM	93.85	RS6,278.27	RS589,215.64
	P2-2.10.9.7 SIXTH FLOOR	23.00d	4.00d		637.40	RS12,395.10	RS3,878,616.53
	A: BRICKWORK 1:6	23.00d	4.00d	CUM	554.13	RS6,047.04	RS3,350,846.28
	A: HALF BRICKWORK 1:4	23.00d	4.00d	CUM	83.27	RS6,338.06	RS527,770.26
	P2-2.10.9.8 MUMTY	10.00d	0.00d		222.54	RS6,104.08	RS1,358,401.96
	A: BRICKWORK 1:6	10.00d	0.00d	CUM	222.54	RS6,104.08	RS1,358,401.96
	P2-2.10.10 ELECTRICAL WORK WALL CON	214.00d	42.00d		8.00	RS0.00	RS0.00
	A24C GROUND FLOOR	15.00d	334.00d	JOB	1.00	RS0.00	RS0.00
	A241 FIRST FLOOR	15.00d	307.00d	JOB	1.00	RS0.00	RS0.00
	A242 SECOND FLOOR	15.00d	168.00d	JOB	1.00	RS0.00	RS0.00
	A243 THIRD FLOOR	15.00d	131.00d	JOB	1.00	RS0.00	RS0.00
	A244 FOURTH FLOOR	15.00d	83.00d	JOB	1.00	RS0.00	RS0.00
	A245 FIFTH FLOOR	10.00d	56.00d	JOB	1.00	RS0.00	RS0.00
	A246 SIXTH FLOOR	10.00d	39.00d	JOB	1.00	RS0.00	RS0.00
	A247 MUMTY	10.00d	42.00d	JOB	1.00	RS0.00	RS0.00
	P2-2.10.11 WATER SUPPLY GI WORK	249.00d	7.00d		47781.04	RS1,460.80	RS8,724,817.90
	A24E GROUND FLOOR	45.00d	304.00d	RMT	8422.63	RS182.60	RS1,537,972.24
	A24F FIRST FLOOR	45.00d	172.00d	RMT	7770.63	RS182.60	RS1,418,917.04
	A25C SECOND FLOOR	45.00d	133.00d	RMT	5732.63	RS182.60	RS1,046,778.24
	A251 THIRD FLOOR	45.00d	96.00d	RMT	5732.63	RS182.60	RS1,046,778.24
	A252 FOURTH FLOOR	45.00d	48.00d	RMT	5732.63	RS182.60	RS1,046,778.24
	A253 FIFTH FLOOR	45.00d	21.00d	RMT	4808.63	RS182.60	RS878,055.84
	A254 SIXTH FLOOR	45.00d	4.00d	RMT	4790.63	RS182.60	RS874,769.04
	A25E MUMTY	30.00d	22.00d	RMT	4790.63	RS182.60	RS874,769.04
	P2-2.10.12 INTERNAL PLASTER	249.00d	4.00d		57466.00	RS5,586.17	RS13,361,596.30
	P2-2.10.12.13 INTERNAL PLASTER WORK/CE	207.00d	42.00d		20793.07	RS1,950.77	RS5,047,890.62
	A: GROUND FLOOR	15.00d	334.00d	SQM	3302.31	RS235.60	RS778,024.24
	A: FIRST FLOOR	15.00d	307.00d	SQM	2014.62	RS237.96	RS479,398.98
	A: SECOND FLOOR	15.00d	168.00d	SQM	3075.72	RS240.31	RS739,126.27

siddharth nagar copy		Classic Schedule Layout				14-Mar-20 02:01 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A:	THIRD FLOOR	15.00d	131.00x	SQM	3266.98	RS242.67	RS792,798.04
A:	FOURTH FLOOR	8.00d	83.00d	SQM	3256.05	RS245.02	RS797,797.37
A:	FIFTH FLOOR	8.00d	56.00d	SQM	3259.48	RS247.38	RS806,330.16
A:	SIXTH FLOOR	8.00d	39.00d	SQM	2367.39	RS249.74	RS591,231.98
A:	MUMTY	8.00d	42.00d	SQM	250.52	RS252.09	RS63,153.59
P2-2.10.12.1	INTERNAL PLASTER WORK:SMK	219.00d	4.00d		36674.93	RS3,635.40	RS8,313,735.68
A:	GROUND FLOOR	10.00d	204.00x	SQM	1569.06	RS212.00	RS332,640.72
A:	FIRST FLOOR	10.00d	172.00x	SQM	1820.20	RS214.12	RS389,741.22
A:	SECOND FLOOR	15.00d	133.00x	SQM	2510.11	RS216.24	RS542,786.19
A:	THIRD FLOOR	15.00d	96.00d	SQM	2945.72	RS218.36	RS643,227.42
A:	FOURTH FLOOR	15.00d	48.00d	SQM	2824.01	RS220.48	RS622,637.72
A:	FIFTH FLOOR	15.00d	21.00d	SQM	2658.21	RS222.60	RS591,717.55
A:	SIXTH FLOOR	15.00d	4.00d	SQM	2027.79	RS224.72	RS455,684.97
A:	MUMTY	5.00d	22.00d	SQM	715.21	RS231.08	RS165,270.73
P2-2.10.12.1.1	INTERNAL PLASTER WORK	219.00d	4.00d		19604.62	RS1,875.80	RS4,570,029.17
A:	GROUND FLOOR	10.00d	204.00x	SQM	1979.47	RS226.00	RS447,360.22
A:	FIRST FLOOR	10.00d	172.00x	SQM	2298.71	RS228.26	RS524,703.54
A:	SECOND FLOOR	15.00d	133.00x	SQM	3246.35	RS230.52	RS748,348.60
A:	THIRD FLOOR	15.00d	96.00d	SQM	3390.07	RS232.78	RS789,140.49
A:	FOURTH FLOOR	15.00d	48.00d	SQM	3268.36	RS235.04	RS768,195.33
A:	FIFTH FLOOR	15.00d	21.00d	SQM	3102.56	RS237.30	RS736,237.49
A:	SIXTH FLOOR	15.00d	4.00d	SQM	2248.32	RS239.56	RS538,807.54
A:	MUMTY	5.00d	22.00d	SQM	70.78	RS246.34	RS17,435.95
P2-2.10.13	DOOR WINDOW FRAMING/PANE	214.00d	43.00d		20941.04	RS2,941.76	RS7,700,439.23
A28C:	GROUND FLOOR	20.00d	237.00x	SQM	1986.80	RS367.72	RS730,586.10
A28I:	FIRST FLOOR	20.00d	206.00x	SQM	3959.52	RS367.72	RS1,455,994.69
A28J:	SECOND FLOOR	18.00d	170.00x	SQM	3043.76	RS367.72	RS1,119,251.43
A28K:	THIRD FLOOR	14.00d	135.00x	SQM	3689.28	RS367.72	RS1,356,622.04
A28L:	FOURTH FLOOR	13.00d	103.00x	SQM	3287.92	RS367.72	RS1,209,033.94
A28E:	FIFTH FLOOR	11.00d	83.00d	SQM	2881.20	RS367.72	RS1,059,474.86
A28F:	SIXTH FLOOR	10.00d	43.00d	SQM	2032.08	RS367.72	RS747,236.46
A287:	MUMTY	2.00d	22.00d	SQM	60.48	RS367.72	RS22,239.71
P2-2.10.14	FLOORING WORK/TILING WOR	234.00d	4.00d		21731.57	RS9,548.49	RS29,643,382.69
A28E:	GROUND FLOOR	30.00d	204.00x	SQM	3372.93	RS1,364.07	RS4,600,912.63
A28E:	FIRST FLOOR	30.00d	172.00x	SQM	2122.44	RS1,364.07	RS2,895,156.73
A29C:	SECOND FLOOR	30.00d	133.00x	SQM	3347.67	RS1,364.07	RS4,566,456.22
A29I:	THIRD FLOOR	30.00d	96.00d	SQM	3487.07	RS1,364.07	RS4,756,607.57
A29J:	FOURTH FLOOR	30.00d	48.00d	SQM	3507.03	RS1,364.07	RS4,783,834.41
A29K:	FIFTH FLOOR	30.00d	21.00d	SQM	3501.98	RS1,364.07	RS4,776,945.86
A29L:	SIXTH FLOOR	30.00d	4.00d	SQM	2392.45	RS1,364.07	RS3,263,469.27
P2-2.10.15	INTERNAL PUTTY & PAINT WOR	225.00d	4.00d		51161.92	RS584.71	RS4,273,555.18
A29E:	GROUND FLOOR	25.00d	204.00x	SQM	5825.95	RS83.53	RS486,641.60
A29E:	FIRST FLOOR	26.00d	172.00x	SQM	6224.08	RS83.53	RS519,897.40
A297:	SECOND FLOOR	27.00d	133.00x	SQM	7988.77	RS83.53	RS667,301.96
A29E:	THIRD FLOOR	30.00d	96.00d	SQM	8449.48	RS83.53	RS705,785.06
A29E:	FOURTH FLOOR	30.00d	48.00d	SQM	8210.43	RS83.53	RS685,817.22
A30C:	FIFTH FLOOR	30.00d	21.00d	SQM	7933.92	RS83.53	RS662,720.34
A30I:	SIXTH FLOOR	26.00d	4.00d	SQM	6529.29	RS83.53	RS545,391.59
P2-2.10.16	DOOR WINDOW SHUTTERS	207.00d	4.00d		2576.89	RS3,403.92	RS1,096,440.93
A30G:	GROUND FLOOR	7.00d	204.00x	SQM	234.07	RS425.49	RS99,594.44
A30I:	FIRST FLOOR	7.00d	172.00x	SQM	483.60	RS425.49	RS205,766.96

siddharth nagar copy		Classic Schedule Layout				14-Mar-20 02:01 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A304	SECOND FLOOR	7.00d	133.00d	SQM	365.35	RS425.49	RS155,452.77
A305	THIRD FLOOR	7.00d	96.00d	SQM	461.16	RS425.49	RS196,218.97
A306	FOURTH FLOOR	7.00d	63.00d	SQM	410.99	RS425.49	RS174,872.14
A307	FIFTH FLOOR	7.00d	41.00d	SQM	360.15	RS425.49	RS153,240.22
A308	SIXTH FLOOR	7.00d	4.00d	SQM	254.01	RS425.49	RS108,078.71
A309	MUMTY	7.00d	22.00d	SQM	7.56	RS425.49	RS3,216.70
P2-2.10.17	EXTERNAL FINISHING WORK	103.00d	0.00d		32692.76	RS3,277.62	RS5,134,596.87
A310	10M TO 13M	30.00d	0.00d	SQM	1321.24	RS38.87	RS51,356.60
A311	13M TO 16M	25.00d	0.00d	SQM	1294.93	RS77.75	RS100,680.81
A320	16M TO 19M	20.00d	42.00d	SQM	1499.31	RS116.63	RS174,864.53
A321	19M TO 22M	18.00d	54.00d	SQM	1298.42	RS155.51	RS201,917.29
A322	22M TO 25M	15.00d	64.00d	SQM	1323.84	RS194.38	RS257,328.02
A323	25M TO 28M	14.00d	72.00d	SQM	1379.43	RS233.25	RS321,752.05
A324	28M TO 31M	12.00d	84.00d	SQM	1009.39	RS272.14	RS274,695.39
A325	31M TO 34M	15.00d	88.00d	SQM	329.35	RS311.01	RS102,431.14
P2-2.10.17.1	EXTERNAL PLASTER	78.00d	0.00d		9418.85	RS1,788.08	RS2,405,951.04
A	GROUND FLOOR	30.00d	0.00d	SQM	1345.55	RS248.00	RS333,696.40
A	FIRST FLOOR	25.00d	0.00d	SQM	1345.55	RS250.48	RS337,033.36
A	SECOND FLOOR	20.00d	0.00d	SQM	1345.55	RS252.96	RS340,370.33
A	THIRD FLOOR	18.00d	0.00d	SQM	1345.55	RS255.44	RS343,707.29
A	FOURTH FLOOR	15.00d	0.00d	SQM	1345.55	RS257.92	RS347,044.26
A	FIFTH FLOOR	14.00d	0.00d	SQM	1345.55	RS260.40	RS350,381.22
A	SIXTH FLOOR	12.00d	0.00d	SQM	1345.55	RS262.88	RS353,718.18
P2-2.10.17.3	EXTERNAL PAINT	50.00d	1.00d		13818.00	RS90.00	RS1,243,620.00
A	EXTERNAL PAINT	50.00d	1.00d	SQM	13818.00	RS90.00	RS1,243,620.00
P2-2.10.24	PLUMBING FIXTURES	20.00d	22.00d		1.00	RS25,127,451.79	RS25,127,451.79
A326	PLUMBING FIXTURES	20.00d	22.00d	JOB	1.00	RS25,127,451.79	RS25,127,451.79
P2-2.10.23	ELECTRICAL FIXTURES	20.00d	22.00d		1.00	RS82,161,000.00	RS82,161,000.00
A327	ELECTRICAL FIXTURES	20.00d	22.00d	JOB	1.00	RS82,161,000.00	RS82,161,000.00
P2-2.10.18	METAL FALSE CEILING	220.00d	4.00d		11750.69	RS10,224.27	RS17,163,175.32
A330	GROUND FLOOR	20.00d	204.00d	SQM	1896.34	RS1,460.61	RS2,769,813.17
A331	FIRST FLOOR	20.00d	172.00d	SQM	1003.99	RS1,460.61	RS1,466,437.83
A332	SECOND FLOOR	20.00d	133.00d	SQM	1751.17	RS1,460.61	RS2,557,776.41
A333	THIRD FLOOR	20.00d	96.00d	SQM	1999.07	RS1,460.61	RS2,919,861.63
A334	FOURTH FLOOR	20.00d	48.00d	SQM	1986.82	RS1,460.61	RS2,901,969.16
A335	FIFTH FLOOR	20.00d	21.00d	SQM	1945.50	RS1,460.61	RS2,841,616.76
A336	SIXTH FLOOR	20.00d	4.00d	SQM	1167.80	RS1,460.61	RS1,705,700.36
P2-2.10.19	EXPANSION JOINTS	20.00d	96.00d		425.53	RS4,200.91	RS1,787,613.23
A337	EXPANSION JOINT WORK	20.00d	96.00d	RMT	425.53	RS4,200.91	RS1,787,613.23
P2-2.10.20	SS RAILING WORK	15.00d	48.00d		8556.50	RS451.78	RS3,865,655.57
A338	SS RAILING WORK	15.00d	48.00d	KG	8556.50	RS451.78	RS3,865,655.57
P2-2.10.22	TESTING & COMMISSIONING	15.00d	22.00d		0.00	RS0.00	RS0.00
A339	TESTING & COMMISSIONING	15.00d	22.00d		0.00	RS0.00	RS0.00
P2-2.10.21	HANDING OVER	11.00d	1.00d		0.00	RS0.00	RS0.00
A340	HANDING OVER	11.00d	1.00d		0.00	RS0.00	RS0.00

B)PRECAST CONCRETE SLAB INSTEAD OF TRADITIONAL CONCRETE SLAB.

I) PRECAST SOLID SLAB

siddharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
P2-3 siddharth nagar precast		404.00d	0.00d		300778.14	RS108,087,095.72	RS383,819,052.15
A1000	START OF THE PROJECT	0.00d	0.00d		0.00	RS0.00	RS0.00
A1010	SITE CLEARANCE	5.00d	0.00d		0.00	RS0.00	RS0.00
A1020	SETUP OF MACHINERIES	14.00d	0.00d		0.00	RS0.00	RS0.00
P2-3.1 SUBSTRUCTURE		104.00d	0.00d		19081.35	RS147,026.40	RS39,143,430.45
P2-3.1.1 PILES		63.00d	0.00d		3125.80	RS92,746.30	RS7,137,567.58
A1030	500 mm dia PILING AND CASTING(1-15C	40.00d	0.00d	RV	1075.50	RS5,992.80	RS6,445,256.40
A1040	INITIAL TEST	30.00d	0.00d	NC	2.00	RS53,874.48	RS107,748.96
A1050	ROUTINE TEST	45.00d	0.00d	NC	11.00	RS32,769.02	RS360,459.22
A1060	EXCAVATION	2.00d	12.00d	CU	2037.30	RS110.00	RS224,103.00
P2-3.1.2 FILE CAPS		53.00d	0.00d		7474.50	RS17,790.28	RS20,914,632.69
A1070	ANTI-TERMITE TREATMENT	45.00d	0.00d	SC	3121.00	RS266.00	RS830,186.00
A1080	PCC 1:4:8 IN FOUNDATION	45.00d	0.00d	CU	226.36	RS5,225.00	RS1,182,731.00
A1090	REINFORCEMENT	45.00d	0.00d	MT	1348.36	RS5,693.16	RS7,676,429.22
A1100	SHUTTERING	45.00d	0.00d	SC	1061.12	RS185.49	RS196,827.15
A1110	ROCC PILECAP	45.00d	0.00d	CU	1717.66	RS6,420.63	RS11,028,459.33
P2-3.1.3 COLOUMN UPTO PLINTH		52.00d	0.00d		2674.91	RS12,299.28	RS3,826,731.96
A1120	REINFORCEMENT	45.00d	0.00d	QTL	491.46	RS5,693.16	RS2,797,960.41
A1130	SHUTTERING	45.00d	0.00d	SC	2083.41	RS185.49	RS386,451.72
A1140	ROCC UPTO PLINTH	45.00d	0.00d	CU	100.04	RS6,420.63	RS642,319.83
P2-3.1.4 BRICKWORK UPTO PLINTH		10.00d	0.00d		133.32	RS5,248.75	RS699,763.35
A1170	BRICKWORK UPTO PLINTH	10.00d	0.00d	CU	133.32	RS5,248.75	RS699,763.35
P2-3.1.5 PLASTER WORK		10.00d	0.00d		192.22	RS235.00	RS45,171.70
A1180	PLASTER WORK- PLINTH(1:4)	10.00d	0.00d	SC	192.22	RS235.00	RS45,171.70
P2-3.1.6 DPC & BITUMEN PAINTING		12.00d	0.00d		474.96	RS251.75	RS119,571.18
A1190	DPC & BITUMEN PAINTING	12.00d	0.00d	SC	474.96	RS251.75	RS119,571.18
P2-3.1.7 EARTH FILLING IN PLINTH		12.00d	0.00d		3684.38	RS289.75	RS1,067,549.11
A1200	EARTH FILLING IN PLINTH	12.00d	0.00d	CU	3684.38	RS289.75	RS1,067,549.11
P2-3.1.8 SAND FILLING IN PLINTH		12.00d	0.00d		439.72	RS826.50	RS363,428.58
A1210	SAND FILLING IN PLINTH	12.00d	0.00d	CU	439.72	RS826.50	RS363,428.58
P2-3.1.9 GRADE SLAB/BEAM		20.00d	0.00d		861.54	RS17,338.79	RS4,969,014.30
A1220	PCC 1:4:8	7.00d	0.00d	CU	278.84	RS5,225.00	RS1,456,939.00
A1230	REINFORCEMENT IN GRADE SLAB	7.00d	0.00d	QTL	315.10	RS5,693.16	RS1,793,914.72
A1240	CONCRETING IN GRADE BEAM/SLAB	12.00d	0.00d	CU	267.60	RS6,420.63	RS1,718,160.59
P2-3.1.10 SUPER STRUCTURE		291.00d	0.00d		281716.79	RS107,940,089.32	RS344,675,621.70
P2-3.1.10.1 GROUND FLOOR		35.00d	10.00d		2751.77	RS68,390.15	RS15,216,833.56
A1270	COLOUMN REINFORCEMENT GF	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1280	COLOUMN SHUTTERING GF	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1290	COLOUMN CASTING GF	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.1.10.2 SLAB PART-1 GF		5.00d	0.00d		393.75	RS27,530.20	RS5,420,008.13
A2	Beam pre cast installation	2.00d	0.00d	CU	78.75	RS13,765.10	RS1,084,001.63
A2	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A2	Slab pre cast installation	1.00d	0.00d	CU	315.00	RS13,765.10	RS4,336,006.50
P2-3.1.10.3 SLAB PART-2 GF		5.00d	10.00d		393.75	RS27,530.20	RS5,420,008.13
A2	Beam pre cast installation	2.00d	10.00d	CU	78.75	RS13,765.10	RS1,084,001.63
A2	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A2	Slab pre cast installation	1.00d	10.00d	CU	315.00	RS13,765.10	RS4,336,006.50
P2-3.1.10.2 FIRST FLOOR		36.00d	10.00d		2760.89	RS68,390.15	RS15,338,241.75
A1390	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1400	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14

sidharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A1410	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.10.2.2	SLAB PART-1 GF	5.00d	0.00d		398.16	RS27,530.20	RS5,480,712.22
A1	Beam pre cast installation	2.00d	0.00d		84.00	RS13,765.10	RS1,156,268.40
A2	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	0.00d		314.16	RS13,765.10	RS4,324,443.82
P2-3.10.2.3	SLAB PART-2 GF	5.00d	10.00d		398.16	RS27,530.20	RS5,480,712.22
A1	Beam pre cast installation	2.00d	10.00d		84.00	RS13,765.10	RS1,156,268.40
A2	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	10.00d		314.16	RS13,765.10	RS4,324,443.82
P2-3.10.3	SECOND FLOOR	35.00d	10.00d		2790.67	RS68,390.15	RS15,752,268.42
A1520	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1530	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1540	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.10.3.2	SLAB PART-1 GF	5.00d	0.00d		413.20	RS27,530.20	RS5,687,711.79
A1	Beam pre cast installation	2.00d	0.00d		81.75	RS13,765.10	RS1,125,296.93
A2	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	0.00d		331.45	RS13,765.10	RS4,562,414.86
P2-3.10.3.3	SLAB PART-2 GF	5.00d	10.00d		413.20	RS27,530.20	RS5,687,739.32
A1	Beam pre cast installation	2.00d	10.00d		81.75	RS13,765.10	RS1,125,296.93
A2	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	10.00d		331.45	RS13,765.10	RS4,562,442.39
P2-3.10.4	THIRD FLOOR	33.00d	12.00d		2821.37	RS68,390.15	RS16,174,884.52
A1650	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1660	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1670	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.10.4.2	SLAB PART-1 GF	5.00d	0.00d		428.55	RS27,530.20	RS5,899,033.61
A1	Beam pre cast installation	2.00d	0.00d	CU	82.25	RS13,765.10	RS1,132,179.48
A2	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	0.00d	CU	346.30	RS13,765.10	RS4,766,854.13
P2-3.10.4.3	SLAB PART-2 GF	5.00d	12.00d		428.55	RS27,530.20	RS5,899,033.61
A1	Beam pre cast installation	2.00d	12.00d	CU	82.25	RS13,765.10	RS1,132,179.48
A2	INSPECTION	2.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	12.00d	CU	346.30	RS13,765.10	RS4,766,854.13
P2-3.10.5	FOURTH FLOOR	33.00d	12.00d		2833.57	RS68,390.15	RS16,342,818.74
A1780	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1790	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1800	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.10.5.2	SLAB PART-1 GF	5.00d	0.00d		434.65	RS27,530.20	RS5,983,000.72
A1	Beam pre cast installation	2.00d	0.00d	CU	81.25	RS13,765.10	RS1,118,414.38
A2	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	0.00d	CU	353.40	RS13,765.10	RS4,864,586.34
P2-3.10.5.3	SLAB PART-2 GF	5.00d	12.00d		434.65	RS27,530.20	RS5,983,000.72
A1	Beam pre cast installation	2.00d	12.00d	CU	81.25	RS13,765.10	RS1,118,414.38
A2	INSPECTION	2.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A3	Slab pre cast installation	1.00d	12.00d	CU	353.40	RS13,765.10	RS4,864,586.34
P2-3.10.6	FIFTH FLOOR	35.00d	0.00d		2839.65	RS68,390.15	RS16,426,510.55
A1910	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1920	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1930	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-3.10.6.2	SLAB PART-1 GF	5.00d	6.00d		437.69	RS27,530.20	RS6,024,846.62
A1	Beam pre cast installation	2.00d	6.00d	CU	82.65	RS13,765.10	RS1,137,685.51
A2	INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00

siddharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
	A: Slab pre cast installation	1.00d	6.00d	CU	355.04	RS13,765.10	RS4,887,161.10
	P2-3.10.6.3 SLAB PART-2 GF	5.00d	0.00d		437.69	RS27,530.20	RS6,024,846.62
	A: Beam pre cast installation	2.00d	0.00d	CU	82.65	RS13,765.10	RS1,137,685.51
	A: INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
	A: Slab pre cast installation	1.00d	0.00d	CU	355.04	RS13,765.10	RS4,887,161.10
	P2-3.10.7 SIXTH FLOOR	32.00d	138.00d		2774.69	RS66,390.15	RS15,532,329.66
	A2040 COLOUMN REINFORCEMENT	25.00d	143.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
	A2050 COLOUMN SHUTTERING	25.00d	143.00d	SC	1352.67	RS447.43	RS605,225.14
	A2060 COLOUMN CASTING	25.00d	6.00d	CU	193.62	RS7,189.16	RS1,391,985.16
	P2-3.10.7.2 SLAB PART-1 GF	5.00d	16.00d		372.73	RS27,530.20	RS5,130,686.72
	A: Beam pre cast installation	2.00d	16.00d	CU	83.20	RS13,765.10	RS1,145,256.32
	A: INSPECTION	2.00d	18.00d	JOB	0.00	RS0.00	RS0.00
	A: Slab pre cast installation	1.00d	16.00d	CU	289.53	RS13,765.10	RS3,985,409.40
	P2-3.10.7.3 SLAB PART-2 GF	5.00d	6.00d		437.69	RS27,530.20	RS6,024,846.62
	A: Beam pre cast installation	2.00d	6.00d	CU	82.65	RS13,765.10	RS1,137,685.51
	A: INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00
	A: Slab pre cast installation	1.00d	6.00d	CU	355.04	RS13,765.10	RS4,887,161.10
	P2-3.10.8 MUMTY	15.00d	6.00d		1863.92	RS40,659.95	RS3,120,223.35
	A2170 COLOUMN REINFORCEMENT	5.00d	6.00d	QTL	38.64	RS5,693.16	RS219,983.70
	A2180 COLOUMN SHUTTERING	5.00d	6.00d	SC	1596.61	RS447.43	RS714,371.21
	A2190 COLOUMN CASTING	5.00d	6.00d	CU	146.26	RS7,189.16	RS1,051,486.54
	P2-3.10.8.1 SLAB PART 1	5.00d	6.00d		82.41	RS27,530.20	RS1,134,381.89
	A: Beam pre cast installation	2.00d	6.00d		16.50	RS13,765.10	RS227,124.15
	A: INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00
	A: Slab pre cast installation	1.00d	6.00d		65.91	RS13,765.10	RS907,257.74
	P2-3.10.9 BRICKWORK	141.00d	23.00d		5184.62	RS90,346.10	RS30,731,786.13
	P2-3.10.9.1 GROUND FLOOR	20.00d	124.00d		580.09	RS11,684.05	RS3,334,362.30
	A: BRICKWORK 16	20.00d	124.00d	CU	488.69	RS5,704.75	RS2,787,854.28
	A: HALF BRICKWORK 14	20.00d	124.00d	CU	91.40	RS5,979.30	RS546,508.02
	P2-3.10.9.2 FIRST FLOOR	21.00d	101.00d		596.53	RS11,600.89	RS3,465,378.45
	A: BRICKWORK 16	21.00d	101.00d	CU	494.50	RS5,761.80	RS2,849,210.10
	A: HALF BRICKWORK 14	21.00d	101.00d	CU	102.03	RS6,039.09	RS616,168.35
	P2-3.10.9.3 SECOND FLOOR	23.00d	78.00d		749.55	RS11,917.74	RS4,387,053.06
	A: BRICKWORK 16	23.00d	78.00d	CU	658.37	RS5,818.85	RS3,830,956.27
	A: HALF BRICKWORK 14	23.00d	78.00d	CU	91.18	RS6,098.89	RS556,096.79
	P2-3.10.9.4 THIRD FLOOR	25.00d	35.00d		820.04	RS12,034.57	RS4,844,999.02
	A: BRICKWORK 16	25.00d	35.00d	CU	726.21	RS5,875.89	RS4,267,130.08
	A: HALF BRICKWORK 14	25.00d	35.00d	CU	93.83	RS6,158.68	RS577,868.94
	P2-3.10.9.5 FOURTH FLOOR	25.00d	25.00d		803.40	RS12,151.41	RS4,793,258.17
	A: BRICKWORK 16	25.00d	25.00d	CU	709.77	RS5,932.94	RS4,211,022.82
	A: HALF BRICKWORK 14	25.00d	25.00d	CU	93.63	RS6,218.47	RS582,235.35
	P2-3.10.9.6 FIFTH FLOOR	23.00d	40.00d		775.07	RS12,268.26	RS4,669,716.63
	A: BRICKWORK 16	23.00d	0.00d	CU	681.22	RS5,989.99	RS4,080,500.99
	A: HALF BRICKWORK 14	23.00d	40.00d	CU	93.85	RS6,278.27	RS589,215.64
	P2-3.10.9.7 SIXTH FLOOR	23.00d	7.00d		637.40	RS12,385.10	RS3,878,616.53
	A: BRICKWORK 16	23.00d	7.00d	CU	554.13	RS6,047.04	RS3,350,846.28
	A: HALF BRICKWORK 14	23.00d	7.00d	CU	83.27	RS6,338.06	RS527,770.26
	P2-3.10.9.8 MUMTY	10.00d	6.00d		222.54	RS6,104.08	RS1,358,401.96
	A: BRICKWORK 16	10.00d	6.00d	CU	222.54	RS6,104.08	RS1,358,401.96
	P2-3.10.10 ELECTRICAL WORK WALL CON	131.00d	45.00d		8.00	RS0.00	RS0.00
	A2400 GROUND FLOOR	15.00d	154.00d	JOB	1.00	RS0.00	RS0.00
	A2410 FIRST FLOOR	15.00d	136.00d	JOB	1.00	RS0.00	RS0.00

sidharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A2420	SECOND FLOOR	15.00d	113.00d	JOB	1.00	RS0.00	RS0.00
A2430	THIRD FLOOR	15.00d	95.00d	JOB	1.00	RS0.00	RS0.00
A2440	FOURTH FLOOR	15.00d	60.00d	JOB	1.00	RS0.00	RS0.00
A2450	FIFTH FLOOR	10.00d	35.00d	JOB	1.00	RS0.00	RS0.00
A2460	SIXTH FLOOR	10.00d	42.00d	JOB	1.00	RS0.00	RS0.00
A2470	MUMTY	10.00d	48.00d	JOB	1.00	RS0.00	RS0.00
P2-3.10.11	WATER SUPPLY GI WORK	166.00d	10.00d		47781.04	RS1,460.80	RS8,724,817.90
A2490	GROUND FLOOR	45.00d	124.00d	Rv	8422.63	RS182.60	RS1,537,972.24
A2490	FIRST FLOOR	45.00d	101.00d	Rv	7770.63	RS182.60	RS1,418,917.04
A2500	SECOND FLOOR	45.00d	78.00d	Rv	5732.63	RS182.60	RS1,046,778.24
A2510	THIRD FLOOR	45.00d	60.00d	Rv	5732.63	RS182.60	RS1,046,778.24
A2520	FOURTH FLOOR	45.00d	25.00d	Rv	5732.63	RS182.60	RS1,046,778.24
A2530	FIFTH FLOOR	45.00d	0.00d	Rv	4808.63	RS182.60	RS878,055.84
A2540	SIXTH FLOOR	45.00d	7.00d	Rv	4790.63	RS182.60	RS874,769.04
A2550	MUMTY	30.00d	28.00d	Rv	4790.63	RS182.60	RS874,769.04
P2-3.10.12	INTERNAL PLASTER	166.00d	7.00d		57468.00	RS5,586.17	RS13,361,596.30
P2-3.10.12.13	INTERNAL PLASTER WORK CCI	124.00d	45.00d		20793.07	RS1,990.77	RS5,047,860.62
A2	GROUND FLOOR	15.00d	154.00d	SC	3302.31	RS235.60	RS778,024.24
A2	FIRST FLOOR	15.00d	136.00d	SC	2014.62	RS237.96	RS479,398.98
A2	SECOND FLOOR	15.00d	113.00d	SC	3075.72	RS240.31	RS739,126.27
A2	THIRD FLOOR	15.00d	95.00d	SC	3266.98	RS242.67	RS792,798.04
A2	FOURTH FLOOR	8.00d	60.00d	SC	3256.05	RS245.02	RS797,797.37
A2	FIFTH FLOOR	8.00d	35.00d	SC	3259.48	RS247.38	RS806,330.16
A2	SIXTH FLOOR	8.00d	42.00d	SC	2367.39	RS249.74	RS591,231.98
A2	MUMTY	8.00d	48.00d	SC	250.52	RS252.09	RS63,153.59
P2-3.10.12.1	INTERNAL PLASTER WORK SMC	136.00d	7.00d		36674.93	RS3,635.40	RS8,313,735.68
A2	GROUND FLOOR	10.00d	124.00d	SC	1569.06	RS212.00	RS332,640.72
A2	FIRST FLOOR	10.00d	101.00d	SC	1820.20	RS214.12	RS389,741.22
A2	SECOND FLOOR	15.00d	78.00d	SC	2510.11	RS216.24	RS542,786.19
A2	THIRD FLOOR	15.00d	60.00d	SC	2945.72	RS218.36	RS643,227.42
A2	FOURTH FLOOR	15.00d	25.00d	SC	2824.01	RS220.48	RS622,637.72
A2	FIFTH FLOOR	15.00d	0.00d	SC	2658.21	RS222.60	RS591,717.55
A2	SIXTH FLOOR	15.00d	7.00d	SC	2027.79	RS224.72	RS455,684.97
A2	MUMTY	5.00d	28.00d	SC	715.21	RS231.08	RS165,270.73
P2-3.10.12.1.1	INTERNAL PLASTER WORK	136.00d	7.00d		19804.62	RS1,875.80	RS4,570,029.17
A2	GROUND FLOOR	10.00d	124.00d	SC	1979.47	RS226.00	RS447,360.22
A2	FIRST FLOOR	10.00d	101.00d	SC	2298.71	RS228.26	RS524,703.54
A2	SECOND FLOOR	15.00d	78.00d	SC	3246.35	RS230.52	RS748,348.60
A2	THIRD FLOOR	15.00d	60.00d	SC	3390.07	RS232.78	RS789,140.49
A2	FOURTH FLOOR	15.00d	25.00d	SC	3268.36	RS235.04	RS768,196.33
A2	FIFTH FLOOR	15.00d	0.00d	SC	3102.56	RS237.30	RS736,237.49
A2	SIXTH FLOOR	15.00d	7.00d	SC	2248.32	RS239.56	RS538,607.54
A2	MUMTY	5.00d	28.00d	SC	70.78	RS246.34	RS17,435.95
P2-3.10.13	DOOR WINDOW FRAMING/PANE	131.00d	46.00d		20941.04	RS2,941.76	RS7,700,439.23
A2800	GROUND FLOOR	20.00d	157.00d	SC	1986.80	RS367.72	RS730,586.10
A2810	FIRST FLOOR	20.00d	135.00d	SC	3959.52	RS367.72	RS1,455,994.69
A2820	SECOND FLOOR	18.00d	115.00d	SC	3043.76	RS367.72	RS1,119,251.43
A2830	THIRD FLOOR	14.00d	99.00d	SC	3689.28	RS367.72	RS1,356,622.04
A2840	FOURTH FLOOR	13.00d	80.00d	SC	3287.92	RS367.72	RS1,209,033.94
A2850	FIFTH FLOOR	11.00d	62.00d	SC	2881.20	RS367.72	RS1,059,474.86
A2860	SIXTH FLOOR	10.00d	46.00d	SC	2032.08	RS367.72	RS747,236.46

siddharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A2870	MUMTY	2.00d	28.00d	SC	60.48	RS367.72	RS22,239.71
P2-3.10.14 FLOORING WORK/TILING WORK		151.00d	7.00d		21731.57	RS9,548.49	RS29,643,382.69
A2880	GROUND FLOOR	30.00d	124.00c	SC	3372.93	RS1,364.07	RS4,600,912.83
A2890	FIRST FLOOR	30.00d	101.00c	SC	2122.44	RS1,364.07	RS2,895,156.73
A2900	SECOND FLOOR	30.00d	78.00d	SC	3347.67	RS1,364.07	RS4,566,456.22
A2910	THIRD FLOOR	30.00d	60.00d	SC	3487.07	RS1,364.07	RS4,756,607.57
A2920	FOURTH FLOOR	30.00d	25.00d	SC	3507.03	RS1,364.07	RS4,783,834.41
A2930	FIFTH FLOOR	30.00d	0.00d	SC	3501.98	RS1,364.07	RS4,776,945.86
A2940	SIXTH FLOOR	30.00d	7.00d	SC	2392.45	RS1,364.07	RS3,263,469.27
P2-3.10.15 INTERNAL PUTTY & PAINT WORK		142.00d	7.00d		51161.92	RS884.71	RS4,273,555.18
A2950	GROUND FLOOR	25.00d	124.00c	SC	5825.95	RS83.53	RS486,641.60
A2960	FIRST FLOOR	26.00d	101.00c	SC	6224.08	RS83.53	RS519,897.40
A2970	SECOND FLOOR	27.00d	78.00d	SC	7988.77	RS83.53	RS667,301.96
A2980	THIRD FLOOR	30.00d	60.00d	SC	8449.48	RS83.53	RS705,785.06
A2990	FOURTH FLOOR	30.00d	25.00d	SC	8210.43	RS83.53	RS685,817.22
A3000	FIFTH FLOOR	30.00d	0.00d	SC	7933.92	RS83.53	RS662,720.34
A3010	SIXTH FLOOR	26.00d	7.00d	SC	6529.29	RS83.53	RS545,391.59
P2-3.10.16 DOOR/WINDOW SHUTTERS		124.00d	7.00d		2576.89	RS3,403.92	RS1,096,440.93
A3020	GROUND FLOOR	7.00d	124.00c	SC	234.07	RS425.49	RS99,594.44
A3030	FIRST FLOOR	7.00d	101.00c	SC	483.60	RS425.49	RS205,766.96
A3040	SECOND FLOOR	7.00d	78.00d	SC	365.35	RS425.49	RS155,452.77
A3050	THIRD FLOOR	7.00d	60.00d	SC	461.16	RS425.49	RS198,218.97
A3060	FOURTH FLOOR	7.00d	40.00d	SC	410.99	RS425.49	RS174,872.14
A3070	FIFTH FLOOR	7.00d	20.00d	SC	360.15	RS425.49	RS153,240.22
A3080	SIXTH FLOOR	7.00d	7.00d	SC	254.01	RS425.49	RS108,078.71
A3090	MUMTY	7.00d	28.00d	SC	7.56	RS425.49	RS3,216.70
P2-3.10.17 EXTERNAL FINISHING WORK		103.00d	6.00d		32692.76	RS3,277.62	RS5,134,596.87
A3180	10M TO 13M	30.00d	6.00d	SC	1321.24	RS38.87	RS51,356.60
A3190	13M TO 16M	25.00d	6.00d	SC	1294.93	RS77.75	RS100,680.81
A3200	16M TO 19M	20.00d	48.00d	SC	1499.31	RS116.63	RS174,864.53
A3210	19M TO 22M	18.00d	60.00d	SC	1298.42	RS155.51	RS201,917.29
A3220	22M TO 25M	15.00d	70.00d	SC	1323.84	RS194.38	RS257,328.02
A3230	25M TO 28M	14.00d	78.00d	SC	1379.43	RS233.25	RS321,752.05
A3240	28M TO 31M	12.00d	90.00d	SC	1009.39	RS272.14	RS274,696.39
A3250	31M TO 34M	15.00d	94.00d	SC	329.35	RS311.01	RS102,431.14
P2-3.10.17.1 EXTERNAL PLASTER		78.00d	6.00d		9418.85	RS1,788.08	RS2,405,951.04
A3260	GROUND FLOOR	30.00d	6.00d	SC	1345.55	RS248.00	RS333,696.40
A3270	FIRST FLOOR	25.00d	6.00d	SC	1345.55	RS250.48	RS337,033.36
A3280	SECOND FLOOR	20.00d	6.00d	SC	1345.55	RS252.96	RS340,370.33
A3290	THIRD FLOOR	18.00d	6.00d	SC	1345.55	RS255.44	RS343,707.29
A3300	FOURTH FLOOR	15.00d	6.00d	SC	1345.55	RS257.92	RS347,044.26
A3310	FIFTH FLOOR	14.00d	6.00d	SC	1345.55	RS260.40	RS350,381.22
A3320	SIXTH FLOOR	12.00d	6.00d	SC	1345.55	RS262.88	RS353,718.18
P2-3.10.17.3 EXTERNAL PAINT		50.00d	7.00d		13818.00	RS90.00	RS1,243,620.00
A3330	EXTERNAL PAINT	50.00d	7.00d	SC	13818.00	RS90.00	RS1,243,620.00
P2-3.10.24 PLUMBING FIXTURES		20.00d	28.00d		1.00	RS25,127,451.79	RS25,127,451.79
A3280	PLUMBING FIXTURES	20.00d	28.00d	JOB	1.00	RS25,127,451.79	RS25,127,451.79
P2-3.10.23 ELECTRICAL FIXTURES		20.00d	28.00d		1.00	RS82,161,000.00	RS82,161,000.00
A3290	ELECTRICAL FIXTURES	20.00d	28.00d	JOB	1.00	RS82,161,000.00	RS82,161,000.00
P2-3.10.18 METAL FALSE CEILING		144.00d	0.00d		11750.69	RS10,224.27	RS17,163,175.32
A3300	GROUND FLOOR	20.00d	124.00c	SC	1896.34	RS1,460.61	RS2,769,813.17

siddharth nagar precast		Classic Schedule Layout				14-Mar-20 02:04 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A3310	FIRST FLOOR	20.00d	101.00d	SC	1003.99	RS1,460.61	RS1,466,437.83
A3320	SECOND FLOOR	20.00d	78.00d	SC	1751.17	RS1,460.61	RS2,557,776.41
A3330	THIRD FLOOR	20.00d	60.00d	SC	1999.07	RS1,460.61	RS2,919,861.63
A3340	FOURTH FLOOR	20.00d	25.00d	SC	1986.82	RS1,460.61	RS2,901,969.16
A3350	FIFTH FLOOR	20.00d	0.00d	SC	1945.50	RS1,460.61	RS2,841,616.76
A3360	SIXTH FLOOR	20.00d	7.00d	SC	1167.80	RS1,460.61	RS1,705,700.36
P2-3.10.19	EXPANSION JOINTS	20.00d	60.00d		425.53	RS4,200.91	RS1,787,613.23
A3370	EXPANSION JOINT WORK	20.00d	60.00d	RM	425.53	RS4,200.91	RS1,787,613.23
P2-3.10.20	SS RAILING WORK	15.00d	25.00d		8556.50	RS451.78	RS3,865,655.57
A3380	SS RAILING WORK	15.00d	25.00d	KG	8556.50	RS451.78	RS3,865,655.57
P2-3.10.22	TESTING & COMMISSIONING	15.00d	28.00d		0.00	RS0.00	RS0.00
A3390	TESTING & COMMISSIONING	15.00d	28.00d		0.00	RS0.00	RS0.00
P2-3.10.21	HANDING OVER	11.00d	7.00d		0.00	RS0.00	RS0.00
A3400	HANDING OVER	11.00d	7.00d		0.00	RS0.00	RS0.00

	Page 6 of 6	TASK filter: All Activities © Oracle Corporation
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II)HOLLOW PRECAST SLAB

siddharth nagar hollow slab		Classic Schedule Layout			10-Apr-20 09:10 PM		
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
P2-4 siddharth nagar hollow slab		404.00d	0.00d		295842.76	RS107,720,539.22	RS304,037,807.15
A1000	START OF THE PROJECT	0.00d	0.00d		0.00	RS0.00	RS0.00
A1010	SITE CLEARANCE	5.00d	0.00d		0.00	RS0.00	RS0.00
A1020	SETUP OF MACHINERIES	14.00d	0.00d		0.00	RS0.00	RS0.00
A1150	NewActivity	5.00d					RS0.00
P2-4.1 SUBSTRUCTURE		104.00d	0.00d		19061.35	RS147,026.40	RS39,143,430.45
P2-4.1.1 PILES		63.00d	0.00d		3125.80	RS92,746.30	RS7,137,567.58
A1030	500 mm dia PILING AND CASTING(1-15)	40.00d	0.00d	RM	1075.50	RS5,992.80	RS6,445,256.40
A1040	INITIAL TEST	30.00d	0.00d	NC	2.00	RS53,874.48	RS107,748.96
A1050	ROUTINE TEST	45.00d	0.00d	NC	11.00	RS32,769.02	RS360,459.22
A1060	EXCAVATION	2.00d	12.00d	CU	2037.30	RS110.00	RS224,103.00
P2-4.1.2 PILE CAPS		53.00d	0.00d		7474.50	RS17,790.28	RS20,914,632.69
A1070	ANTI-TERMITE TREATMENT	45.00d	0.00d	SC	3121.00	RS266.00	RS830,186.00
A1080	POC 1:4:8 IN FOUNDATION	45.00d	0.00d	CU	226.36	RS5,225.00	RS1,182,731.00
A1090	REINFORCEMENT	45.00d	0.00d	MT	1348.36	RS5,693.16	RS7,676,429.22
A1100	SHUTTERING	45.00d	0.00d	SC	1061.12	RS185.49	RS196,827.15
A1110	ROCC PILECAP	45.00d	0.00d	CU	1717.66	RS6,420.63	RS11,028,459.33
P2-4.1.3 COLOUMN UPTO PLINTH		52.00d	0.00d		2674.91	RS12,299.28	RS3,826,731.96
A1120	REINFORCEMENT	45.00d	0.00d	QTL	491.46	RS5,693.16	RS2,797,960.41
A1130	SHUTTERING	45.00d	0.00d	SC	2083.41	RS185.49	RS386,451.72
A1140	ROCC UPTO PLINTH	45.00d	0.00d	CU	100.04	RS6,420.63	RS642,319.83
P2-4.1.4 BRICKWORK UPTO PLINTH		10.00d	0.00d		133.32	RS5,248.75	RS699,763.35
A1170	BRICKWORK UPTO PLINTH	10.00d	0.00d	CU	133.32	RS5,248.75	RS699,763.35
P2-4.1.5 PLASTER WORK		10.00d	0.00d		192.22	RS235.00	RS45,171.70
A1180	PLASTERWORK-PLINTH(1:4)	10.00d	0.00d	SC	192.22	RS235.00	RS45,171.70
P2-4.1.6 DPC & BITUMEN PAINTING		12.00d	0.00d		474.96	RS251.75	RS119,571.18
A1190	DPC & BITUMEN PAINTING	12.00d	0.00d	SC	474.96	RS251.75	RS119,571.18
P2-4.1.7 EARTH FILLING IN PLINTH		12.00d	0.00d		3684.38	RS289.75	RS1,067,549.11
A1200	EARTH FILLING IN PLINTH	12.00d	0.00d	CU	3684.38	RS289.75	RS1,067,549.11
P2-4.1.8 SAND FILLING IN PLINTH		12.00d	0.00d		439.72	RS826.50	RS363,428.58
A1210	SAND FILLING IN PLINTH	12.00d	0.00d	CU	439.72	RS826.50	RS363,428.58
P2-4.1.9 GRADE SLAB/BEAM		20.00d	0.00d		861.54	RS17,338.79	RS4,969,014.30
A1220	POC 1:4:8	7.00d	0.00d	CU	278.84	RS5,225.00	RS1,456,939.00
A1230	REINFORCEMENT IN GRADE SLAB	7.00d	0.00d	QTL	315.10	RS5,693.16	RS1,793,914.72
A1240	CONCRETING IN GRADE BEAM/SLAB	12.00d	0.00d	CU	267.60	RS6,420.63	RS1,718,160.59
P2-4.1.10 SUPER STRUCTURE		291.00d	0.00d		276781.41	RS107,573,512.82	RS264,894,376.70
P2-4.10.1 GROUND FLOOR		35.00d	10.00d		2086.51	RS19,515.95	RS4,584,426.19
A1270	COLOUMN REINFORCEMENT GF	25.00d	0.00d	QTL	417.96	RS5,693.16	RS2,379,627.02
A1280	COLOUMN SHUTTERING GF	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1290	COLOUMN CASTING GF	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.1.2 SLAB PART-1 GF		5.00d	0.00d		67.12	RS3,093.10	RS103,804.44
A:	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	0.00d		44.76	RS1,546.55	RS69,223.58
P2-4.10.1.3 SLAB PART-2 GF		5.00d	10.00d		67.12	RS3,093.10	RS103,804.44
A:	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	10.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	10.00d		44.76	RS1,546.55	RS69,223.58
P2-4.10.2 FIRST FLOOR		36.00d	10.00d		2086.47	RS19,515.95	RS4,579,724.67
A1390	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.96	RS5,693.16	RS2,379,627.02

siddharth nagar hollow slab		Classic Schedule Layout				10-Apr-20 09:10 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A1400	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1410	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.2.2	SLAB PART-1 GF	5.00d	0.00d		65.60	RS3,093.10	RS101,453.68
A1	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	0.00d		43.24	RS1,546.55	RS66,872.82
P2-4.10.2.3	SLAB PART-2 GF	5.00d	10.00d		65.60	RS3,093.10	RS101,453.68
A1	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	10.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	10.00d		43.24	RS1,546.55	RS66,872.82
P2-4.10.3	SECOND FLOOR	35.00d	10.00d		2099.03	RS19,515.95	RS4,585,230.39
A1520	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1530	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1540	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.3.2	SLAB PART-1 GF	5.00d	0.00d		67.38	RS3,093.10	RS104,206.54
A1	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	0.00d		45.02	RS1,546.55	RS69,625.68
P2-4.10.3.3	SLAB PART-2 GF	5.00d	10.00d		67.38	RS3,093.10	RS104,206.54
A1	INSPECTION	2.00d	12.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	10.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	10.00d		45.02	RS1,546.55	RS69,625.68
P2-4.10.4	THIRD FLOOR	33.00d	12.00d		2100.75	RS19,515.95	RS4,587,890.46
A1650	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1660	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1670	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.4.2	SLAB PART-1 GF	5.00d	0.00d		68.24	RS3,093.10	RS105,536.57
A1	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	0.00d		45.88	RS1,546.55	RS70,965.71
P2-4.10.4.3	SLAB PART-2 GF	5.00d	12.00d		68.24	RS3,093.10	RS105,536.57
A1	INSPECTION	2.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	12.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	12.00d		45.88	RS1,546.55	RS70,965.71
P2-4.10.5	FOURTH FLOOR	33.00d	12.00d		2102.25	RS19,515.95	RS4,590,210.28
A1780	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1790	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1800	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.5.2	SLAB PART-1 GF	5.00d	0.00d		68.99	RS3,093.10	RS106,696.48
A1	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	0.00d		46.63	RS1,546.55	RS72,115.63
P2-4.10.5.3	SLAB PART-2 GF	5.00d	12.00d		68.99	RS3,093.10	RS106,696.48
A1	INSPECTION	2.00d	14.00d	JOB	0.00	RS0.00	RS0.00
A1	Beam pre cast installation	2.00d	12.00d		22.36	RS1,546.55	RS34,580.86
A1	Slab pre cast installation	1.00d	12.00d		46.63	RS1,546.55	RS72,115.63
P2-4.10.6	FIFTH FLOOR	35.00d	0.00d		2102.25	RS19,515.95	RS4,590,210.28
A1910	COLOUMN REINFORCEMENT	25.00d	0.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A1920	COLOUMN SHUTTERING	25.00d	0.00d	SC	1352.67	RS447.43	RS605,225.14
A1930	COLOUMN CASTING	25.00d	0.00d	CU	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.6.2	SLAB PART-1 GF	5.00d	6.00d		68.99	RS3,093.10	RS106,696.48
A1	INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00

siddharth nagar hollow slab		Classic Schedule Layout				10-Apr-20 09:10 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A:	Beam pre cast installation	2.00d	6.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	6.00d		46.63	RS1,546.55	RS72,115.63
P2-4.10.6.3	SLAB PART-2 GF	5.00d	0.00d		68.99	RS3,093.10	RS106,696.48
A:	INSPECTION	2.00d	2.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	0.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	0.00d		46.63	RS1,546.55	RS72,115.63
P2-4.10.7	SIXTH FLOOR	32.00d	138.00d		2097.33	RS19,515.95	RS4,582,601.26
A2040	COLOUMN REINFORCEMENT	25.00d	143.00d	QTL	417.98	RS5,693.16	RS2,379,627.02
A2050	COLOUMN SHUTTERING	25.00d	143.00d	SC	1352.67	RS447.43	RS605,225.14
A2060	COLOUMN CASTING	25.00d	6.00d	CL	193.62	RS7,189.16	RS1,391,965.16
P2-4.10.7.2	SLAB PART-1 GF	5.00d	16.00d		64.07	RS3,093.10	RS99,067.48
A:	INSPECTION	2.00d	18.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	16.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	16.00d		41.71	RS1,546.55	RS64,506.60
P2-4.10.7.3	SLAB PART-2 GF	5.00d	6.00d		68.99	RS3,093.10	RS106,696.48
A:	INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	6.00d		22.36	RS1,546.55	RS34,580.86
A:	Slab pre cast installation	1.00d	6.00d		46.63	RS1,546.55	RS72,115.63
P2-4.10.8	MUMTY	15.00d	6.00d		1805.26	RS16,422.85	RS2,022,572.02
A2170	COLOUMN REINFORCEMENT	5.00d	6.00d	QTL	38.64	RS5,693.16	RS219,983.70
A2180	COLOUMN SHUTTERING	5.00d	6.00d	SC	1596.61	RS447.43	RS714,371.21
A2190	COLOUMN CASTING	5.00d	6.00d	CL	146.26	RS7,189.16	RS1,051,486.54
P2-4.10.8.1	SLAB PART 1	5.00d	6.00d		23.75	RS3,093.10	RS36,730.56
A:	INSPECTION	2.00d	8.00d	JOB	0.00	RS0.00	RS0.00
A:	Beam pre cast installation	2.00d	6.00d		8.06	RS1,546.55	RS12,465.19
A:	Slab pre cast installation	1.00d	6.00d		15.69	RS1,546.55	RS24,265.37
P2-4.10.9	BRICKWORK	141.00d	23.00d		5184.62	RS90,346.10	RS30,731,786.13
P2-4.10.9.1	GROUND FLOOR	20.00d	124.00d		580.09	RS11,684.05	RS3,334,362.30
A:	BRICKWORK 16	20.00d	124.00d	CU	488.69	RS5,704.75	RS2,787,854.28
A:	HALF BRICKWORK 14	20.00d	124.00d	CU	91.40	RS5,979.30	RS546,508.02
P2-4.10.9.2	FIRST FLOOR	21.00d	101.00d		596.53	RS11,800.89	RS3,465,378.45
A:	BRICKWORK 16	21.00d	101.00d	CU	494.50	RS5,761.80	RS2,849,210.10
A:	HALF BRICKWORK 14	21.00d	101.00d	CU	102.03	RS6,039.09	RS616,168.35
P2-4.10.9.3	SECOND FLOOR	23.00d	78.00d		749.55	RS11,917.74	RS4,387,063.06
A:	BRICKWORK 16	23.00d	78.00d	CU	658.37	RS5,818.85	RS3,830,956.27
A:	HALF BRICKWORK 14	23.00d	78.00d	CU	91.18	RS6,098.89	RS556,096.79
P2-4.10.9.4	THIRD FLOOR	25.00d	35.00d		820.04	RS12,034.57	RS4,844,999.02
A:	BRICKWORK 16	25.00d	35.00d	CU	726.21	RS5,875.89	RS4,267,130.08
A:	HALF BRICKWORK 14	25.00d	35.00d	CU	93.83	RS6,158.68	RS577,868.94
P2-4.10.9.5	FOURTH FLOOR	25.00d	25.00d		803.40	RS12,151.41	RS4,793,258.17
A:	BRICKWORK 16	25.00d	25.00d	CU	709.77	RS5,932.94	RS4,211,022.82
A:	HALF BRICKWORK 14	25.00d	25.00d	CU	93.63	RS6,218.47	RS582,235.35
P2-4.10.9.6	FIFTH FLOOR	23.00d	40.00d		775.07	RS12,268.26	RS4,669,716.63
A:	BRICKWORK 16	23.00d	0.00d	CU	681.22	RS5,989.99	RS4,080,500.99
A:	HALF BRICKWORK 14	23.00d	40.00d	CU	93.85	RS6,278.27	RS589,215.64
P2-4.10.9.7	SIXTH FLOOR	23.00d	7.00d		637.40	RS12,385.10	RS3,878,616.53
A:	BRICKWORK 16	23.00d	7.00d	CU	554.13	RS6,047.04	RS3,350,846.28
A:	HALF BRICKWORK 14	23.00d	7.00d	CU	83.27	RS6,338.06	RS527,770.26
P2-4.10.9.8	MUMTY	10.00d	6.00d		222.54	RS6,104.08	RS1,358,401.96
A:	BRICKWORK 16	10.00d	6.00d	CU	222.54	RS6,104.08	RS1,358,401.96
P2-4.10.10	ELECTRICAL WORK WALL CON	131.00d	45.00d		8.00	RS0.00	RS0.00
A2400	GROUND FLOOR	15.00d	154.00d	JOB	1.00	RS0.00	RS0.00

sidharth nagar hollow slab		Classic Schedule Layout				10-Apr-20 09:10 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A2410	FIRST FLOOR	15.00d	136.00d	JOB	1.00	RS0.00	RS0.00
A2420	SECOND FLOOR	15.00d	113.00d	JOB	1.00	RS0.00	RS0.00
A2430	THIRD FLOOR	15.00d	95.00d	JOB	1.00	RS0.00	RS0.00
A2440	FOURTH FLOOR	15.00d	60.00d	JOB	1.00	RS0.00	RS0.00
A2450	FIFTH FLOOR	10.00d	35.00d	JOB	1.00	RS0.00	RS0.00
A2460	SIXTH FLOOR	10.00d	42.00d	JOB	1.00	RS0.00	RS0.00
A2470	MUMTY	10.00d	48.00d	JOB	1.00	RS0.00	RS0.00
P2-4.10.11	WATER SUPPLY GI WORK	166.00d	10.00d		47781.04	RS1,460.80	RS8,724,817.90
A2480	GROUND FLOOR	45.00d	124.00d	Rh	8422.63	RS182.60	RS1,537,972.24
A2490	FIRST FLOOR	45.00d	101.00d	Rh	7770.63	RS182.60	RS1,418,917.04
A2500	SECOND FLOOR	45.00d	78.00d	Rh	5732.63	RS182.60	RS1,046,778.24
A2510	THIRD FLOOR	45.00d	60.00d	Rh	5732.63	RS182.60	RS1,046,778.24
A2520	FOURTH FLOOR	45.00d	25.00d	Rh	5732.63	RS182.60	RS1,046,778.24
A2530	FIFTH FLOOR	45.00d	0.00d	Rh	4808.63	RS182.60	RS878,055.84
A2540	SIXTH FLOOR	45.00d	7.00d	Rh	4790.63	RS182.60	RS874,769.04
A2550	MUMTY	30.00d	28.00d	Rh	4790.63	RS182.60	RS874,769.04
P2-4.10.12	INTERNAL PLASTER	166.00d	7.00d		57468.00	RS5,586.17	RS13,361,596.30
P2-4.10.12.13	INTERNAL PLASTER WORK/CEI	124.00d	45.00d		20793.07	RS1,950.77	RS5,047,860.62
A2	GROUND FLOOR	15.00d	154.00d	SC	3302.31	RS235.60	RS778,024.24
A2	FIRST FLOOR	15.00d	136.00d	SC	2014.62	RS237.96	RS479,398.98
A2	SECOND FLOOR	15.00d	113.00d	SC	3075.72	RS240.31	RS739,126.27
A2	THIRD FLOOR	15.00d	95.00d	SC	3266.98	RS242.67	RS792,798.04
A2	FOURTH FLOOR	8.00d	60.00d	SC	3256.05	RS245.02	RS797,797.37
A2	FIFTH FLOOR	8.00d	35.00d	SC	3259.48	RS247.38	RS806,330.16
A2	SIXTH FLOOR	8.00d	42.00d	SC	2367.39	RS249.74	RS591,231.98
A2	MUMTY	8.00d	48.00d	SC	250.52	RS252.09	RS63,153.59
P2-4.10.12.1	INTERNAL PLASTER WORK/SMC	136.00d	7.00d		36674.93	RS3,635.40	RS8,313,735.68
A2	GROUND FLOOR	10.00d	124.00d	SC	1569.06	RS212.00	RS332,640.72
A2	FIRST FLOOR	10.00d	101.00d	SC	1820.20	RS214.12	RS389,741.22
A2	SECOND FLOOR	15.00d	78.00d	SC	2510.11	RS216.24	RS542,786.19
A2	THIRD FLOOR	15.00d	60.00d	SC	2945.72	RS218.36	RS643,227.42
A2	FOURTH FLOOR	15.00d	25.00d	SC	2824.01	RS220.48	RS622,637.72
A2	FIFTH FLOOR	15.00d	0.00d	SC	2658.21	RS222.60	RS591,717.55
A2	SIXTH FLOOR	15.00d	7.00d	SC	2027.79	RS224.72	RS455,684.97
A2	MUMTY	5.00d	28.00d	SC	715.21	RS231.08	RS165,270.73
P2-4.10.12.1.1	INTERNAL PLASTER WORK	136.00d	7.00d		19604.62	RS1,875.80	RS4,570,029.17
A2	GROUND FLOOR	10.00d	124.00d	SC	1979.47	RS226.00	RS447,360.22
A2	FIRST FLOOR	10.00d	101.00d	SC	2298.71	RS228.26	RS524,703.54
A2	SECOND FLOOR	15.00d	78.00d	SC	3246.35	RS230.52	RS748,348.60
A2	THIRD FLOOR	15.00d	60.00d	SC	3390.07	RS232.78	RS789,140.49
A2	FOURTH FLOOR	15.00d	25.00d	SC	3268.36	RS235.04	RS768,195.33
A2	FIFTH FLOOR	15.00d	0.00d	SC	3102.56	RS237.30	RS736,237.49
A2	SIXTH FLOOR	15.00d	7.00d	SC	2248.32	RS239.56	RS538,607.54
A2	MUMTY	5.00d	28.00d	SC	70.78	RS246.34	RS17,435.95
P2-4.10.13	DOOR WINDOW FRAMING/PANE	131.00d	46.00d		20941.04	RS2,941.76	RS7,700,439.23
A2800	GROUND FLOOR	20.00d	157.00d	SC	1986.80	RS367.72	RS730,586.10
A2810	FIRST FLOOR	20.00d	135.00d	SC	3959.52	RS367.72	RS1,455,994.69
A2820	SECOND FLOOR	18.00d	115.00d	SC	3043.76	RS367.72	RS1,119,251.43
A2830	THIRD FLOOR	14.00d	99.00d	SC	3689.28	RS367.72	RS1,356,622.04
A2840	FOURTH FLOOR	13.00d	80.00d	SC	3287.92	RS367.72	RS1,209,033.94
A2850	FIFTH FLOOR	11.00d	62.00d	SC	2881.20	RS367.72	RS1,059,474.86

siddharth nagar hollow slab		Classic Schedule Layout				10-Apr-20 09:10 PM	
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT
A2860	SIXTH FLOOR	10.00d	46.00d	SC	2032.08	RS367.72	RS747,236.46
A2870	MUMTY	2.00d	28.00d	SC	60.48	RS367.72	RS22,239.71
P2-4.10.14 FLOORING WORK/TILING WORK		151.00d	7.00d		21731.57	RS9,548.49	RS29,643,382.69
A2880	GROUND FLOOR	30.00d	124.00d	SC	3372.93	RS1,364.07	RS4,600,912.63
A2890	FIRST FLOOR	30.00d	101.00d	SC	2122.44	RS1,364.07	RS2,895,156.73
A2900	SECOND FLOOR	30.00d	78.00d	SC	3347.67	RS1,364.07	RS4,566,456.22
A2910	THIRD FLOOR	30.00d	60.00d	SC	3487.07	RS1,364.07	RS4,756,607.57
A2920	FOURTH FLOOR	30.00d	25.00d	SC	3507.03	RS1,364.07	RS4,783,834.41
A2930	FIFTH FLOOR	30.00d	0.00d	SC	3501.98	RS1,364.07	RS4,776,945.86
A2940	SIXTH FLOOR	30.00d	7.00d	SC	2392.45	RS1,364.07	RS3,263,469.27
P2-4.10.15 INTERNAL PUTTY & PAINT WORK		142.00d	7.00d		51161.92	RS584.71	RS4,273,555.18
A2950	GROUND FLOOR	25.00d	124.00d	SC	5825.95	RS83.53	RS486,641.60
A2960	FIRST FLOOR	26.00d	101.00d	SC	6224.08	RS83.53	RS519,897.40
A2970	SECOND FLOOR	27.00d	78.00d	SC	7988.77	RS83.53	RS667,301.96
A2980	THIRD FLOOR	30.00d	60.00d	SC	8449.48	RS83.53	RS705,785.06
A2990	FOURTH FLOOR	30.00d	25.00d	SC	8210.43	RS83.53	RS685,817.22
A3000	FIFTH FLOOR	30.00d	0.00d	SC	7933.92	RS83.53	RS662,720.34
A3010	SIXTH FLOOR	26.00d	7.00d	SC	6529.29	RS83.53	RS545,391.59
P2-4.10.16 DOOR/WINDOW SHUTTERS		124.00d	7.00d		2576.89	RS3,403.92	RS1,096,440.93
A3090	MUMTY	7.00d	28.00d	SC	7.56	RS425.49	RS3,216.70
A3020	GROUND FLOOR	7.00d	124.00d	SC	234.07	RS425.49	RS99,594.44
A3030	FIRST FLOOR	7.00d	101.00d	SC	483.60	RS425.49	RS205,766.96
A3040	SECOND FLOOR	7.00d	78.00d	SC	365.35	RS425.49	RS155,452.77
A3050	THIRD FLOOR	7.00d	60.00d	SC	461.16	RS425.49	RS196,218.97
A3060	FOURTH FLOOR	7.00d	40.00d	SC	410.99	RS425.49	RS174,872.14
A3070	FIFTH FLOOR	7.00d	20.00d	SC	360.15	RS425.49	RS153,240.22
A3080	SIXTH FLOOR	7.00d	7.00d	SC	254.01	RS425.49	RS108,078.71
P2-4.10.17 EXTERNAL FINISHING WORK		103.00d	6.00d		32892.76	RS3,277.62	RS5,134,596.87
A3190	13M TO 16M	25.00d	6.00d	SC	1294.93	RS77.75	RS100,680.81
A3200	16M TO 19M	20.00d	48.00d	SC	1499.31	RS116.63	RS174,864.53
A3210	19M TO 22M	18.00d	60.00d	SC	1298.42	RS155.51	RS201,917.29
A3220	22M TO 25M	15.00d	70.00d	SC	1323.84	RS194.38	RS257,328.02
A3230	25M TO 28M	14.00d	78.00d	SC	1379.43	RS233.25	RS321,752.05
A3240	28M TO 31M	12.00d	90.00d	SC	1009.39	RS272.14	RS274,695.39
A3250	31M TO 34M	15.00d	94.00d	SC	329.35	RS311.01	RS102,431.14
A3180	10M TO 13M	30.00d	6.00d	SC	1321.24	RS38.87	RS51,356.60
P2-4.10.17.1 EXTERNAL PLASTER		78.00d	6.00d		9418.85	RS1,788.00	RS2,405,951.04
A:	GROUND FLOOR	30.00d	6.00d	SC	1345.55	RS248.00	RS333,696.40
A:	FIRST FLOOR	25.00d	6.00d	SC	1345.55	RS250.48	RS337,033.36
A:	SECOND FLOOR	20.00d	6.00d	SC	1345.55	RS252.96	RS340,370.33
A:	THIRD FLOOR	18.00d	6.00d	SC	1345.55	RS255.44	RS343,707.29
A:	FOURTH FLOOR	15.00d	6.00d	SC	1345.55	RS257.92	RS347,044.26
A:	FIFTH FLOOR	14.00d	6.00d	SC	1345.55	RS260.40	RS350,381.22
A:	SIXTH FLOOR	12.00d	6.00d	SC	1345.55	RS262.88	RS353,718.18
P2-4.10.17.3 EXTERNAL PAINT		50.00d	7.00d		13818.00	RS90.00	RS1,243,620.00
A:	EXTERNAL PAINT	50.00d	7.00d	SC	13818.00	RS90.00	RS1,243,620.00
P2-4.10.24 PLUMBING FIXTURES		20.00d	28.00d		1.00	RS25,127,451.79	RS25,127,451.79
A3280	PLUMBING FIXTURES	20.00d	28.00d	JOB	1.00	RS25,127,451.79	RS25,127,451.79
P2-4.10.23 ELECTRICAL FIXTURES		20.00d	28.00d		1.00	RS82,161,000.00	RS82,161,000.00
A3290	ELECTRICAL FIXTURES	20.00d	28.00d	JOB	1.00	RS82,161,000.00	RS82,161,000.00
P2-4.10.18 METAL FALSE CEILING		144.00d	0.00d		11750.69	RS10,224.27	RS17,163,175.32

siddharth nagar hollow slab		Classic Schedule Layout				10-Apr-20 09:10 PM		
Activity ID	Activity Name	Original Duration	Total Float	UNIT	QUANTITY	RATE	AMOUNT	
A3340	FOURTH FLOOR	20.00d	25.00d	SC	1986.82	RS1,460.61	RS2,901,969.16	
A3300	GROUND FLOOR	20.00d	124.00d	SC	1896.34	RS1,460.61	RS2,769,813.17	
A3310	FIRST FLOOR	20.00d	101.00d	SC	1003.99	RS1,460.61	RS1,466,437.83	
A3320	SECOND FLOOR	20.00d	78.00d	SC	1751.17	RS1,460.61	RS2,557,776.41	
A3330	THIRD FLOOR	20.00d	60.00d	SC	1999.07	RS1,460.61	RS2,919,861.63	
A3350	FIFTH FLOOR	20.00d	0.00d	SC	1945.50	RS1,460.61	RS2,841,616.76	
A3360	SIXTH FLOOR	20.00d	7.00d	SC	1167.80	RS1,460.61	RS1,705,700.36	
P2-4.10.19	EXPANSION JOINTS	20.00d	60.00d		425.53	RS4,200.91	RS1,787,613.23	
A3370	EXPANSION JOINT WORK	20.00d	60.00d	Rb	425.53	RS4,200.91	RS1,787,613.23	
P2-4.10.20	SS RAILING WORK	15.00d	25.00d		8556.50	RS451.78	RS3,865,655.57	
A3380	SS RAILING WORK	15.00d	25.00d	KG	8556.50	RS451.78	RS3,865,655.57	
P2-4.10.22	TESTING & COMMISSIONING	15.00d	28.00d		0.00	RS0.00	RS0.00	
A3390	TESTING & COMMISSIONING	15.00d	28.00d		0.00	RS0.00	RS0.00	
P2-4.10.21	HANDING OVER	11.00d	7.00d		0.00	RS0.00	RS0.00	
A3400	HANDING OVER	11.00d	7.00d		0.00	RS0.00	RS0.00	

Page 6 of 6
 TASK filter: All Activities
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❑ JUSTIFICATION FOR ALLOTMENT OF TIME TAKEN FOR INSTALLATION OF PRECAST SLAB

Installation of precast slab finishes quickly as the slab are manufactured off site in a quality control environment & installed on the site during the project time .Installation is done with the help of crane having adequate lifting capacity and working boom radius.

In this thesis time allotted for installation of precast slab for each floor is 10 days(5days for slab part 1 and 5days for slab part 2) including inspection. This Time allotment is done on the basis of following:-

- a) According to the building and construction authority(BCA) (which is an agency under the Ministry of National development & whose mission is to shape a safe high quality sustainable and friendly built environment) BSL chapter no. 4 **“Estimated time to install a typical precast element is ½ to ¾ hour”**.
- b) By taking references from Precast Flooring Federation code of practice for: The safe installation of precast concrete flooring and associated components (2017).
- c) By taking references from the published research papers that involve similar type of constructions with precast element.They are
 - **B.Raghavendra, K.holla, Siddhant Anant, Muzzammi alimohammad,Aakash periwal, Aakash Kapoor(2016) “Time,cost,productivity & quality analysis of precast concrete system”:IJSET(3),252-257.**
 - **Lakhi M. chavan,Prof. D.B Desal(2017)“Analyze time – cost required for conventional & prefabrication building components” : IRJET(4),1957-1965.**
 - **U.D. Dabhade, N.A Headao, Dr. I.M Gupta & DR G.N Ronghe(2009) “Time and cost evaluation of construction of steel framed composite floor precast concrete floor structure.ISARC 2009.**

□ **CALUCLATION:-**

- **In the analysis of Precast solid slab , changes are made under following sections:-**

P2-3.10.1.2 , P2-3.10.1.3 , P2-3.10.2.2 , P2-3.10.2.3 , P2-3.10.3.2 , P2-3.10.3.3 , P2-3.10.2.2 , P2-3.10.5.3 , P2-3.10.6.2 , P2-3.10.6.3 , P2-3.10.7.2 , P2-3.10.7.3

- **In the analysis of Precast Hollow slab , changes are made under following sections:-**

P2-4.10.1.2 , P2-4.10.1.3 , P2-4.10.2.2 , P2-4.10.2.3 , P2-4.10.3.2 , P2-4.10.3.3 , P2-4.10.2.2 , P2-4.10.5.3 , P2-4.10.6.2 , P2-4.10.6.3 , P2-4.10.7.2 , P2-4.10.7.3

CALCULATION OF TOTAL FLOAT:-

Total float is calculated using the formula LST-EST & LFT-EFT

For First floor

P2-2.10.2.2 Slab Part 1

Total Float =LST – EST= 28-oct-19 – 28-oct-19 = 0d

P2-2.10.2.3 Slab Part 2

Total Float=LST – EST= 22-nov-19 – 12-nov-19 = 10d

Note:- Similarly Total float is calculated for other floors as shown in the float analysis below

TOTAL FLOAT ANALYSIS:-

siddharth nagar copy		Classic Schedule Layout				23-Sep-20 15:08	
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
P2-2 siddharth nagar co		404d	01-Jun-19 08:00	09-Jul-20 14:30	01-Jun-19 08:00	09-Jul-20 14:30	0d
A1150	New Activity	5d					
A1020	SETUP OF MACHINE	14d	06-Jun-19 08:00	19-Jun-19 17:00	06-Jun-19 08:00	19-Jun-19 17:00	0d
A1010	SITE CLEARANCE	5d	01-Jun-19 08:00	05-Jun-19 17:00	01-Jun-19 08:00	05-Jun-19 17:00	0d
A1000	START OF THE PRO.	0d	01-Jun-19 08:00		01-Jun-19 08:00		0d
P2-2.1 SUBSTRUCTURE		104d	20-Jun-19 08:00	01-Oct-19 17:00	20-Jun-19 08:00	01-Oct-19 17:00	0d
P2-2.1.1 PILES		63d	20-Jun-19 08:00	21-Aug-19 17:00	20-Jun-19 08:00	21-Aug-19 17:00	0d
A1060	EXCAVATION	2d	25-Jun-19 08:00	26-Jun-19 17:00	07-Jul-19 08:00	08-Jul-19 17:00	12d
A1050	ROUTINE TEST	45d	08-Jul-19 08:00	21-Aug-19 17:00	08-Jul-19 08:00	21-Aug-19 17:00	0d
A1040	INITIAL TEST	30d	08-Jul-19 08:00	06-Aug-19 17:00	08-Jul-19 08:00	06-Aug-19 17:00	0d
A1030	500 mm dia PILING A	40d	20-Jun-19 08:00	29-Jul-19 17:00	20-Jun-19 08:00	29-Jul-19 17:00	0d
P2-2.1.2 PILE CAPS		53d	08-Jul-19 08:00	29-Aug-19 17:00	08-Jul-19 08:00	29-Aug-19 17:00	0d
A1110	RCC PILECAP	45d	16-Jul-19 08:00	29-Aug-19 17:00	16-Jul-19 08:00	29-Aug-19 17:00	0d
A1100	SHUTTERING	45d	14-Jul-19 08:00	27-Aug-19 17:00	14-Jul-19 08:00	27-Aug-19 17:00	0d
A1090	REINFORCEMENT	45d	09-Jul-19 08:00	22-Aug-19 17:00	09-Jul-19 08:00	22-Aug-19 17:00	0d
A1080	PCC 1:4:8 IN FOUND.	45d	08-Jul-19 08:00	21-Aug-19 17:00	08-Jul-19 08:00	21-Aug-19 17:00	0d
A1070	ANTI-TERMITE TREA'	45d	08-Jul-19 08:00	21-Aug-19 17:00	08-Jul-19 08:00	21-Aug-19 17:00	0d
P2-2.1.3 COLOUMN UPTO P		52d	16-Jul-19 08:00	05-Sep-19 17:00	16-Jul-19 08:00	05-Sep-19 17:00	0d
A1140	RCC: UPTO PLINTH	45d	23-Jul-19 08:00	05-Sep-19 17:00	23-Jul-19 08:00	05-Sep-19 17:00	0d
A1130	SHUTTERING	45d	22-Jul-19 08:00	04-Sep-19 17:00	22-Jul-19 08:00	04-Sep-19 17:00	0d
A1120	REINFORCEMENT	45d	16-Jul-19 08:00	29-Aug-19 17:00	16-Jul-19 08:00	29-Aug-19 17:00	0d
P2-2.1.4 BRICKWORK UPTO		10d	27-Aug-19 08:00	05-Sep-19 17:00	27-Aug-19 08:00	05-Sep-19 17:00	0d
A1170	BRICKWORK UPTO F	10d	27-Aug-19 08:00	05-Sep-19 17:00	27-Aug-19 08:00	05-Sep-19 17:00	0d
P2-2.1.5 PLASTER WORK		10d	01-Sep-19 08:00	10-Sep-19 17:00	01-Sep-19 08:00	10-Sep-19 17:00	0d
A1180	PLASTER WORK: PL	10d	01-Sep-19 08:00	10-Sep-19 17:00	01-Sep-19 08:00	10-Sep-19 17:00	0d
P2-2.1.6 DPC & BITUMEN PA		12d	08-Sep-19 08:00	19-Sep-19 17:00	08-Sep-19 08:00	19-Sep-19 17:00	0d
A1190	DPC & BITUMEN PAI	12d	08-Sep-19 08:00	19-Sep-19 17:00	08-Sep-19 08:00	19-Sep-19 17:00	0d
P2-2.1.7 EARTH FILLING IN F		12d	08-Sep-19 08:00	19-Sep-19 17:00	08-Sep-19 08:00	19-Sep-19 17:00	0d
A1200	EARTH FILLING IN PL	12d	08-Sep-19 08:00	19-Sep-19 17:00	08-Sep-19 08:00	19-Sep-19 17:00	0d
P2-2.1.8 SAND FILLING IN PI		12d	09-Sep-19 08:00	20-Sep-19 17:00	09-Sep-19 08:00	20-Sep-19 17:00	0d
A1210	SAND FILLING IN PLI	12d	09-Sep-19 08:00	20-Sep-19 17:00	09-Sep-19 08:00	20-Sep-19 17:00	0d
P2-2.1.9 GRADE SLAB/BEAN		20d	12-Sep-19 08:00	01-Oct-19 17:00	12-Sep-19 08:00	01-Oct-19 17:00	0d
A1240	CONCRETING IN GRA	12d	20-Sep-19 08:00	01-Oct-19 17:00	20-Sep-19 08:00	01-Oct-19 17:00	0d
A1230	REINFORCEMENT IN	7d	15-Sep-19 08:00	21-Sep-19 17:00	15-Sep-19 08:00	21-Sep-19 17:00	0d
A1220	PCC 1:4:8	7d	12-Sep-19 08:00	18-Sep-19 17:00	12-Sep-19 08:00	18-Sep-19 17:00	0d
P2-2.10 SUPER STRUC'		291d	22-Sep-19 08:00	09-Jul-20 14:30	22-Sep-19 08:00	09-Jul-20 14:30	0d
P2-2.10.1 GROUND FLOOR		35d	22-Sep-19 08:00	26-Oct-19 17:00	22-Sep-19 08:00	05-Nov-19 17:00	10d
A1290	COLOUMN CASTING	25d	25-Sep-19 08:00	19-Oct-19 17:00	25-Sep-19 08:00	19-Oct-19 17:00	0d
A1280	COLOUMN SHUTTER	25d	24-Sep-19 08:00	18-Oct-19 17:00	24-Sep-19 08:00	18-Oct-19 17:00	0d
A1270	COLOUMN REINFORI	25d	22-Sep-19 08:00	16-Oct-19 17:00	22-Sep-19 08:00	16-Oct-19 17:00	0d
P2-2.10.1.2 SLAB PART-1 G		5d	07-Oct-19 08:00	11-Oct-19 17:00	07-Oct-19 08:00	11-Oct-19 17:00	0d
A327	Slab pre cast installa	1d	11-Oct-19 08:00	11-Oct-19 17:00	11-Oct-19 08:00	11-Oct-19 17:00	0d
A317	INSPECTION	2d	07-Oct-19 08:00	08-Oct-19 17:00	09-Oct-19 08:00	10-Oct-19 17:00	2d
A317	Beam pre cast instal	2d	07-Oct-19 08:00	08-Oct-19 17:00	07-Oct-19 08:00	08-Oct-19 17:00	0d
P2-2.10.1.3 SLAB PART-2 G		5d	22-Oct-19 08:00	26-Oct-19 17:00	01-Nov-19 08:00	05-Nov-19 17:00	10d
A343	Slab pre cast installa	1d	26-Oct-19 08:00	26-Oct-19 17:00	05-Nov-19 08:00	05-Nov-19 17:00	10d
A342	INSPECTION	2d	22-Oct-19 08:00	23-Oct-19 17:00	03-Nov-19 08:00	04-Nov-19 17:00	12d
A341	Beam pre cast instal	2d	22-Oct-19 08:00	23-Oct-19 17:00	01-Nov-19 08:00	02-Nov-19 17:00	10d
P2-2.10.2 FIRST FLOOR		36d	12-Oct-19 08:00	16-Nov-19 17:00	12-Oct-19 08:00	26-Nov-19 17:00	10d
A1410	COLOUMN CASTING	25d	16-Oct-19 08:00	09-Nov-19 17:00	16-Oct-19 08:00	09-Nov-19 17:00	0d

siddharth nagar copy		Classic Schedule Layout				23-Sep-20 15:10	
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
A1400	COLOUMN SHUTTER	25d	15-Oct-19 08:00	08-Nov-19 17:00	15-Oct-19 08:00	08-Nov-19 17:00	0d
A1390	COLOUMN REINFOR	25d	12-Oct-19 08:00	05-Nov-19 17:00	12-Oct-19 08:00	05-Nov-19 17:00	0d
P2-2.10.2.2	SLAB PART-1 G	5d	28-Oct-19 08:00	01-Nov-19 17:00	28-Oct-19 08:00	01-Nov-19 17:00	0d
A346	Slab pre cast installa	1d	01-Nov-19 08:00	01-Nov-19 17:00	01-Nov-19 08:00	01-Nov-19 17:00	0d
A345	INSPECTION	2d	28-Oct-19 08:00	29-Oct-19 17:00	30-Oct-19 08:00	31-Oct-19 17:00	2d
A345	Beam pre cast instal	2d	28-Oct-19 08:00	29-Oct-19 17:00	28-Oct-19 08:00	29-Oct-19 17:00	0d
P2-2.10.2.3	SLAB PART-2 G	5d	12-Nov-19 08:00	16-Nov-19 17:00	22-Nov-19 08:00	26-Nov-19 17:00	10d
A349	Slab pre cast installa	1d	16-Nov-19 08:00	16-Nov-19 17:00	26-Nov-19 08:00	26-Nov-19 17:00	10d
A348	INSPECTION	2d	12-Nov-19 08:00	13-Nov-19 17:00	24-Nov-19 08:00	25-Nov-19 17:00	12d
A348	Beam pre cast instal	2d	12-Nov-19 08:00	13-Nov-19 17:00	22-Nov-19 08:00	23-Nov-19 17:00	10d
P2-2.10.3	SECOND FLOOR	35d	02-Nov-19 08:00	06-Dec-19 17:00	02-Nov-19 08:00	16-Dec-19 17:00	10d
A1540	COLOUMN CASTING	25d	05-Nov-19 08:00	29-Nov-19 17:00	05-Nov-19 08:00	29-Nov-19 17:00	0d
A1530	COLOUMN SHUTTER	25d	04-Nov-19 08:00	28-Nov-19 17:00	04-Nov-19 08:00	28-Nov-19 17:00	0d
A1520	COLOUMN REINFOR	25d	02-Nov-19 08:00	26-Nov-19 17:00	02-Nov-19 08:00	26-Nov-19 17:00	0d
P2-2.10.3.2	SLAB PART-1 G	5d	17-Nov-19 08:00	21-Nov-19 17:00	17-Nov-19 08:00	21-Nov-19 17:00	0d
A352	Slab pre cast installa	1d	21-Nov-19 08:00	21-Nov-19 17:00	21-Nov-19 08:00	21-Nov-19 17:00	0d
A351	INSPECTION	2d	17-Nov-19 08:00	18-Nov-19 17:00	19-Nov-19 08:00	20-Nov-19 17:00	2d
A351	Beam pre cast instal	2d	17-Nov-19 08:00	18-Nov-19 17:00	17-Nov-19 08:00	18-Nov-19 17:00	0d
P2-2.10.3.3	SLAB PART-2 G	5d	02-Dec-19 08:00	06-Dec-19 17:00	12-Dec-19 08:00	16-Dec-19 17:00	10d
A355	Slab pre cast installa	1d	06-Dec-19 08:00	06-Dec-19 17:00	16-Dec-19 08:00	16-Dec-19 17:00	10d
A354	INSPECTION	2d	02-Dec-19 08:00	03-Dec-19 17:00	14-Dec-19 08:00	15-Dec-19 17:00	12d
A354	Beam pre cast instal	2d	02-Dec-19 08:00	03-Dec-19 17:00	12-Dec-19 08:00	13-Dec-19 17:00	10d
P2-2.10.4	THIRD FLOOR	33d	22-Nov-19 08:00	24-Dec-19 17:00	22-Nov-19 08:00	05-Jan-20 17:00	12d
A1670	COLOUMN CASTING	25d	25-Nov-19 08:00	19-Dec-19 17:00	25-Nov-19 08:00	19-Dec-19 17:00	0d
A1660	COLOUMN SHUTTER	25d	24-Nov-19 08:00	18-Dec-19 17:00	24-Nov-19 08:00	18-Dec-19 17:00	0d
A1650	COLOUMN REINFOR	25d	22-Nov-19 08:00	16-Dec-19 17:00	22-Nov-19 08:00	16-Dec-19 17:00	0d
P2-2.10.4.2	SLAB PART-1 G	5d	07-Dec-19 08:00	11-Dec-19 17:00	07-Dec-19 08:00	11-Dec-19 17:00	0d
A358	Slab pre cast installa	1d	11-Dec-19 08:00	11-Dec-19 17:00	11-Dec-19 08:00	11-Dec-19 17:00	0d
A357	INSPECTION	2d	07-Dec-19 08:00	08-Dec-19 17:00	09-Dec-19 08:00	10-Dec-19 17:00	2d
A357	Beam pre cast instal	2d	07-Dec-19 08:00	08-Dec-19 17:00	07-Dec-19 08:00	08-Dec-19 17:00	0d
P2-2.10.4.3	SLAB PART-2 G	5d	20-Dec-19 08:00	24-Dec-19 17:00	01-Jan-20 08:00	05-Jan-20 17:00	12d
A361	Slab pre cast installa	1d	24-Dec-19 08:00	24-Dec-19 17:00	05-Jan-20 08:00	05-Jan-20 17:00	12d
A360	INSPECTION	2d	20-Dec-19 08:00	21-Dec-19 17:00	03-Jan-20 08:00	04-Jan-20 17:00	14d
A360	Beam pre cast instal	2d	20-Dec-19 08:00	21-Dec-19 17:00	01-Jan-20 08:00	02-Jan-20 17:00	12d
P2-2.10.5	FOURTH FLOOR	33d	12-Dec-19 08:00	13-Jan-20 17:00	12-Dec-19 08:00	25-Jan-20 17:00	12d
A1800	COLOUMN CASTING	25d	15-Dec-19 08:00	08-Jan-20 17:00	15-Dec-19 08:00	08-Jan-20 17:00	0d
A1790	COLOUMN SHUTTER	25d	14-Dec-19 08:00	07-Jan-20 17:00	14-Dec-19 08:00	07-Jan-20 17:00	0d
A1780	COLOUMN REINFOR	25d	12-Dec-19 08:00	05-Jan-20 17:00	12-Dec-19 08:00	05-Jan-20 17:00	0d
P2-2.10.5.2	SLAB PART-1 G	5d	27-Dec-19 08:00	31-Dec-19 17:00	27-Dec-19 08:00	31-Dec-19 17:00	0d
A364	Slab pre cast installa	1d	31-Dec-19 08:00	31-Dec-19 17:00	31-Dec-19 08:00	31-Dec-19 17:00	0d
A363	INSPECTION	2d	27-Dec-19 08:00	28-Dec-19 17:00	29-Dec-19 08:00	30-Dec-19 17:00	2d
A363	Beam pre cast instal	2d	27-Dec-19 08:00	28-Dec-19 17:00	27-Dec-19 08:00	28-Dec-19 17:00	0d
P2-2.10.5.3	SLAB PART-2 G	5d	09-Jan-20 08:00	13-Jan-20 17:00	21-Jan-20 08:00	25-Jan-20 17:00	12d
A367	Slab pre cast installa	1d	13-Jan-20 08:00	13-Jan-20 17:00	25-Jan-20 08:00	25-Jan-20 17:00	12d
A366	INSPECTION	2d	09-Jan-20 08:00	10-Jan-20 17:00	23-Jan-20 08:00	24-Jan-20 17:00	14d
A366	Beam pre cast instal	2d	09-Jan-20 08:00	10-Jan-20 17:00	21-Jan-20 08:00	22-Jan-20 17:00	12d
P2-2.10.6	FIFTH FLOOR	35d	01-Jan-20 08:00	04-Feb-20 14:30	01-Jan-20 08:00	04-Feb-20 14:30	0d
A1930	COLOUMN CASTING	25d	04-Jan-20 08:00	28-Jan-20 17:00	04-Jan-20 08:00	28-Jan-20 17:00	0d
A1920	COLOUMN SHUTTER	25d	03-Jan-20 08:00	27-Jan-20 17:00	03-Jan-20 08:00	27-Jan-20 17:00	0d
A1910	COLOUMN REINFOR	25d	01-Jan-20 08:00	25-Jan-20 17:00	01-Jan-20 08:00	25-Jan-20 17:00	0d
P2-2.10.6.2	SLAB PART-1 G	5d	16-Jan-20 08:00	20-Jan-20 17:00	22-Jan-20 08:00	26-Jan-20 17:00	6d
A370	Slab pre cast installa	1d	20-Jan-20 08:00	20-Jan-20 17:00	26-Jan-20 08:00	26-Jan-20 17:00	6d

siddharth nagar copy		Classic Schedule Layout				23-Sep-20 15:11	
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
A369	INSPECTION	2d	16-Jan-20 08:00	17-Jan-20 17:00	24-Jan-20 08:00	25-Jan-20 17:00	8d
A369	Beam pre cast instal	2d	16-Jan-20 08:00	17-Jan-20 17:00	22-Jan-20 08:00	23-Jan-20 17:00	6d
P2-2.10.6.3	SLAB PART-2 G	5d	30-Jan-20 16:30	04-Feb-20 14:30	30-Jan-20 16:30	04-Feb-20 14:30	0d
A373	Slab pre cast installa	1d	03-Feb-20 14:30	04-Feb-20 14:30	03-Feb-20 14:30	04-Feb-20 14:30	0d
A372	INSPECTION	2d	30-Jan-20 16:30	01-Feb-20 14:30	01-Feb-20 14:30	03-Feb-20 14:30	2d
A372	Beam pre cast instal	2d	30-Jan-20 16:30	01-Feb-20 14:30	30-Jan-20 16:30	01-Feb-20 14:30	0d
P2-2.10.7	SIXTH FLOOR	32d	21-Jan-20 08:00	21-Feb-20 14:30	27-Jan-20 08:00	09-Jul-20 14:30	138d
A2060	COLOUMN CASTING	25d	21-Jan-20 08:00	14-Feb-20 14:30	27-Jan-20 08:00	20-Feb-20 14:30	6d
A2050	COLOUMN SHUTTER	25d	23-Jan-20 08:00	16-Feb-20 14:30	14-Jun-20 14:30	09-Jul-20 14:30	143d
A2040	COLOUMN REINFORI	25d	21-Jan-20 08:00	14-Feb-20 14:30	12-Jun-20 14:30	07-Jul-20 14:30	143d
P2-2.10.7.2	SLAB PART-1 G	5d	01-Feb-20 14:30	06-Feb-20 14:30	17-Feb-20 14:30	22-Feb-20 14:30	16d
A376	Slab pre cast installa	1d	05-Feb-20 14:30	06-Feb-20 14:30	21-Feb-20 14:30	22-Feb-20 14:30	16d
A375	INSPECTION	2d	01-Feb-20 14:30	03-Feb-20 14:30	19-Feb-20 14:30	21-Feb-20 14:30	18d
A375	Beam pre cast instal	2d	01-Feb-20 14:30	03-Feb-20 14:30	17-Feb-20 14:30	19-Feb-20 14:30	16d
P2-2.10.7.3	SLAB PART-2 G	5d	16-Feb-20 14:30	21-Feb-20 14:30	22-Feb-20 14:30	27-Feb-20 14:30	6d
A379	Slab pre cast installa	1d	20-Feb-20 14:30	21-Feb-20 14:30	26-Feb-20 14:30	27-Feb-20 14:30	6d
A378	INSPECTION	2d	16-Feb-20 14:30	18-Feb-20 14:30	24-Feb-20 14:30	26-Feb-20 14:30	8d
A378	Beam pre cast instal	2d	16-Feb-20 14:30	18-Feb-20 14:30	22-Feb-20 14:30	24-Feb-20 14:30	6d
P2-2.10.8	MUMTY	15d	16-Feb-20 14:30	02-Mar-20 14:30	22-Feb-20 14:30	08-Mar-20 14:30	6d
A2190	COLOUMN CASTING	5d	19-Feb-20 14:30	24-Feb-20 14:30	25-Feb-20 14:30	01-Mar-20 14:30	6d
A2180	COLOUMN SHUTTER	5d	18-Feb-20 14:30	23-Feb-20 14:30	24-Feb-20 14:30	29-Feb-20 14:30	6d
A2170	COLOUMN REINFORI	5d	16-Feb-20 14:30	21-Feb-20 14:30	22-Feb-20 14:30	27-Feb-20 14:30	6d
P2-2.10.8.1	SLAB PART 1	5d	26-Feb-20 14:30	02-Mar-20 14:30	03-Mar-20 14:30	08-Mar-20 14:30	6d
A382	Slab pre cast installa	1d	01-Mar-20 14:30	02-Mar-20 14:30	07-Mar-20 14:30	08-Mar-20 14:30	6d
A381	INSPECTION	2d	26-Feb-20 14:30	28-Feb-20 14:30	05-Mar-20 14:30	07-Mar-20 14:30	8d
A380	Beam pre cast instal	2d	26-Feb-20 14:30	28-Feb-20 14:30	03-Mar-20 14:30	05-Mar-20 14:30	6d
P2-2.10.9	BRICKWORK	141d	29-Oct-19 08:00	17-Mar-20 14:30	30-Jan-20 16:30	09-Apr-20 14:30	23d
P2-2.10.9.1	GROUND FLOOR	20d	29-Oct-19 08:00	17-Nov-19 17:00	29-Feb-20 14:30	20-Mar-20 14:30	124d
A228	HALF BRICKWORK 1	20d	29-Oct-19 08:00	17-Nov-19 17:00	29-Feb-20 14:30	20-Mar-20 14:30	124d
A225	BRICKWORK 1:6	20d	29-Oct-19 08:00	17-Nov-19 17:00	29-Feb-20 14:30	20-Mar-20 14:30	124d
P2-2.10.9.2	FIRST FLOOR	21d	19-Nov-19 08:00	09-Dec-19 17:00	27-Feb-20 14:30	19-Mar-20 14:30	101d
A228	HALF BRICKWORK 1	21d	19-Nov-19 08:00	09-Dec-19 17:00	27-Feb-20 14:30	19-Mar-20 14:30	101d
A227	BRICKWORK 1:6	21d	19-Nov-19 08:00	09-Dec-19 17:00	27-Feb-20 14:30	19-Mar-20 14:30	101d
P2-2.10.9.3	SECOND FLOOR	23d	09-Dec-19 08:00	31-Dec-19 17:00	24-Feb-20 14:30	18-Mar-20 14:30	78d
A230	HALF BRICKWORK 1	23d	09-Dec-19 08:00	31-Dec-19 17:00	24-Feb-20 14:30	18-Mar-20 14:30	78d
A229	BRICKWORK 1:6	23d	09-Dec-19 08:00	31-Dec-19 17:00	24-Feb-20 14:30	18-Mar-20 14:30	78d
P2-2.10.9.4	THIRD FLOOR	25d	27-Dec-19 08:00	20-Jan-20 17:00	30-Jan-20 16:30	24-Feb-20 14:30	35d
A232	HALF BRICKWORK 1	25d	27-Dec-19 08:00	20-Jan-20 17:00	30-Jan-20 16:30	24-Feb-20 14:30	35d
A231	BRICKWORK 1:6	25d	27-Dec-19 08:00	20-Jan-20 17:00	30-Jan-20 16:30	24-Feb-20 14:30	35d
P2-2.10.9.5	FOURTH FLOOR	25d	16-Jan-20 08:00	09-Feb-20 14:30	09-Feb-20 14:30	05-Mar-20 14:30	25d
A234	HALF BRICKWORK 1	25d	16-Jan-20 08:00	09-Feb-20 14:30	09-Feb-20 14:30	05-Mar-20 14:30	25d
A233	BRICKWORK 1:6	25d	16-Jan-20 08:00	09-Feb-20 14:30	09-Feb-20 14:30	05-Mar-20 14:30	25d
P2-2.10.9.6	FIFTH FLOOR	23d	06-Feb-20 14:30	29-Feb-20 14:30	06-Feb-20 14:30	09-Apr-20 14:30	40d
A236	HALF BRICKWORK 1	23d	06-Feb-20 14:30	29-Feb-20 14:30	17-Mar-20 14:30	09-Apr-20 14:30	40d
A235	BRICKWORK 1:6	23d	06-Feb-20 14:30	29-Feb-20 14:30	06-Feb-20 14:30	29-Feb-20 14:30	0d
P2-2.10.9.7	SIXTH FLOOR	23d	23-Feb-20 14:30	17-Mar-20 14:30	01-Mar-20 14:30	24-Mar-20 14:30	7d
A238	HALF BRICKWORK 1	23d	23-Feb-20 14:30	17-Mar-20 14:30	01-Mar-20 14:30	24-Mar-20 14:30	7d
A237	BRICKWORK 1:6	23d	23-Feb-20 14:30	17-Mar-20 14:30	01-Mar-20 14:30	24-Mar-20 14:30	7d
P2-2.10.9.8	MUMTY	10d	04-Mar-20 14:30	14-Mar-20 14:30	10-Mar-20 14:30	20-Mar-20 14:30	6d
A239	BRICKWORK 1:6	10d	04-Mar-20 14:30	14-Mar-20 14:30	10-Mar-20 14:30	20-Mar-20 14:30	6d
P2-2.10.10	ELECTRICAL WC	131d	18-Nov-19 08:00	27-Mar-20 14:30	04-Apr-20 14:30	12-May-20 14:30	45d
A2470	MUMTY	10d	14-Mar-20 14:30	24-Mar-20 14:30	02-May-20 14:30	12-May-20 14:30	48d

1.IMPACT OF USING PRECAST CONCRETE SLAB(HOLLOW) INSTEAD OF TRADITIONAL CONCRETE SLAB IN CONSTRUCTION PROJECT

CONSTRUCTION WITH HOLLOW PRECAST SLAB

Column of Total float is obtained by using the formula LST-EST & LFT-EFT

- I. TOTAL FLOAT (Obtained by summation of float from float column) :-
 $=10+10+10+12+12+138+6+23+45+10+7+46+7+7+7+6+28+28+60+25+28+7=539d$
- II. Duration=404d
- III. ERECTION AND INSTALLATION COST:- $217.45 \times 35932.08=7813431.383$
TOTAL COST(PRECAST HOLLOW SLAB)= $304037807.15 + 7813431.383=Rs311851238.4$

CONSTRUCTION WITHOUT PRECAST SLAB

Column of Total float is obtained by using the formula LST-EST & LFT-EFT

- I. TOTAL FLOAT(Obtained by summation of float from float column)
 $=348+19+14+241+48+18+143+20+42+7+4+43+4+4+4+22+22+4+96+48+22+1=1170d$
- II. Duration=495d
- III. Total Cost=Rs402519088.08

$$\text{TOTAL FLOAT REDUCTION IN \%} = \{(1170-539)/1170\} \times 100 = 53.93\%$$

$$\text{DURATION REDUCTION IN \%} = (495-404)/495 = 18.38\%$$

$$\text{TOTAL COST REDUCTION IN \%} = (402519088.08-311851238.4)/402519088.08 = 22.52\%$$

2. IMPACT OF USING PRECAST CONCRETE SLAB(SOLID) INSTEAD OF TRADITIONAL CONCRETE SLAB IN CONSTRUCTION PROJECT

CONSTRUCTION WITHOUT PRECAST SLAB

- I. TOTAL FLOAT(Obtained by summation of float from float column)=
 $348+19+14+241+48+18+143+20+42+7+4+43+4+4+4+22+22+4+96+48+22+1=1170d$
- II. Duration=495d
- III. Total Cost=Rs402519088.08

CONSTRUCTION WITH SOLID PRECAST SLAB

- I. TOTAL FLOAT(Obtained by summation of float from float column)=
 $10+10+10+12+12+138+6+23+45+10+7+46+7+7+7+6+28+28+60+25+28+7=539d$
- II. Duration=404d
- III. ERECTION AND INSTALLATION COST:-217.45 X 35932.08=Rs7813431.383
TOTAL COST=383819052.15+7813431.383=Rs391632483.5

$$\text{TOTAL FLOAT REDUCTION IN \%} = \{(1170-539)/1170\} \times 100 \\ = 53.93\%$$

$$\text{DURATION REDUCTION IN \%} = (495-404)/495 \\ = 18.38\%$$

$$\text{TOTAL COST REDUCTION IN \%} = (402519088.08-391632483.5)/402519088.08 \\ = 2.70\%$$

CHAPTER-4

RESULT

- ❑ **RESULT**:-Based on the above analysis of data using Primavera P6 EPPSs, following results are obtained :-

1.IMPACT OF USING PRECAST CONCRETE SLAB(HOLLOW) INSTEAD OF TRADITIONAL CONCRETE SLAB IN CONSTRUCTION PROJECT

TABLE1.1

S.NO	PARAMETERS	CONSTRUCTION WITHOUT PRECAST SLAB	CONSTRUCTION WITH HOLLOW CORE PRECAST SLAB	PERCENTAGE REDUCTION
1.	FLOAT	1170d	539d	53.93%
2.	DURATION	495d	404d	18.38%
3.	COST	Rs402519088.08	Rs311851238.4	22.52%

NOTE:-ABOVE COST IS CALCULATED ACCORDING TO CPWD SCHEDULE OF RATES.

2.IMPACT OF USING PRECAST CONCRETE SLAB(SOLID) INSTEAD OF TRADITIONAL CONCRETE SLAB IN CONSTRUCTION PROJECT

TABLE1.2

S.No.	PARAMETERS	CONSTRUCTION WITHOUT PRECAST SLAB	CONSTRUCTION WITH SOLID PRECAST SLAB	PERCENTAGE REDUCTION
1.	FLOAT	1170d	539d	53.93%
2.	DURATION	495d	404d	18.38%
3.	COST	Rs402519088.08	Rs391632483.5	2.70%

NOTE:-ABOVE COST IS CALCULATED ACCORDING TO CPWD SCHEDULE OF RATES.

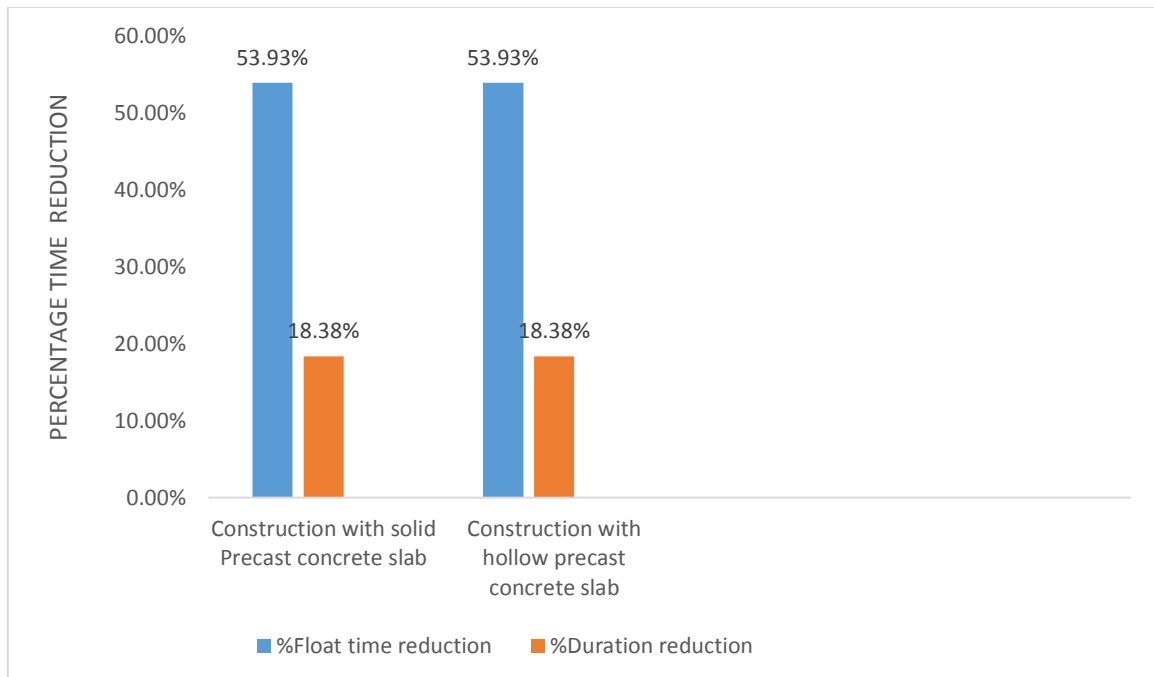


Fig:1.3 A graph showing comparison of %Float time reduction,%Duration reduction and in case of construction with solid precast concrete slab & construction with hollow precast concrete slab v/s Construction with Traditional concrete slab.

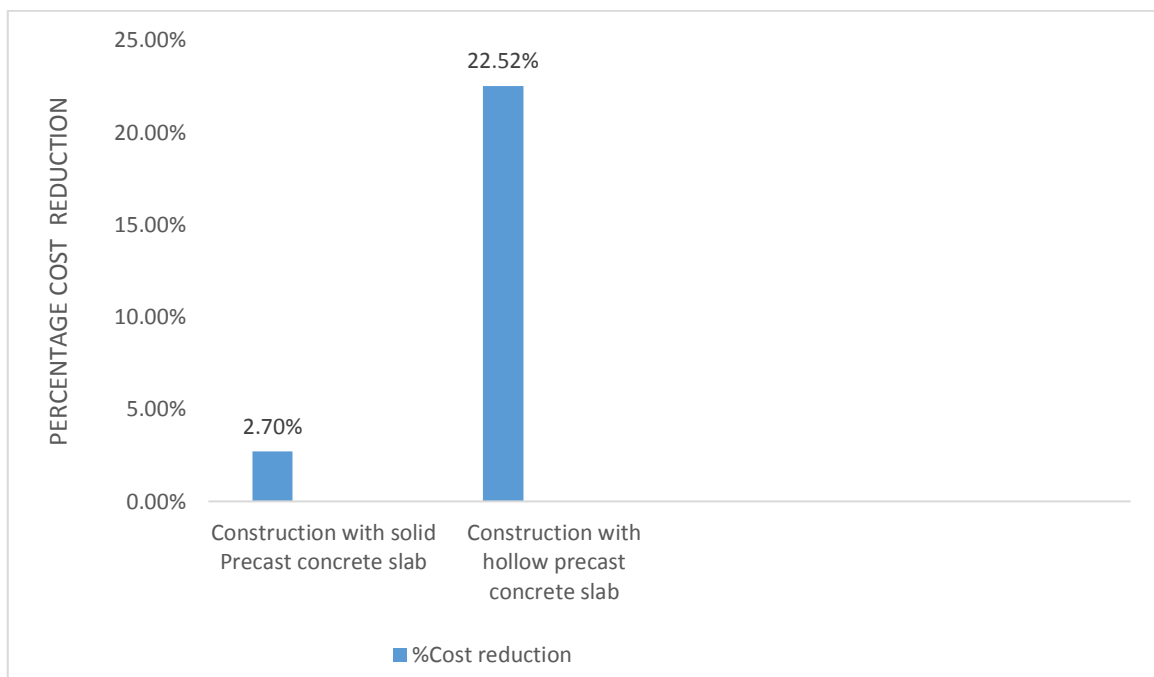


Fig:1.4 A graph showing comparison of %Cost reduction in case of construction with solid precast concrete slab & construction with hollow precast concrete slab v/s Construction with Traditional concrete slab.

CHAPTER-5

CONCLUSION

5.1 CONCLUSION:-

- In the construction of regular concrete slab,generally the shuttering of the slab is removed after 10-14 days of slab casting and until that time the different work like plastering and painting of wall stops which consume a lot of time ,this time -gap between removal of slab and other associated work to begin is float time which can be decreased via the use of some revolutionary techniques.
- Some of the factors that affect float time are as follows:-
 - a) Manpower(skilled,unskilled)
 - b) Machinery,Equipment type used
 - c) Type of material used
 - d) Construction material and techniques used like i) Precast members like Precast slab in form of panels,Precast brick panels etc. ii)Mivan shuttering iii)AAC blocks iv)Steel structures etc.
- In this thesis an attempt is made to reduce float by using the Precast concrete slab in place of traditional concrete slab and Primavera P6 is used for analysis purpose.Precast concrete slab is used because of the following reasons:
 - a) No on site form work
 - b) Efficiency and sustainable material use
 - c) Quality control
 - d) Labour efficiency because the work is done in factory
 - e) Proper curing
 - f) Cast ahead of time
 - g) Weather:An unexpected rain storm can grind construction work to a half if it occurs when you are doing site casting.Thankfully,this simply isn't a problem when it comes to precast solutions.if it is raining when your precast slab arrive on site,you can lift them into place just as you would during a sunny day.

- For the analysis of data, when precast concrete slab(solid or hollow)is used instead of trtraditional concrete slab,**PRIMEVERA P6 Enterprise Project Portfolio System(EPPS)** software is used.
- .This research Paper work concluded that about 53.93% of float time can be reduced using precast concrete slab which results in time reduction of about 18.38% and cost reduction of about 2.7%(for solid precast slab) and 22.52%(for hollow slab).

5.2 SUGGESTIONS FOR FUTURE RESEARCH:-

The following areas are recommended for further study in order to enhance the capability of float time reduction and its impact:-

- Detailed Comparision of traditional building construction v/s construction of buildings using innovative techniques like building made of purely precast elements(solid or hollow),Mivan shuttering,AAC blocks etc. in order to find result in tems of %float reduction,%cost reduction through adequate no. of comparative results.
- To find out Constraints and it's solution in the field of using innovative techniques like Precast elements Mivan shuttering,AAC blocks etc. for pupose of building construction.

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