41

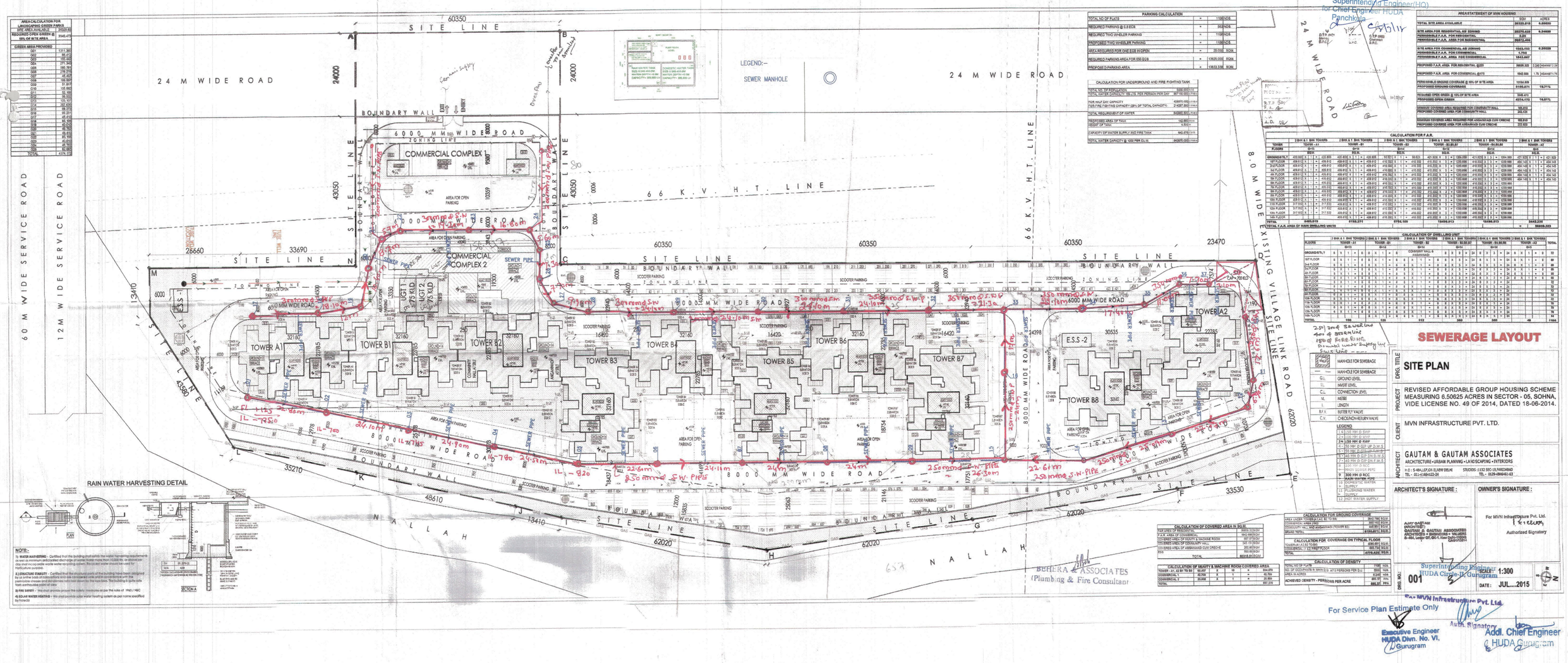
SEWERAGE LAYOUT PLAN

Director
Town and Country Planning
Haryana, Chandigarh

Checked subject to comments in forwarding letter No. 45000 Dt. 31.3.15 and notes attached with the estimate

Superintending Engineer(HQ)
for Chief Engineer HUDA
Panchkula

AREA CALCULATION FOR LANDSCAPING GREEN PARCS	
SITE AREA AVAILABLE	20325.83
REQUIRED OPEN GREEN @ 15% OF SITE AREA	3048.872
GREEN AREA PROVIDED	
G01	1311.985
G02	66.412
G03	600.446
G04	271.346
G05	185.791
G06	278.376
G07	46.420
G08	189.997
G09	51.847
G10	105.860
G11	53.160
G12	55.000
G13	105.101
G14	302.000
G15	58.201
G16	56.201
G17	46.420
G18	46.420
G19	45.620
G20	46.780
G21	45.620
G22	85.798
G23	45.620
G24	45.620
G25	62.000
TOTAL	4374.122



PARKING CALCULATION		
TOTAL NO OF FLATS	=	1108NOS.
REQUIRED PARKING @ 0.5 ECS	=	552NOS.
REQUIRED TWO WHEELER PARKING	=	110NOS.
PROPOSED TWO WHEELER PARKING	=	110NOS.
AREA REQUIRED FOR ONE ECS IN OPEN	=	28.05M2 (5CS)
REQUIRED PARKING AREA FOR ESS ECS	=	1392.05M2 (50CS)
PROPOSED PARKING AREA	=	1393.33M2 (50CS)

CALCULATION FOR UNDERGROUND AND FIRE FIGHTING TANK	
TOTAL NO OF POPULATION	5532 (2011)
TOTAL WATER CAPACITY (135 LTS. PER PERSON PER DAY)	837100.000LITRES
FOR HALF DAY CAPACITY	418670.000LITRES
(50% FIRE FIGHTING CAPACITY (25% OF TOTAL CAPACITY)	214587.500LITRES
TOTAL REQUIREMENT OF WATER	842882.500LITRES
REQUIRED AREA OF TANK	142.88M2 (15M)
HEIGHT OF TANK	5.50M
CAPACITY OF WATER SUPPLY AND FIRE TANK	940.67M3 (15M)
TOTAL WATER CAPACITY @ 1000 PER CU.M.	940875.000LITRES

AREA STATEMENT OF MVN HOUSING			
		SQM	ACRES
TOTAL SITE AREA AVAILABLE		26325.815	6.50625
SITE AREA FOR RESIDENTIAL A/B ZONING		25375.035	6.26800
PERMISSIBLE F.A.R. FOR RESIDENTIAL		3.25	
PERMISSIBLE F.A.R. AREA FOR RESIDENTIAL		82437.864	
SITE AREA FOR COMMERCIAL A/B ZONING		1950.455	0.48225
PERMISSIBLE F.A.R. FOR COMMERCIAL		1.75	
PERMISSIBLE F.A.R. AREA FOR COMMERCIAL		3412.287	
PROPOSED F.A.R. AREA FOR RESIDENTIAL @3.25		88898.325	3.249 (Allowed 3.25)
PROPOSED F.A.R. AREA FOR COMMERCIAL @1.75		1842.688	1.75 (Allowed 1.75)
PERMISSIBLE GROUND COVERAGE @ 50% OF SITE AREA		12662.908	
PROPOSED GROUND COVERAGE		5195.871	19.71%
REQUIRED OPEN GREEN @ 15% OF SITE AREA		3948.472	
PROPOSED OPEN GREEN		4374.123	16.61%
MINIMUM COVERED AREA REQUIRED FOR COMMUNITY HALL		189.618	
PROPOSED COVERED AREA FOR COMMUNITY HALL		243.315	
MINIMUM COVERED AREA REQUIRED FOR ANGANWADI CUM CRECHE		162.918	
PROPOSED COVERSE AREA FOR ANGANWADI CUM CRECHE		202.800	

CALCULATION FOR F.A.R.																																									
TOWER	2 BHK & 1 BHK TOWERS TOWER - A1							2 BHK & 1 BHK TOWERS TOWER - B1							2 BHK & 1 BHK TOWERS TOWER - B2,B3							2 BHK & 1 BHK TOWERS TOWER - B4,B5,B6							2 BHK & 1 BHK TOWERS TOWER - B7,B8							2 BHK & 1 BHK TOWERS TOWER - A2						
FLOORS	G+15							G+15							G+14							G+14							G+14							G+5						
	BSUA							BSUA							BSUA							BSUA							BSUA							BSUA						
GROUND+STILT	420.665	X	1	=	420.665	420.665	X	1	=	420.665	60.921	X	1	=	60.921	421.539	X	3	=	1264.589	421.539	X	3	=	1264.589	421.539	X	1	=	421.539	421.539	X	1	=	421.539
1ST FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
2nd FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
3rd FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
4th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
5th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
6th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332	454.143	X	1	=	454.143
7th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
8th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
9th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
10th FLOOR	456.612	X	1	=	456.612	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
11th FLOOR	317.832	X	1	=	317.832	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
12th FLOOR	317.832	X	1	=	317.832	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
13th FLOOR	317.832	X	1	=	317.832	456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
14th FLOOR						456.612	X	1	=	456.612	410.332	X	1	=	410.332	410.332	X	3	=	1230.996	410.332	X	3	=	1230.996	410.332	X	1	=	410.332					
TOTAL						6485.919					6158.271				5756.509					16406.513					16406.513					16406.513					5462.238					
TOTAL F.A.R. AREA OF MAIN DWELLING UNITS																																									88898.393

CALCULATION OF DWELLING UNIT																																									
FLOORS	2 BHK & 1 BHK TOWERS TOWER - A1							2 BHK & 1 BHK TOWERS TOWER - B1							2 BHK & 1 BHK TOWERS TOWER - B2,B3							2 BHK & 1 BHK TOWERS TOWER - B4,B5,B6							2 BHK & 1 BHK TOWERS TOWER - B7,B8							2 BHK & 1 BHK TOWERS TOWER - A2							TOTAL
	G+15							G+15							G+14							G+14							G+14							G+5							
GROUND+STILT	8	X	1	=	8	8	X	1	=	8	COMMUNITY HALL & ANGANWADI					8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
1ST FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
2nd FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
3rd FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
4th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
5th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
6th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24	8	X	3	=	24	8	X	1	=	8	72
7th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
8th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
9th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
10th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
11th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
12th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
13th FLOOR	8	X	1	=	8	8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
14th FLOOR						8	X	1	=	8	8	X	1	=	8	8	X	3	=	24	8	X	3	=	24											
TOTAL	168					176					176					112				336	112				336	48				48	8				8	1168

2.5" bore sewer line
4nos of sewerline
18nos of fire line
Domestic water supply line
Fire line

	MANHOLE FOR SEWERAGE
	MANHOLE FOR SEWERAGE
G.L.	GROUND LEVEL
I.L.	INVERT LEVEL
C.L.	CONNECTION LEVEL
M.	METRE
L	LENGTH
B.F.V.	BUTTER FLY VALVE
C.V.	CHECKNON-RETURN VALVE

LEGEND

1 & 150 MM Ø SWP
2 & 150 MM Ø WWP
2 & 150 MM Ø RWP
3 & 50 MM Ø GIP UP DN S
4 & 40 MM Ø GIP DN UP S
5 & 40 MM Ø GIP DN DN S
6 & 40 MM Ø GIP UP DN S
7 & 100 MM Ø MS
8 MAIN SEWER PIPE
9 300 MM Ø RCC
RAIN WATER PIPE
10 DOMESTIC WATER SUPPLY
11 FLUSHING WATER SUPPLY
12 HOT WATER SUPPLY

CALCULATION OF MUMTY & MACHINE ROOM COVERED AREA				
TOWER - A1, A2 & B1 TO B8	65.857	X	10	= 658.570
COMMERCIAL 1	49.769	X	1	= 49.769
COMMERCIAL 2	39.898	X	1	= 39.898
TOTAL				697.237

CALCULATION FOR GROUND COVERAGE	
AREA UNDER TOWERS (A1 &2 TO B8)	3943.786 SQM
COMMERCIAL AREA (2NO)	899.1952 SQM
COMMUNITY HALL AND ANGANWADI (TOWER B2)	442.931 SQM
GRAND TOTAL	5195.9712 SQM
CALCULATION FOR COVERAGE ON TYPICAL FLOOR	
TOWER A1 A2 & B1 TO B8	658.598 SQM
COMMERCIAL 1 & 2 (MUMTY FLOOR	697.237 SQM
TOTAL	1355.835 SQM

CALCULATION OF DENSITY		
TOTAL NO OF FLATS	1108	NOS.
NO OF DOCTORS IN MAIN BLDG	8	NOS.
AREA IN ACRES	6.50	ACRES
ACHIEVED DENSITY - PERSONS PER ACRE	852.31	PPA.

CALCULATION OF COVERED AREA IN SLTM	
FAR AREA OF RESIDENTIAL	88898.393SQM
F.A.R. AREA OF COMMERCIAL	1842.688SQM
COVERED AREA OF MUMTY & MACHINE ROOM	697.237SQM
COVERED AREA OF GROUND FLOOR	5195.971SQM
COVERED AREA OF ANGANWADI CUM CRECHE	202.800SQM
COVERSE AREA OF COMMUNITY HALL	243.315SQM
TOTAL	92218.8.8SQM

BEHERA & ASSOCIATES
(Plumbing & Fire Consultant

SEWERAGE LAYOUT

DRG. TITLE: SITE PLAN

PROJECT: REVISED AFFORDABLE GROUP HOUSING SCHEME MEASURING 6.50625 ACRES IN SECTOR - 05, SOHNA, VIDE LICENSE NO. 49 OF 2014, DATED 18-06-2014.

CLIENT: MVN INFRASTRUCTURE PVT. LTD.

ARCHITECT: GAUTAM & GAUTAM ASSOCIATES
ARCHITECTURE • URBAN PLANNING • LANDSCAPING • INTERIORS
H.O : S-484,LGF,GK-2(NEW DELHI STUDIOS :1152 SEC-15,PARDANDD
TEL : 011-41664122-24 TEL : 0129-4864643-53

ARCHITECT'S SIGNATURE:
AJAY GAUTAM (ARCHITECT)
GAUTAM & GAUTAM ASSOCIATES
ARCHITECTS • ENGINEERS • VALUERS
S-484, Lajpat Nagar, Gr. Floor, New Delhi-110024
CA/2001/33811

OWNER'S SIGNATURE:
For MVN Infrastructure Pvt. Ltd.
Authorized Signatory

Superintending Engineer
HUDA Circle IV Gurugram

DRG. NO.: 001
SCALE: 1:300
DATE: JUL....2015

For MVN Infrastructure Pvt. Ltd.
Auth. Signatory

For Service Plan Estimate Only

Executive Engineer
HUDA Divn. No. VI,
Gurugram

Addl. Chief Engineer
HUDA Gurugram

NOTE:-

1) WATER HARVESTING - Certified that the building shall satisfy the water harvesting requirements as well as minimum anticipated discharge of water flows more than 10,000 lits. on sites where drip shall include usable waste water recycling system. Recycled water should be used for Horticulture purposes.

2.) STRUCTURE STABILITY - Certified that the structural parts of the building have been designed by us in the basis of calculations and are considered safe and in accordance with the permissible stresses and deformations not laid down for the type laws. The building is quite safe from earthquake point of view.

3) FIRE SAFETY - We shall provide proper fire safety measures as per the rules of HMA / NBC

4) SOLAR WATER HEATING - We shall provide solar water heating system as per norms specified by Horecda