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Report On
**FEASIBILITY STUDY FOR EXISTING OF PREFAB SHELTER, THE EXISTING
DG SET & EXISTING RELIANCE TOWER OVER THE EXISTING
RESIDENTIAL APPARTMENT BUILDING BELONGS TO
MAY FLOWER PARK, SY.NO: 174, 4-106, MALLAPUR, KAPRAZONE,
G.H.M.C, R.R. DIST, PIN: 500076.
ANDHRA PRADESH.**

OCT 2007

Report for
**The General Manager – Projects,
M/s. Reliance Telecom Infrastructure Ltd.,
2nd Floor, Lake Shore Towers, Somajiguda,
HYDERABAD – 500 082.**

**M/s BRIGHT INFOTEC,
5TH FLOOR, ROOM No.8,
SREENATH COMMERCIAL COMPLEX,
SAROJINI DEVI ROAD, SECUNDERABAD- 003
PHONE: +91-40-40021036.**

(27)

Report on

Feasibility study for Existing of prefab shelter, the existing DG set & existing Reliance Tower over the existing Residential Apartment building belongs to May Flower Park, S.y No: 174, 4-106, Mallapur, Kaprazone, G.H.M.C, R.R. Dist. Pin: 500076.

Report for

The General Manager – Projects,
M/s Reliance Telecom Infrastructure Limited,
2nd Floor, H.No.6-3-1090/B/1, Lake shore Towers,
Raj Bhavan Road, Somajiguda,
HYDERABAD – 500 082.

Study carried out by

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Graduate in Civil Engineer

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Diploma in Civil Engineer

M/s Bright Infotec

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1. INTRODUCTION:

The existing Residential Apartment building belongs to May Flower Park, Sy.No: 174, 4-106, Mallapur, Kaprazone, G.H.M.C, R.R. Dist, Pin: 500076. is an R.C. Framed structure with infill masonry walls. The building comprises of Stilt+5 Upper floors. The concerned authorities of M/s Reliance Telecom Infrastructure Ltd. Proposed to Installation Of Prefab Shelter, Increased Capacity Of The Existing DG Set & Existing Reliance Tower Over The Existing Residential Apartment Building. Hence, a reference was made to us to investigate the structural soundness of the identified R.C. members of the building for the erection of the proposed Roof Top BTS installation, prefab shelter and DG set on them.

In view of the above, a detailed study was carried out to study the feasibility. As a part of the study, building inspection, Non-destructive testing and structural analysis/design check were performed. The test reports are attached.

This report in brief, summarises the outcome of the studies carried out and inferences thereon.

2. PHYSICAL OBSERVATIONS:

A visual inspection of the building was carried out and dimensions of the concerned Columns/spans were cross checked against the existing drawings to confirm the correctness and There are minor cracks observed on the Building Terrace floor. Due to this cracks There is problem of building rain water seapages through slab and flows over the side wall. By this the slab steel will be Rust due to this the structure may be week, for this we have to use Nito bond or any other approved bonding chemical for the safety of the building structure. The Stilt+5 Upper floor (toc+ 18.60m) investigated.

- a. No signs of settlement of foundation was observed in any part of the Building.
- b. No significant distress features were observed in any of the r.c.members.

3. STRUCTURAL ANALYSIS AND DESIGN CHECK:

Structural Analysis:

The aim of theoretical analysis was to find the adequacy of the identified columns for the existing loads and loads due to proposed shelter. To calculate the loads from the existing beam network, entire building was generated in such manner that at least one grid beyond the identified columns was considered. The required reinforcement in columns was calculated using member forces obtained from STAAD PRO package. The actual grade of concrete, which was obtained from test results, was considered in the design check. The following loadings are considered.

a. Slab thickness	: 0.115m
b. Floor finish thick	: 0.040m
c. Unit weight of concrete	: 25.0KN/m ³
d. Unit weight of floor finish	: 24.0KN/m ³
e. Unit weight of masonry wall	: 19.0KN/m ³
f. Thickness of walls	
i. External(9")	: 0.230m
ii. Internal(4.5")	: 0.115m
g. Floor height	: 3.0m
h. Live Load	: 2.0 KN/m ² (for all floors)
	: 1.5 KN/m ² (for terrace floor)

Load Calculations:

Dead load of slab	: 2.875 KN/m ²
Dead load of floor finish	: 0.960 KN/m ²
Total dead load	: 3.835 KN/m ²
External wall load per running meter	: 10.488 KN/m ² (considering 20% Openings)
Internal wall load per running meter	: 5.244 KN/m ² (considering 20% Openings)

Structural Design Check:

Axial forces and moments on the identified columns were determined and the sections were checked for adequacy based on the existing sizes and reinforcement detailing as per IS456-2000.

4. INFERENCES:

Based on the physical observations and probing tests, following inferences are drawn.

- A. The configuration and the reinforcement in the identified columns in the region are **ADEQUATE STRENGTH** to transfer the existing loads (For DL & LL).

5. CONCLUSION:

Based on the above studies, it is concluded that the identified columns of the building are structurally **ADEQUATE STRENGTH**.

(In minor Cracks Observed which are not because of reliance tower. It can be filled by **NITO BOND** or any other approved bonding chemical).

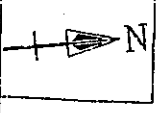
for BRIGHT INFOTEC



(U SATYANARAYANA)
DIRECTOR

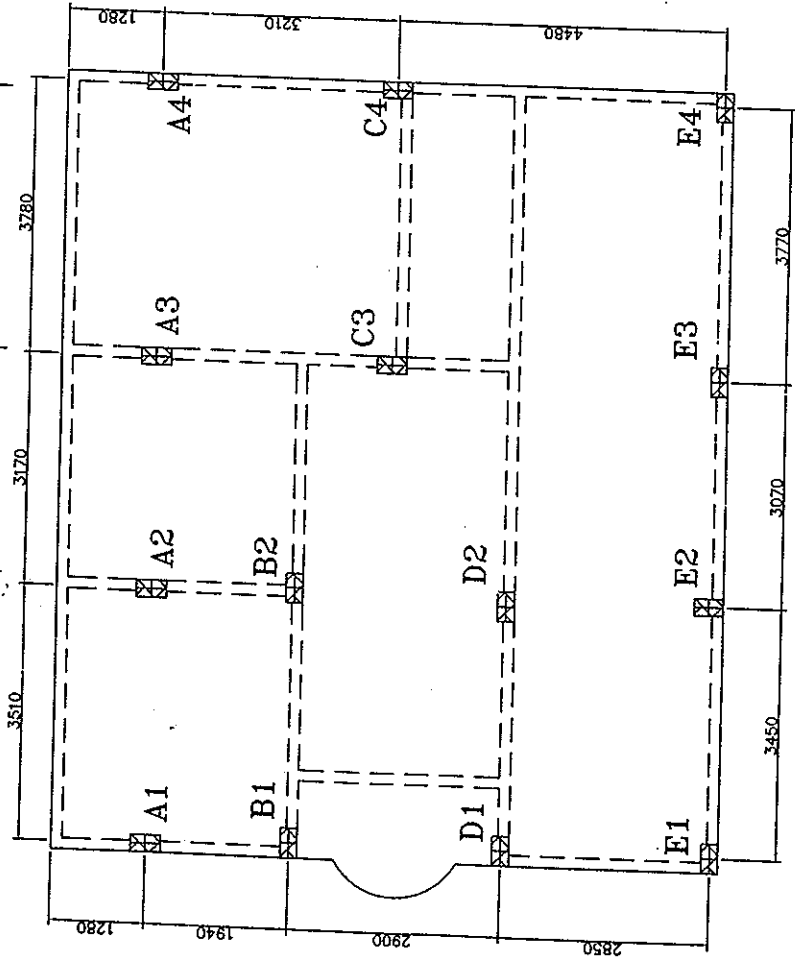
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SKETCHES



APARTMENT INTERNAL ROAD

① ② ③ ④



APARTMENT INTERNAL ROAD

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

COLUMNS SIZES
230X400

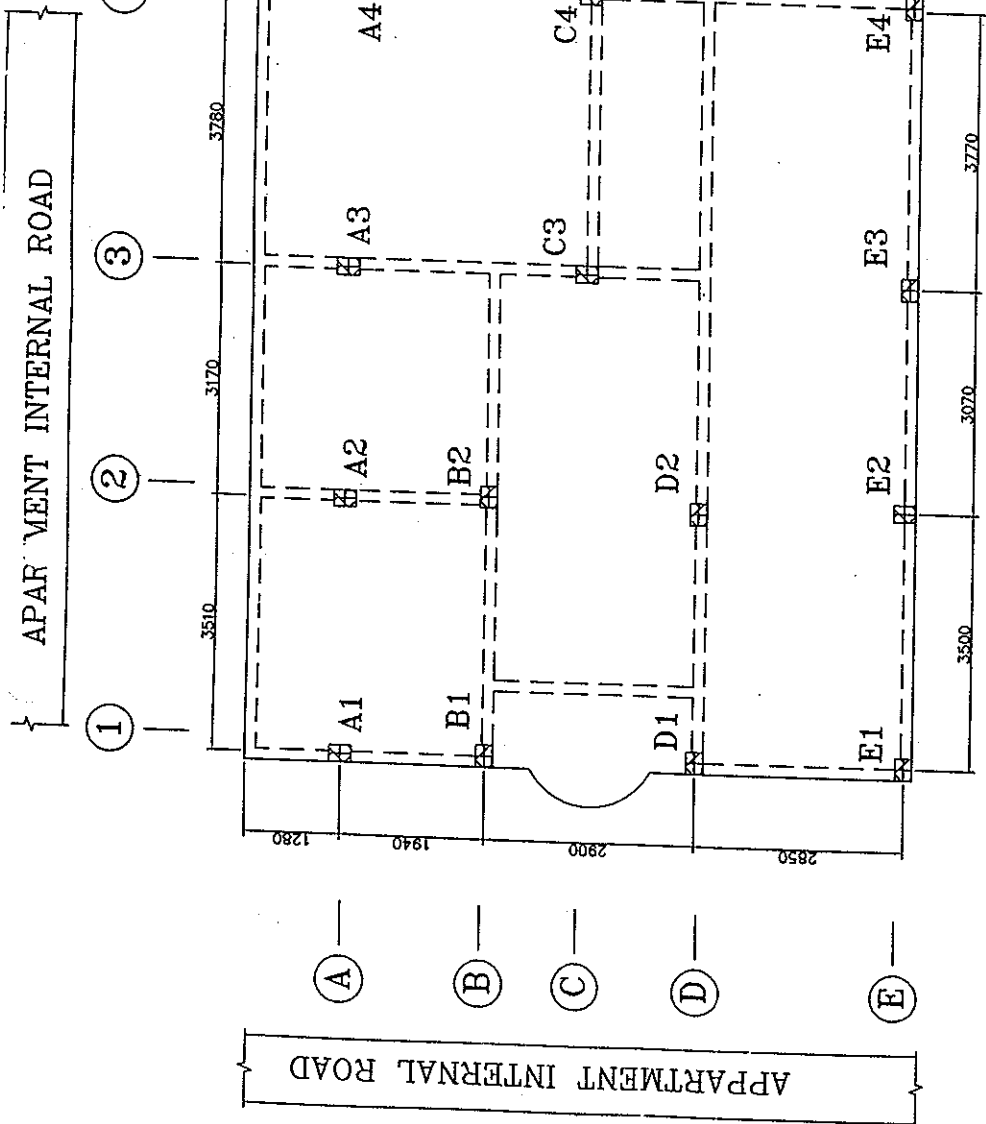
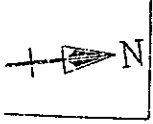
BEAMS SIZES
150X300

NO OF FLOORS STILT+5
TOC +18.60M

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CONSULTANT	M/s BRIGHT INFOTEC SERVAH COMMERCIAL COMPLEX, PATRY SEC-9A8, HYDRABAD.	NAME	DME
CLIENT	M/s RELIANCE INFOCOM ENGINEERING LTD., HYDRABAD.	DRAWN	A/VERKATESH 18-09-07
PROJECT	PROPOSED ROOF TOP TOWER	CHECKED	U.S.A 18-09-07
ADDRESS	P. HANUMANTH RAO PH/02-728, NCL ENCLAVE (EAST) SRIKANTH REHABILITATION INSTITUTE, NEAR SRIKANTHA DISPER COLLEGE, KOMPALLY VILLAGE, MEDAK MANDAL, RR DIST.	APP	U.S.N 18-09-07
		SURVEY	MAILESH P22/03/18/9
		FILE NAME	KCIFA...7
		SITE ID	
		TITLE: LAY OUT PLAN	
		SCALE: AS SHOWN	
		SCALE: NTS	
		SHEET: 1 OF 3	REV No. 0

LAY OUT OF STILT, FIRST, SECOND & THIRD FLOOR COLUMNS & BEAMS



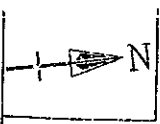
COLUMNS SIZES
230X300

BEAMS SIZES
150X300

NO OF FLOORS	STILT+5
	TOC +18.60M

CONSULTANT	M/S BRIGHT INFOTEC SRINIL COMMERICAL COMPLEX, PANDY SEC-9/04	NAME	A. VERGATESH	DATE	28-09-07
CLIENT	M/S RELIANCE INFOCOMM ENGINEERING LTD., HYDRABAD.	CHECKED	U.S.N	SCALE	1:2
PROJECT	PROPOSED ROOF TOP TOWER	APP	U.S.N	SCALE	1:2
ADDRESS	P. HANUMANTH RAO H.NO.2-128, NCL ENCLAVE (EAST) SREEKAR REHABILITATION INSTITUTE NEAR: CHATANYA DEGREE COLLEGE KOMPALLY VILLAGE, MEDCHAL MANDAL, RR DIST.	SURVEY	HAALLESH 9229531969	SCALE	1:2
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		SITE #		SCALE	1:2
		TITLE	LAY OUT PLAN	SCALE	1:2
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		SHEET	2 OF 3	REV	NO.3

LAY OUT OF FOURTH & FIFTH FLOOR COLUMNS & BEAMS

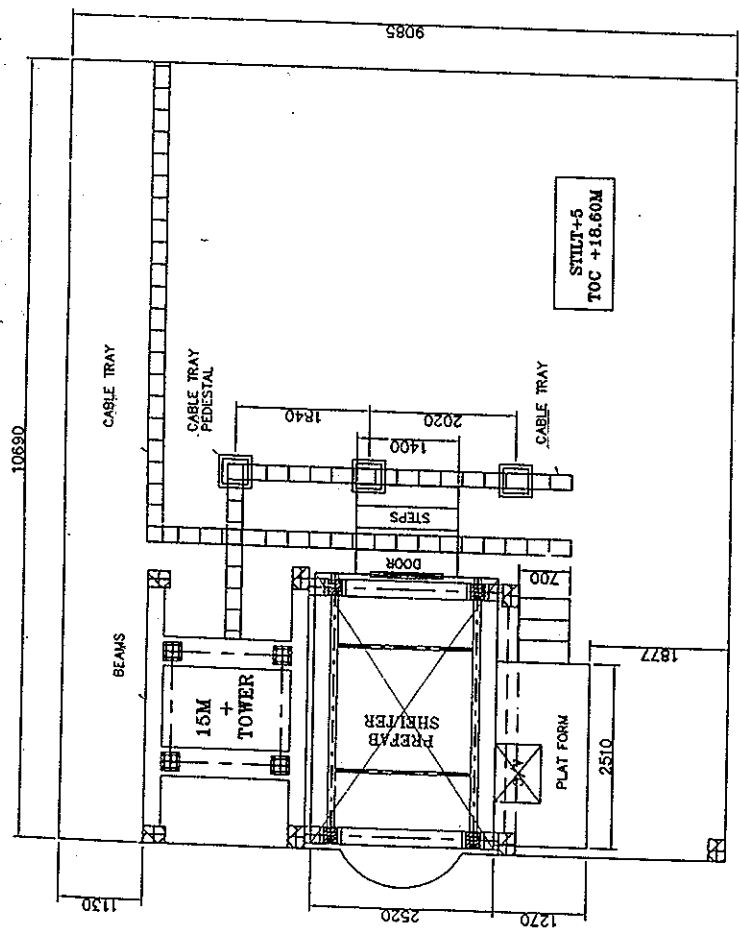


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NO OF FLOORS STILT+5
TOC +18.60M

APARTMENT INTERNAL ROAD

APARTMENT INTERNAL ROAD



CONSULTANT	M/s BRIGET INFOTEC	NAME	DATE
CLIENT	SMRITH COMMERCIAL COMPLEX PART SEC-BAD.	DRAWN	A. VENKATESH 06-09-07
PROJECT	M/s RELIANCE INFOCOMM ENGINEERING LTD., HYDERABAD.	CHECKED	U.S.N 08-09-07
		APP.	U.S.N 06-09-07
ADDRESS	PROPOSED ROOF TOP TOWER	SURVEY	MALLESH 09/09/2008
		FILE NAME	KOMPALLY
		SITE ID	
		TITLE	LAY OUT PLAN
		SIZE	A4
		SCALE	NTS
		SHEET	2 OF 3
		REV	No. 0

P. HANUMANTH RAO
H.NO.2/128 NCL ENCLAVE (EAST)
SWEKAR REHABILITATION INSTITUTE
NEAR CHAITANYA LOREEE COLLEGE
KOMPALLY VILLAGE, MEDCHAL MANDAL, RR DIST.