

FILMCITY

ATHESIS

Submitted in partial fulfillment of the requirements for the award of Bachelor of Architecture degree

By

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(37210028)



**DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT**

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY) Accredited

With Grade "A" by NAAC

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NOVEMBER 2021



DEPARTMENT OF ARCHITECTURE

BONA FIDE CERTIFICATE

This is to certify that this Thesis Report is the bonafide work of **SSahana(37210028)** who carried out the Thesis entitled “**Film City**” under our supervision from July 2021 to November 2021.

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DECLARATION

I, **S. Sahana** hereby declare that the Thesis Report entitled “**Film City**” done by me under the guidance of **Ar. Divya** (Internal Guide), **Ar. Surya Rajkumar** (Internal Review Member) and **Ar. Kishore Pannikar** (External Guide) Sathyabama Institute of Science and Technology is submitted in partial fulfilment of the requirements for the award of Bachelor of Architecture Degree.

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S Sahana

THE SISSYNOPSIS

Film city is an amalgamation of the entire film making process under one area. It aims to encompass the various brains under one institution to churn out films all throughout the year and also to break any sort of distance between the creators and the viewers. The film city is a place where the entire process of filmmaking right from ideation to the end result can be done. Here the presence of pre-production, production and post production facilities give required space for the entire process to take place.

A Film City would facilitate a film maker with all the technical facilities for film making along with an atmosphere for outdoor shooting, postproduction facilities and finally serve as the melting pot of artists of the silver screen. A film studio consists of all the equipment and facilities required for preproduction, production and postproductions plus a premier theater. Some years before film studios used to have only indoor and outdoor shooting facilities.

The advancement of technology brought major changes in the field of film making. Animation techniques such as green screen technology and development of sound system had given the touch of reality. In film studio we can find all the facilities required including office spaces, residence facilities for actors and other technicians. The project aims to encompass the vital spaces under one jurisdiction so as to provide the necessary facilities for the user group along with the features for the public to have a glimpse of what happens behind the scene.

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CHAPTER1

INTRODUCTION

1.1 INTRODUCTION

A Film City is a studio complex that brings in all the facilities required for making a film. The development of films is accredited to two wings :the technical development and the creative side .A Film City would facilitate a film maker with all the technical facilities for filmmaking along with an atmosphere for outdoor shooting, post production facilities and finally serve as the melting pot of artists of the silver screen A film studio consists of all the equipment and facilities required for preproduction ,production and post productions plus a primer theater.

Some years before film studios used to have only indoor and outdoor shooting facilities .The advancement of technology brought major changes in the field of filmmaking. Animation techniques such as green screen technology and development of sound system had given the touch of reality .In film studio we can find all the facilities required including office spaces ,residence facilities for actors and other technicians.

1.2 NEED FOR THE PROJECT

Erecting studio-complexes not only cater to the needs of the filmmakers but also create an ideal atmosphere for set designers, prop manufacturers, costumiers, makeup artists and so on. Workshops attached to high quality working conditions eventually provide a huge pool of skilled designers and decorators, which is a selling point for the complex. More over the security of the artists and equipment is largely ensured and a freedom to work without attracting unwanted crowd increases the level of outcome. With Indian Cinema growing substantially every year, it is only fair that the services to cater to the industry is also in par with the growth and standards of today's time

1.3 AIM

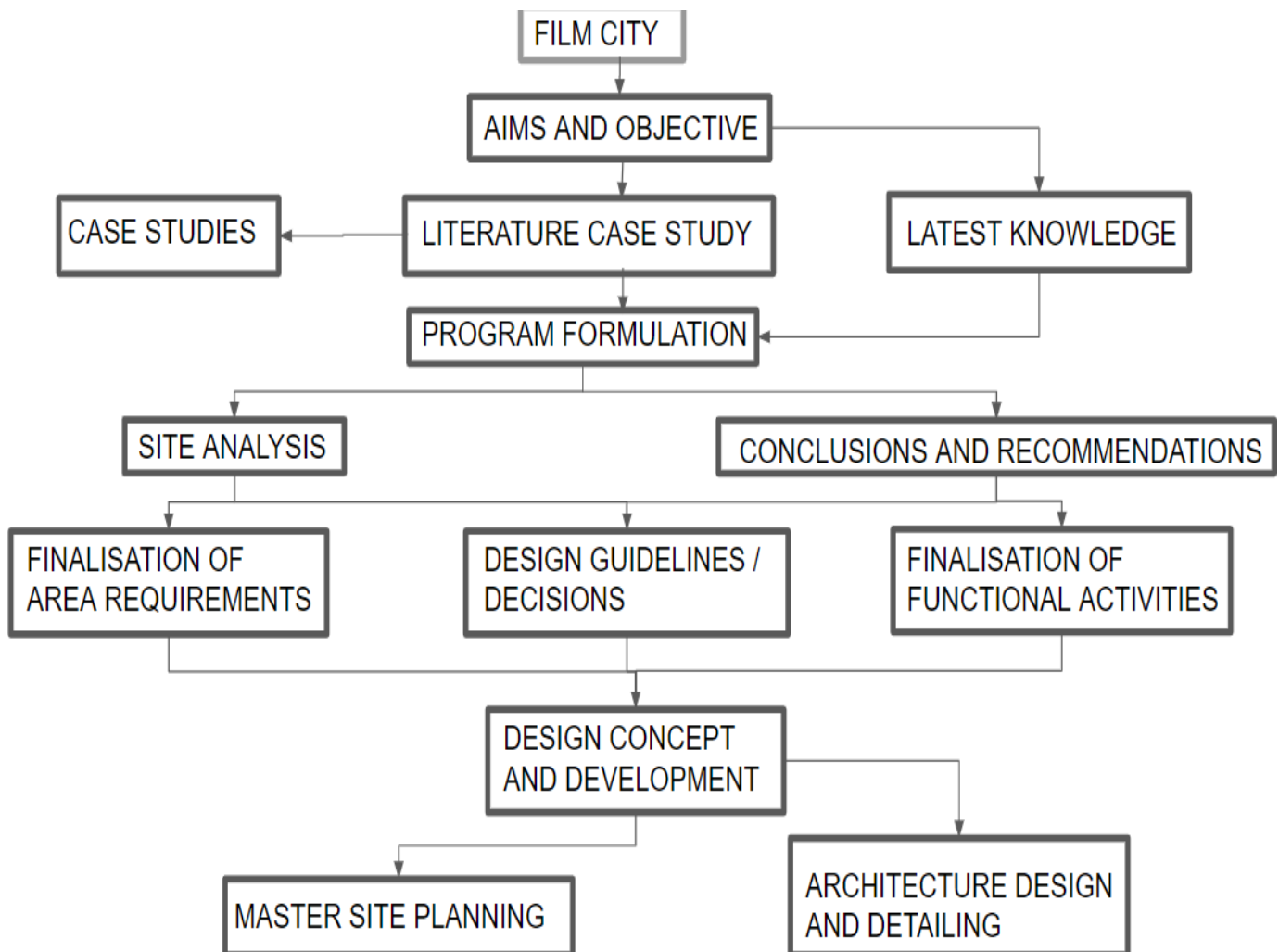
The aim of the project is to provide the film fraternity all the resources under one area so as to promote the production of films in a fast rate and give an opportunity to the general public an insight on what happens behind the scenes of the silver screen

1.4 OBJECTIVE

The objective of the thesis is to bring forth the various modes of film making that is emerging in recent trends under one umbrella alongside the general requirements that is required in film making under one site . film city is also a recreational genre .hence the objective includes the providence of an insight for the audience on what goes on behind the screens.

- Toprovide anallstopspacefor thefilmmakingfraternity
- Flexibilitytoaccommodatethegrowingtrendsandwaysoffilmmakingandpromotions
- Provideaninsightforthegeneralaudience

1.5 METHODOLOGY



2. LITERATURE CASE STUDY

2.1 Dadasaheb Phalke Chitanagiri Film City

LOCATION: Goregaon Maharashtra

AREA: 480 acres

YEAR OF CONSTRUCTION: 1977

STAKEHOLDER: Maharashtra Government

PLANNER: V. Shantaram

WORKFORCE: 800 ppl per day OUTDOOR SHOOTING LOCATIONS: 42

NO OF STUDIOS: 16

The site has a 12 m road running along the west to east direction at the middle of the site that acts as the central spine for the activities designed on the site. The site extends northeast towards Sanjay Gandhi National Park and towards Vihar Lake in the South East. The current Maharashtra Film, Stage and Cultural Development Corporation (MFSCDC) Limited is all set to give this place a new set of looks. They have hired architect Sandee Shikre and acclaimed art Director Nitin Chandrakant Desai to groom in a new master plan for his 500 acre off film have.

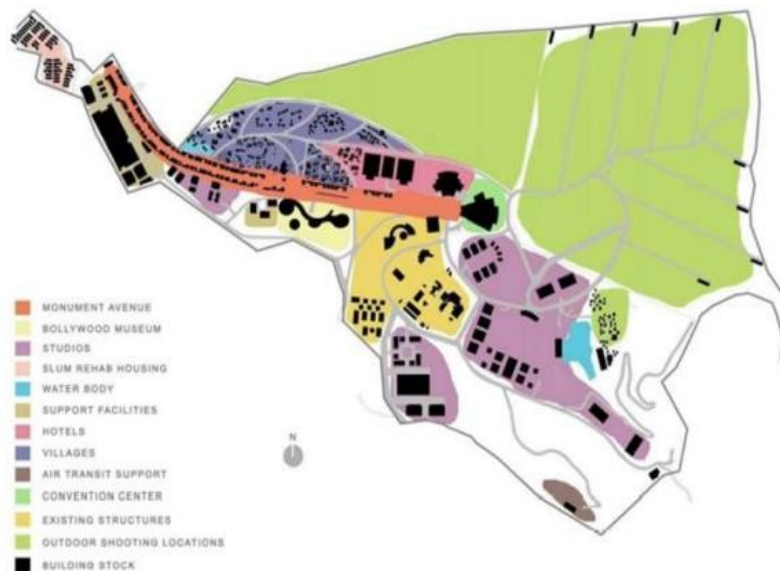
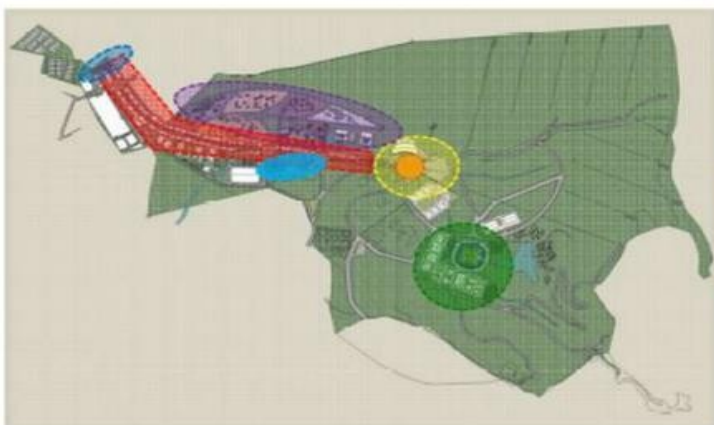
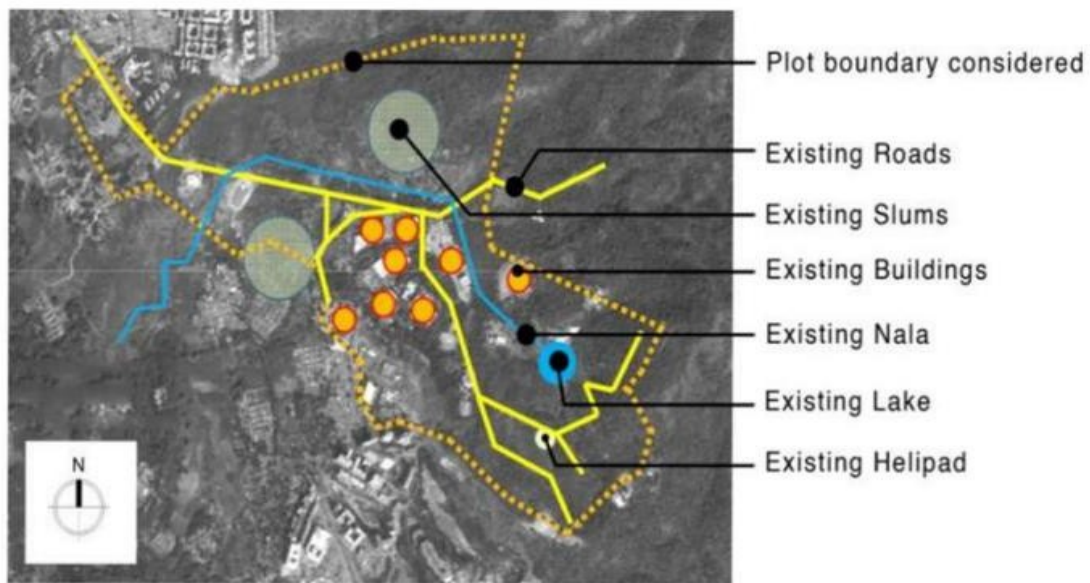


Fig2.1 : Mumbai case study site plan



Entrance Gate:

Village Sets:

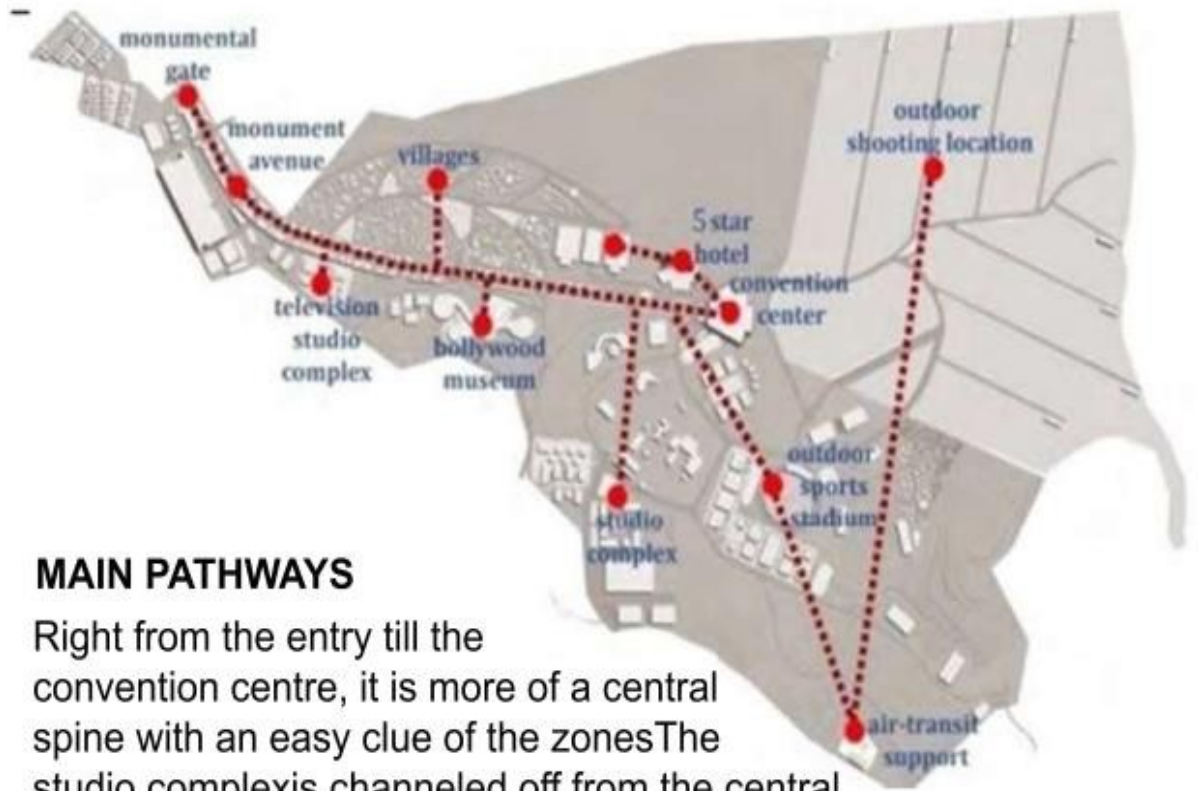


Fig2.2 :Mumbai case study plate pics

Studios & Building Sets:



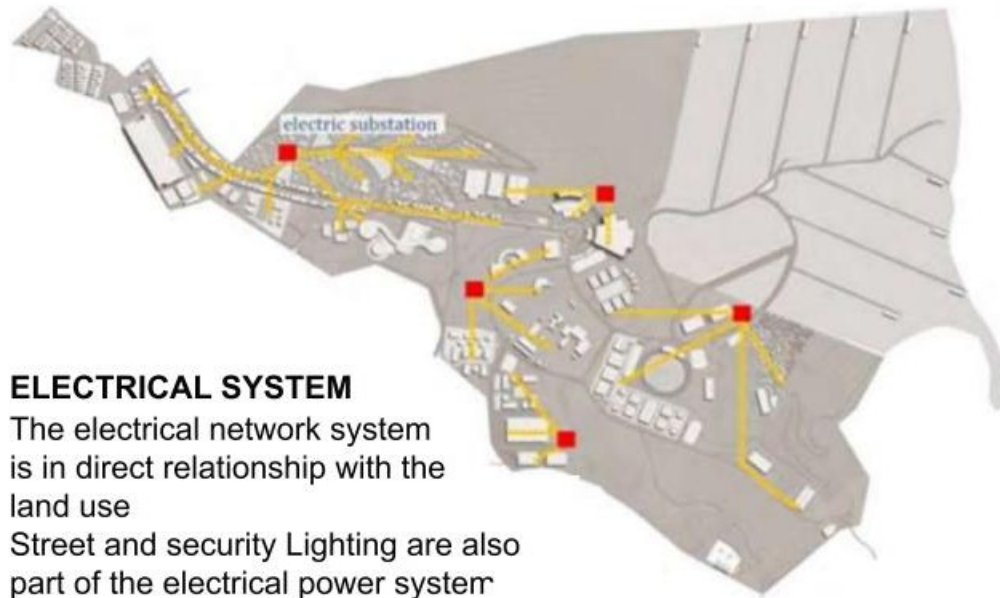
Monumental Avenue:



MAIN PATHWAYS

Right from the entry till the convention centre, it is more of a central spine with an easy clue of the zones. The studio complex is channeled off from the central spine to avoid commotion of the public spaces.

Fig2.3 :Mumbai case study plate pics

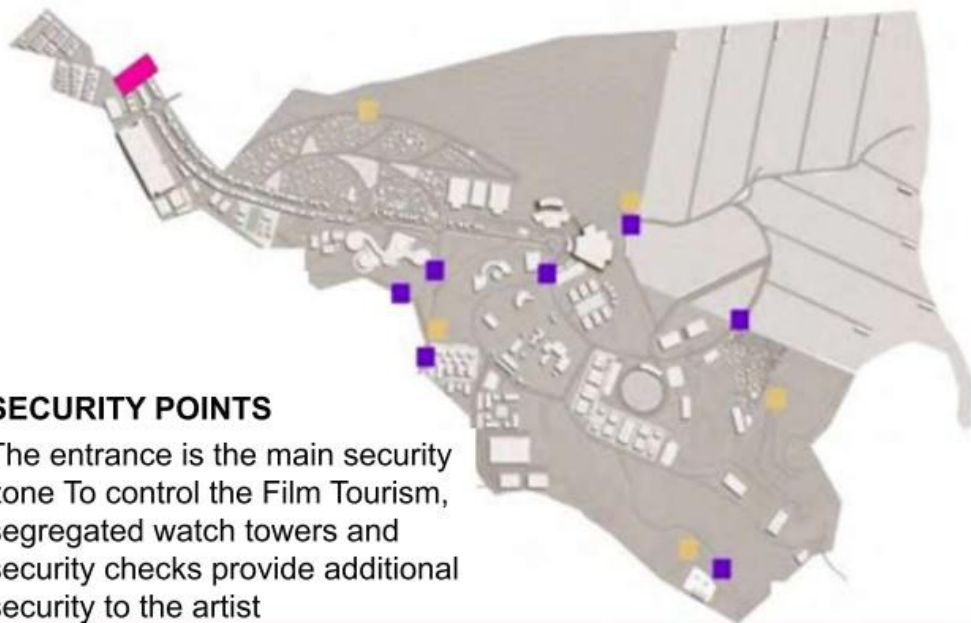


ELECTRICAL SYSTEM

The electrical network system is in direct relationship with the land use

Street and security Lighting are also part of the electrical power system and is required during outdoor shooting

The scheme indicate the proposed areas required for utility services



SECURITY POINTS

The entrance is the main security zone To control the Film Tourism, segregated watch towers and security checks provide additional security to the artist

Fig2.4 :Mumbai case study plate pics

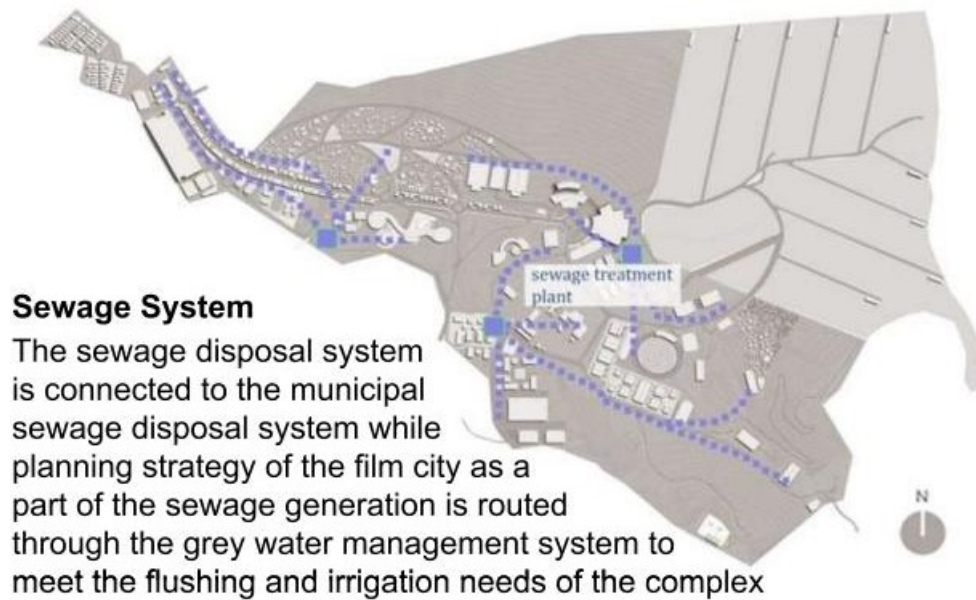


Fig2.5 :Mumbai case study plate pics



Fig2.6 :Mumbai case study plate pics

INFERENCE

>The objective of the case study was to understand the site planning of the film city and its service features on the site level

>POSITIVES

>The water and drainage system follow the site's natural contour so that the reassessed burden on the system that facilitates them

>The electrical system has multiple main points across the site to ensure a constant work flow in the important site zones so that there is no interruption in the work flow or any possible of fire out break through out the entire site-it will be localized to a particular zone

>NEGATIVES

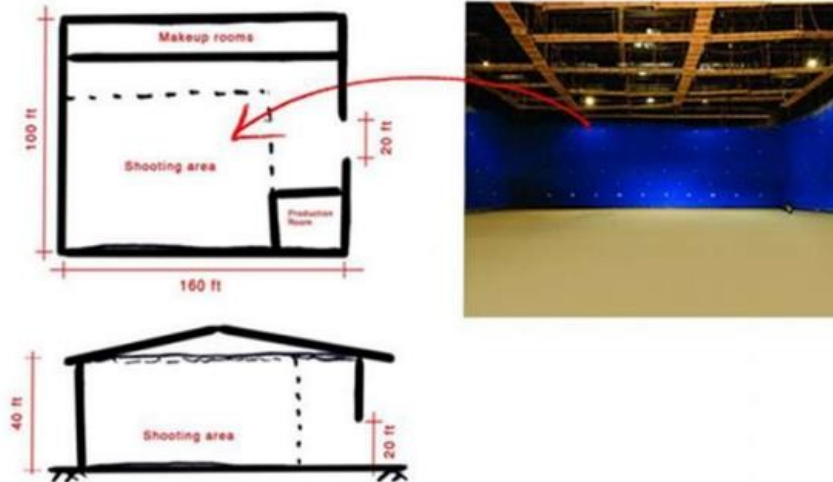
>Unavailability of the under water tanks that would be highly beneficial for the filmmaking company

>Presence of lodging of the staff personnel is at minimal priority

>The production facilities and the production facilities should be next to each other

2.2 EVP Film City

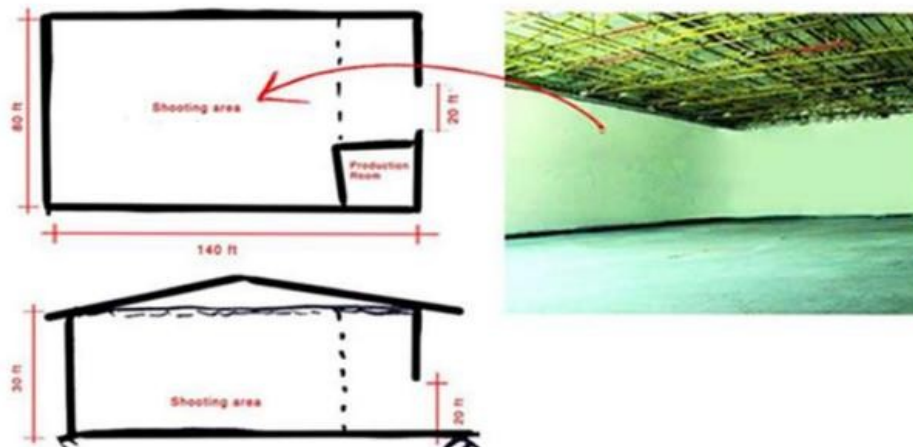
Floor 1 & 2 :



Plan and Section of Floor 1 & 2

Area : 16000 sq.ft - 160ft X 100ft, Clear height - 40 ft, Production room - 1800 sq.ft, Shutter opening - 20ft X 20ft, Power house - 400 KVA.

Floor 3 & 4 :

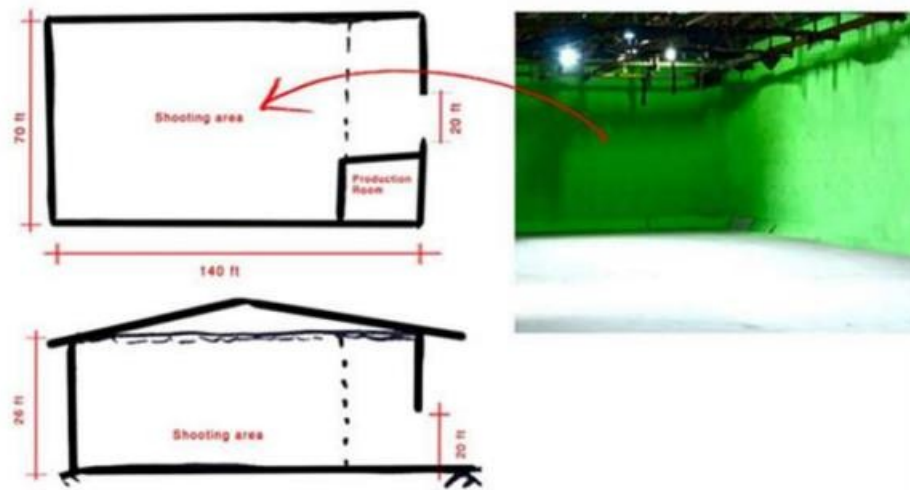


Plan and Section of Floor 3 & 4

Area : 11200 sq.ft - 140ft X 80ft, Clear height - 30 ft, Production room - 3500 sq.ft, Shutter opening - 20ft X 20ft, Power house - 300 KVA.

Fig2.2.1 :evpcase study plate pics

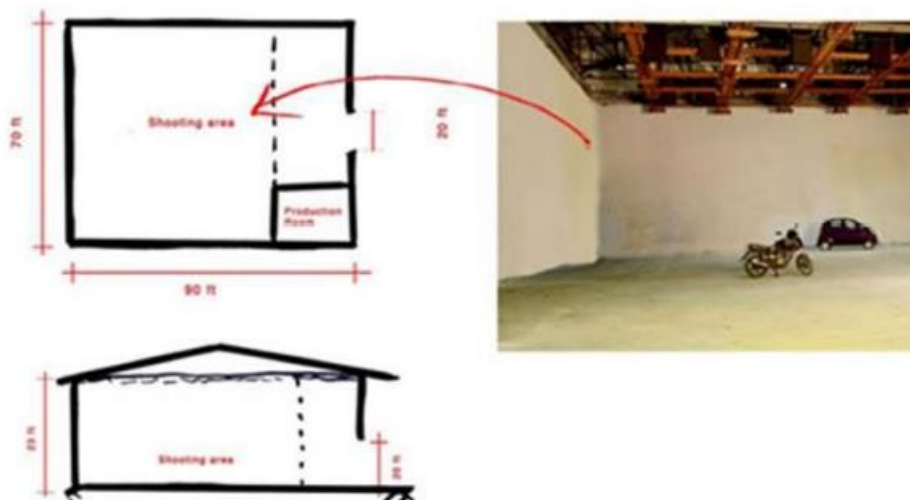
Floor 5 & 6 :



Plan and Section of Floor 5 & 6

Area : 9800 sq.ft - 140ft X 70ft, Clear height - 26 ft, Production room - 3500 sq.ft, Shutter opening - 20ft X 20ft, Power house - 300 KVA.

Floor 7 :



Plan and Section of Floor 7

Area : 6300 sq.ft - 90ft X 70ft, Clear height - 23 ft, Production room - 3500 sq.ft, Shutter opening - 20ft X 20ft, Power house - 300 KVA.

Fig2.2.2:evp case study plate pics

Floor size analysis:

Floor	Area (in sq.ft)	Dimensions (L x B x H in ft)
Floor 1	16000	160 x 100 x 40
Floor 2	16000	160 x 100 x 40
Floor 3	11200	140 x 80 x 30
Floor 4	11200	140 x 80 x 30
Floor 5	9800	140 x 70 x 26
Floor 6	9800	140 x 70 x 26
Floor 7	6300	90 x 70 x 23

Shooting floor dimensions



EVP Carnival cinemas



Dhaba



Court



Jail

EVP Permanent sets



Roads



Outdoor sets



Open space

(100 ft, 80 ft, 60 ft, 50 ft, 40 ft, 30 ft)

Backlots

Fig2.2.3 :evp case study plate pics



Landscapes & Theme park



Shooting floors

Fig2.2.4: evp case study plate pics

Findings of the study

- EVP film city is extended from the theme park
- The internal movement of the site is facilitated by the various different sizes of roads that restrict the movement of vehicles in pedestrian friendly areas
- The site has a vast number of open spaces that can be used for outdoor shooting or for the future expansion as technology grows day by day
- The site has various permanent sets such as jail, train station etc. for public viewing and for the filmmaking process
- The site has 7 well-equipped indoor stages

2.3 Prasad labs , Chennai

Siteacre :23acres

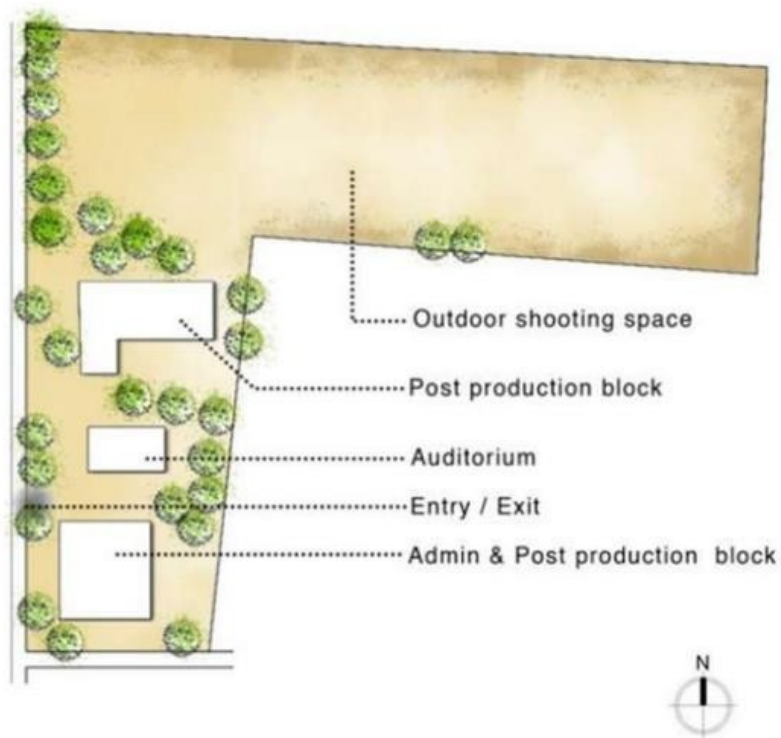
The Prasad group founded at 1956 has produced a plethora of movies in various regional languages and has 12 production units spread across the country and globe

The planning strategy of the film studio is very linear in response, to the site shape and provision .the arrangement has a spinal cord that ends with the outdoor shooting facilities at there are and, providing ample of space as required



Fig2.3.1 :Prasad case study plate pics

Master plan analysis :



Current program of Prasad Lab:

Fig 2.3.2 : Prasad case study plate pics

FUNCTION	AREA	FACILITIES
Block 1 (G+2)	10800 sq.m (ground coverage 3600 sq.m)	Reception, Manager room, Office room, Service room, Network room, Electric supply room Chief editor room, General office room, Editors working space, Meeting room, Rest room
Block 2 - Auditorium	1370 sq.m	230 seating facilities, Fully air conditioned, 4K screen, Dolby sound systems (it will be allowed only for film oriented functions & works)
Block 3 (G+2)	10836 sq.m (ground coverage 3612 sq.m)	Reception, Manager room, Office room, Service room, Network room, Electric supply room Sound complex, Color lab, Editing suite, VFX studio, 3D developing suite, Preview theater, Rest room
Outdoor shooting area	58811 sq.m	This studio provides outdoor shooting area for filmmaking. It is located inside the main city.



Fig 3.40 Admin & Post production block



Fig 3.41 Parking facilities



Fig 3.42 Outdoor shooting area



Fig 3.43 Post production work area

Fig2.3.3 : Prasad case study plate pics

2.4 Bangladesh film city

Siteacre :10acres

EstablishedinTejgaon1949.ThesiteservedasthemajorfacilitypointfortheDhallywoodf
ilms

Analysis of Master plan Zoning:

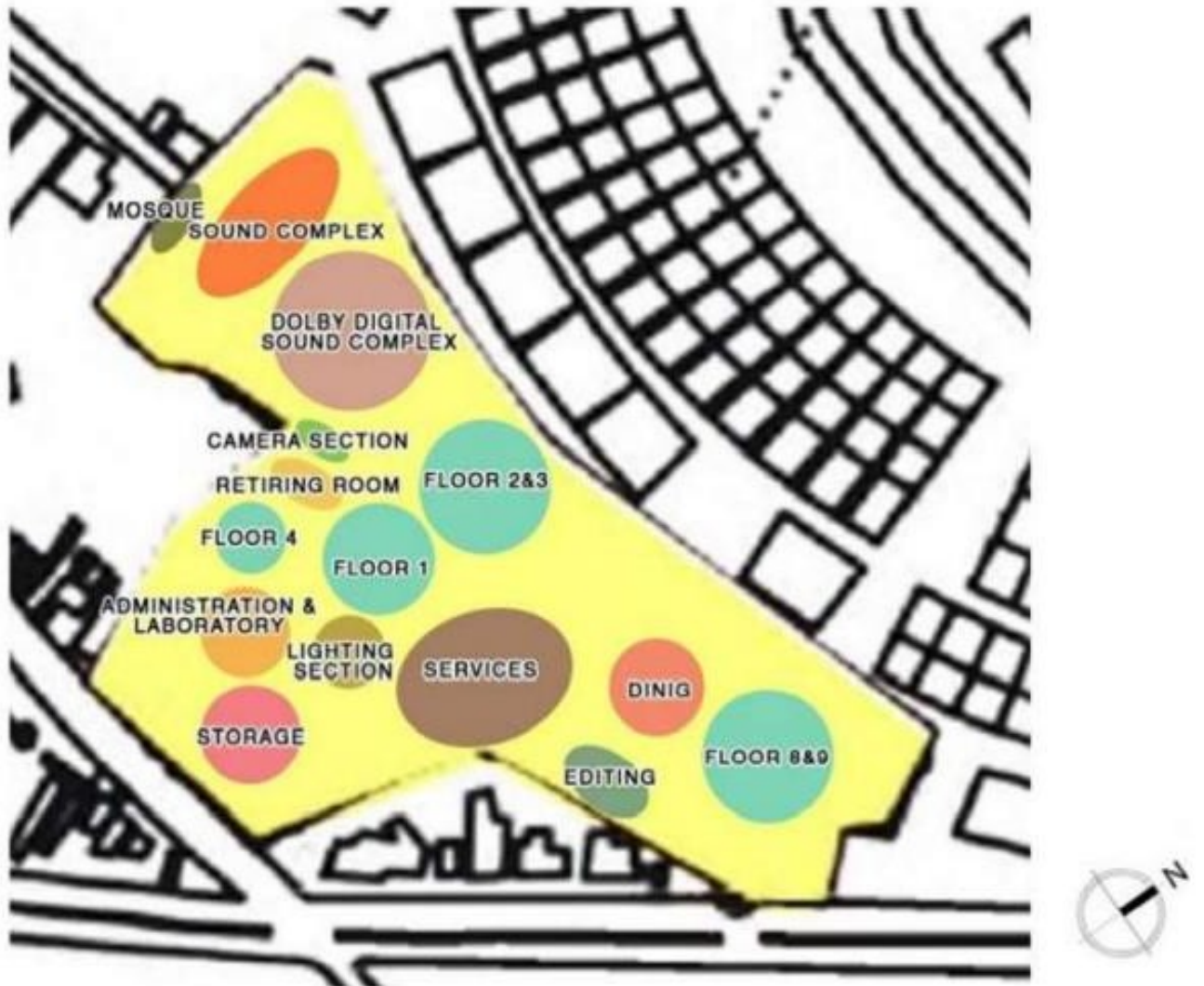


Fig2.4.1 :Bangladesh study plate pics



ANALYSIS OF THE MASTER PLAN ZONING



Fig2.4.2 : Bangladesh study plate pics

The different functions that FDC has include:

FUNCTION	TOTAL AREA	NUMBER OF FLOORS
Administrative Building (Administrative block, producers, officers, bank, etc.)	24 000	3
Cine Auditorium	17 200	1
Laboratory	48 600	4
Sound Complex (inclusive of dubbing and scoring theatre)	16,200	2
Editing	17 200	2

CURRENT PROGRAM OF THE LABORATORY IN BFDC:

FUNCTION	AREA(sft)
GENERAL OFFICE	1000
LAB IN CHARGE: B/W & COLOR	300
CHIEF CHEMIST + SENIOR CHEMIST + JUNIOR CHEMIST (4)	1600
OFFICE ROOMS	
GRADING ROOM	950
PROCESSING LAB (B/W + COLOR)	5000
NEGATIVE LOADING (2)	550
NEGATIVE CUTTING AND CLEARING (2)	600
NEGATIVE ASSEMBLY (2)	350
NEGATIVE VAULT	2000
POSITIVE ASSEMBLY	600
ANALYZER ROOM	500
PRINTING ROOM (8)	1500
RAW FILM STORE	900
CHEMICAL ANALYSIS AND CONTROL	2000
CHEMICAL STORE	1750
REPLENISHES STORE	2200
PHOTOGRAPHIC	1500
QUALITY CONTROL OFFICE	200
SENSITOMETER AND DENSITOMETER	200
FILM DISPATCH RELEASE	300
STORE KEEPER	200

FINDINGSIN THESTUDY

- Notallthefacilitiesrequiredfor filmmakingareavailable
- Very clusteredformofsiteplanning
- Alongtheyearsitshasfounditselftobeapartofveryhighlypopulatedneighborhoodthereby reducingthe privacy

2.5 Pinewoods , London

Site acres=58acres

The site formerly as a country estate is approximately 20 miles of northwest London

It houses some of the largest soundstages in the vicinity and provides sample facilities for the entire production to take place at one place

Site and Surrounding:

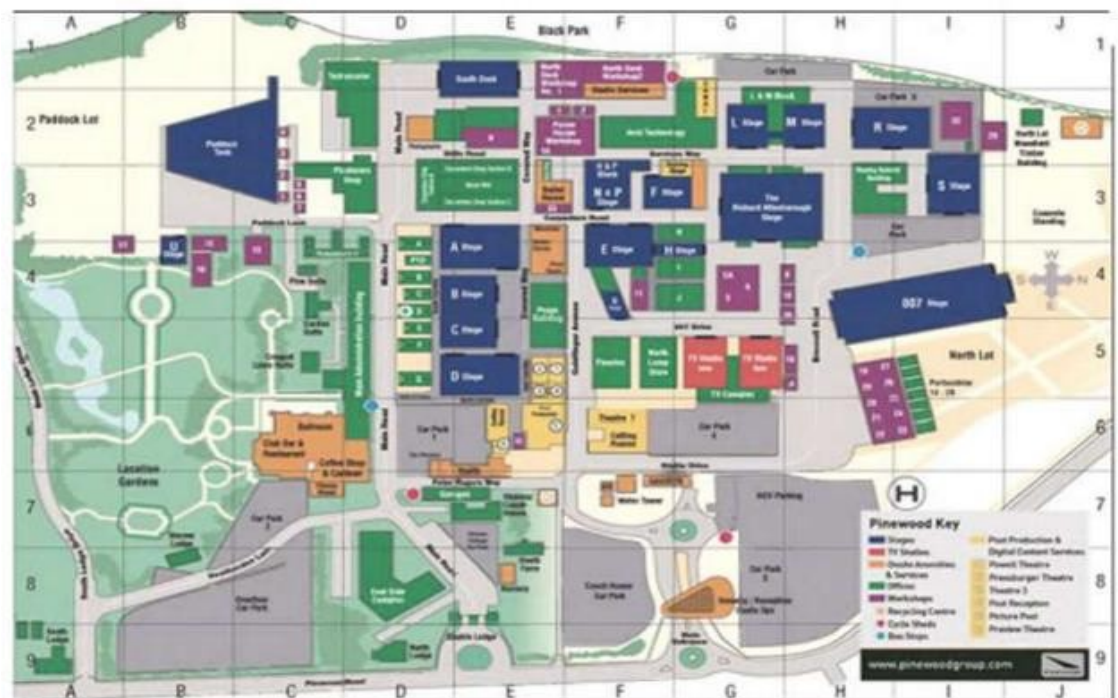


Fig2.5.1 :Pinewoods study plate pics

Analysis of the Studio Complex Master plan:



Zoning of the Complex and the dispersal of the Functions from the entry point



Relationship between workshops, studios and backlots

Fig2.5.2 :Pinewoods study plate pics

Different Sizes of Sound Stages in Pinewood Studios:

SOUND STAGES	AREA (sft)	DIMENSIONS (L x W x H in ft.)
Large Stages		
A	18 150	165 x 110 x 35 ft
D	18 150	165 x 110 x 35 ft
E	18 150	165 x 110 x 35 ft
R	19 140	165 x 116 x 35 ft
S	19 140	165 x 116 x 35 ft
007 Stage	45 424	334 x 136 x 40.5 ft
South Dock	16 704	174 x 96 x 28 ft
Medium Stages		
B	8910	110 x 81 x 34 ft
C	8910	110 x 81 x 34 ft
F	7500	75 x 100 x 35 ft
J	8880	111 x 80 x 29.25 ft
K	8880	111 x 80 x 29.25 ft
L	9450	105 x 90 x 30 ft
M	9450	105 x 90 x 30 ft
N/P	8320	80 x 104 x 19 ft
Large process	4900	175 x 28 x 28
Small Stages		
G	2646	54 x 49 x 23 ft
H	3249	89 x 36.5 x 28 ft

WATER TANK	EXTERNAL		221' narrowing to 105' X 198' long X 3.5' deep
	INTERNAL	Stage A	40 X 30 X 8
		Stage D	40 X 30 X 8
		Stage E	40 X 30 X 8
		Stage F	40 X 30 X 8
		007 Stage	40 X 30 X 8

PRODUCTION SERVICES	Workshops; Wardrobe; Storage area; Dressing area; Production Offices; Client areas and Green rooms; Construction equipment hire; Transport offices; Backlot
POST-PRODUCTION SERVICES	Sound editing; Sound Transfer; Optical Transfer; 6 Sound recording Theatres; 40 Film Cutting Rooms; Film Storage; Preview Theatres.

Table : Facilities at Pinewood Studios
Source: www.pinewoodstudio.co.uk



Indoor shooting Stages



Waiting Space

Fig2.5.3 :Pinewoods study plate pics

Findingsofthe study

- Entryfacilitateseasyaccesstoallthebuildingsfromthestartingpoint
- Creationofsimilarclustersthroughout the site sothat eachmosuleasotownsetofffeaturestoaccommodate
- Easeofaccessinallthmodulesinternally
- Parkingisplacesatcrucialpointsinthe sitetohelptheeaseofmovementforloadingandunloadingfromlargevehicles
- Theresidenceforthecrewisplacedatcloseproximitytotheentrance
- Singularentryforservice
- Facilitiesforsound stagesandbacklotsareplaced incloseproximitytoavoidunnecessary movement

3.1 COMPARITIVEANALYSISOFCASESTUDY

COMPARITIVE ANALYSIS

PARAMETER S	MUMBAI FILM CITY	EVP FILM CITY, CHENNAI	PRASAD LABS, HYDERABAD	BANGLADE SH FILM CITY (FDC)	PINEWOODS ,LONDON
AREA	480 acre	130 acres	23 acres	10 acres	58 acres
ARCHITECT/ PLANNER	V.Shantaram	E V Perumal Samy Reddy	Prasad group	government	Charles Boot
SERVICES PROVIDED	All 3	All 3	All 3	1	All 3
SITE PLANNING STRATEGY	Spinal with branches	Cluster form	linear	cluster	2 main arteries
WORKFORC E PER DAY	800 PPL	550 ppl	250 ppl	85ppl	340 ppl
NO OF STUDIOS	16	7	1	3	10
NO OF SOUND STAGES	20	11	nil	nil	18 +4
NO OF BACKLOTS	42	Open ground	1	nil	6
EXTRA SERVICES	Museums and recreational spaces for visitors	Cinemas Theme park Marriage hall	Auditorium	Cine auditorium	none

4 DATA STANDARDS ACCORDING TO NBC

Sound stage

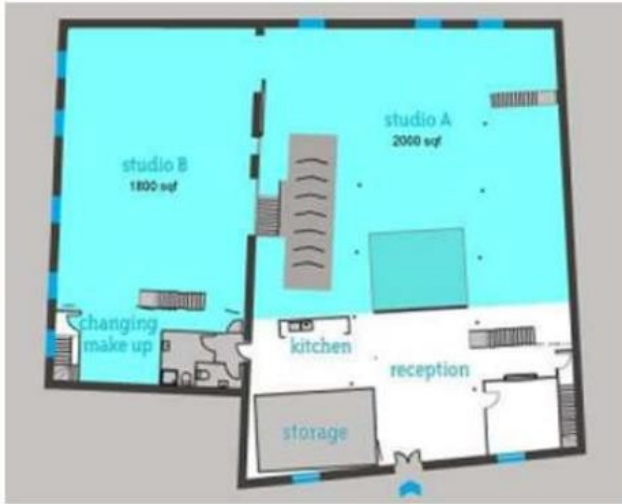


Fig4.1 :sound stage

4.1 Architectural considerations for sound stage

- Area of small sound stage should be 400 sqm, medium should be 820 sqm, large should be 1400 sqm and extra-large should be 1800 sqm.
- Clear height for these categories should be proportional to diagonal length and should not be less than 0.23D
- For super stage span should be 38m to 48m and length should be 54m to 72m.
- Height should be up to 25m
- Soundproofing should be done to keep away outside noise
 - A powerful and noiseless air conditioning system should be provided
- > Postproduction facilities sound editing and recording studio Architectural considerations for sound editing and recording studio
 - Studio should be designed around the principles of room acoustics and should be light proofed i.e., no light should enter the spaces in the recording so that the best quality of sound and visual can be delivered.
- Minimum ceiling height should be 19'
- For visual connection between control room and recording room observation window with glass should be provided and should be of size 6'x9'

- The glass panel of size 8 mm thick and 12 mm thick with air gap of 30 cm separating them.
- All doors in the studio contain double glass with gap between the mass mentioned in above point with glasswool inside.
- Ceilings should be of RCC and should be acoustically treated
- Walls should be double leaf
- Flooring should be of carpet with sponge of good quality to make it noise proof.
- A constant temperature of about 18°C and low humidity should be maintained inside the studio all the times
- The working plane should be well illuminated

4.2 Architectural considerations for video editing studio

- A seal light proof room should be used for video editing
- For ventilation and to throw the heat generated by equipment proper design and installation of air conditioning systems should be done
- Editing room should be of minimum size 13'x19'
- Video editing studio should accommodate a sitting space for editor a working table with monitors and editing panel
- This room should have racks on which to arrange unused film and film being edited can be placed
- Provisions should be made so that it can be dust free



Fig4.2 : sound stage

4.3 PREPRODUCTION

For better working conditions properties of materials like reflection ,refraction set cshould also be kept in mind .Items close to the user should have a 20% to25%reflection,illumination300Luxto500 Luxandglare fromlightmust belimited.

- Sections and facilities that serves entire office should be centrally located and easilyaccessible to all who use them. Data processing ,central files and cost accounting areexamples.
- Certain functions of a business may be of confidential nature that requires them to beisolated from others in the office and from general public, central files, legal offices arethe examples
- Conference andtrainingroomshouldbenear tothose departments thatusethe most
- Departments receiving and delivering quantities of material should be located near thefreight areas for the ease of handling, less time and labor and less distraction of otherworkers.Mail,stockroomandmachinedepartmentarein thiscategory.\
- When an office occupies more than one floor, elevator service will be more effective when the department with large clerical force are on the lower floor Those departmentshaving the greatest no of visitors should be located so the visitors have a short, directand convenient route from the main entrance. The sales ,purchasing and employmentpersonneldepartmentusuallyhave the mostvisitors.
- Department having closest working relation should be placed closest together. When this is done work flow with minimum waste of time can be achieved. Sales andadvertisingdepartmentworktogether Productionfacilities

4.4 Workshops

Architecturalconsiderationforworkshops

- Natural light should be provided in enough quantity and through ribbon window
- Space like storage, cutting, finishing etc should be arrange according to sequence of work

- For small workshop upto 10 staffs production low is in line or L shape and for medium workshop having more than 10 staffs production flow is in U shape, circular or square.
- Workshop should have height of 15'
- There should be enough space to make possible trial set up of an entire set without disturbing other work
- **Dressing room**



Fig4.4 :Dressing room

4.5 Architectural consideration for dressing room

- Forward robe 2' is the standard depth or 2'-6" if a hook strip to be used
- Clothes closet width parallel to the door should be from 3' to 6' per person
- Wardrobe for man's cloth should be 5'-9" in height with 9" clearance at the bottom of wardrobe to cloth and 3" clearance from top of the wardrobe to hanging rod
- Wardrobe for women's cloth should be 6' in height with 6" clearance at the bottom of wardrobe to cloth and 3" above clearance from top of the wardrobe to hanging rod
- Wardrobe for children should be 4'-6" in height with 6" clearance at the bottom of wardrobe to cloth and 6" above clearance from top of the wardrobe to hanging rod
- Minimum 20 sqft should be allowed per person to change the dress
- Minimum 22 sqft should be allowed for hair and make up purpose

5 USER BASED AND AREA ANALYSIS



USERS	TASKS INVOLVED	ACTIVITIES	RESULTS
Film maker • Producer • Director	Pre production • Signing contract with film studio • Hiring cast and crews • Permission is taken for outdoor location • Pre visualization of film • Budget plan is made • Sets for indoor shooting is built • Equipment is hired	• Frequent visit to office by actor and crew member • Meeting of artist, creative staffs and other crew member with producer • Communication between film studio administration and post production office	• Office should be placed near to site entrance • Meeting space should be provided at easily accessible place by visitors in office • Film studio administration and post production office should be close to each other
	Production • Recording of raw footages • Hiring of more crews	• Preparation of sets by technical crew members. • Shooting starts. • Distribution of next day schedule at the end of day. • Daily progress report to the production office.	• Sound stage, backlot and set preparation workshop should be at fair distance • Office, backlot and sound stage should be at fair distance • Set preparation workshop and office should be far from each other
	Post production • Visit of post production studio	• Supervision of voice over and songs • Watching finalized version in screening room	• Post production studio and office should be close to each other and should be linked internally • Post production studio and screening room should be at fair distance

USERS	TASKS INVOLVED	ACTIVITIES	RESULTS
Actors	• Post production studio and office should be close to each other and should be linked internally • Post production studio and screening room should be at fair distance	• Meeting with director and producer • Discussion on script	• Office should be placed near to site entrance • Meeting space should be provided at easily accessible place by visitors in office
	Production • Arrival of actors in set • Makeup, rehearsal, changing costume and shooting	• From parking to shooting area (indoor or outdoor) • Puts on costumes and makeup • Rehearsal of shot • Final shot with crew	• Parking and shooting area (indoor or outdoor) should be at fair distance • Space to take rest should be provided in the sound stage for actors • Makeup room, wardrobe and rehearsal room should be provide in sound stage • Makeup, wardrobe and rehearsal facility should be at fair distance in case of backlot

USERS	TASKS INVOLVED	ACTIVITIES	RESULTS
Technical staffs (film making)	Pre production • Contract signing with director and producer • Story editing and finishing • Costume and set design	• Frequent visit with director and producer • Clothes for costume designing are purchased and design is finalized	• Space for technical staffs should be provided near the production office and should be internally linked • Separate route should be provided from entrance to stores
	Production • Preparation of set for shooting • Assisting actors during rehearsal • Shooting of final footage • Preparation of next set while being shot in one	• Parts of set are brought in shooting area from workshop • Lighting and other equipments necessary for shooting are brought from equipment rental store • Actors rehearse for sometime before final shot • Assembly of next set in shooting area by technical staffs brought from workshop	• Workshop should be at fair distance from shooting area • Equipment rental store and prop store should be close to shooting area • Rehearsal space should be provided in case of sound stage • Store should be provided in sound stage and should be near to backlot

USERS	TASKS INVOLVED	ACTIVITIES	RESULTS
Post production studio staffs • Control room staffs	• Recording of voices • Recording music • Mixing of voices and music with video	• Taking the help of producer and director while recording voices and music • Communicating with artist and musician while recording voices and music • Taking help of music director while mixing the music	• Some space should be provided for directors and producers • Control room should be placed in such a place inside post production studio, where visitors coming here will not disturb other working area • Live room, vocal booth and dubbing room should be adjacent to control room. • Provision for visual connection should be made between live room, vocal booth and dubbing room
• Video editor	• Editing of raw footage from shooting	• Video received • Editing is done with the help of director and producer	• Should have space for director and producer along with editor. • Should be placed so that other spaces will not be affected

INFERENCE

- Officespaceshouldbeplacedneartositeentrance
- Office, backlotand soundstageshouldbeatfairdistance

- Soundstage, backlot and set preparation workshop should be at fair distance
- Set preparation workshop and offices should be far from each other
- Post production studio and office should be close to each other and should be internally linked
- Post production studio and screening room should be at fair distance
- Parking and shooting area (indoor or outdoor) should be at fair distance
 - Makeup, wardrobe and rehearsal facility should be at fair distance in case of backlot
- Space for technical staffs should be provided near the production office and should be internally linked
 - Separate routes should be provided from entrance to stores
- Equipment rental store and prop stores should be close to shooting area
 - Post production studios should be internally linked with animation studio.
 - Alternative route should be from workshops to shooting area
- Post room should be placed near entrance
- Screening room should be placed near to entrance
- Screenings should be separated from other facilities
 - Restaurant should be at intermediate from all the facilities
- Separate routes should be provided for incoming goods stores and restaurants

6 SITE ANALYSIS

WHY WOULD THE PROJECT WORK AT THE GIVEN LOCATION?

> Optimal location with connectivity that would facilitate movement across the globe easier

> The proposed dry port and the freight corridor, while it lies at a distance of 80 kms from the Indira Gandhi International Airport in Delhi. Consequently, the location not only enjoys proximity to the national capital but also with Agra and Mathura, cities of international fame that often feature in Bollywood and Hollywood movies. In broader terms, the film city would not only be easily accessible from seven neighbouring states but also from Nepal.

>About 80% of the technical staff of the Mumbai film industry is apart of UP, Haryanaand Punjab of India, Thus the proposal will not only enrich the skills of the staffs but also promote better opportunities for growth of the regional film industries in a larger scale.



Fig6.1 :Site Analysis

Site location: sector 21 of the Yamuna expressway development
 Surrounding sectors: 28, 34, 20

Sector 28: residential

Sector 34: industrial

Sector 20: industrial

Sector 22ff: green belt

Immediate accessibility: all 4 corners are enclosed by 100m wide highways roads
 Roads: 6 lanes each direction (extendable to 8 lanes)

Intercepted by medians



Fig6.2 : Site Analysis

The proposed site for the film city at direct link with the Yamuna expressway and is intercepted by the commercial zone to attract more tourist attraction to the sector, which is supported by the transport zoning at the north of the site opposite to sector 20

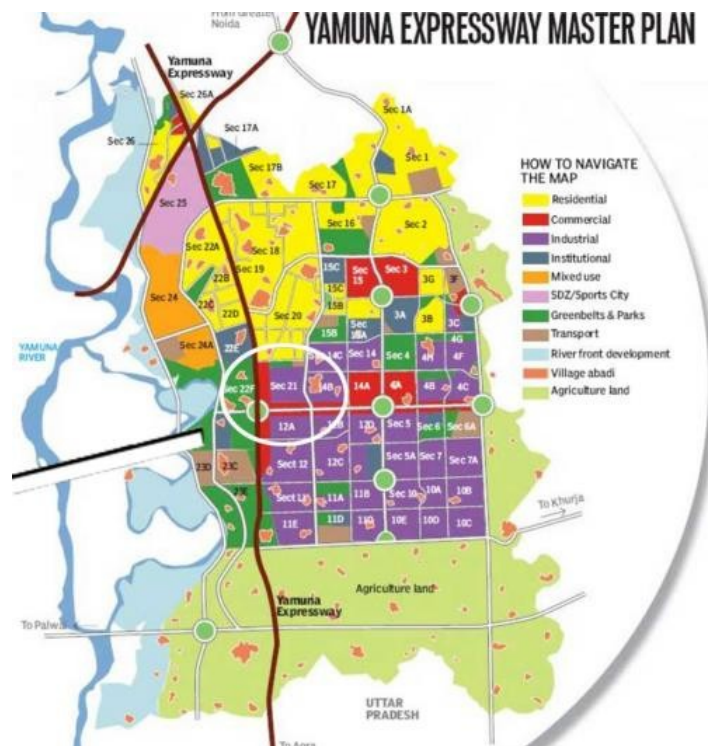
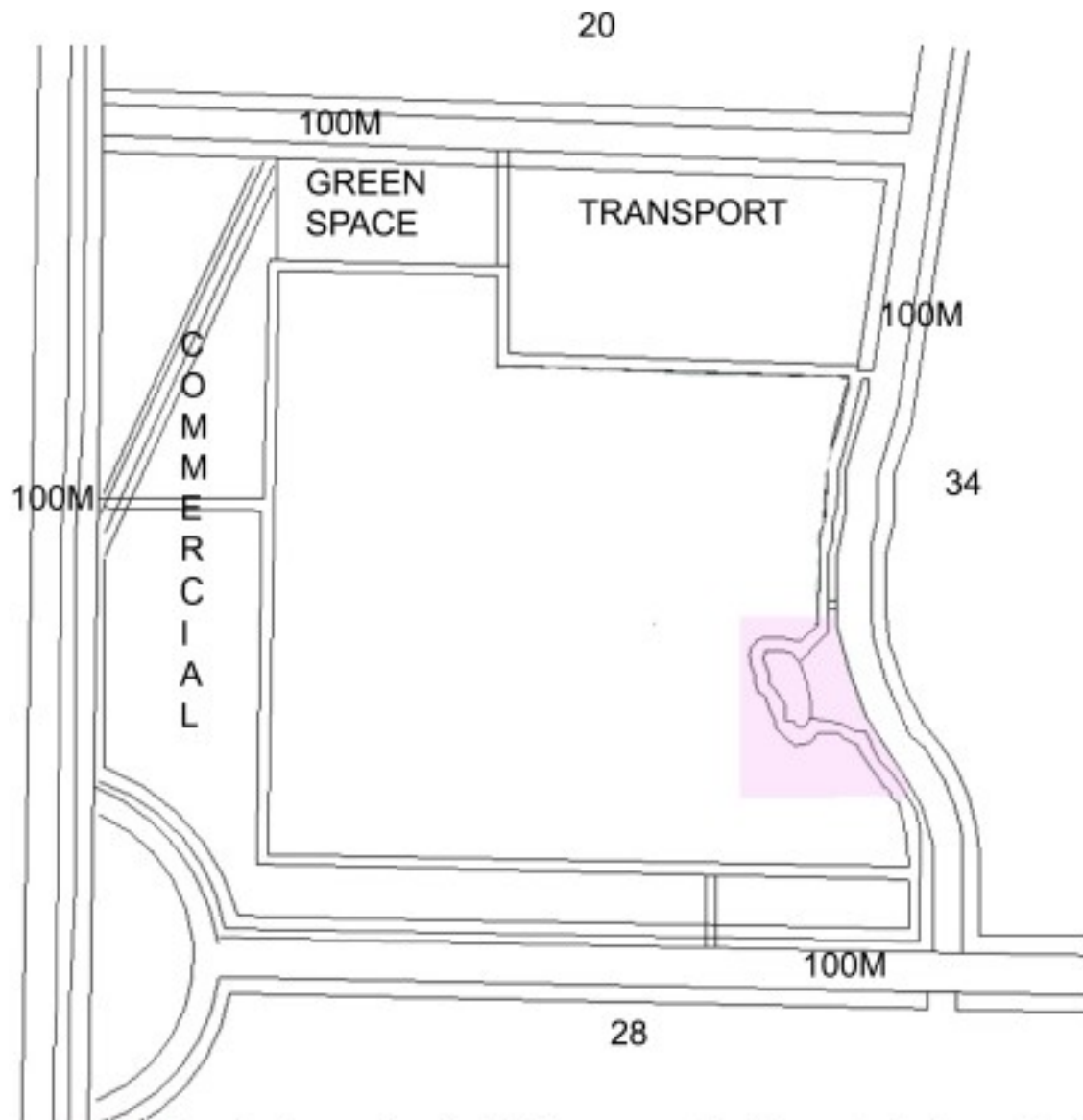


Fig6.3 : Site Analysis



The shaded region is of 57 acres and is the selected area for the proposal's phase 1 comprising of the main film industry's requirements

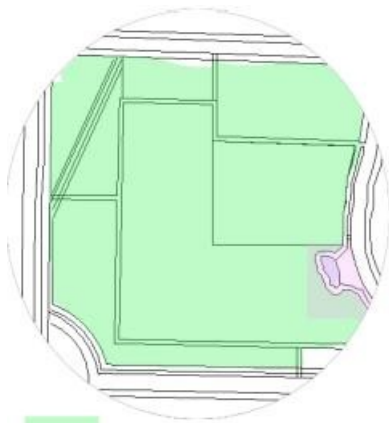
dimensions = 532x558M

surrounding = highway of 10 m width

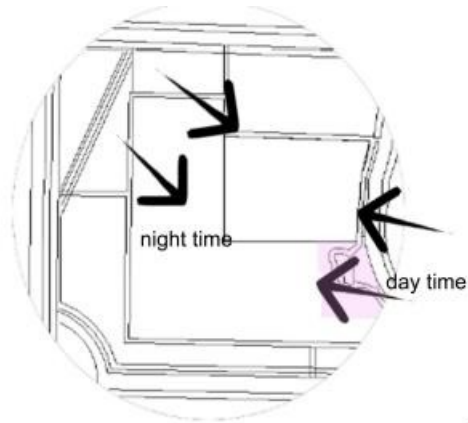
= transport area

= directly opposite to sector 34
(industrial sector)

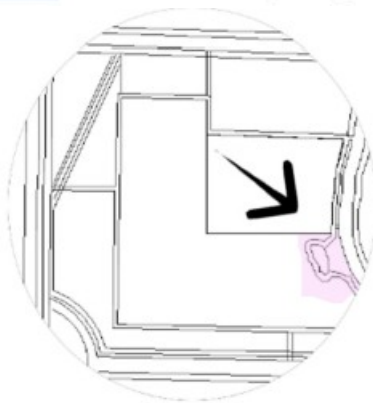
Fig6.4 : Site Analysis



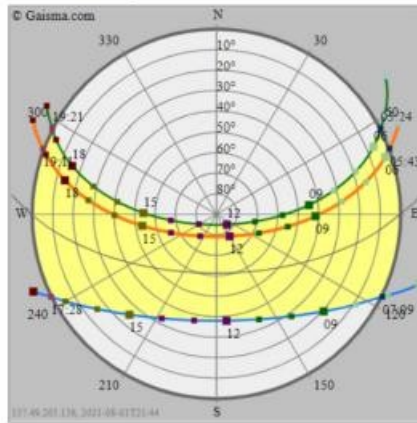
- The existing land is an agricultural land
- Man made water body to irrigate fields



The wind direction is more prominent along the south eastern to north western side during the day and the opposite direction during the night



The direction of the natural drainage of the site is towards the man made water body



	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	13.5 °C (56.4) °F	16.9 °C (62.4) °F	22.5 °C (72.6) °F	28.1 °C (84.6) °F	32.7 °C (90.9) °F	32.9 °C (91.3) °F	29.9 °C (85.8) °F	28.7 °C (83.7) °F	27.7 °C (81.9) °F	25.2 °C (77.3) °F	20.4 °C (68.7) °F	15.3 °C (59.6) °F
Min. Temperature °C (°F)	7.7 °C (45.9) °F	10.6 °C (51) °F	15.2 °C (59.3) °F	21 °C (69.7) °F	25.3 °C (77.5) °F	27.5 °C (81.5) °F	26.6 °C (79.9) °F	25.8 °C (78.5) °F	23.9 °C (74.9) °F	18.9 °C (66.1) °F	14 °C (57.2) °F	9.2 °C (48.5) °F
Max. Temperature °C (°F)	20.1 °C (68.1) °F	23.6 °C (74.4) °F	29.9 °C (86.7) °F	36.7 °C (98.1) °F	39.5 °C (103.2) °F	38.2 °C (100.7) °F	33.6 °C (92.5) °F	32.3 °C (90.1) °F	32.1 °C (89.8) °F	31.6 °C (88.9) °F	27.3 °C (81.2) °F	22.2 °C (72) °F
Precipitation / Rainfall mm (in)	23 (0.9)	33 (1.3)	20 (0.8)	14 (0.6)	20 (0.8)	74 (2.9)	208 (8.2)	183 (7.2)	99 (3.9)	13 (0.5)	5 (0.2)	8 (0.3)
Humidity (%)	68%	62%	48%	29%	32%	47%	72%	78%	73%	58%	55%	62%
Rainy days (d)	2	3	3	3	4	7	15	15	8	2	1	1
avg. Sun hours (hours)	8.2	9.4	10.6	11.5	12.1	11.8	9.5	9.0	9.3	10.1	9.6	8.8

Fig6.5 : Site Analysis

Design interventions based on site analysis

Passive strategies

- Building is to be oriented towards the north and south direction via east – west so that the longer side does not face the large amount of heat radiation from east to west.
- Allow rainwater

harvesting Active strategies

- HVAC system

SWOT Analysis



Strengths

The site is a predetermined site for the film proposal hence the validity of the site location is precise to the ongoing development project with adequate opportunity for growth in the future



Weaknesses

The site is of agricultural lands thereby promoting the phenomenon of global warming and loss of property which would have been the source of bread for the people



Opportunities

The adjacent transport hub promotes the tourism of the film industry and invites people from all over the world to utilise the facilities that are to be offered here



Threats

The commercial zoning of the site may overshadow the various commercial and tourism facilities offered as the part of the project and the possible noise pollution from the adjacent industrial sectors

7 AREAS STATEMENT

GENERAL ADMINISTRATION

ENTRANCE+LOBBY SPACE RECEPTION + WAITING AREA
=300 SQM OFFICES CHAIRPERSON'S ROOM=30 SQM (ATTACHED REST
ROOM) MANAGING DIRECTOR'S ROOM (ATTACHED
RESTROOM)=30 SQM GENERAL OFFICE (30 PPL)=180 SQM
MEETING ROOM=50
SQM CONFERENCE ROOM=100
SQM PRINTER ROOM=40
SQM STORAGE=30 SQM

PRE PRODUCTION COMMON BLOCK

LOBBY+RECEPTION+WAITING ROOM=300 SQM

OFFICES PRODUCER'S

OFFICE=25 SQM DIRECTOR'S OFFICE=25
SQM

STORY BOARD

OFFICE=50 SQM X5 ASSISTANT

PRODUCTION=50 SQM CONFERENCE

ROOM=50 SQM REHEARSAL ROOMS

2=100 SQM 2 OFFICES SPACE=30 SQM

REST AREA DRY KITCHEN=50 SQM

RESTROOM (M) X2=30 SQM

2 RESTROOM (F) X2=30 SQM X2

INDOOR SHOOTING AREA SMALL X5=600 SQM X5L

ARG X2=16000 SQM X2

PRODUCTION CONTROL ROOM X22=40 SQ X22M

AKEUPROOMX20= 40SQMX20

WORKSHOPX20=30SQMX20
 STOREX20=20SQMX20REST
 ROOM(M)=30SQMRESTROO
 M(F)=30SQM
 POST PRODUCTION SOUND STUDIO
 LOBBY+RECEPTION+WAITINGAREA=200SQM
 CHIEFSOUNDENGINEERSOFFICE=30SQM
 SOUND ENGINNER'S
 OFFICE=30SQMGENERAL OFFICE
 SPACE=150SQMMEETINGROOM=60SQM
 SOUNDMIXINGSTUDIOGENERALMIXINGSTUDIO=200SQMMI
 XINGSTUDIO+RECORDINGTHEATRE=250SQM
 DUBBINGSTUDIOGENERALSUITE=200SQMD
 DOLBY5.1STE DUBBINGSTUDIO
 =250SQMSOUNDEFFECTSTUDIO
 REVIEWTHEATREPROJECTIONROOM=60SQMC
 ONSOLEAREA=40SQMSITTINGSPACE=80SQMS
 CREENINGSPACE=40SQM
 EDITINGSTUDIOLOBBY+RECEPTIONAREA+WAITINGAREA=200SQMOF
 FICESCHIEFEDITOR=30SQM
 ASSISTANTEDITOR=30SQM
 GENERAL
 OFFICE=100SQMMEETINGR
 OOM=60SQM
 EDITINGSUITEVFXSTUDIOPANELX2=750SQMX2
 GRAPHICSTUDIO PANEL=400
 SQMSPECIALEFFECT PANEL=750SQM

FILM EDITING PANEL X3=300 SQM X3
 STORAGE PER PANEL X8=30 SQM X8
 OTT BLOCK CEO ROOM=30
 SQM ASSISTANT PRODUCTION
 =50 SQM GREEN ROOMS(5)=30 SQM
 X5
 MUSIC DIRECTOR(5) ROOMS=20 SQM X5
 RECORDING
 STUDIO(5)=40 SQM X5 CHOREOGRAPHER
 ROOM=50 SQM REHEARSAL
 ROOMS=100 SQM X5 STUNT DIRECTOR
 ROOM=30 SQM GYM/TRAINING
 ROOM=20 SQM X2 SET DIRECTORY 5
 ROOM=20 SQM X5 STORYBOARD ROOM
 S=30 SQM X5
 FILM MUSEUM MUSEUM SPACES=50 SQM X6 LO
 BBY= 300 SQ

7.1 SITE ZONING

Site zoning is achieved based on the overall sector zoning with the commercial stretch at the south and the bus terminal at the north.

The provision of the commercial stretch has prompted the use of the southern region for public activities to generate more footfall at the site with the progressive semi-public spaces and private space up the north.

The water body is used as a barrier for the private part of the zoning.

ZONING OF SITE PLAN

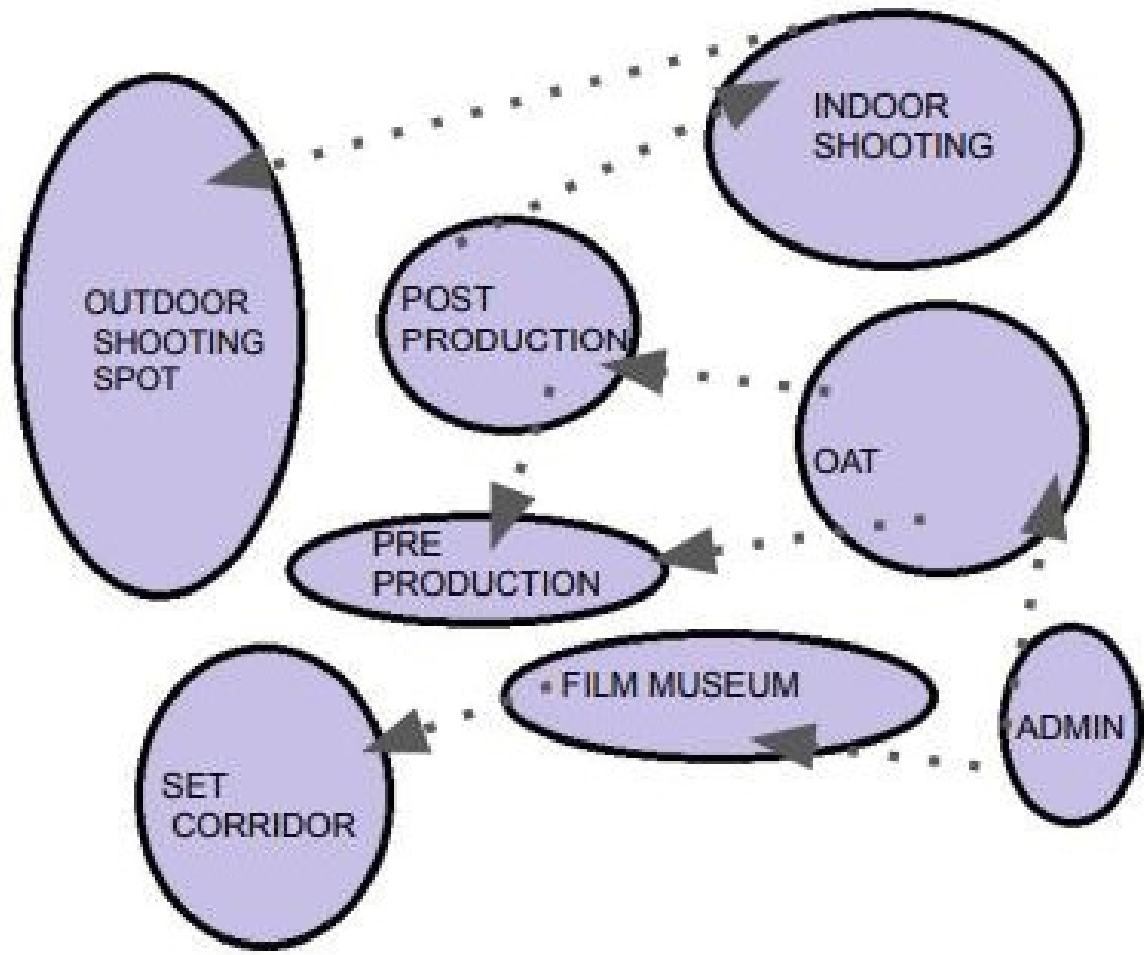


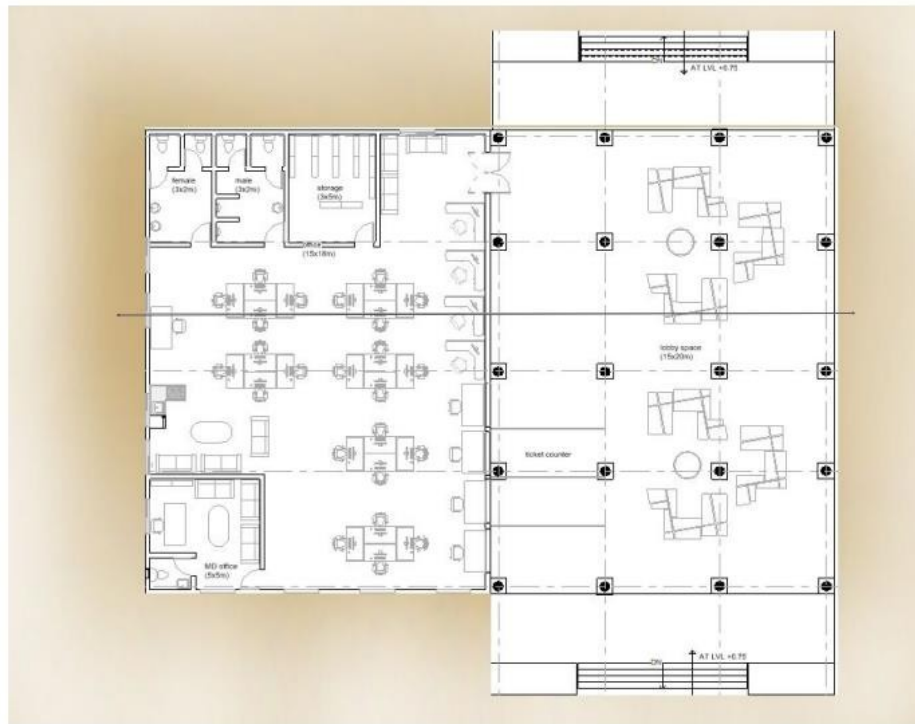
Fig7 :Zoning

SITE-PLAN



Fig7 :Site plan

Plan 1:100
Ground floor

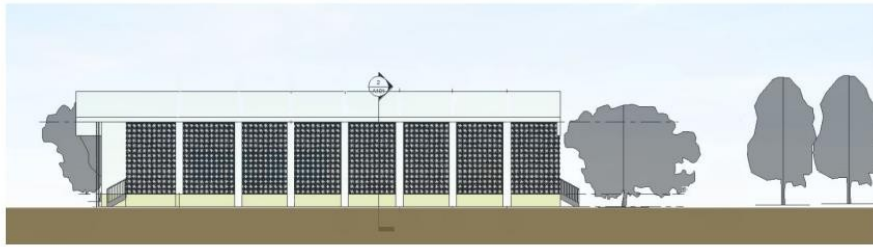


A
D
M
I
N

B
L
O
C
K



Elevation east



FACADE DETAIL



SECTION AA

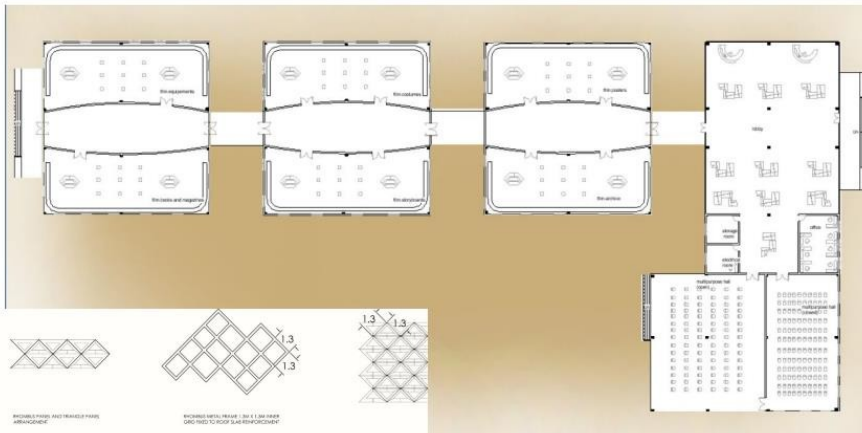


ilm city thesis

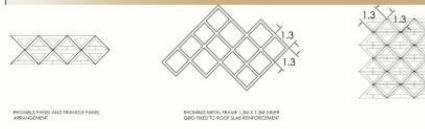
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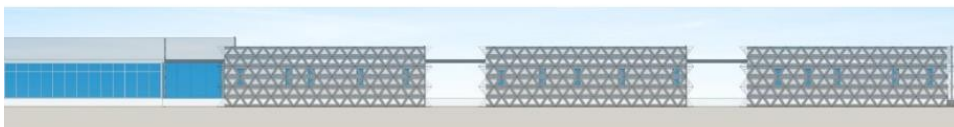
**PLAN 1:100
GROUND FLOOR**



**FACADE
DETAIL**



ELEVATION EAST



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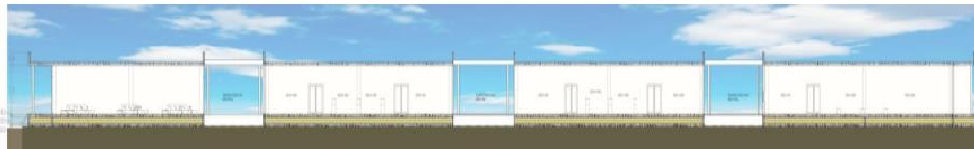
ADMIN
BLOCK

FILM
MUSEUM

PART OF SECTION AA

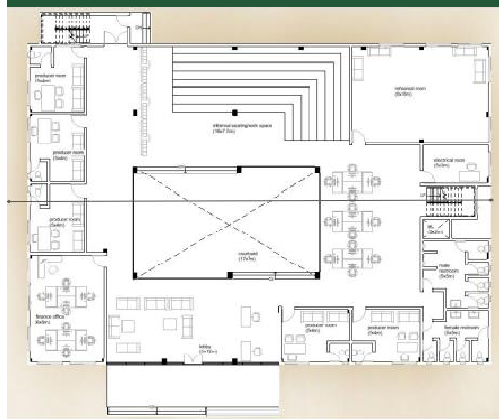


SECTION AA



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**Plan 1:200
GROUND FLOOR**



FIRST FLOOR- SECOND FLOOR

Film city thesis

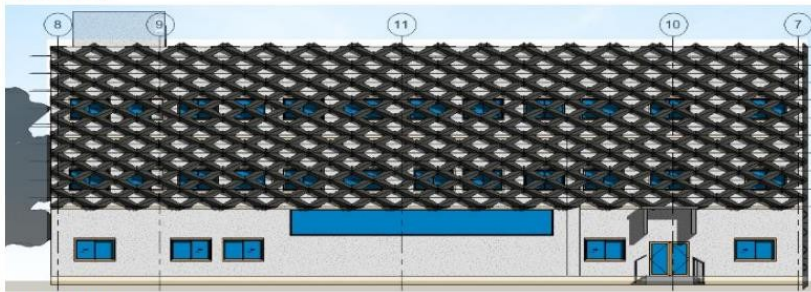
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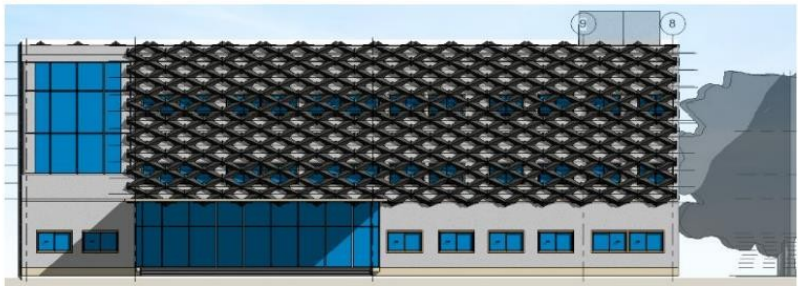
FILM
MUSEUM

PRE
PRODUCTION

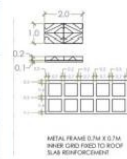
ELEVATION EAST



ELEVATION NORTH



FACADE DETAIL

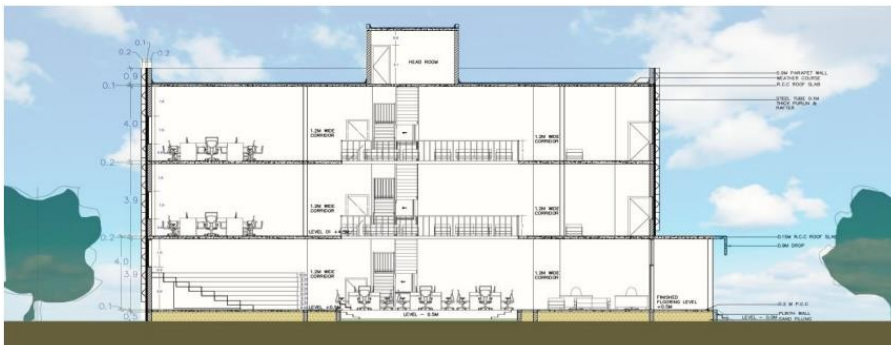


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SECTION AA



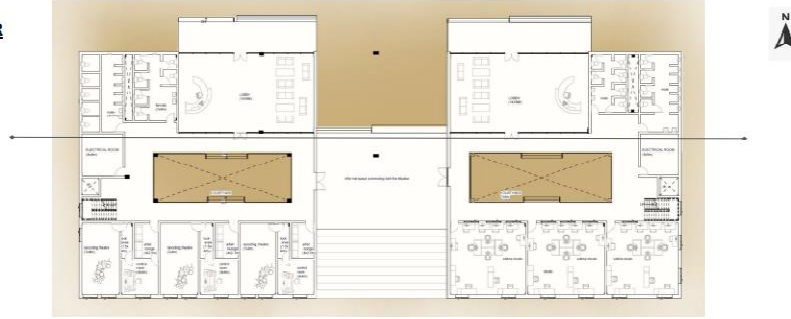
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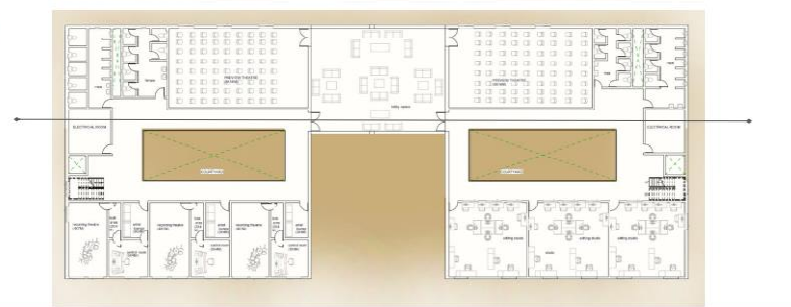


PRE
PRODUCTION
PRE
PRODUCTION

Plan 1:200
GROUND FLOOR



FIRST FLOOR
-THIRD FLOOR



POST
PRODUCTION

Film city thesis

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37210028



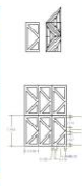
ELEVATION SOUTH



SECTION AA



FACADE DETAIL



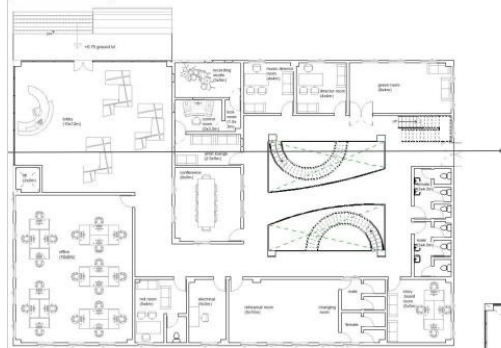
POST
PRODUCTION

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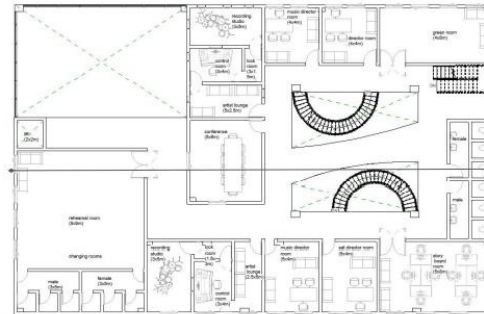
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PLAN 1:100
GROUND FLOOR



FIRST FLOOR-SECOND FLOOR



OTT
BLOCK

Film city thesis

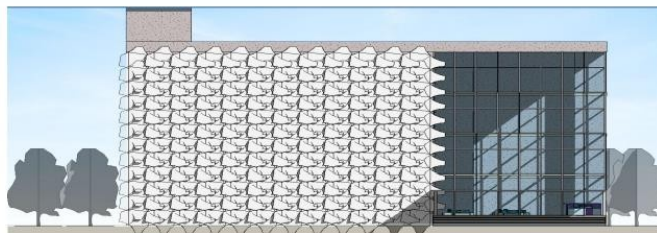
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SECTION AA



ELEVATION EAST



FACADE DETAIL



WALL AND FLOOR FINISHES WOULD BE CHOSEN TO
CREATE THE ARCHITECTURAL CHARACTER OF THE
BUILDING (SEE ARCHIT. PLAN)

WALL: 100mm
FLOOR: 100mm
CEILING: 100mm
ROOF: 100mm

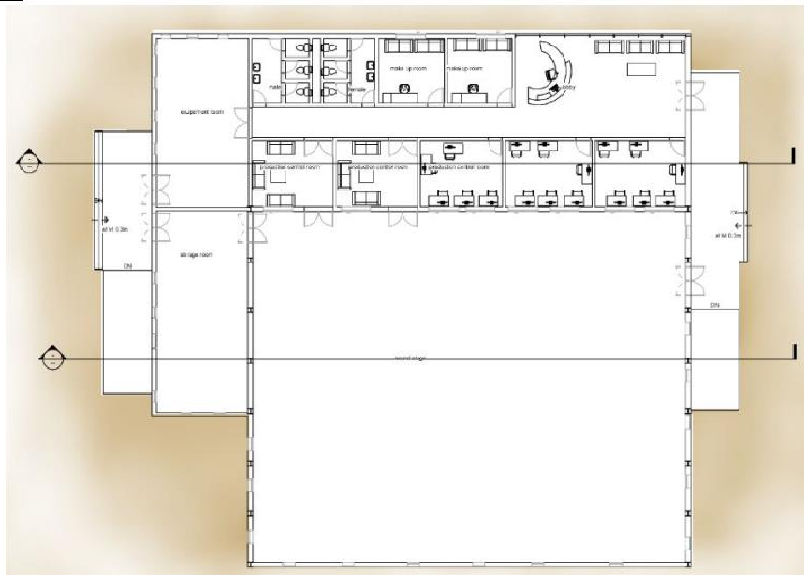
OTT
BLOCK

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Plan 1:200
Ground floor



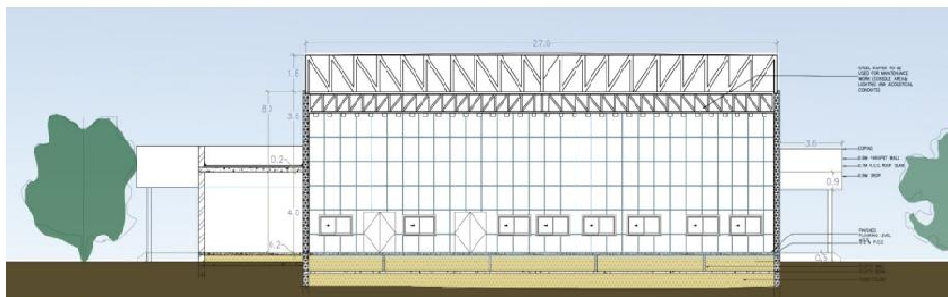
SMALL PRODUCTION

Film city thesis

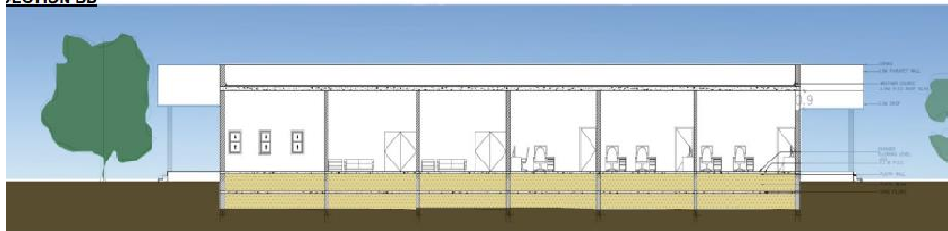
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SECTION AA



SECTION BB



Film city thesis

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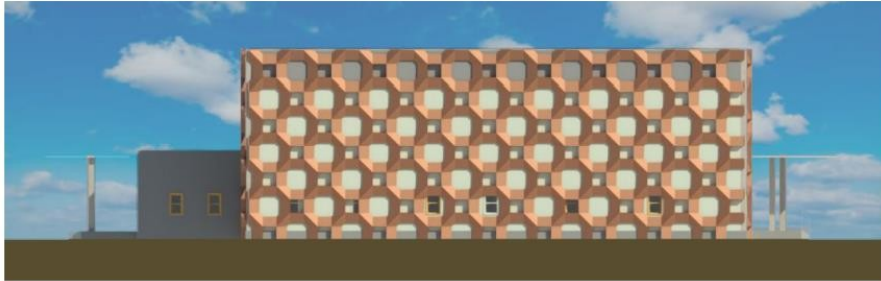


SMALL PRODUCTION

ELEVATION NORTH



ELEVATION WEST



SMALL PRODUCTION

Film city thesis

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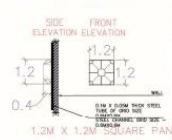
**PLAN 1:200
GROUND FLOOR**



ELEVATION NORTH



FACADE DETAIL



LARGE PRODUCTION

Film city thesis

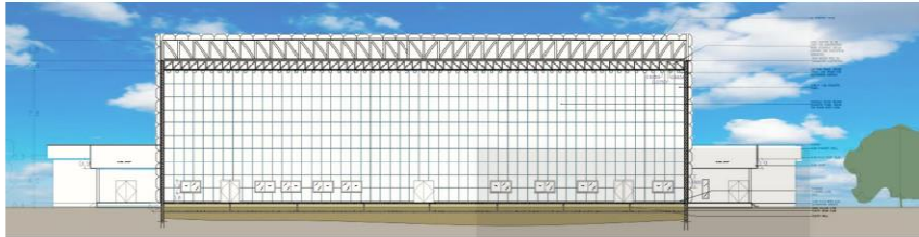
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ELEVATION EAST

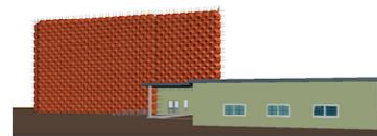
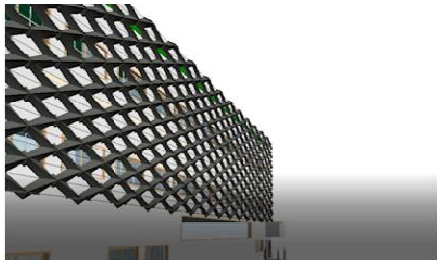
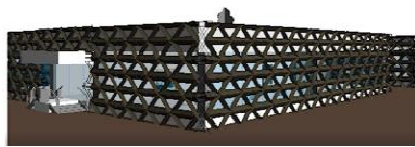


SECTION AA



Film city thesis

SAHANA
37210028



Film city thesis

SAHANA
37210028



LARGE PRODUCTION

REFERENCES

- 7.1.1 P.(2021,January1).*Noida2020:Biggestairport,filmcity andnewpolicesystem*. Cnbctv18.Com.<https://www.cnbctv18.com/india/noida-2020-biggest-airport-film-city-and-new-police-system-7875971.htm>
- 7.1.2 T. (2021b, April 9). *Noida: Film City proposal awaits govt nod*. The Times of India.<https://timesofindia.indiatimes.com/city/noida/film-city-proposal-awaits-govt-nod/articleshow/81978408.cms#:~:text=GREATER%20NOIDA%3A%20The%20Yamuna%20Expressway,of%20the%20Film%20City%20project>.
- 7.1.3 <http://yamunaexpresswayauthority.com/yep.html>
- 7.1.4 Mishra, S.(2021,November 23).*UPfilmcity: WillittransformNoida'srealtymarket?* HousingNews.<https://housing.com/news/uttar-pradesh-film-city/>
- 7.1.5 Prasath P | *Architectural Thesis Report 2020 | Film Studio - Precast Structure*. (2020,September14).Issuu.https://issuu.com/prasathmail/docs/prasath_thesis_report_-_2020film_studio_-_precast
- 7.1.6 Lalchandani, N. (2020, September 23). *Yogi Adityanath picks land near Jewar airport forUP's Film City*. The Times of

India.<https://timesofindia.indiatimes.com/city/lucknow/yogi-picks-land-near-jewar-airport-for-ups-film-city/articleshow/78265862.cms>

- 7.1.7 ZeeMediaBureau.(2020,September21).*YamunaExpresswayIndustrialDevelopmentAuthority sends filmcityproposaltoUPgovernment*.ZeeNews.

<https://zeenews.india.com/india/yamuna-expressway-industrial-development-authority-sends-film-city-proposal-to-up-government-2311082.html>

7.1.8 *Final DISSERTATION on Film musem | koustubhbhale.* (2019, June 23). Archinect.<https://archinect.com/koustubh/project/final-dissertation-on-film-musem#&gid=1&pid=5>

7.1.9 <https://issuu.com/jagavidoshi/stacks/41b6e41e629a4487ac987c4a1f9f709e>

7.1.10 <https://core.ac.uk/download/pdf/61807959.pdf>

7.1.11 *Thesis Project - 'Ashke'-Pollywood Film City at Chandigarh.* (2019, June 9).

Issuu.https://issuu.com/gunjandua/docs/final_sheets_a0