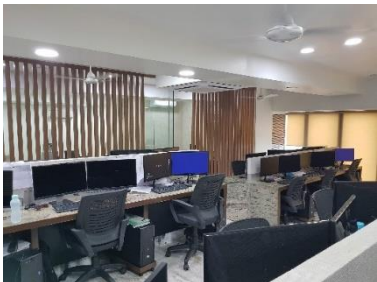


# **AASHIR** ENGINEERING PVT. LTD. **BIM STUDIO**

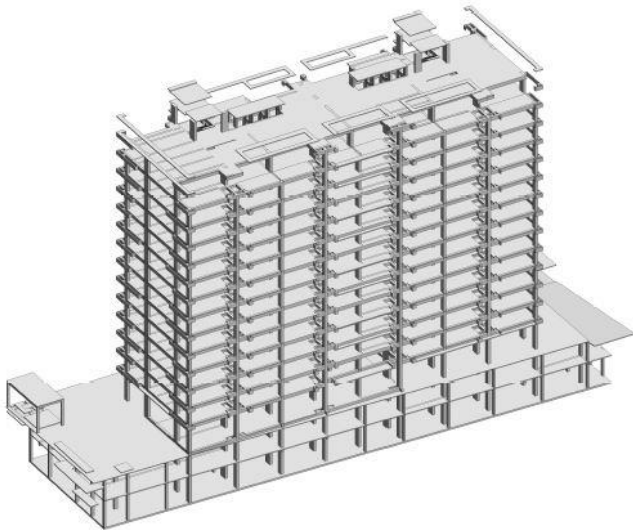
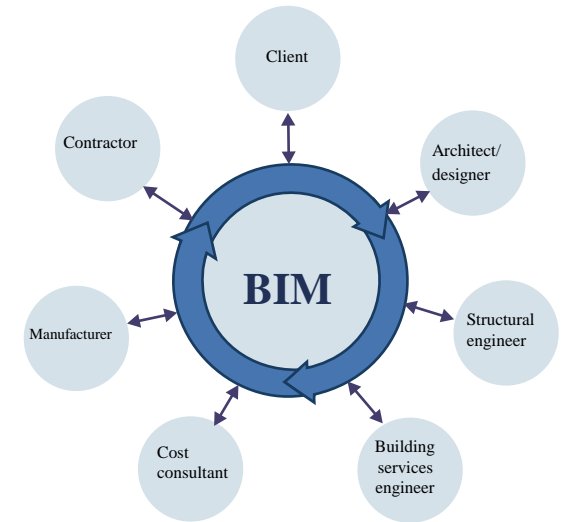


# **BUILDING INFORMATION MODELING (BIM)**

BIM IS NOT JUST SOFTWARE IN FACT IT IS A PROCESS.

IT IS AN INTEGRATED PROCESS OF GENERATING AND MANAGING A BUILDING BY EXPLORING A DIGITAL MODEL BEFORE THE ACTUAL PROJECT IS CONSTRUCTED AND LATER DURING ITS CONSTRUCTION, FACILITY OPERATION AND MAINTENANCE.

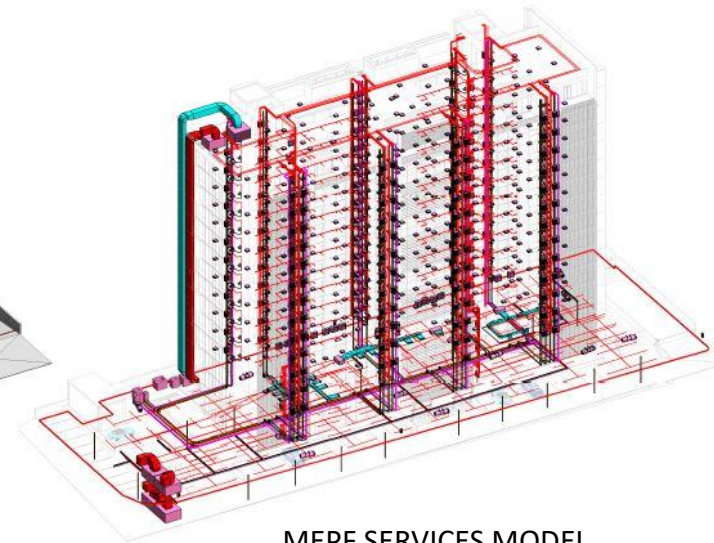
“BIM IS DIGITAL MODEL OF A BUILDING IN WHICH INFORMATION ABOUT PROJECT IS STORED. IT CAN BE 3D, 4D (INTEGRATING TIME) OR 5D (INCLUDING COST) – RIGHT UP TO ‘nD’ (A TERM THAT COVERS ANY OTHER INFORMATION). AS A RECEPTACLE FOR PROJECT INFORMATION, BIM HAS MASSIVE VERSATILITY & POTENTIAL.”



STRUCTURAL MODEL



ARCHITECTURAL MODEL



MEPF SERVICES MODEL



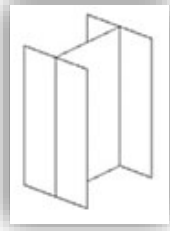
# **LOD (LEVEL OF DEVELOPMENT)**

LOD SPECIFICATION IS A REFERENCE THAT ENABLES PRACTITIONERS IN THE AEC INDUSTRY TO SPECIFY AND ARTICULATE WITH A HIGH LEVEL OF CLARITY THE CONTENT AND RELIABILITY OF BUILDING INFORMATION MODELS (BIMS) AT VARIOUS STAGES IN THE DESIGN AND CONSTRUCTION PROCESS AND ALLOWS DOWNSTREAM USERS TO CLEARLY UNDERSTAND THE USABILITY AND THE LIMITATIONS OF MODELS THEY ARE RECEIVING. THE INTENT OF SPECIFICATIONS HELPS IN EXPLAINING THE LOD FRAMEWORK & STANDARDIZE ITS USE SO THAT IT BECOMES MORE USEFUL AS A COMMUNICATION TOOL.



## **LOD 100:** **CONCEPTUAL**

THE MODEL ELEMENT MAY BE GRAPHICALLY REPRESENTED IN THE MODEL WITH A SYMBOL OR OTHER GENERIC REPRESENTATION.



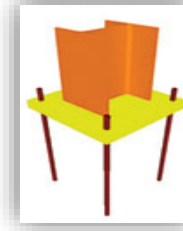
## **LOD 200:** **DESIGN MODEL**

THE MODEL ELEMENT MAY BE GRAPHICALLY REPRESENTED IN THE MODEL AS A GENERIC SYSTEM, OBJECT OR ASSEMBLY WITH APPROXIMATE QUANTITIES, SIZE, SHAPE, LOCATION, AND ORIENTATION.



## **LOD 300:** **CONSTRUCTION MODEL**

THE MODEL ELEMENT IS GRAPHICALLY REPRESENTED AS A SPECIFIC SYSTEM, OBJECT OR ASSEMBLY IN TERMS OF QUANTITY, SIZE, SHAPE, LOCATION, AND ORIENTATION. THE PROJECT ORIGIN IS DEFINED AND THE ELEMENT IS LOCATED ACCURATELY WITH RESPECT TO THE PROJECT ORIGIN.



## **LOD 350 & 400:** **FABRICATION MODEL**

THE MODEL ELEMENT IS GRAPHICALLY REPRESENTED WITHIN THE MODEL AS LOD 300 ALONG INTERFACES WITH OTHER BUILDINGS. LOD 400 IS MODELED AT SUFFICIENT DETAILING, FABRICATION, ASSEMBLY & INSTALLATION INFORMATION.



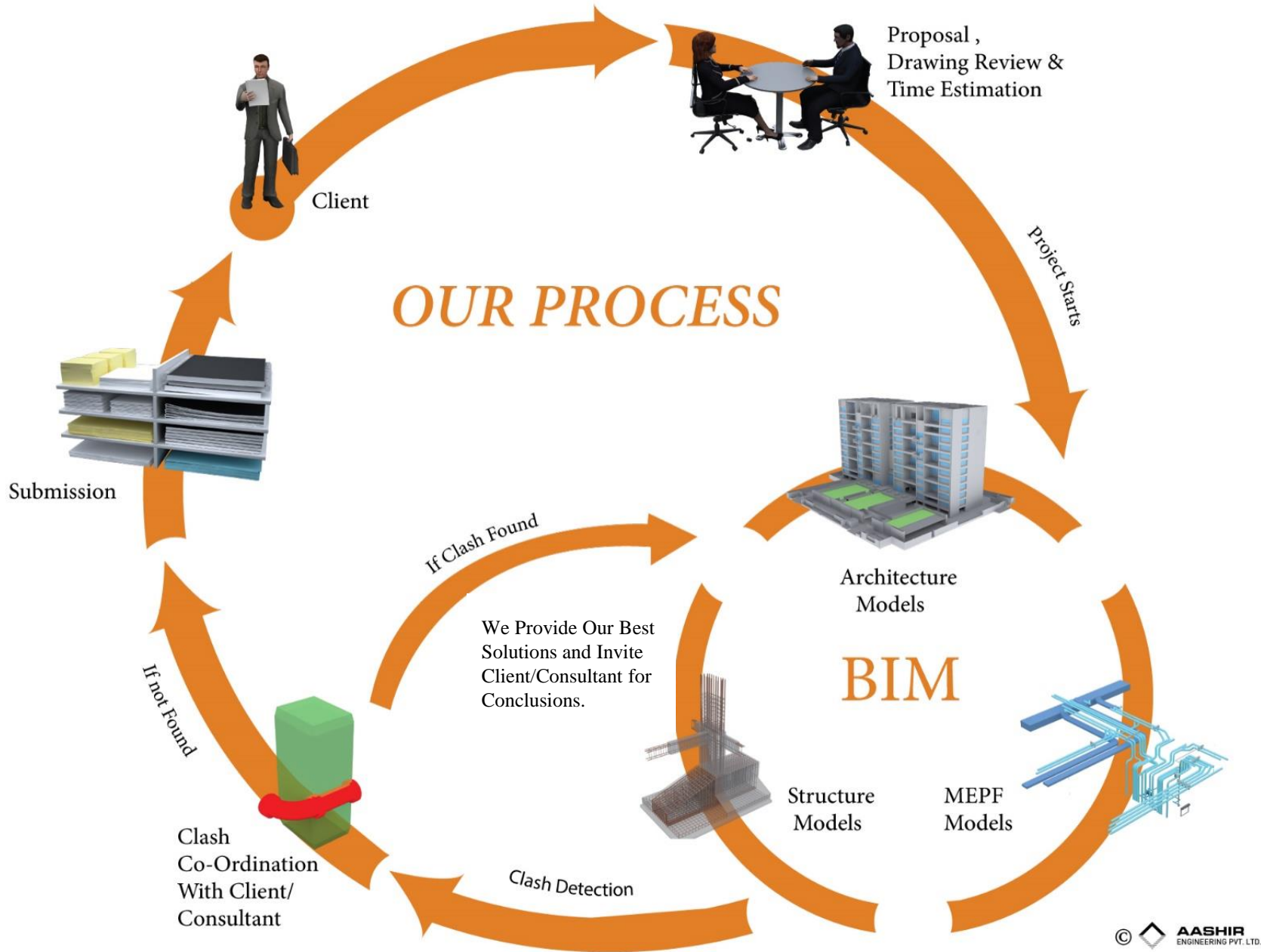
## **LOD 500:** **AS-BUILT MODEL**

THE MODEL ELEMENT IS A FIELD VERIFIED REPRESENTATION. EACH ELEMENT CONTAINS AS BUILT AND FACILITY MANAGEMENT INFO. THAT IS INTEGRATED INTO THE MODEL.

## **LOD BENEFIT:**

- TO HELP TEAMS, INCLUDING OWNERS, TO SPECIFY BIM DELIVERABLES AND TO GET A CLEAR PICTURE OF WHAT WILL BE INCLUDED IN A BIM DELIVERABLE
- TO HELP DESIGN MANAGERS EXPLAIN TO THEIR TEAMS THE INFORMATION AND DETAIL THAT NEEDS TO BE PROVIDED AT VARIOUS POINTS IN THE DESIGN PROCESS
- TO PROVIDE A STANDARD THAT CAN BE REFERENCED BY CONTRACTS AND BIM EXECUTION PLANS.





HOSPITAL

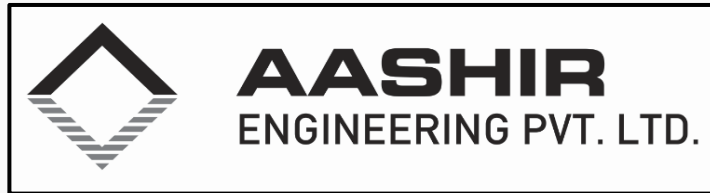


TECH. PARK



CORPORATE HOUSE

OFFICE BUILDING

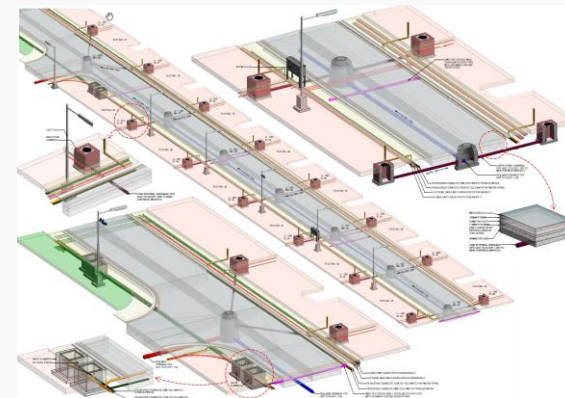


AIRPORT



HOTEL / BANQUET

MIXED USE

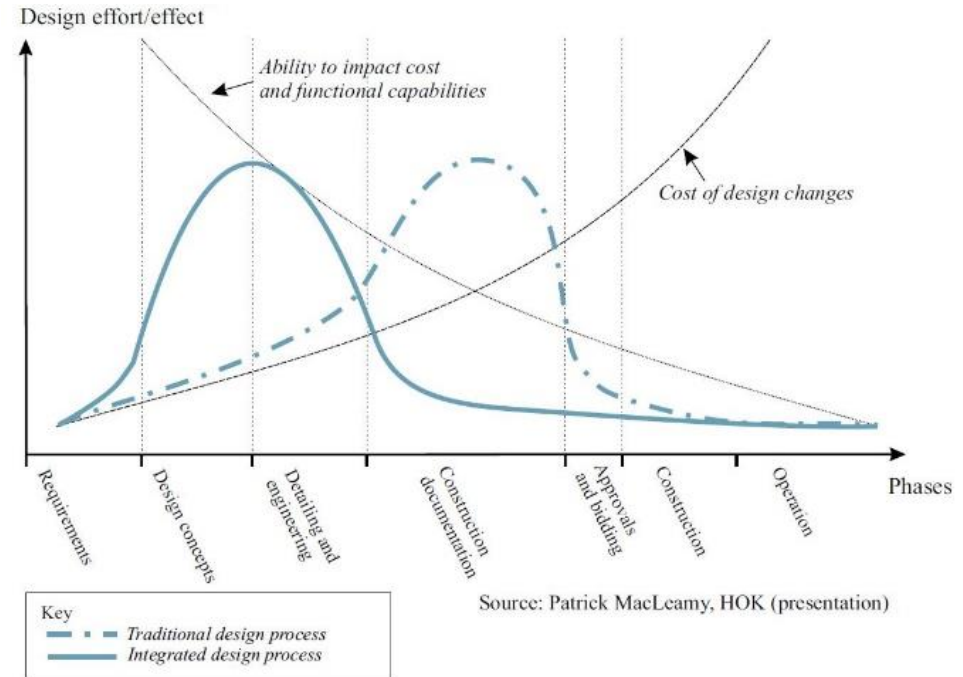


INFRA STRUCTURE DEVP.



# **BENEFITS OF BIM**

- DATA ONCE ENTERED CAN BE REPROCESSED THROUGHOUT THE LIFE CYCLE OF THE PROJECT
- METHOD WIDELY HELD FOR CLASH AVOIDANCE
- REDUCES COSTS
- REDUCES RE-WORK
- FASTER DOCUMENTATION/DRAFTING WITHOUT LOSS OF COST & QUALITY
- MODEL BEHAVIOUR CAN BE ANALYSED
- BLENDING GEO-SPATIAL AND BUILDING INFORMATION FOR PLANNING
- REDUCING REQUESTS FOR INFORMATION AND CHANGE ORDERS
- WORK ON A SINGLE 3D MODEL RATHER THAN A MULTITUDE OF SEPARATE 2D FILES
- IMPROVING AWARENESS OF PROGRESS AND CURRENT STATUS OF PROJECT
- REDUCING CYCLE TIMES BETWEEN REVIEWS & RFI'S
- CREATING A TIME-BASED SIMULATION OF CONSTRUCTION ACTIVITIES
- IMPROVED COMMUNICATION BETWEEN CLIENT AND SUPPLIER
- ENSURING LOWER WHOLE-LIFE COSTS FOR THE ASSET THROUGH SUSTAINABLE DESIGN – TESTED OUT AT THE DESIGN STAGE
- QUANTITY TAKE-OFF
- CLARITY IN CONSTRUCTION SEQUENCING
- ENERGY ANALYSIS
- INCREASES PROJECT VIABILITY IN TERMS OF FINANCE / TIME PERIOD WHICH MINIMIZES THE RISK FACTOR



## **DURING CONSTRUCTION**

- SOLVES CLASHES BEFORE CONSTRUCTION.
- NO DISTURBANCE TO STRUCTURAL ELEMENTS AS ALL SLEEVES CAN BE PLANNED IN THE BIM MODEL.
- REDUCE CONSTRUCTION WASTAGE .
- QUALITY CONSTRUCTION OF ALL SERVICES.
- SAVES TIME.
- 3-D DRAWINGS BRINGS CLARITY AT SITE.

## **AFTER CONSTRUCTION**

- EASE OF MAINTENANCE DURING RENOVATION.
- DETECT PROBLEMS DURING SERVICE FAILURE.
- FUTURE MODIFICATION AND ITS ESTIMATION.
- USERS GET EXACT BENEFITS WHICH WAS PLANNED.



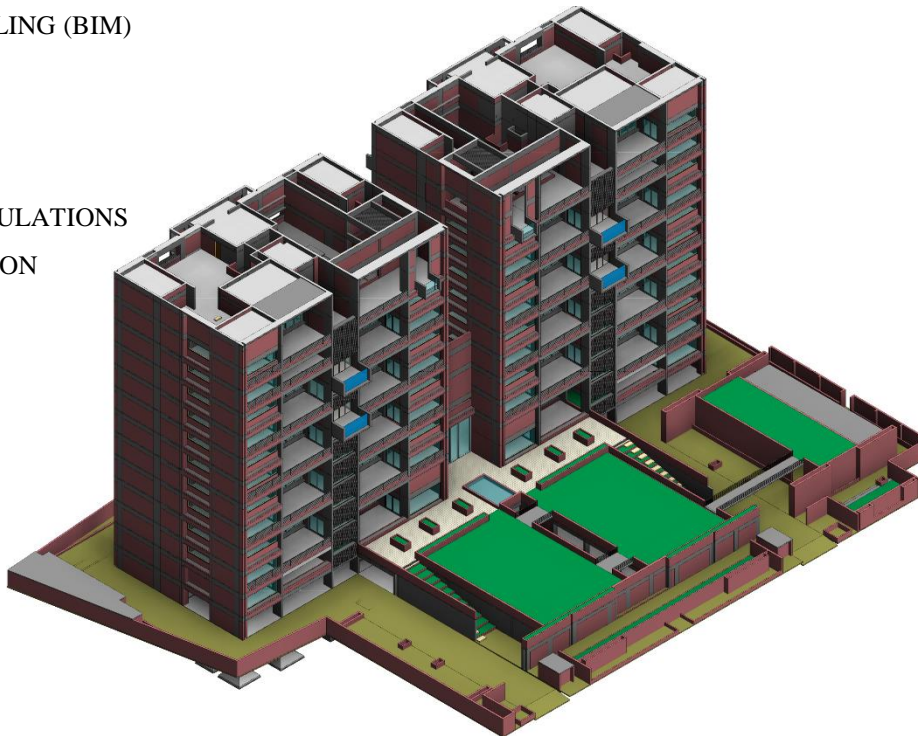
# **ARCHITECTURAL BIM SERVICE**

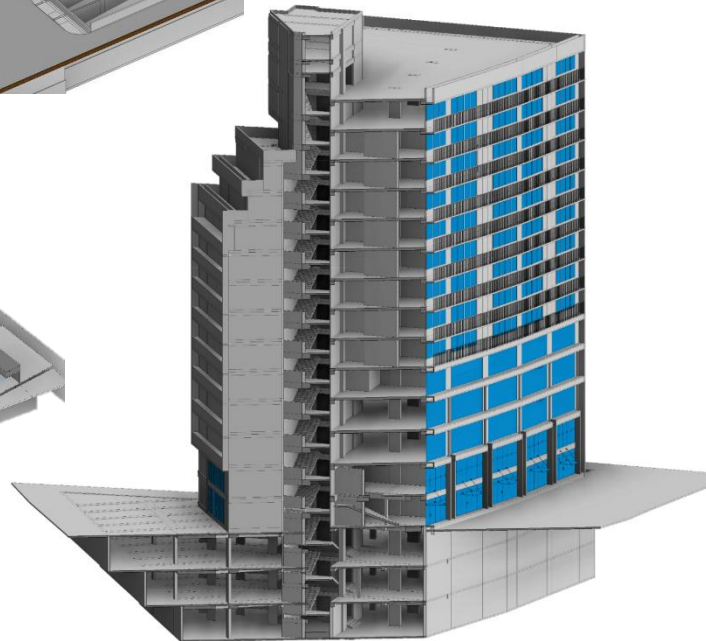
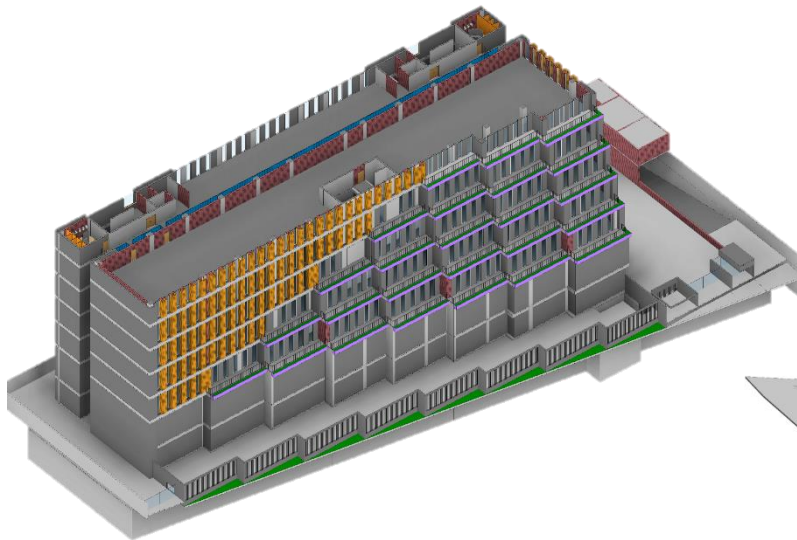
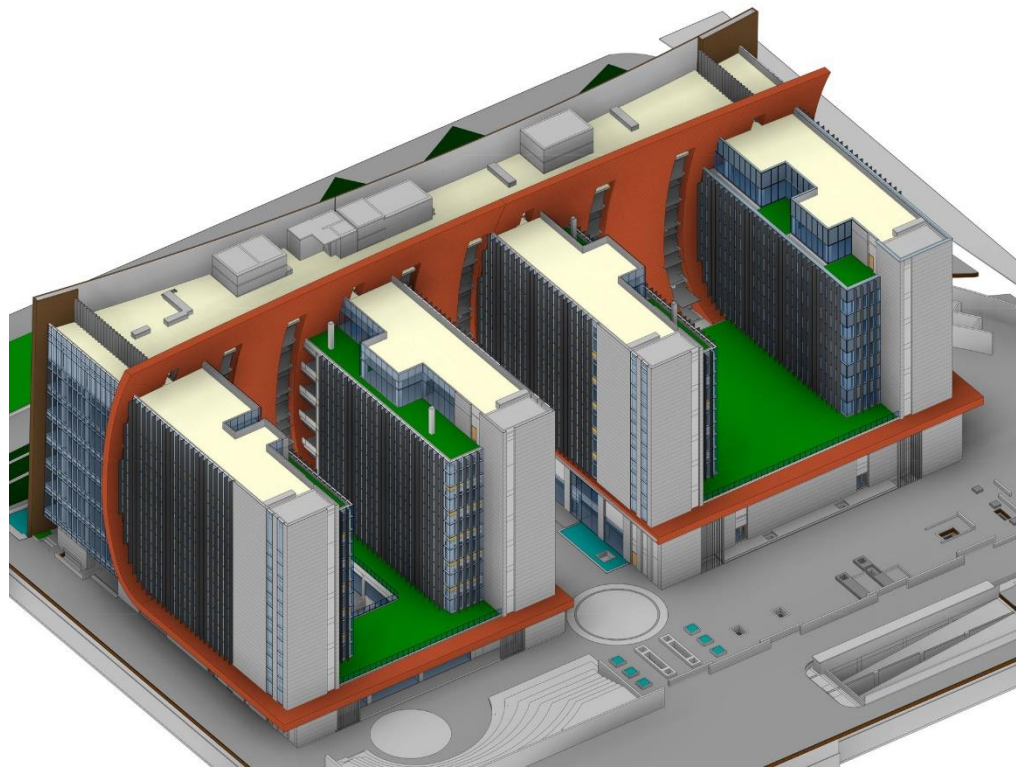
WE AT AASHIR SUPPORT OUR CLIENT'S FOR THEIR PROJECTS OF ANY NATURE AND AT ANY STAGE, CONFORMING CODES AND STANDARDS. WE SUPPORT OUR CLIENTS IN THEIR BUILDING INFORMATION MODELING PROJECTS FROM SIMPLE 3D PARAMETRIC MODELING WITH SERVICES SUCH AS COORDINATION BETWEEN THE VARIOUS DISCIPLINES, CLASH DETECTION, CONSTRUCTION SEQUENCING AND 4D ANALYSIS WHICH BRINGS PROJECT COST NEXT TO NOTHING.

OUR TEAM HAS EXPERTISE IN THE INDUSTRY LEADING TOOLS & PLATFORMS LIKE AUTODESK REVIT, AUTOCAD, SKETCHUP, PHOTOSHOP ETC.

## **ARCHITECTURAL SUPPORT :**

- ARCHITECTURAL CGIS (COMPUTER GENERATED IMAGERY) IN BOTH 2D AND 3D FOR VISUALIZATION
- DESIGN DEVELOPMENT
- PARAMETRIC 3D MODELING (BIM)
- GFC DRAWINGS
- DOCUMENTATION
- QUANTITY TAKE OFF
- 4D CONSTRUCTION SIMULATIONS
- JUNCTION COORDINATION
- CLASH DETECTION
- AS BUILT DRAWINGS

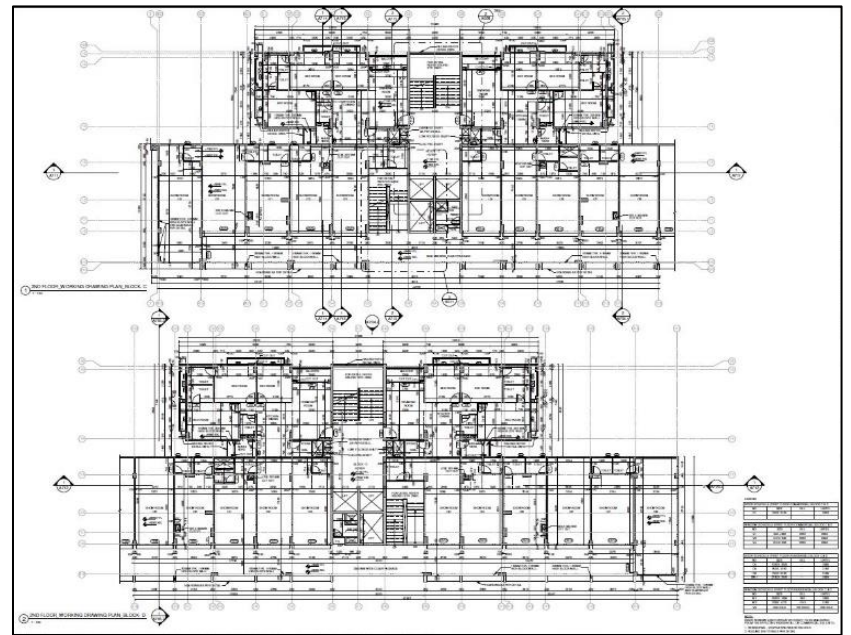




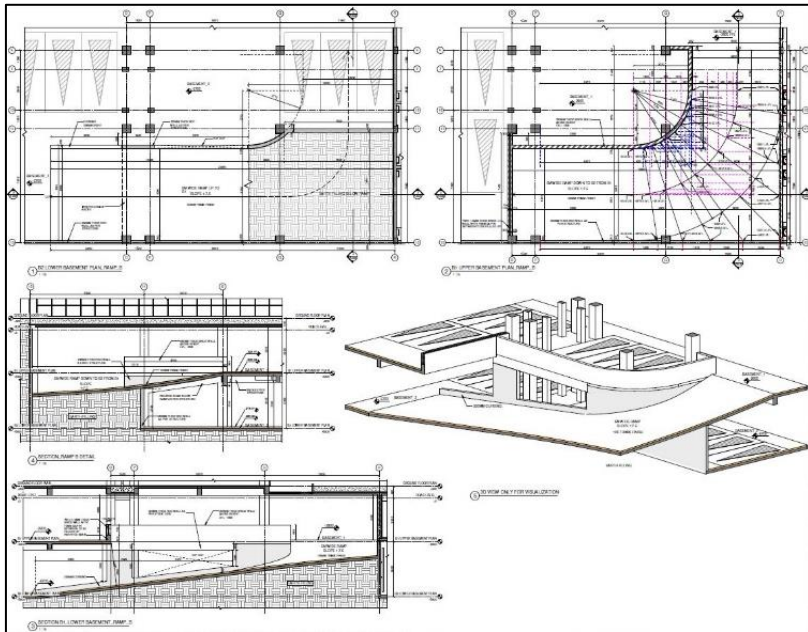




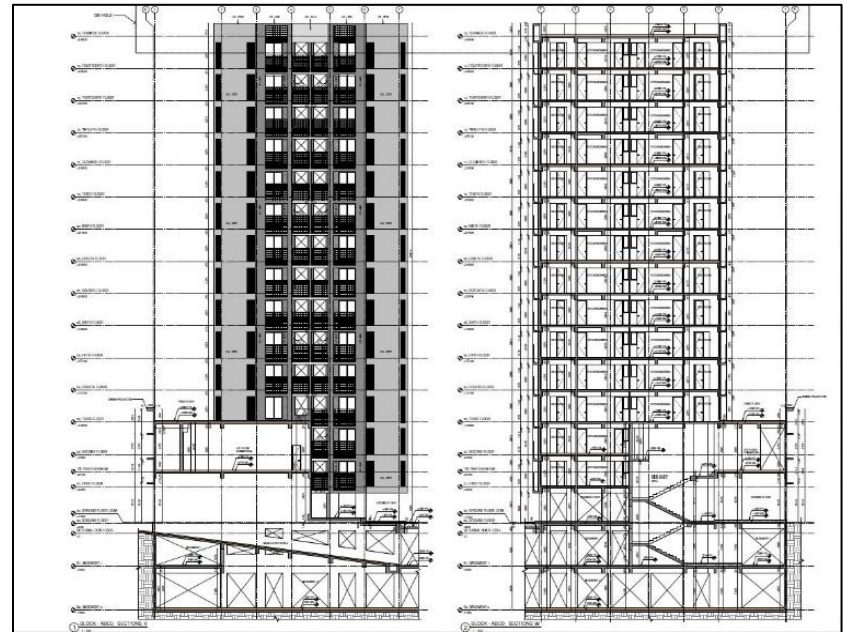
RCP & SEP PLAN



WORKING FLOOR PLAN



ENLARGE & DETAIL DRAWING



ELEVATION & SECTION



## **MEPF BIM SERVICE**

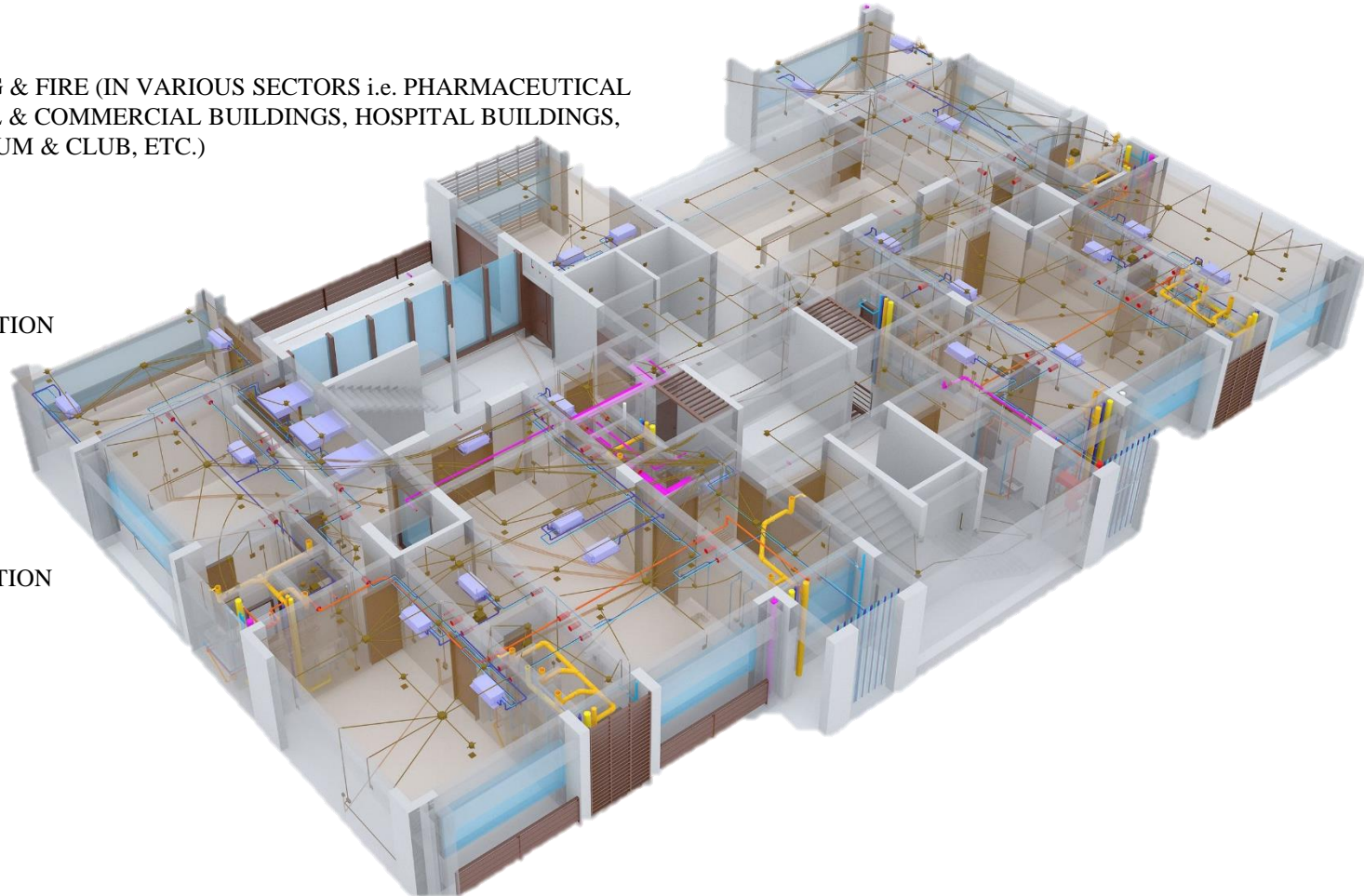
OUR TEAM HAS EXPERTISE WHO HAVE WORKED WITH PROJECT FROM RESIDENTIAL, LARGE SCALE PROJECTS TO CRITICAL AREAS LIKE HOSPITAL, ETC. WE AT AASHIR FOLLOW UNIQUE COMMUNICATION METHODS BETWEEN ARCHITECT, CONSULTANT, CONTRACTOR AND PROMISE OF A WELL-COORDINATED CLASH FREE MODEL. OUR PRESENTATION METHOD OF CREATING GOOD FOR CONSTRUCTION DRAWING WITH SMART ANNOTATIONS BRINGS EASE TO UNDERSTAND AND EXECUTE INSTALLATION ON SITE.

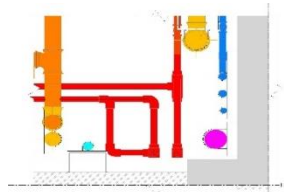
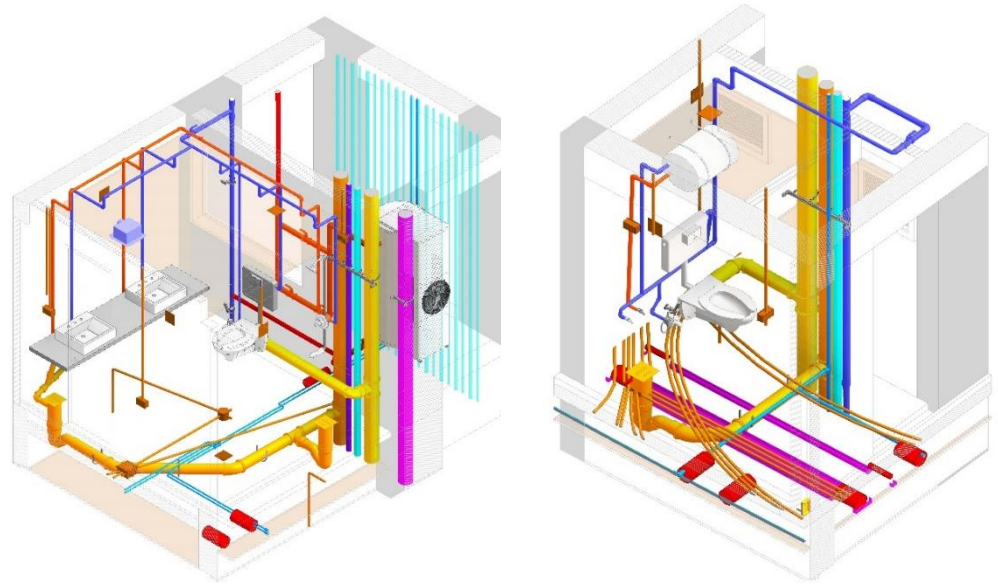
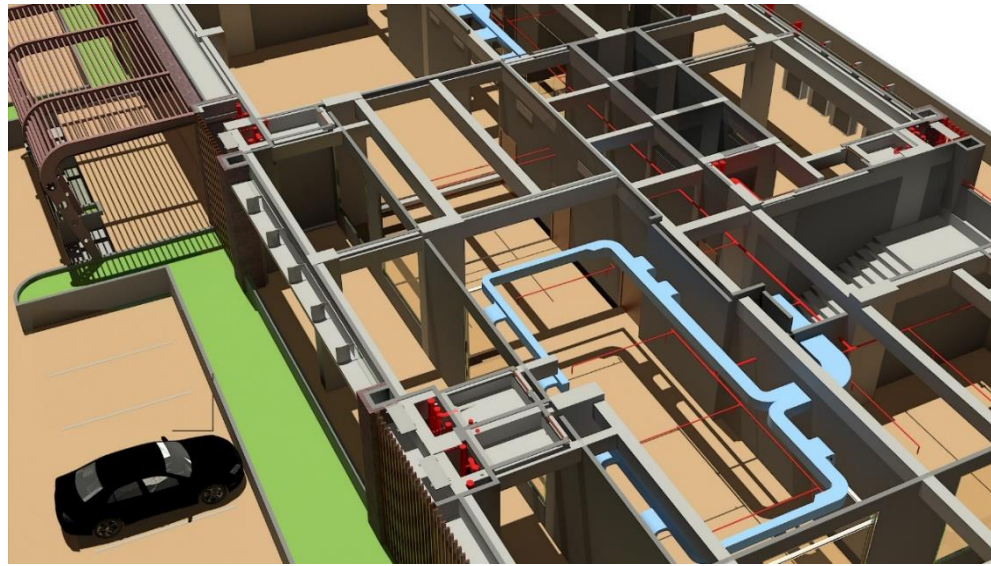
### **MECHANICAL BIM MODEL SUPPORT**

### **ELECTRICAL BIM MODEL SUPPORT**

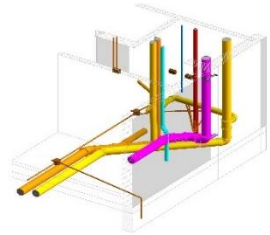
### **PLUMBING & FIRE:**

- DESIGN CONSULTANCY FOR PLUMBING & FIRE (IN VARIOUS SECTORS i.e. PHARMACEUTICAL MANUFACTURING UNITS, RESIDENTIAL & COMMERCIAL BUILDINGS, HOSPITAL BUILDINGS, CHEMICAL INDUSTRIES, SPORTS STADIUM & CLUB, ETC.)
- SHOP DRAWING
- GFC DRAWING
- CLASH DETECTION WITH SOLUTIONS
- RESOLVES JUNCTION & PROVIDE SOLUTION
- VALUE ENGINEERING
- 4D CONSTRUCTION SIMULATIONS
- QUANTITY TAKE OFF
- AS BUILT DRAWINGS
- PREPARATION OF DESIGN REQUIREMENT DOCUMENT/ SPECIFICATION

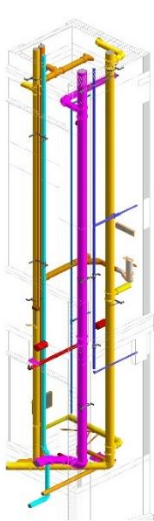




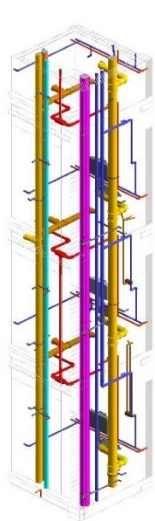
1 SHAFT NO. 01 & 04-30



2 GROUND FLOOR



3 GROUND FLOOR TO SECOND FLOOR



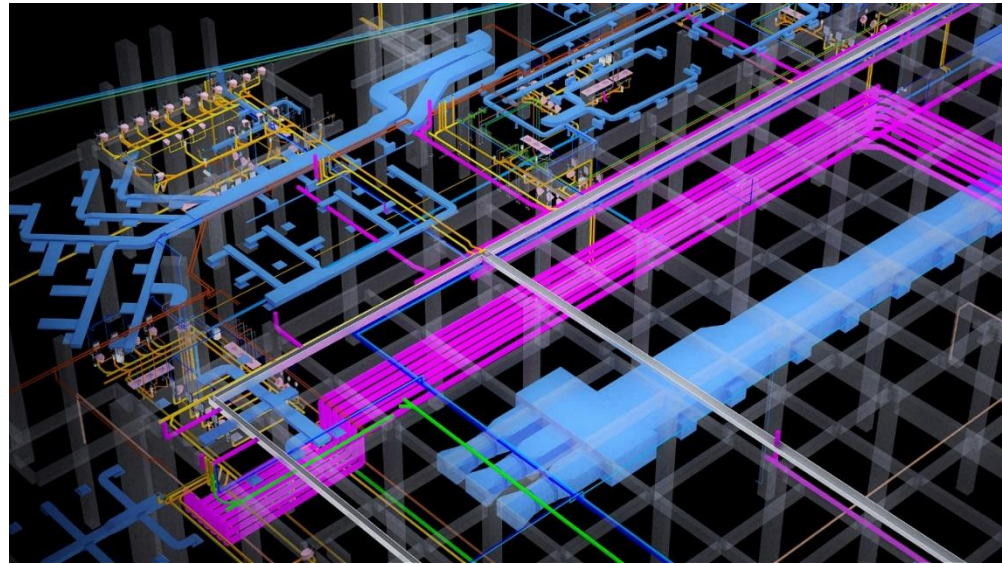
4 SECOND FLOOR TO FIFTH FLOOR

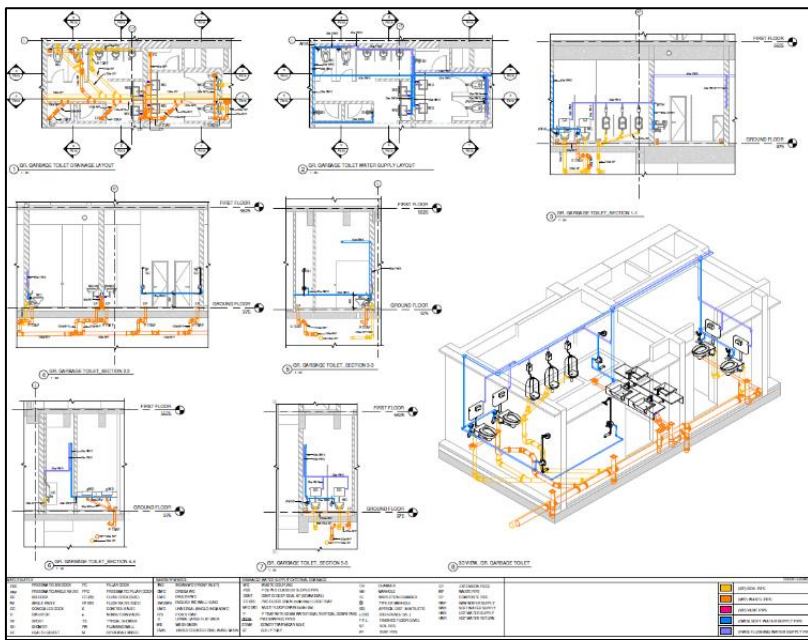


5 FIFTH FLOOR TO EIGHT FLOOR

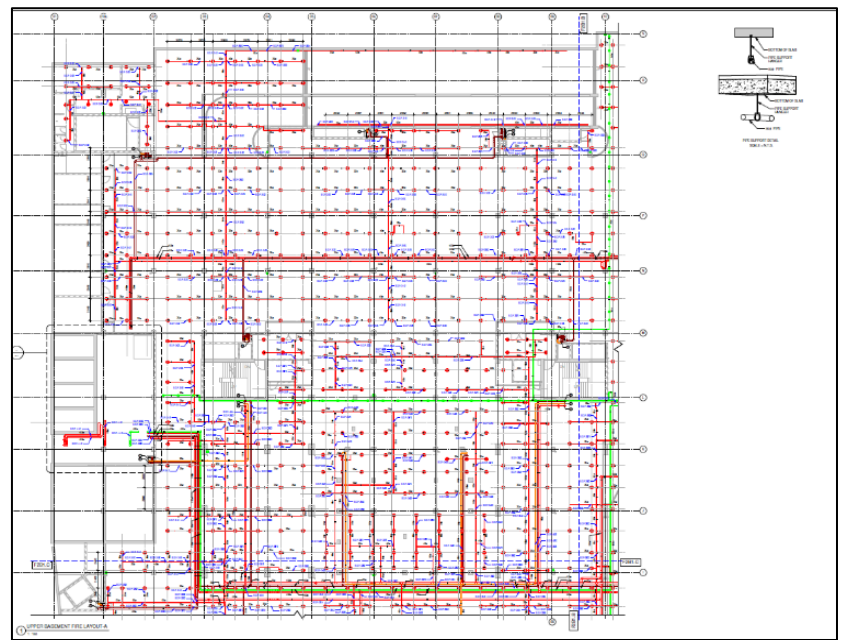


6 EIGHT FLOOR TO TERRACE FLOOR

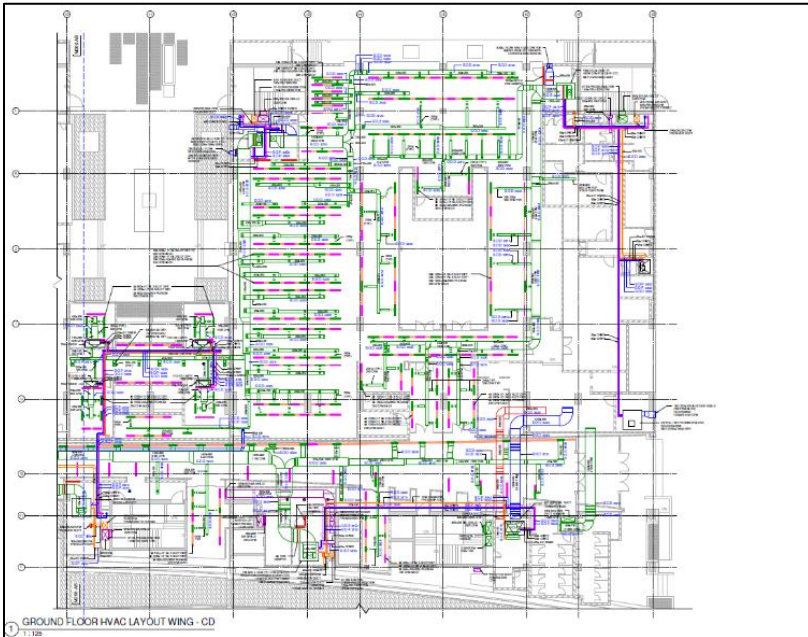




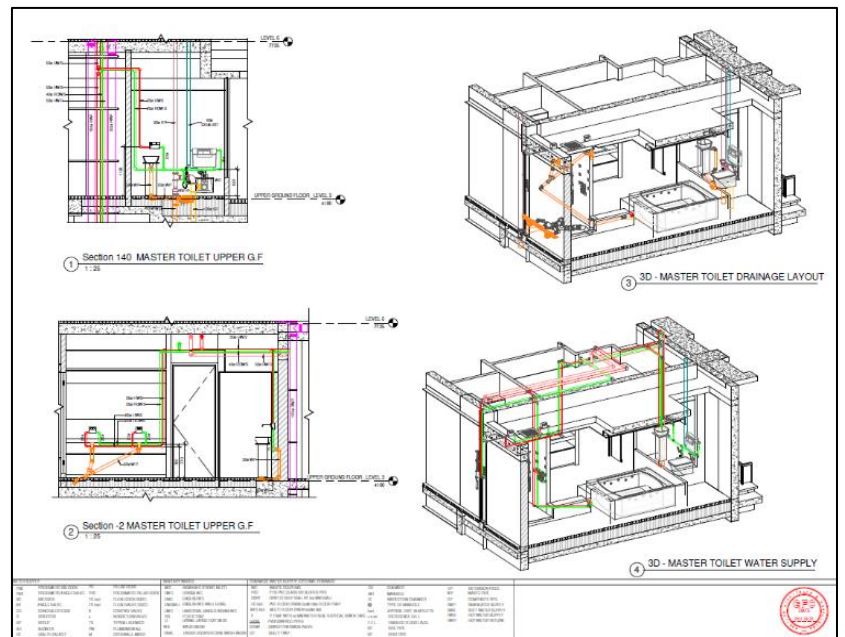
ENLARGE TOILET DETAIL



FIRE SYSTEM LAYOUT PLAN



HVAC DETAIL PLAN



PLUMBING DRAWING



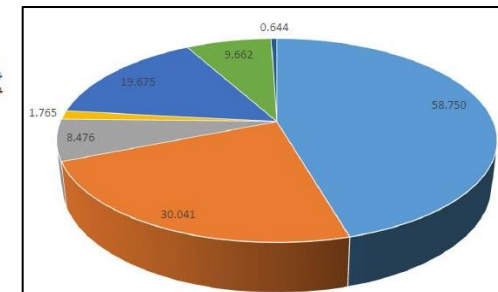
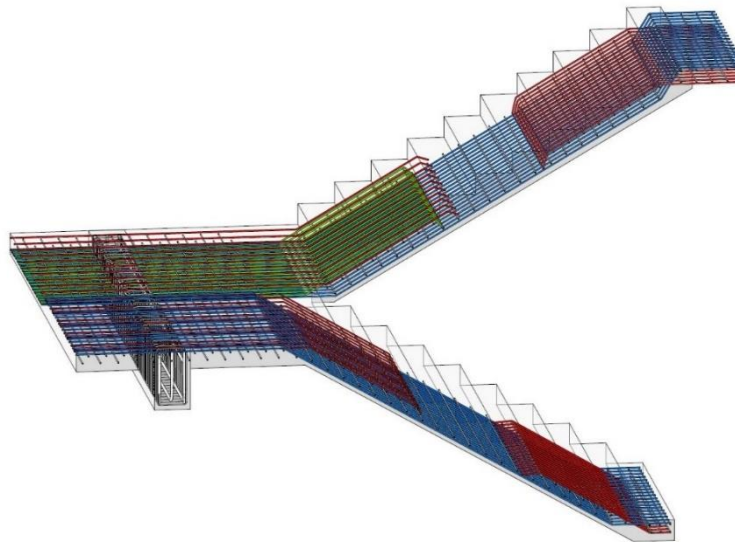
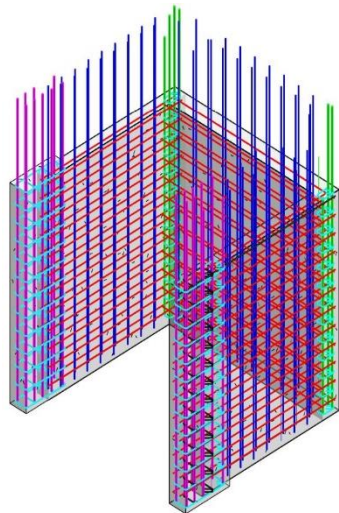
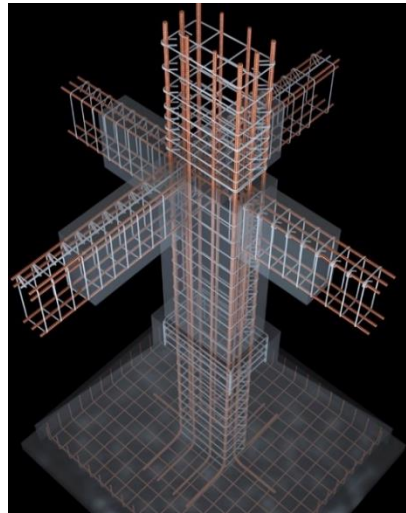
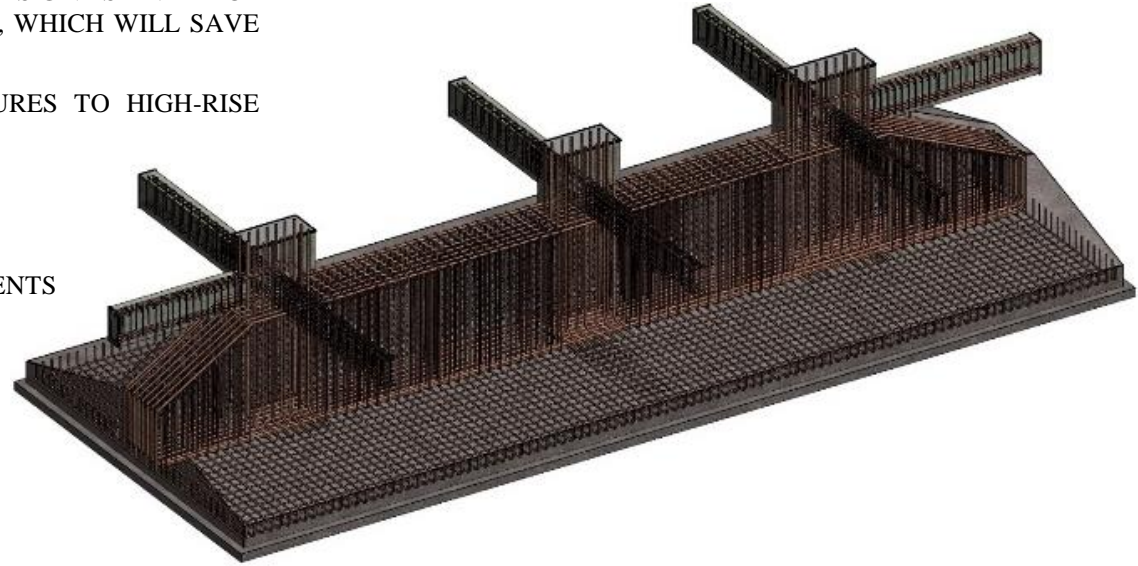
# STRUCTURAL BIM SERVICE

WE SUPPORT OUR CLIENTS IN PLANNING PURCHASE & FINANCES. THIS GIVES AN EXACT QUANTITY OF STEEL TO BE USED IN THE PROJECT FROM DAY ONE, WHICH WILL SAVE WASTAGE & CONSTRUCTION TIME IN HUGE WAY.

OUR EXPERIENCE RANGES FROM SMALL RESIDENTIAL STRUCTURES TO HIGH-RISE BUILDING STRUCTURES.

## STRUCTURAL SUPPORT:

- IDENTIFY HIGH RISK / COST ELEMENTS IN STRUCTURE
- PRELIMINARY INPUT TO ARCHITECT ON ARCHITECTURAL ELEMENTS
- REBAR BBS (BAR BENDING SCHEDULE) AND BILL OF MATERIALS
- VALUE ENGINEERING
- 3D TENSILE STRUCTURE & DETAILING
- DIGITAL PREFABRICATION
- RCC QUANTITY TAKE OFF FOR RMC



SUMMARY SHEET		
SR. NO.	DESCRIPTION	WT IN TON
1	BBS OF FOOTINGS OF ALL COLUMNS	58.750
2	BBS OF COLUMNS (VERTICALS UPTO MID OF HOLLOW PLINTH LEVEL)	30.041
3	BBS OF STIRRUPS OF COLUMNS (UPTO HOLLOW PLINTH LEVEL)	8.476
4	BBS OF WALL FOOTINGS	1.765
5	BBS OF EXISTING COMPOUND WALL (VERTICALS + HORIZONTALS)	19.675
6	BBS OF SHEAR WALLS (VERTICALS UPTO HOLLOW PLINTH LEVEL)	9.662
7	SHEAR WALL STIRRUPS AND LINKS UPTO (HOLLOW PLINTH LEVEL)	0.644
8	TOTAL WT IN TON	129.013



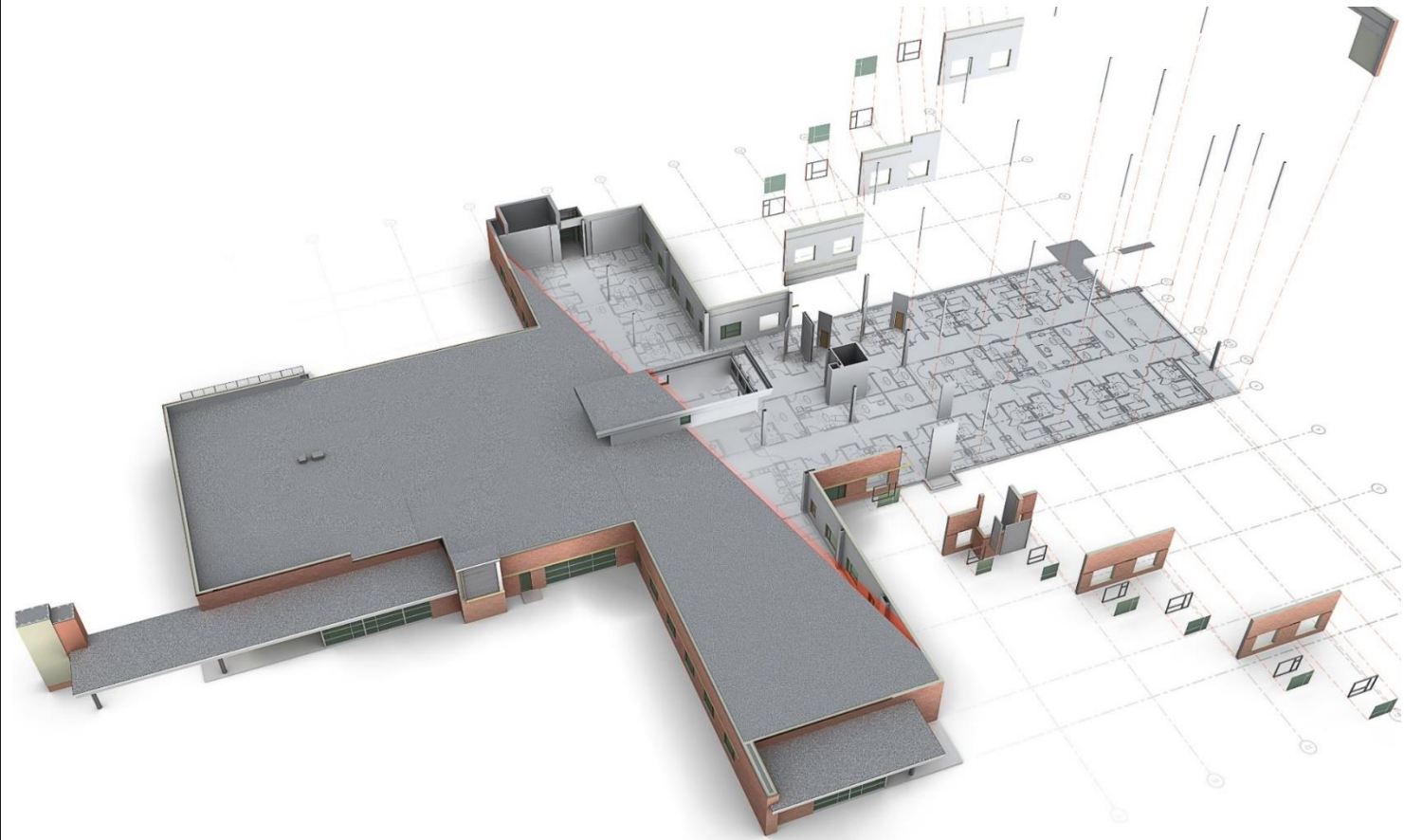


**AASHIR**  
ENGINEERING PVT. LTD.

"Where imagination to execution goes on with integration."

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Thank You

