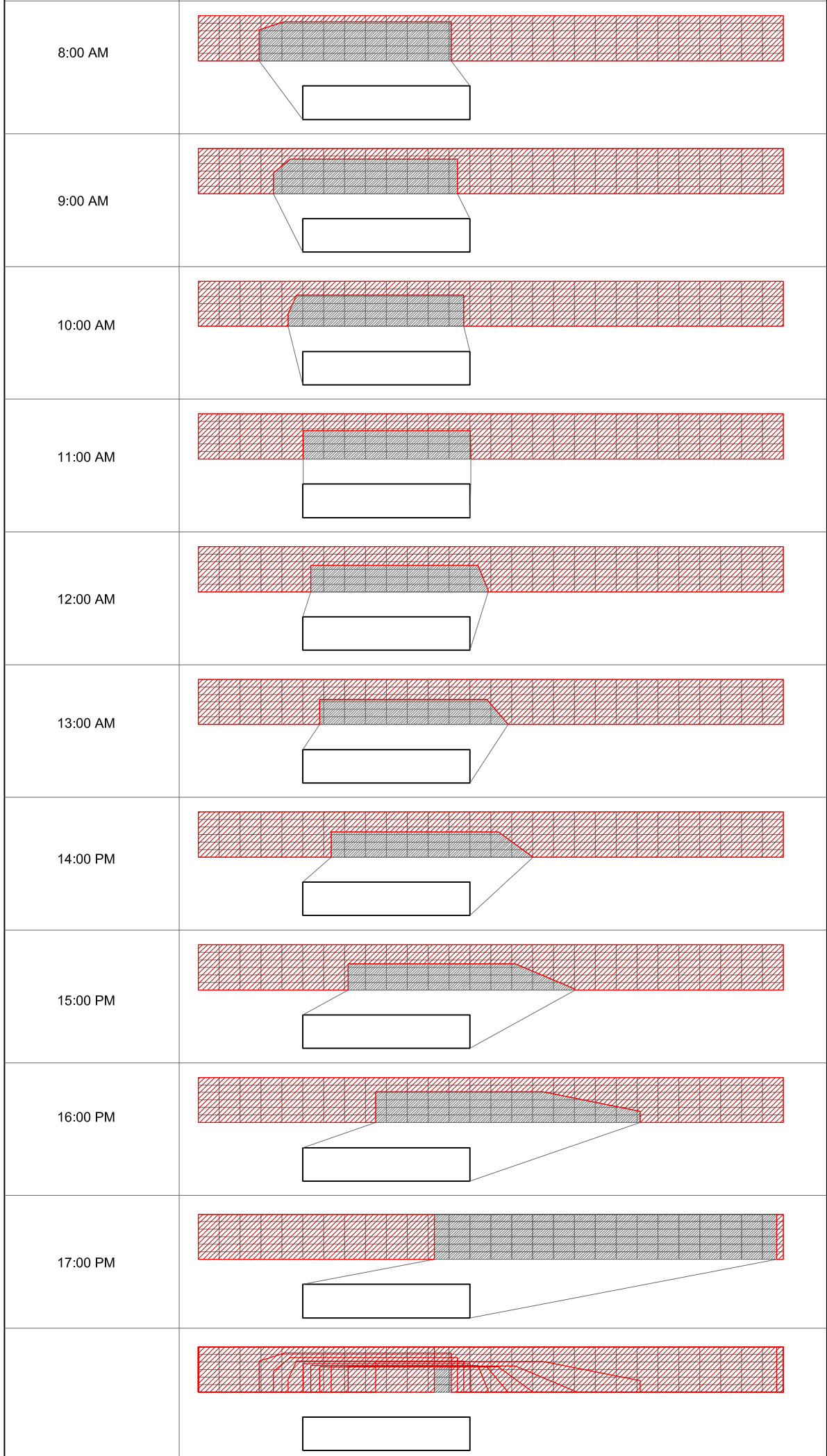


**PROPOSAL FOR PLOT A&B - PROPOSAL FOR BLOCKS**  
**S H A D O W   A N A L Y S I S**

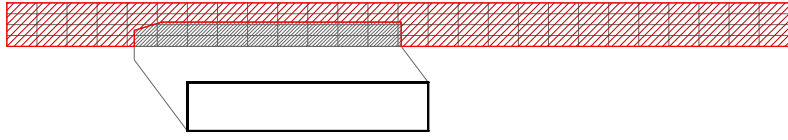
Unit 60m x 12m x 6fl. @ 9m



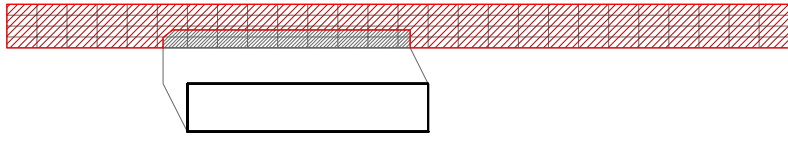


Unit 60m x 12m x 3 fl. @ 9m

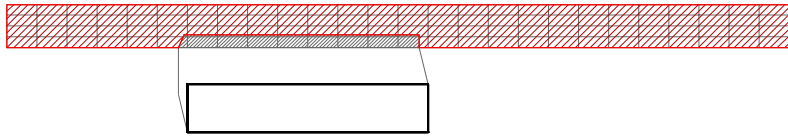
8:00 AM



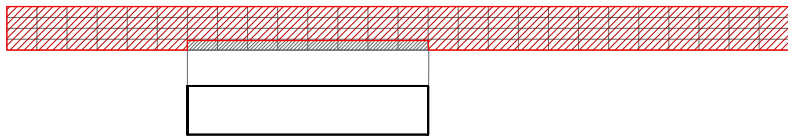
9:00 AM



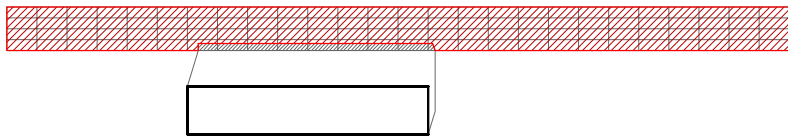
10:00 AM



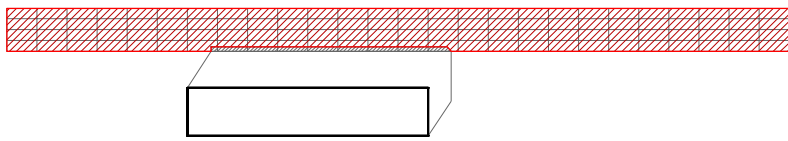
11:00 AM



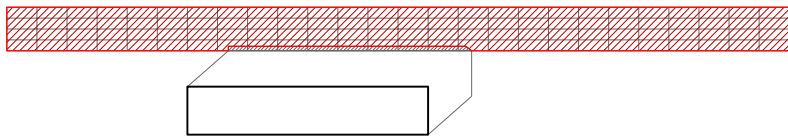
12:00 AM



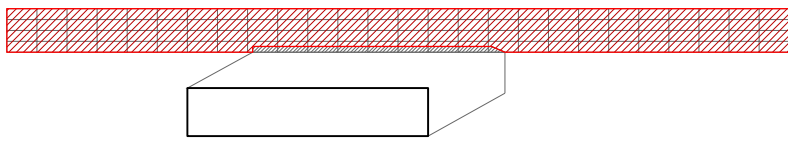
13:00 AM



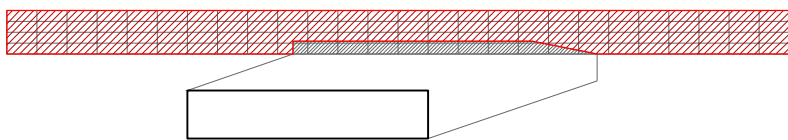
14:00 PM



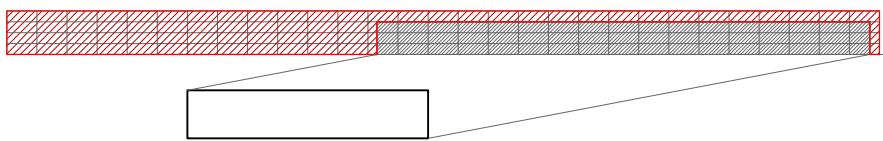
15:00 PM



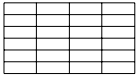
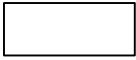
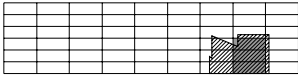
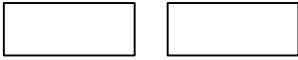
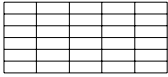
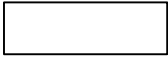
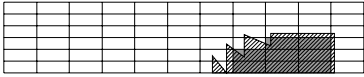
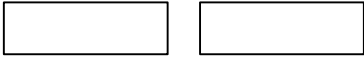
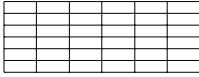
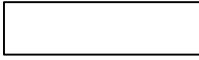
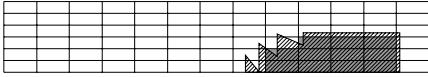
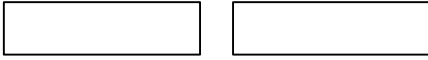
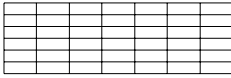
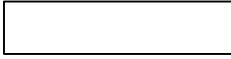
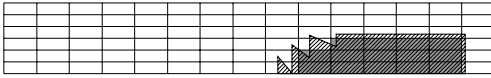
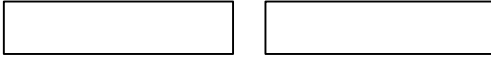
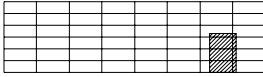

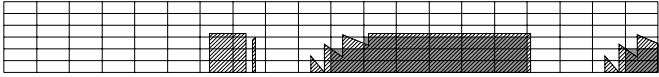

16:00 PM



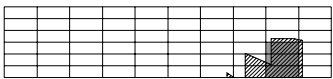
17:00 PM



	Lane of 7.5m between 2 units
8:00 AM	<p>Diagram showing a narrow lane between two units. A small red hatched area is located in the center of the lane.</p>
9:00 AM	<p>Diagram showing a slightly wider lane between two units. A red hatched area is located in the center of the lane.</p>
10:00 AM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
11:00 AM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
12:00 AM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
13:00 AM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
14:00 PM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
15:00 PM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
16:00 PM	<p>Diagram showing a wider lane between two units. A red hatched area is located in the center of the lane.</p>
17:00 PM	<p>Diagram showing a very wide lane between two units. A red hatched area is located in the center of the lane.</p>
	<p>Diagram showing a lane with a large red hatched area in the center.</p>

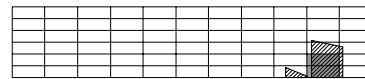
6 FLOORS	1 UNITS	2 BLOCKS	
		@7.5m	
BLOCKS 30m 4 units x 7.5m	 	 	
Blocks 37.5m 5 units x 7.5m	 	 	
Block 45m 6 units x 7.5m	 	 	
Blocks 52.5m 7 units x 7.5m	 	 	
Block 60m 8 units x 7.5m	 	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>120-19=101</span> <span style="border: 1px solid red; padding: 2px;">209</span> <span>108</span> </div>  	

@15m

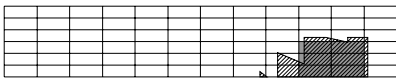


Two empty rectangular boxes for data entry.

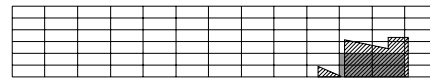
@22.5m



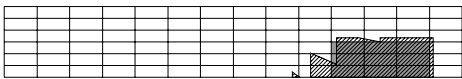
Two empty rectangular boxes for data entry.



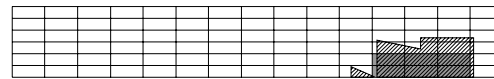
Two empty rectangular boxes for data entry.



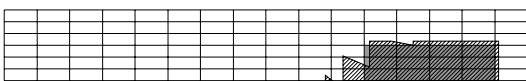
Two empty rectangular boxes for data entry.



Two empty rectangular boxes for data entry.



Two empty rectangular boxes for data entry.

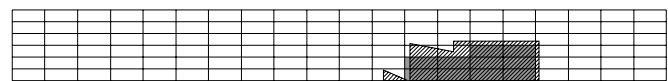


Two empty rectangular boxes for data entry.

120-10=110

194

84

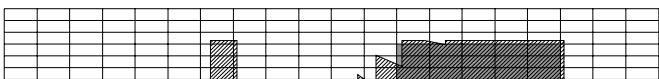


Two empty rectangular boxes for data entry.

120-15=105

201

96

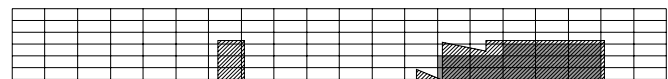


Two empty rectangular boxes for data entry.

120-13=107

203

96

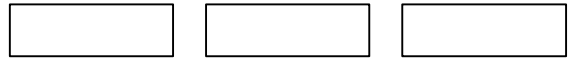
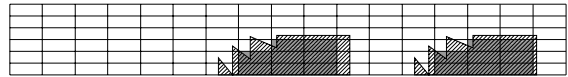
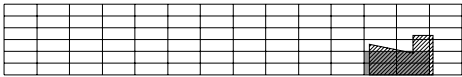
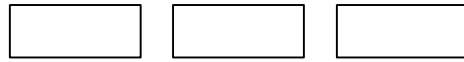
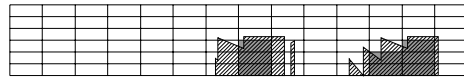
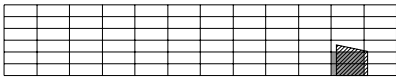


Two empty rectangular boxes for data entry.

3 BLOCKS

@30m

@7.5m



120-7=113

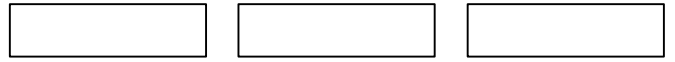
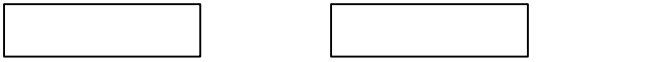
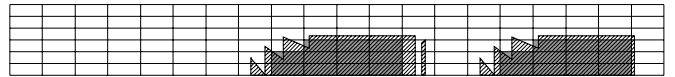
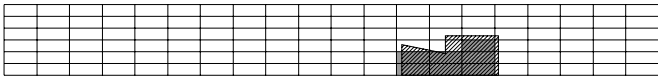
185

72

120-22=98

206

108



120-10=110

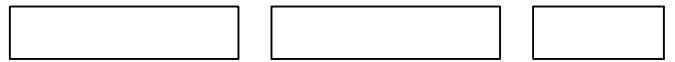
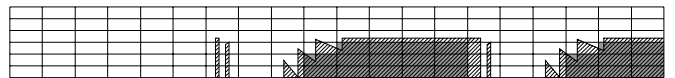
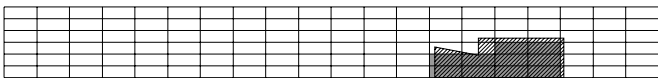
194

84

120-22=98

206

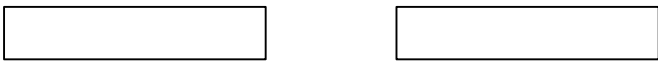
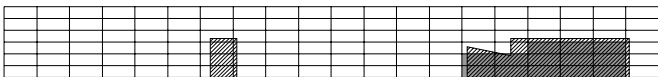
108



120-13=107

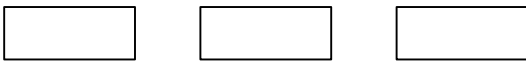
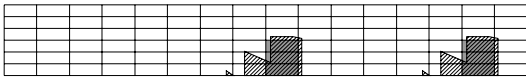
203

96





@15m

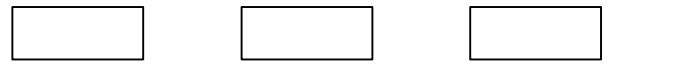
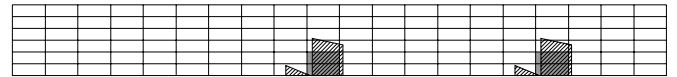


@22.5m

$120-4=116$

188

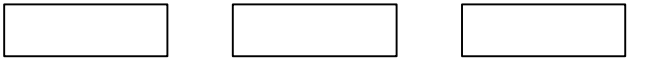
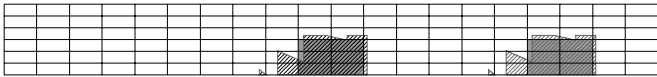
72



$120-12=108$

198

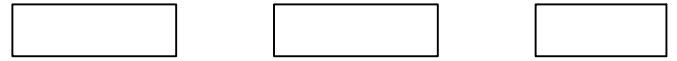
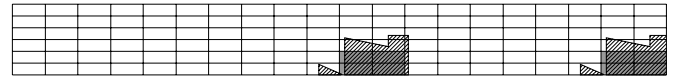
90



$120-8=112$

196

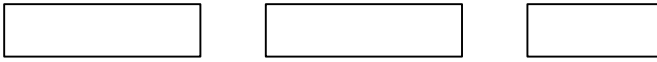
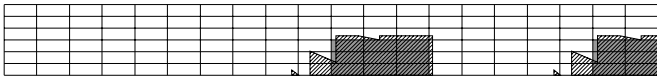
84



$120-15=105$

201

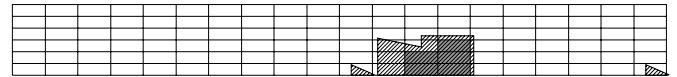
96



$120-5=115$

199

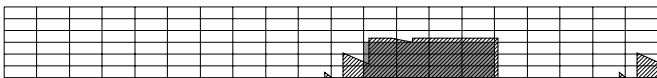
84

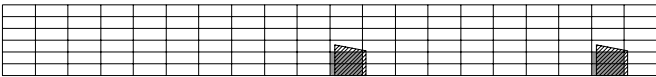
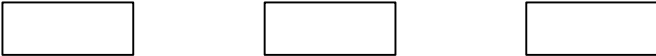
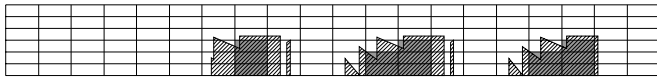

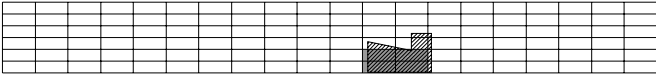

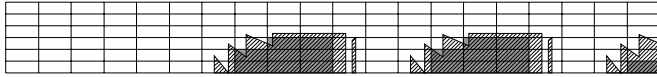



$120-12=108$

204

96



		4 BLOCKS	
@30m		@7.5m	
120-4=116	188	72	
			
			
120-13=107	203	96	
			
			
120-4=116	188	72	
			
			
120-17=103	205	102	
			
			

L  
120-6=  
Number  
the ne  
at leas  
light in



		@15m		
203	96	120-6=114	198	84
205	102			
		<b>LEGEND :</b>		
120-6=114	198	84		
Number of units on the next row having at least 1h sun light in December 21	Total number of units on of the two rows having at least 1h sun light in December 21	Number of units on the first row having at least 1h sun light in December 21		
	<b>Area without sun light during December 21</b>			
	<b>Area being taken out</b>			

EXPERIENCE OF LANE DESIGN  
FOR PLOT A ( area : 30600 sqm )

6 FLOOR BLOCK:

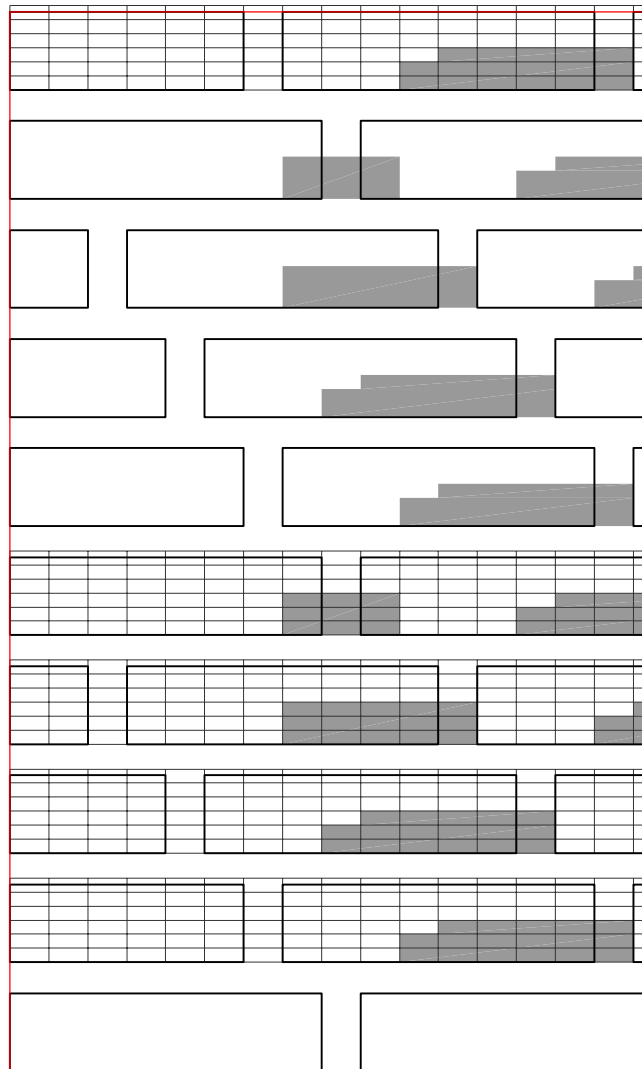
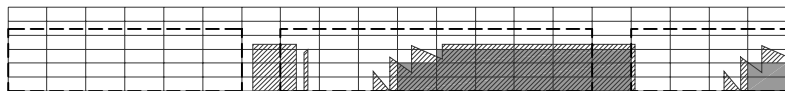
Total built areas :  
 $19,687 \times 6 = 118,128$

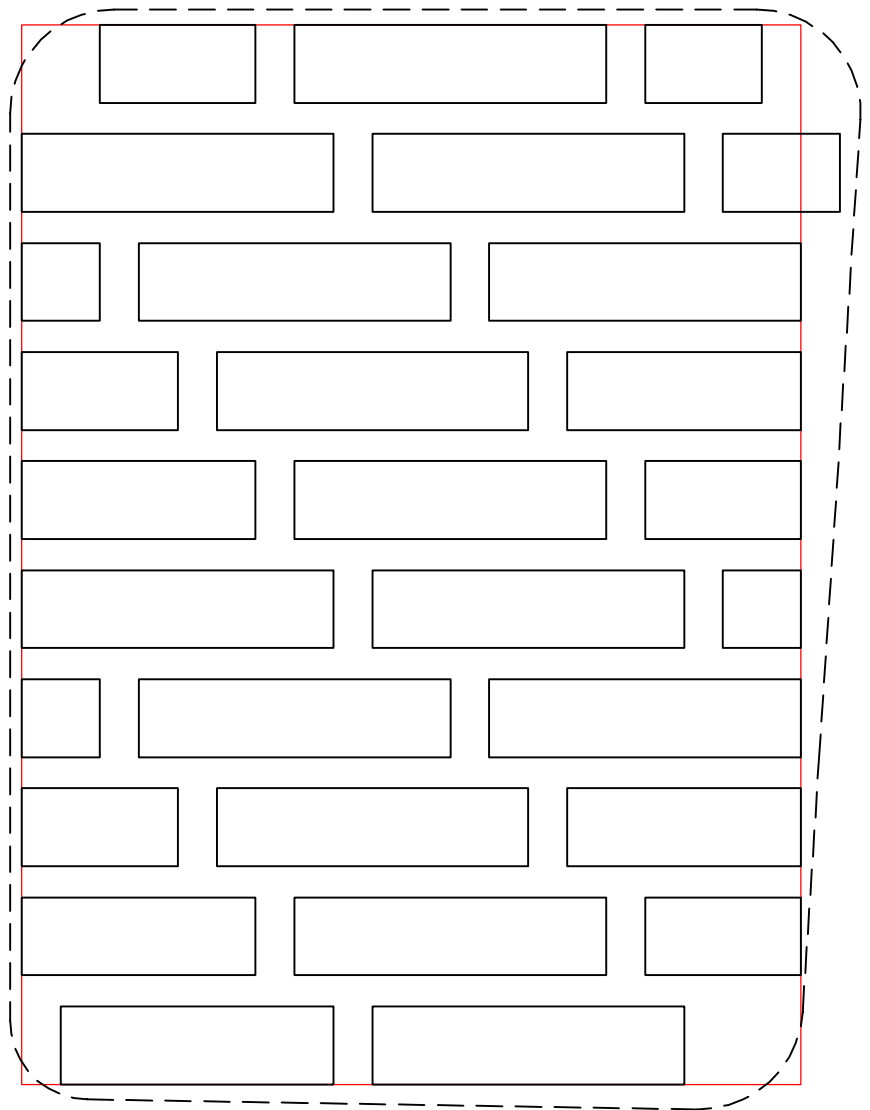
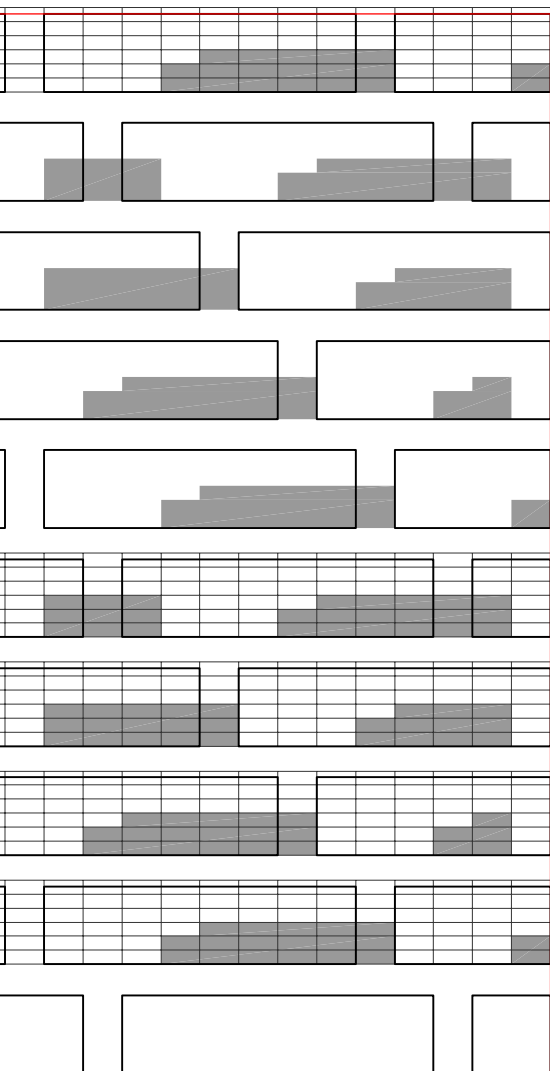
F.A.R = 3.86

Taken out units :  
 $170 \times 7.5 \times 12 = 15,3$

TOTAL :  
 $118,128 - 15,3 = 102,828$

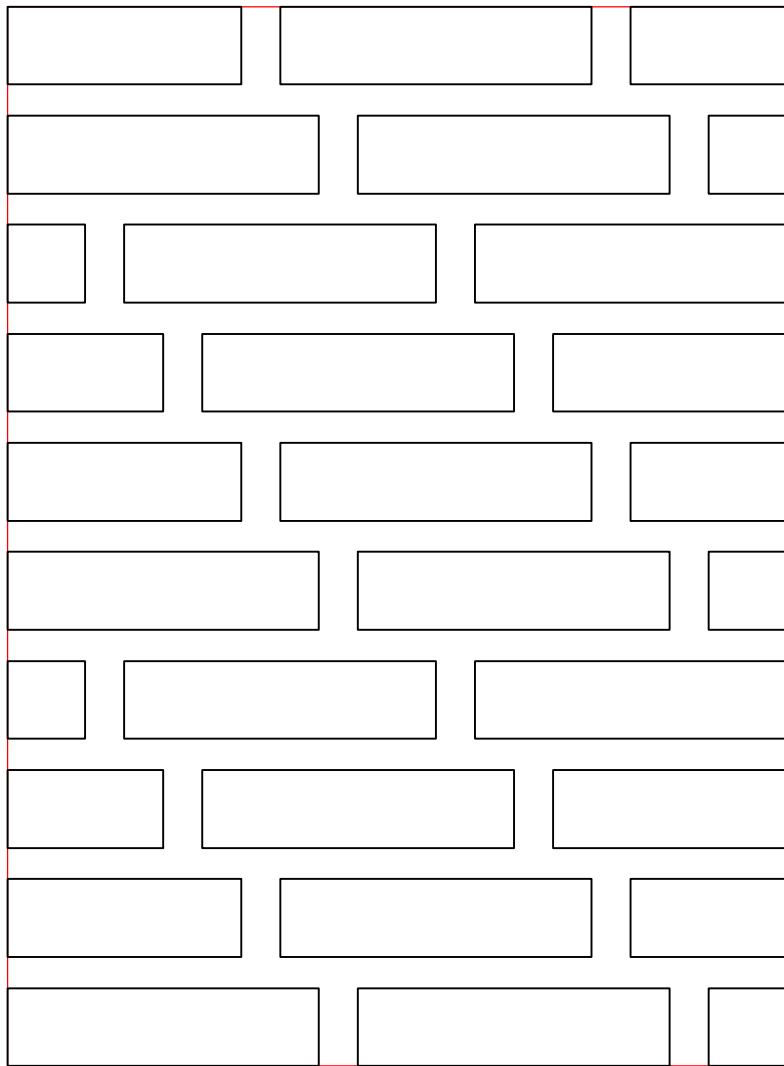
F.A.R : 3.36



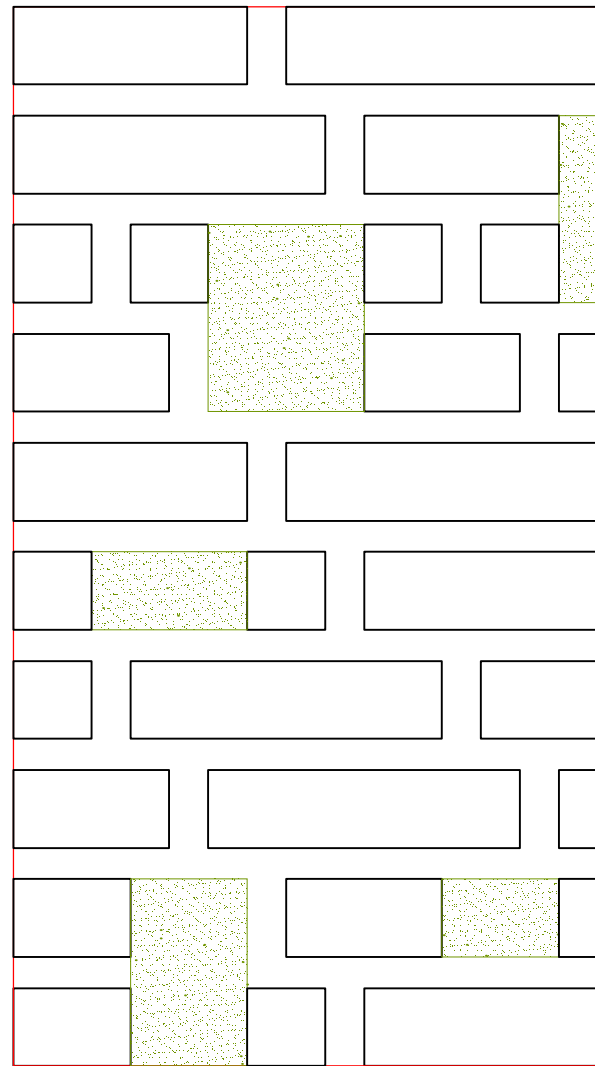


PLOT A ( area : 30600 sqm )

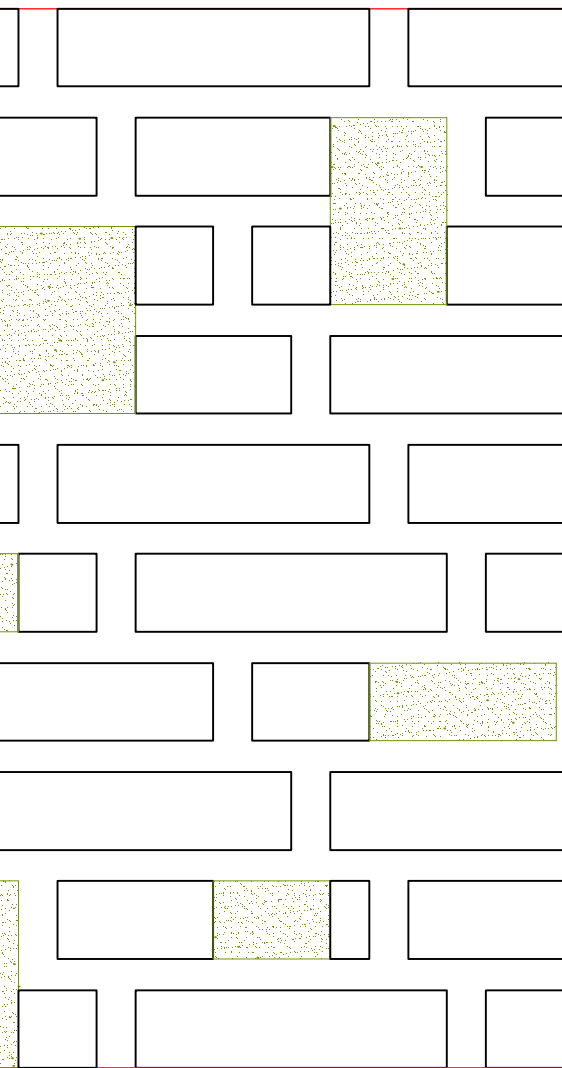
All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m



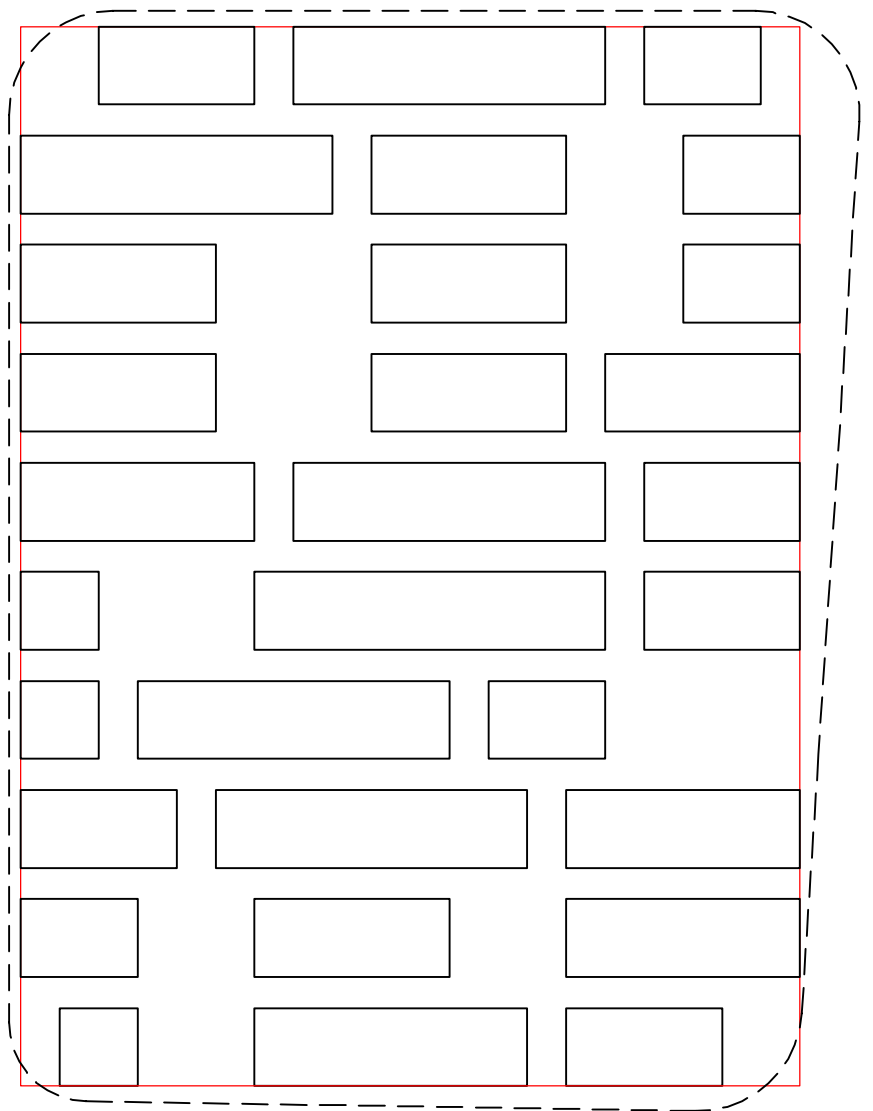
The sequence to get the most units



Introduce the green inner space



space

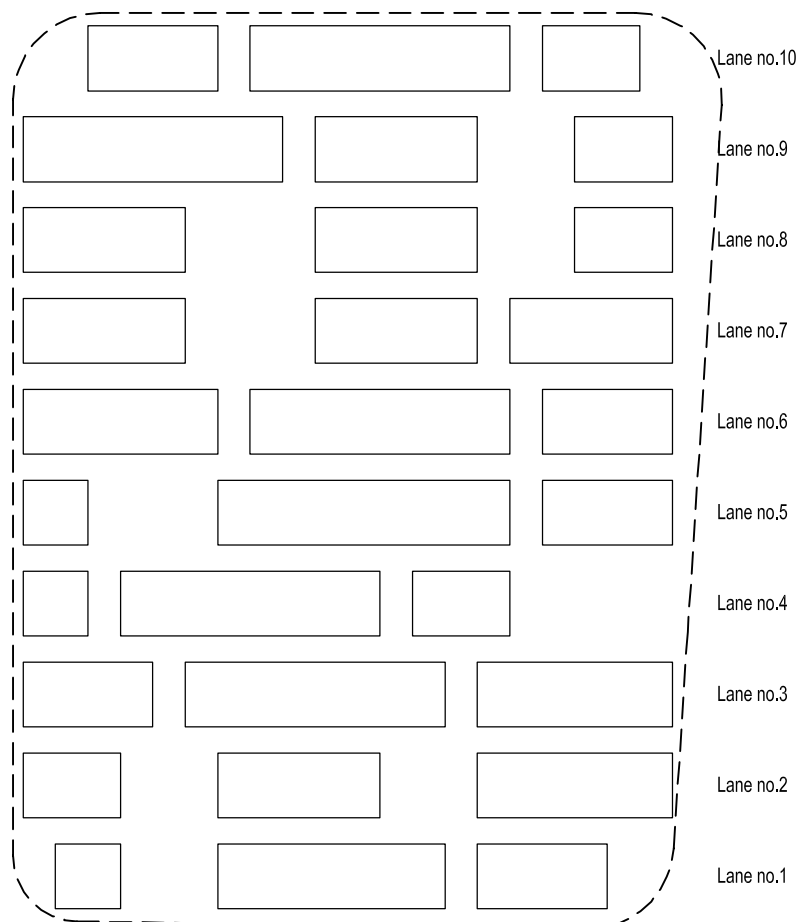


Result

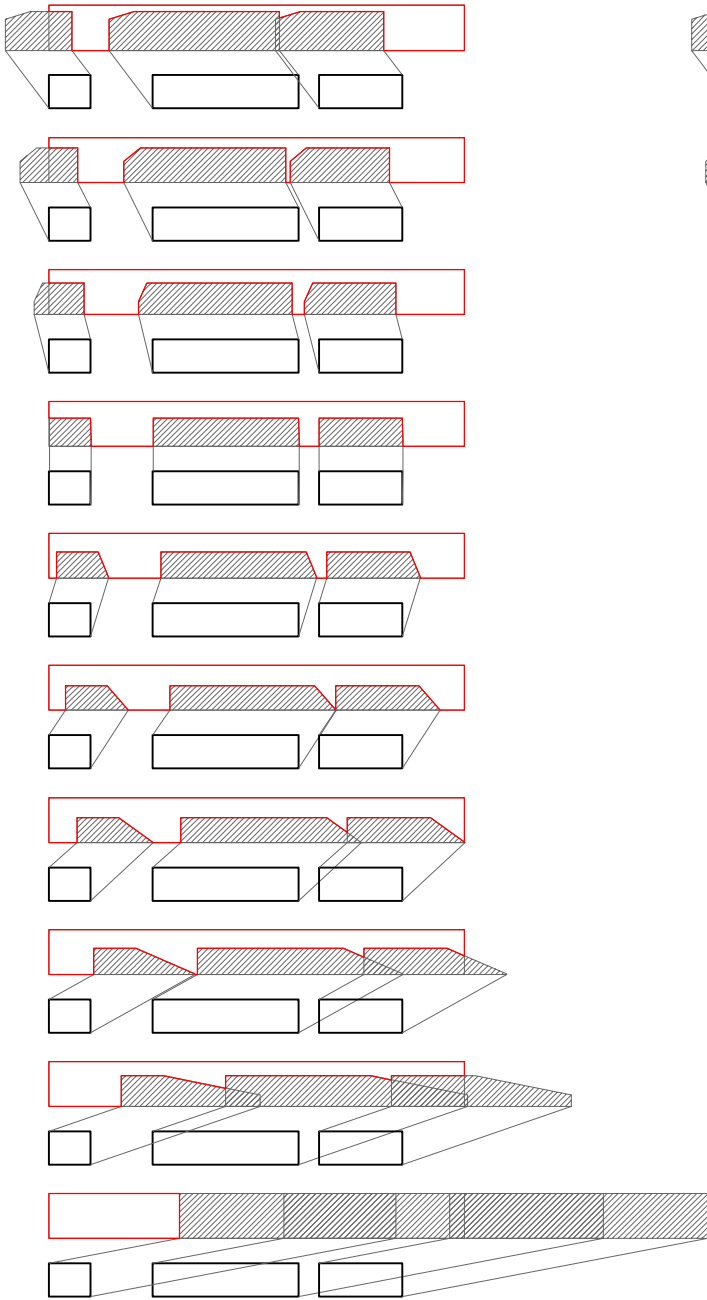
PLOT A ( area : 30600 sqm )

All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m

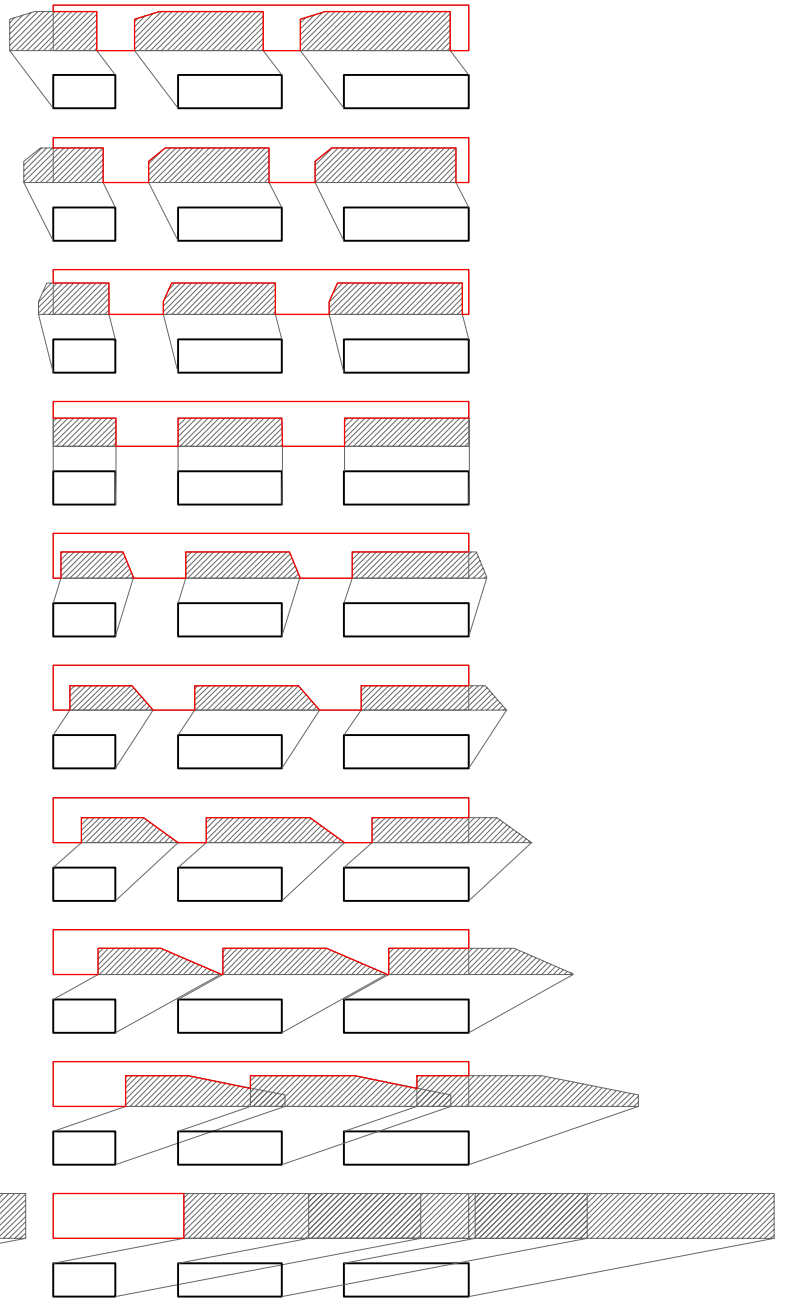
SHADOW ANALYSIS OF EACH LANE



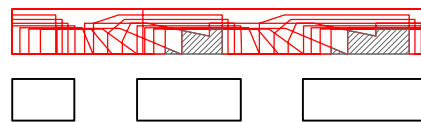
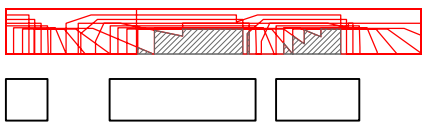


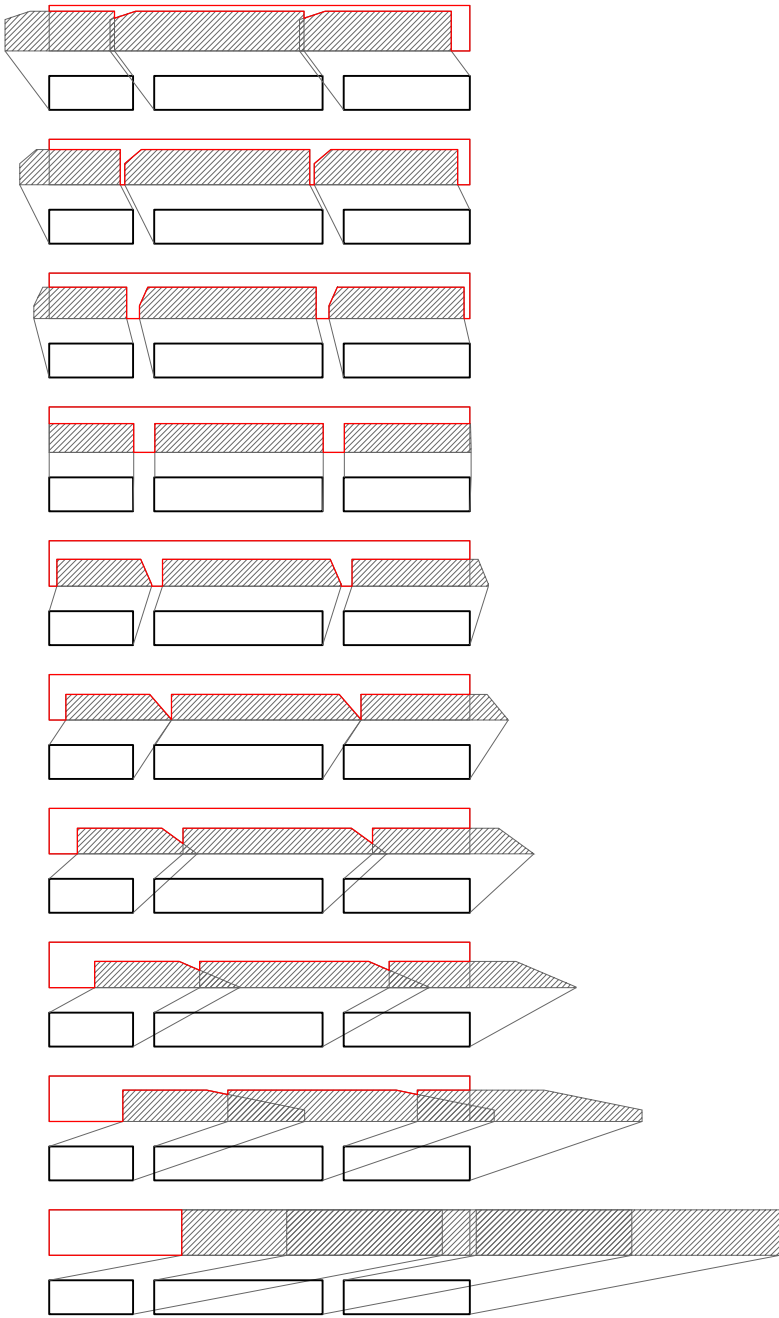


LANE no.1

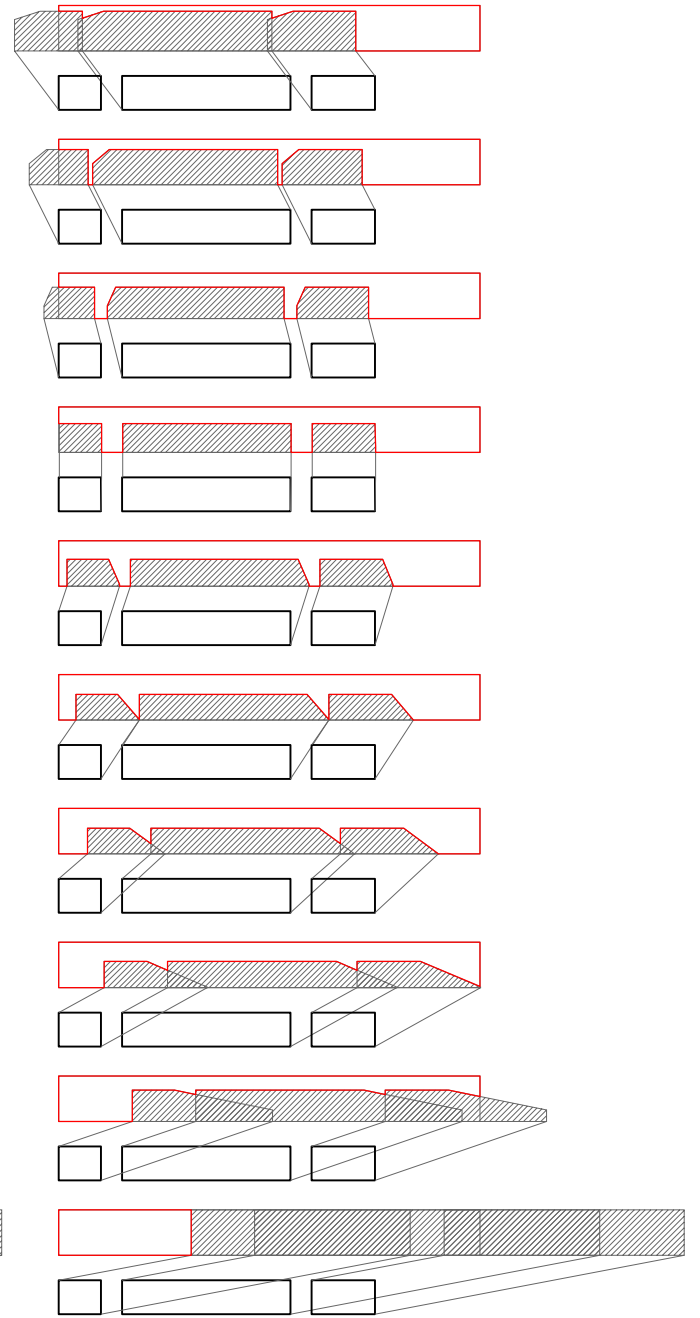


LANE no.2

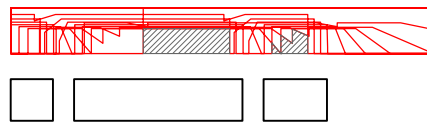
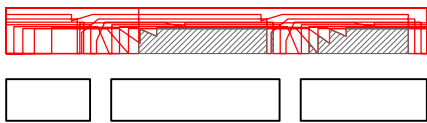


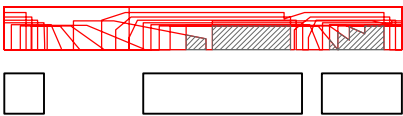
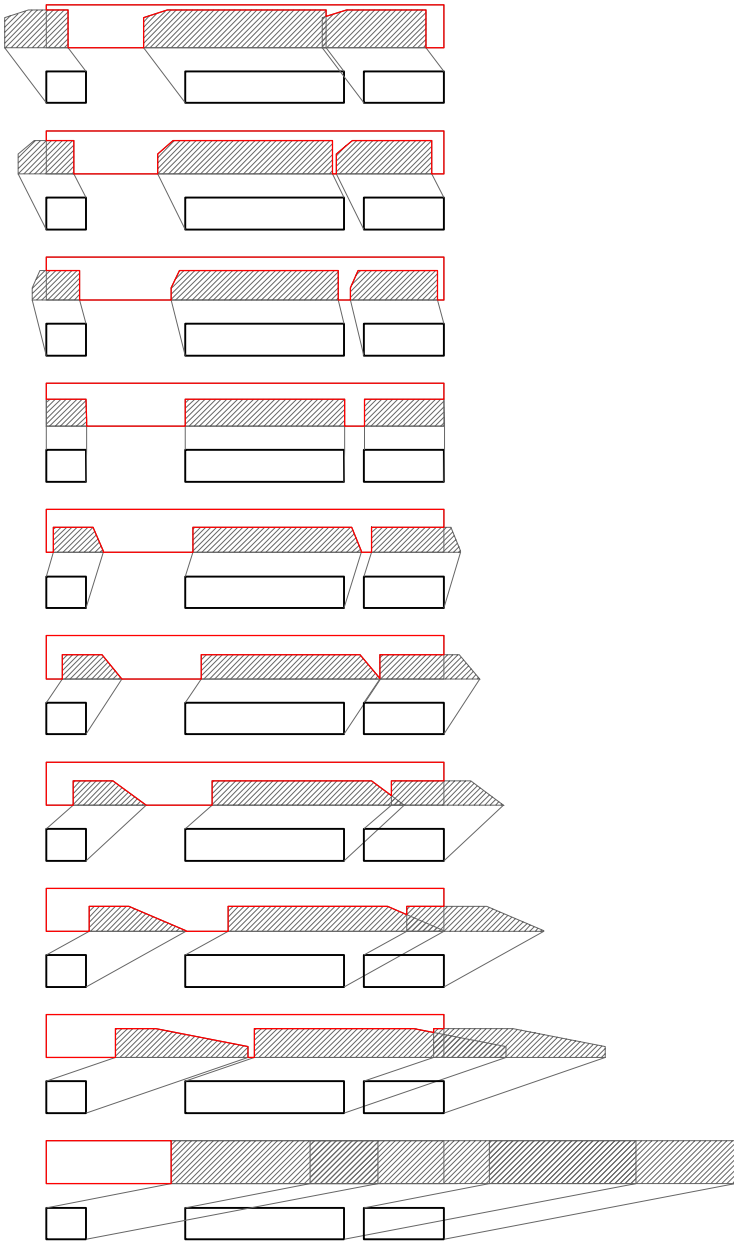


LANE no.3

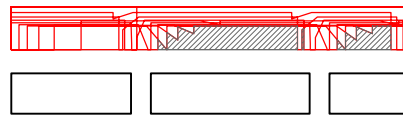
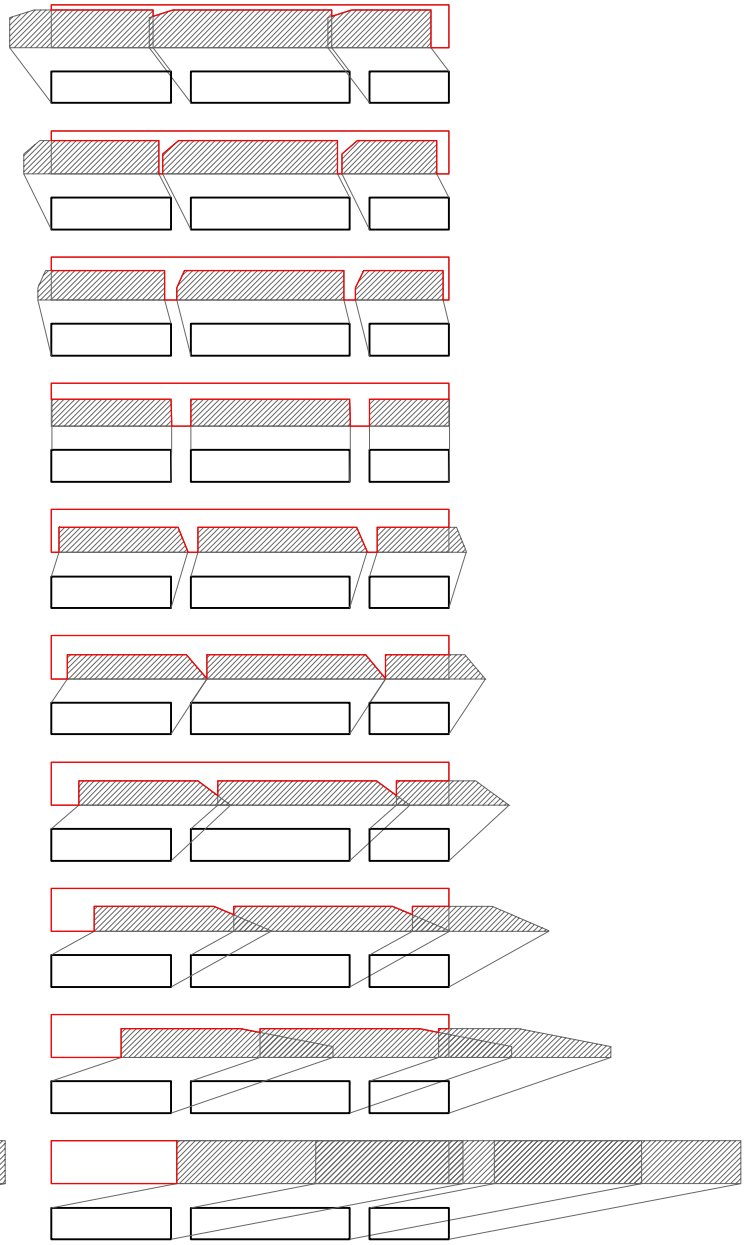


LANE no.4

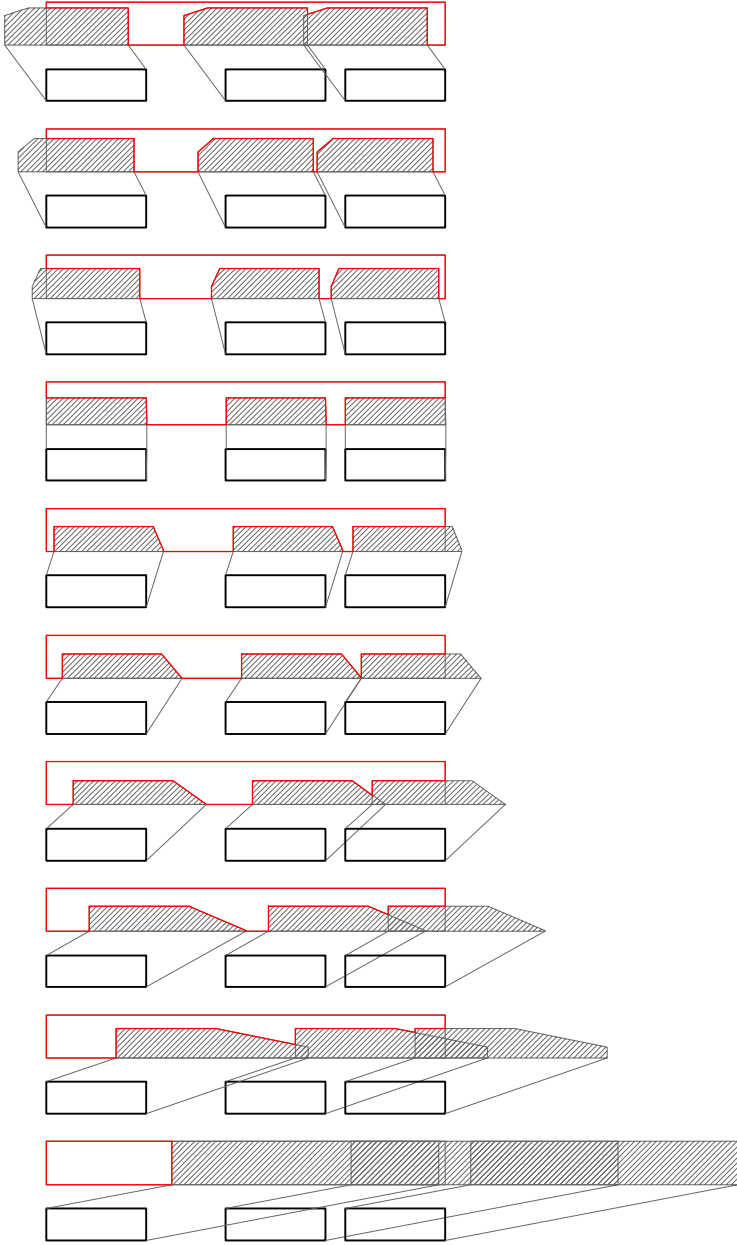




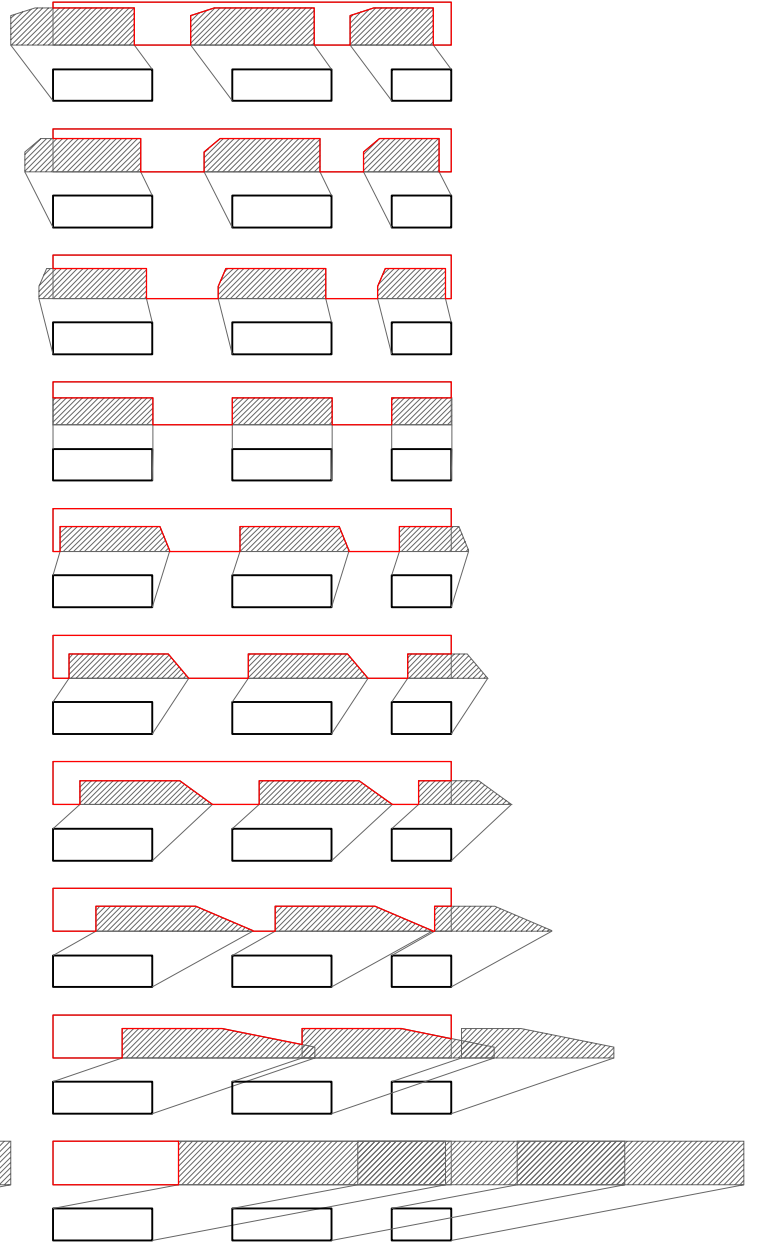
LANE no.5



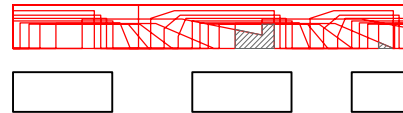
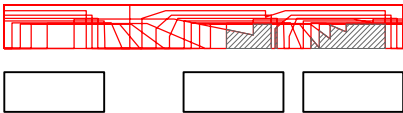
LANE no.6

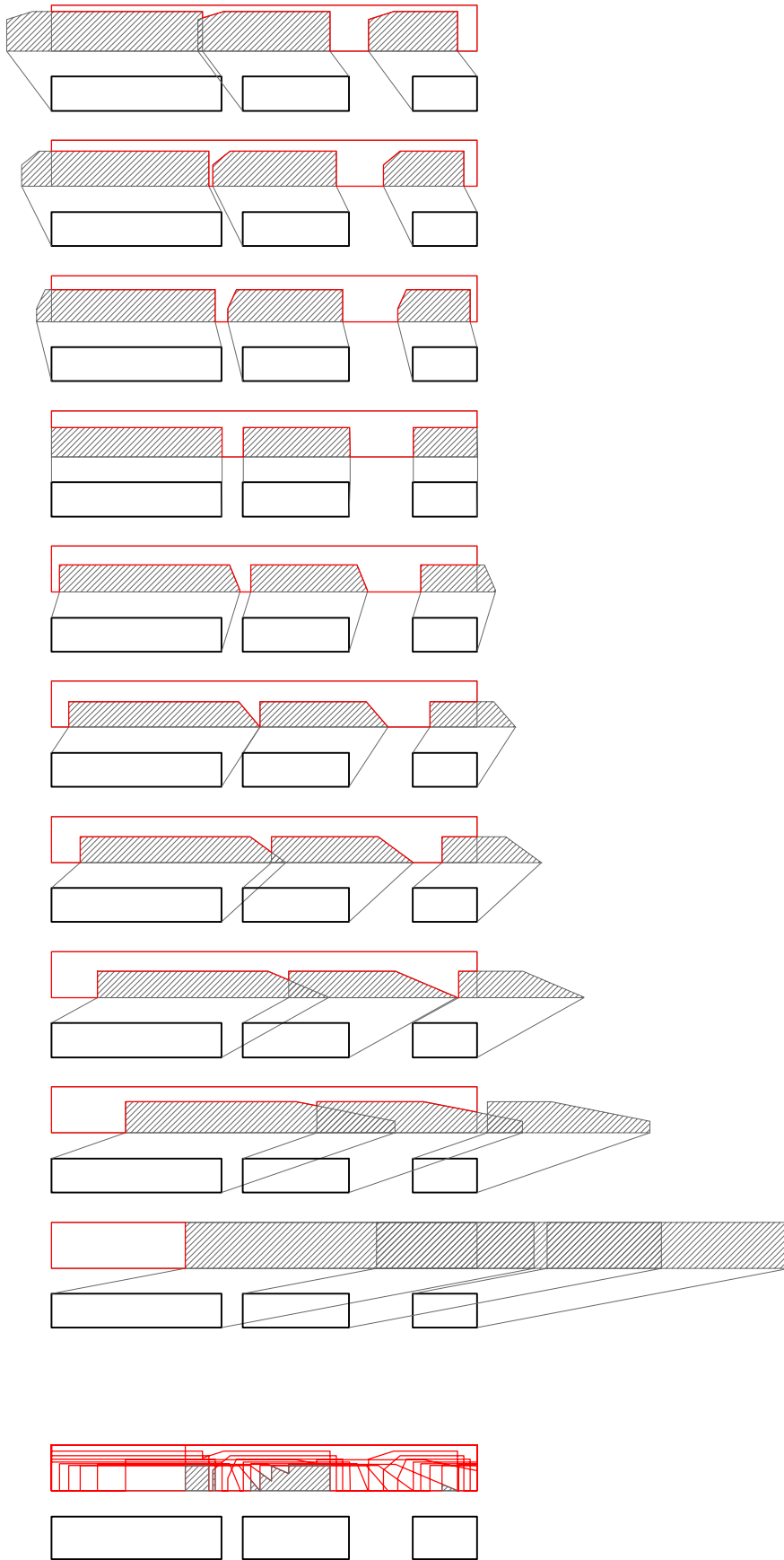


LANE no.7

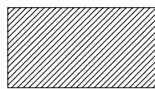
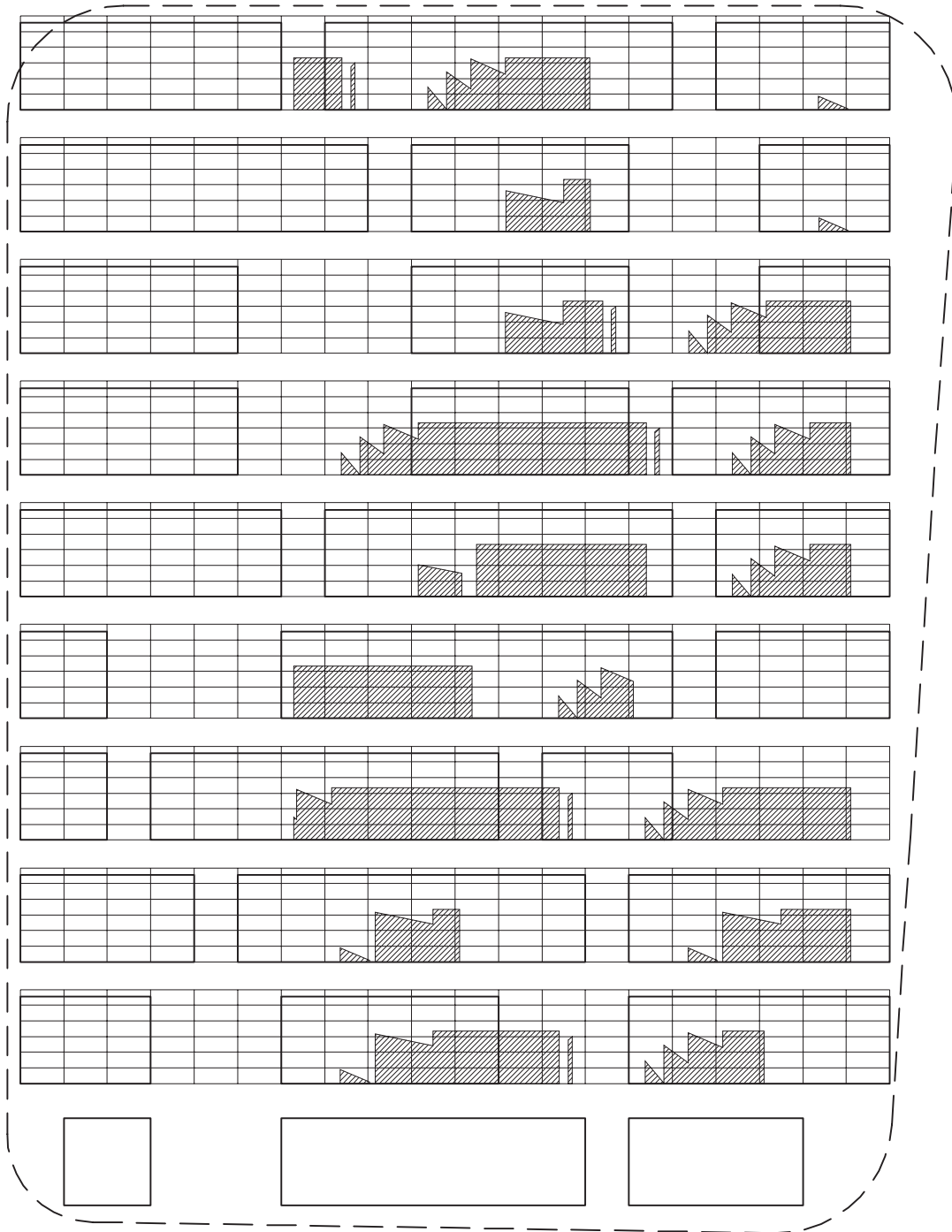


LANE no.8



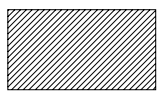
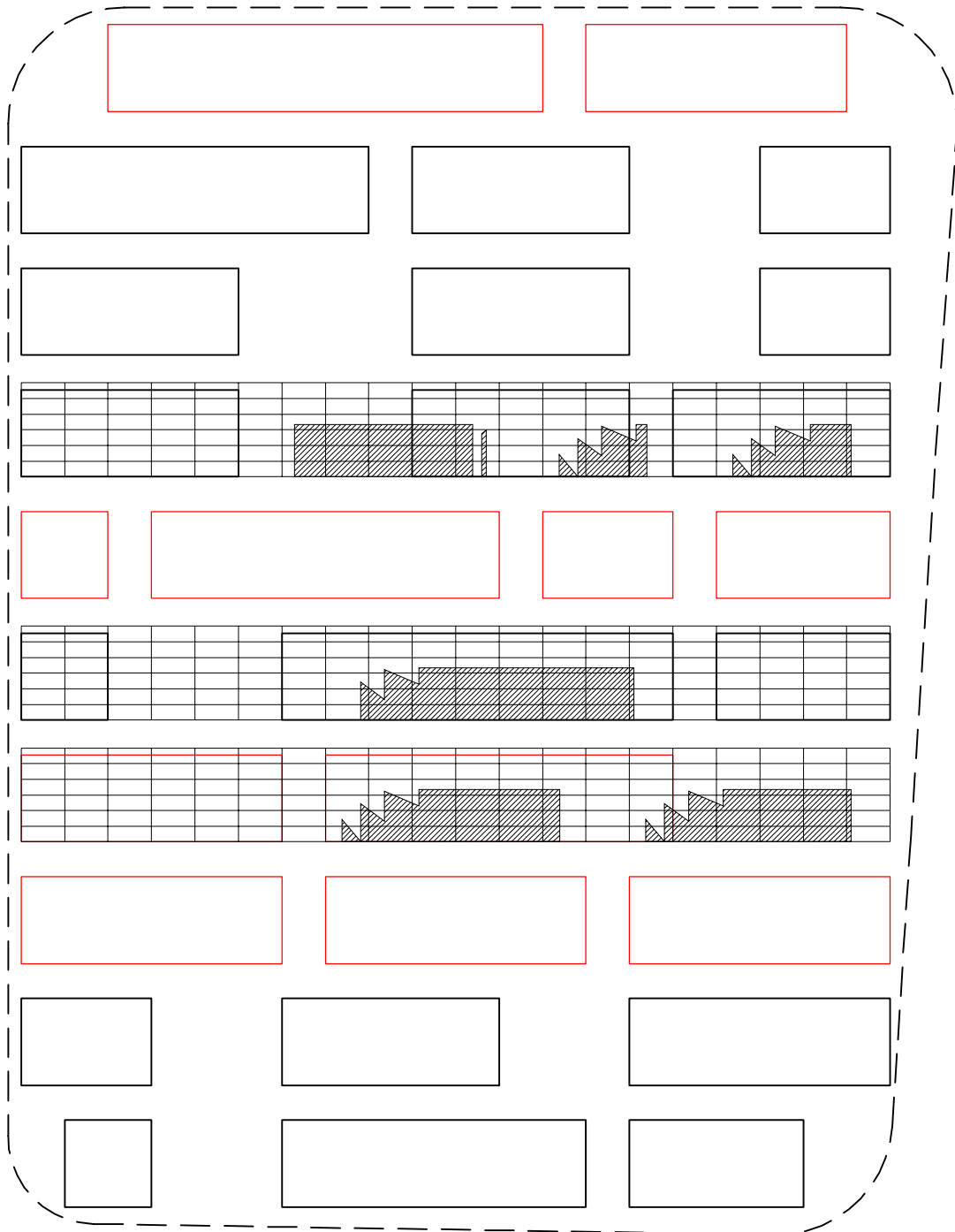


PLOT A ( area : 30600 sqm )  
All blocks are 6 floors



Areas on elevation without sunlight during December 21

PLOT A ( area : 30600 sqm )  
All blocks are 6 floors

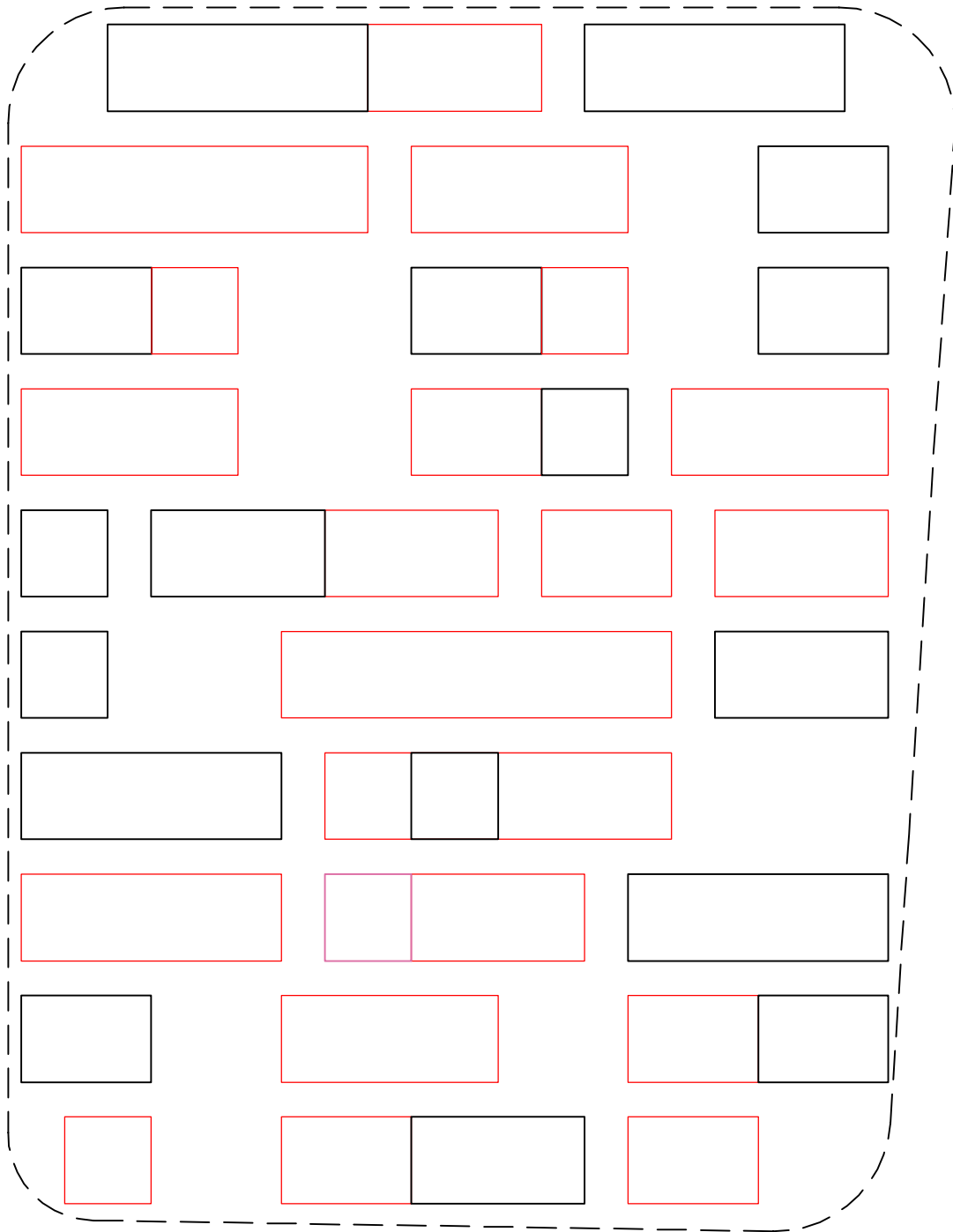


Areas on elevation without sun light during December 21



In modification

PLOT A ( area : 30600 sqm )



Block with 6 floors



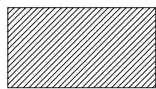
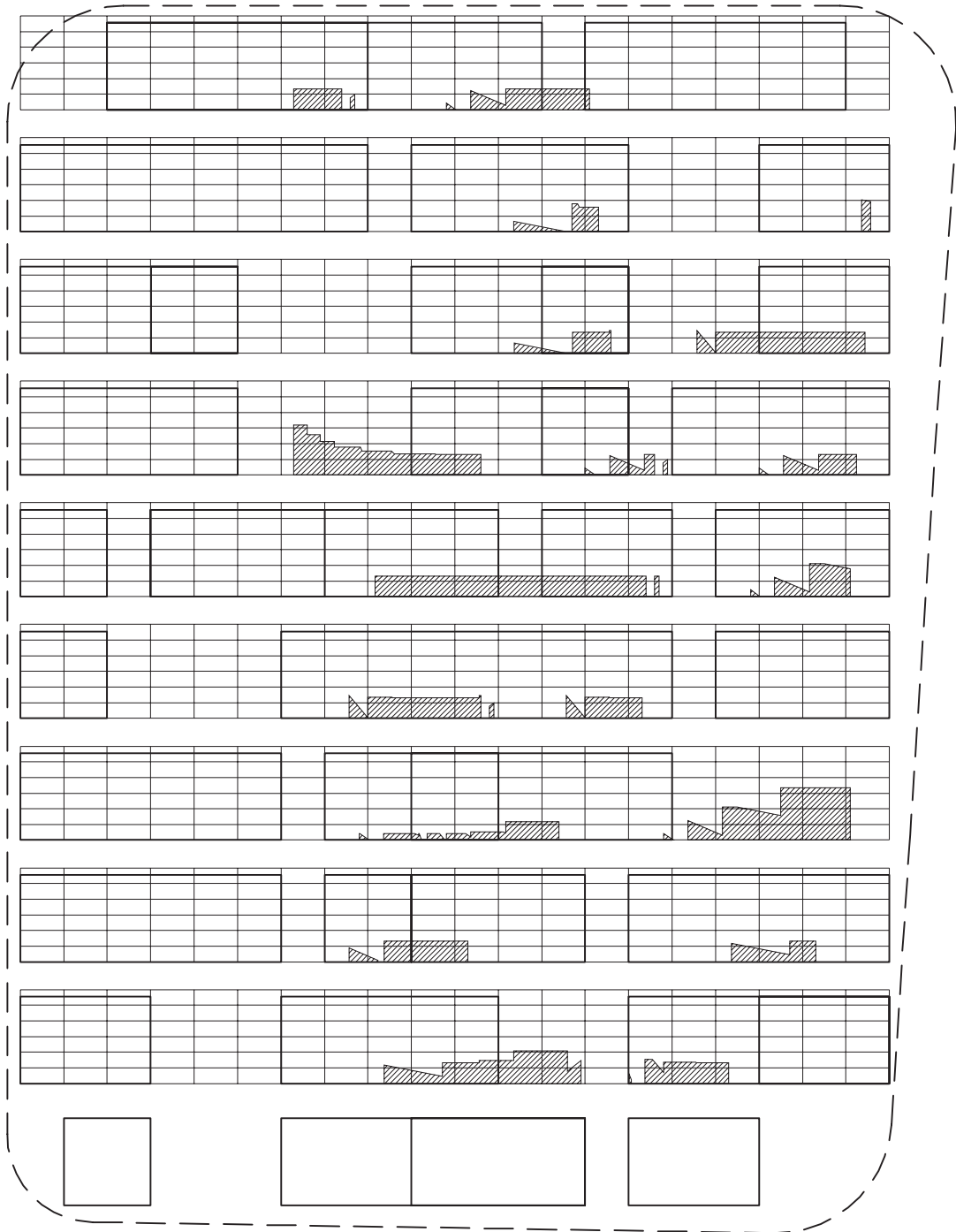
Block with 4 floors



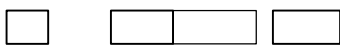
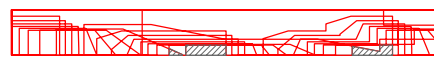
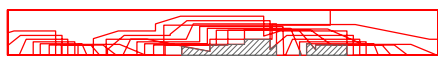
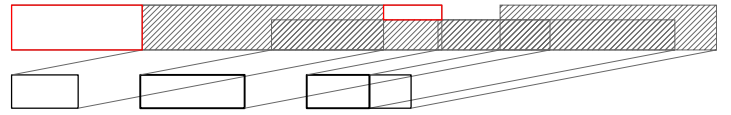
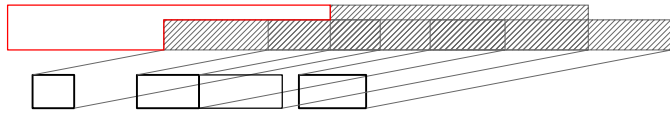
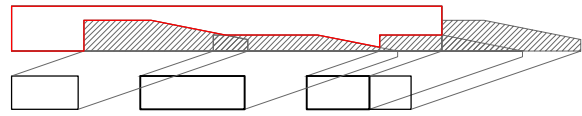
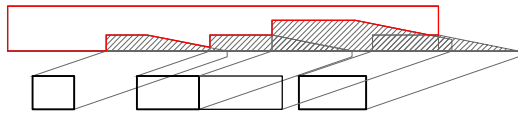
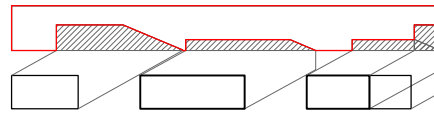
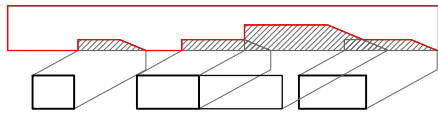
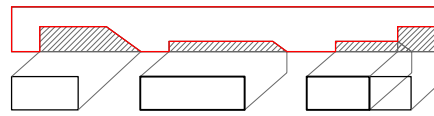
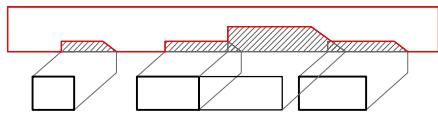
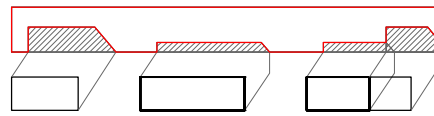
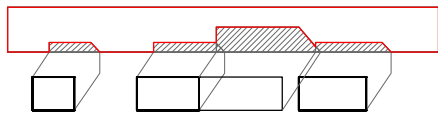
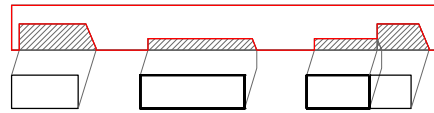
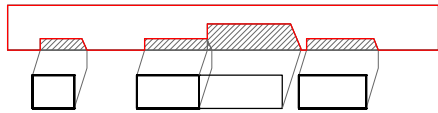
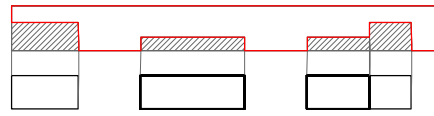
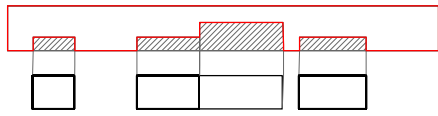
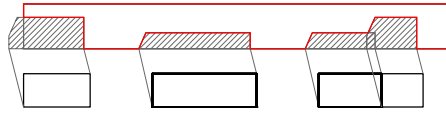
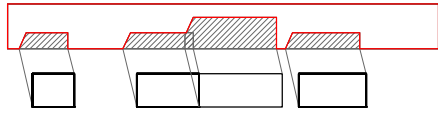
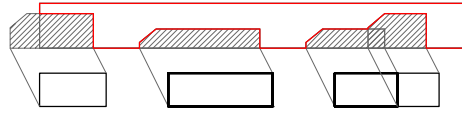
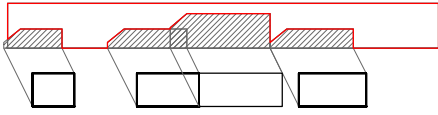
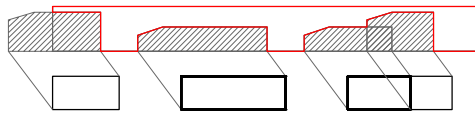
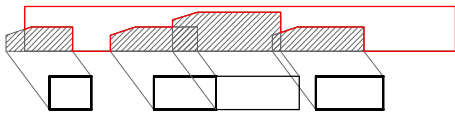
Block with 3 floors



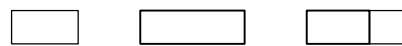
PLOT A ( area : 30600 sqm )



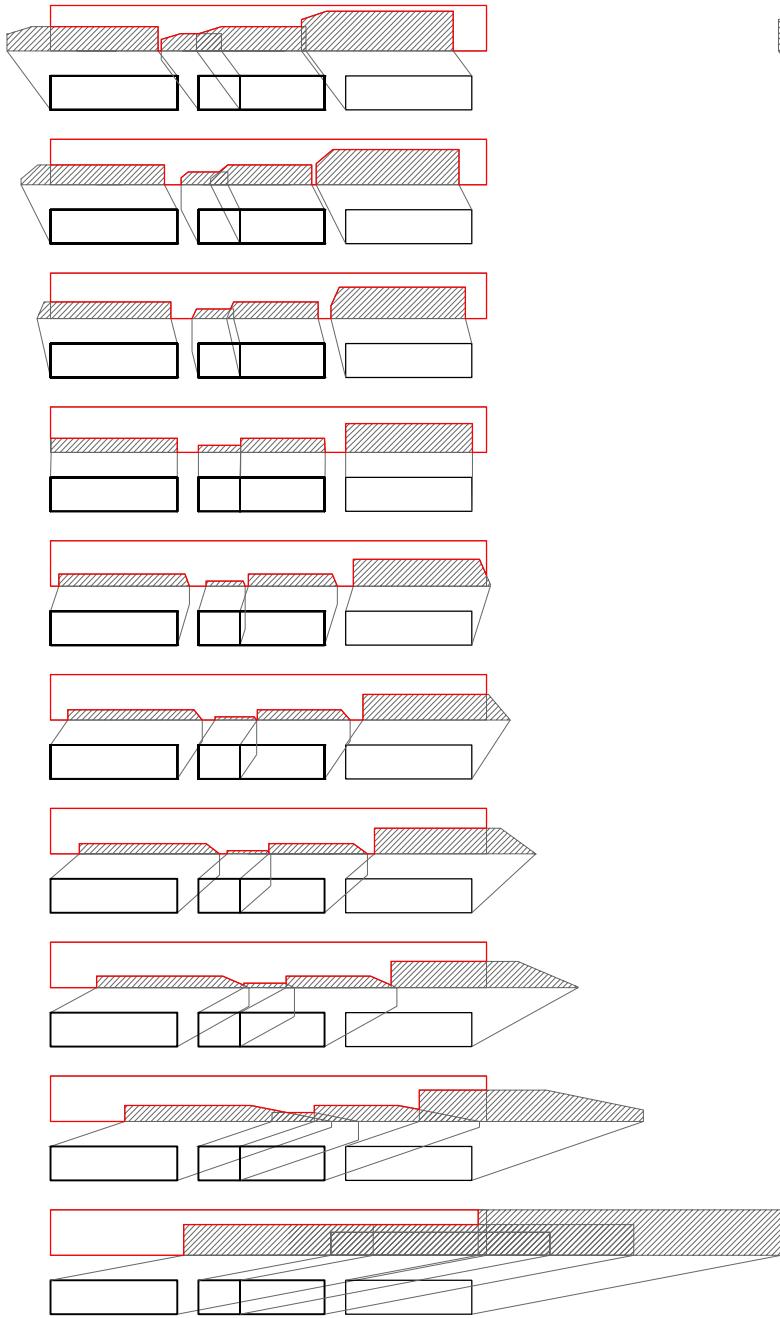
Areas on elevation without sun  
light during December 21



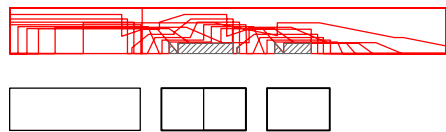
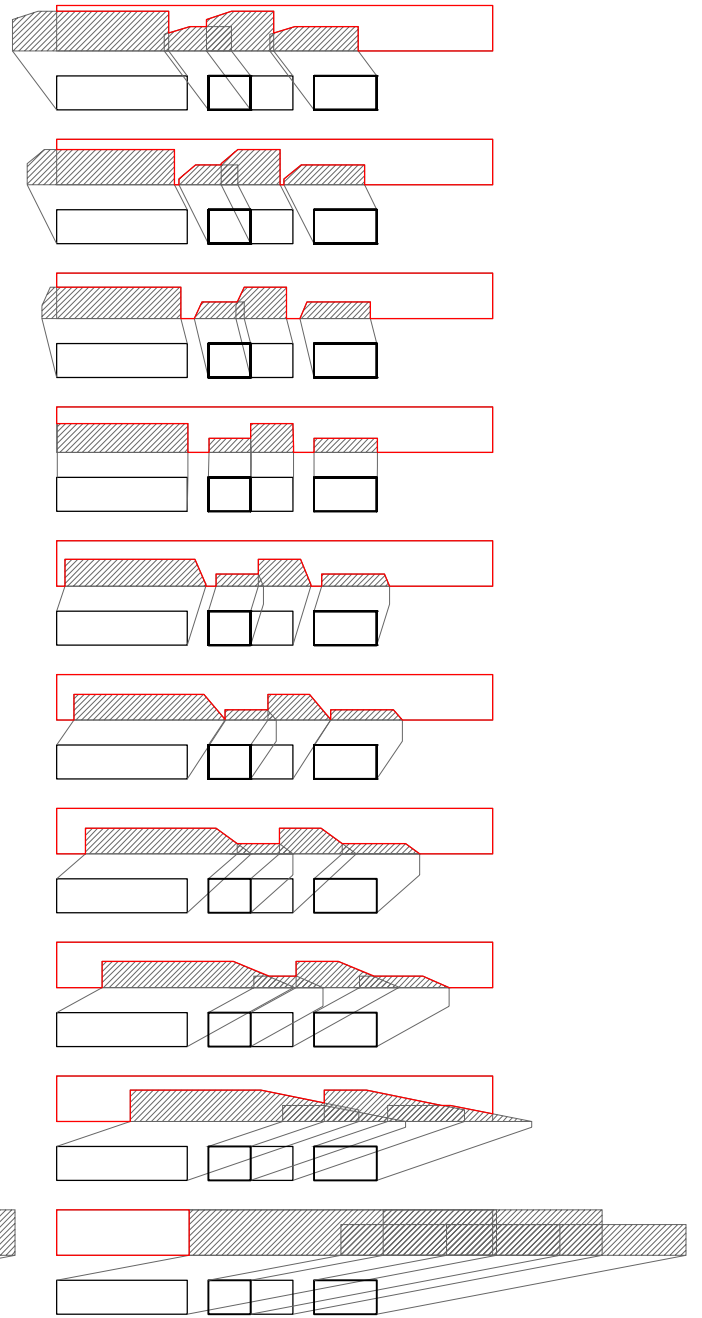
LANE no.1



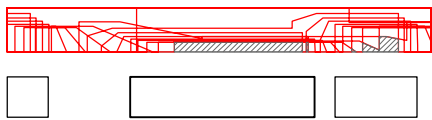
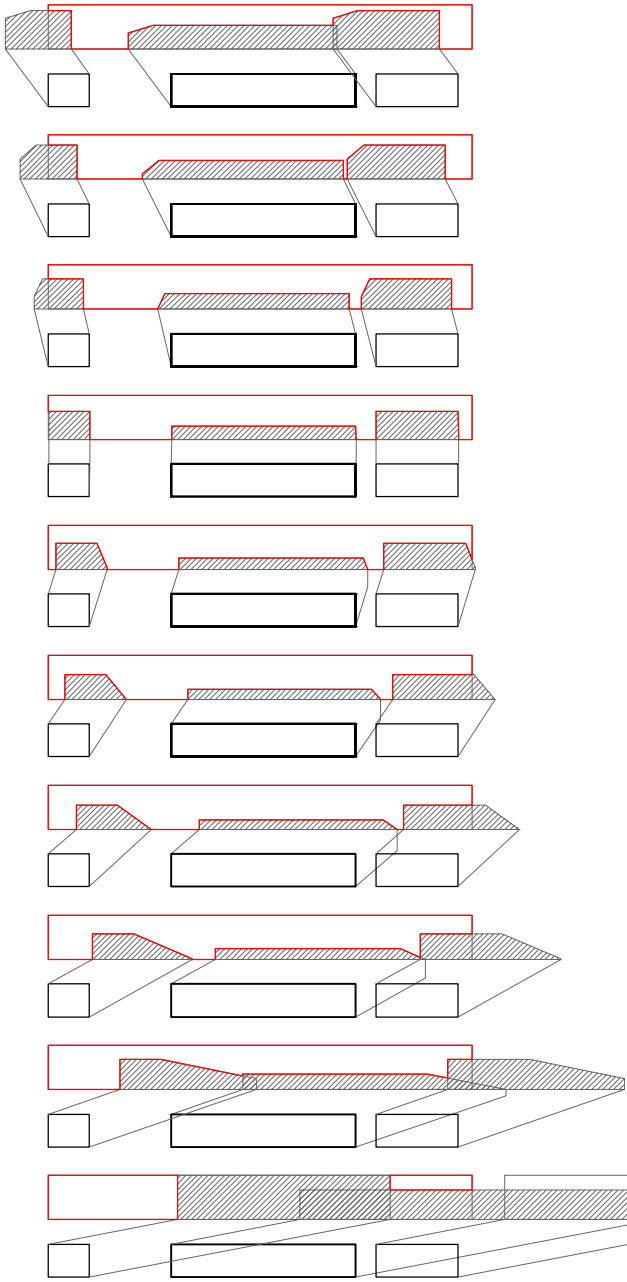
LANE no.2



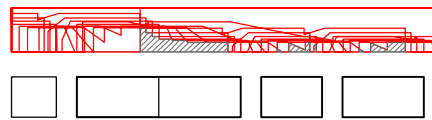
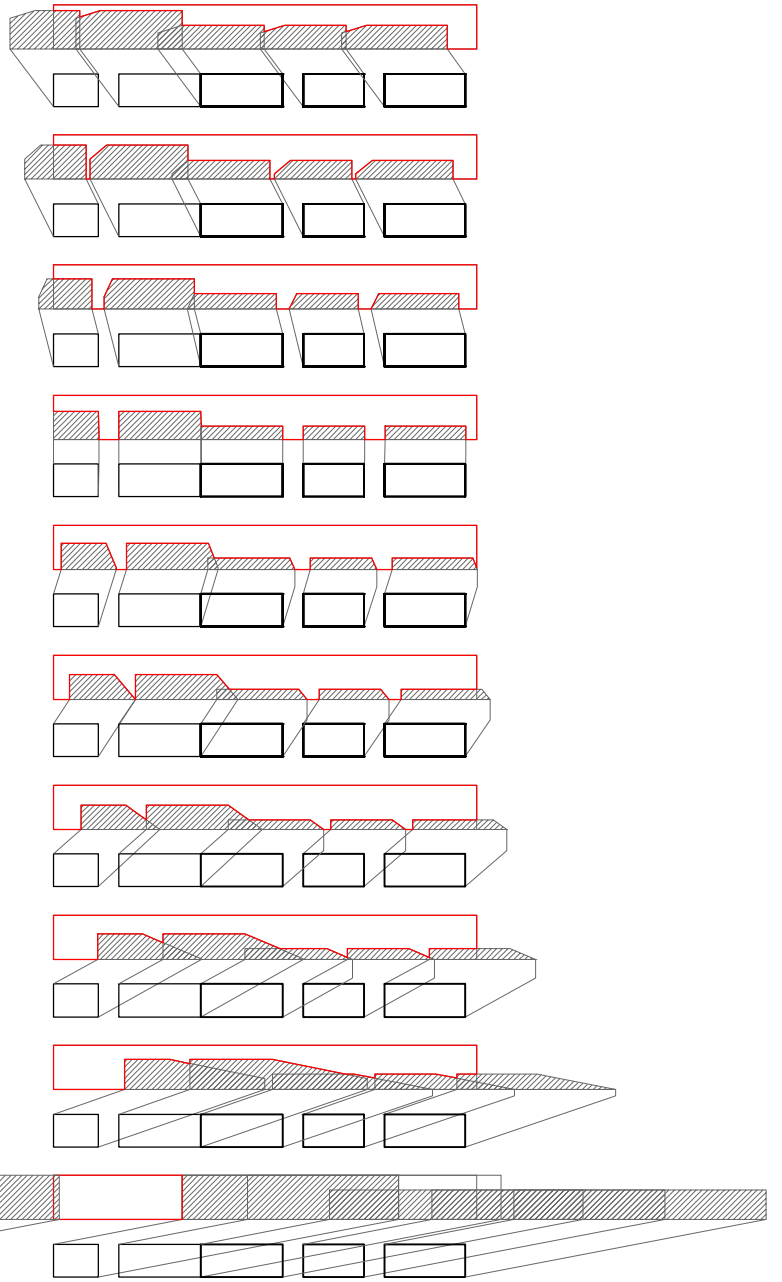
LANE no.3



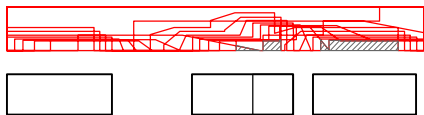
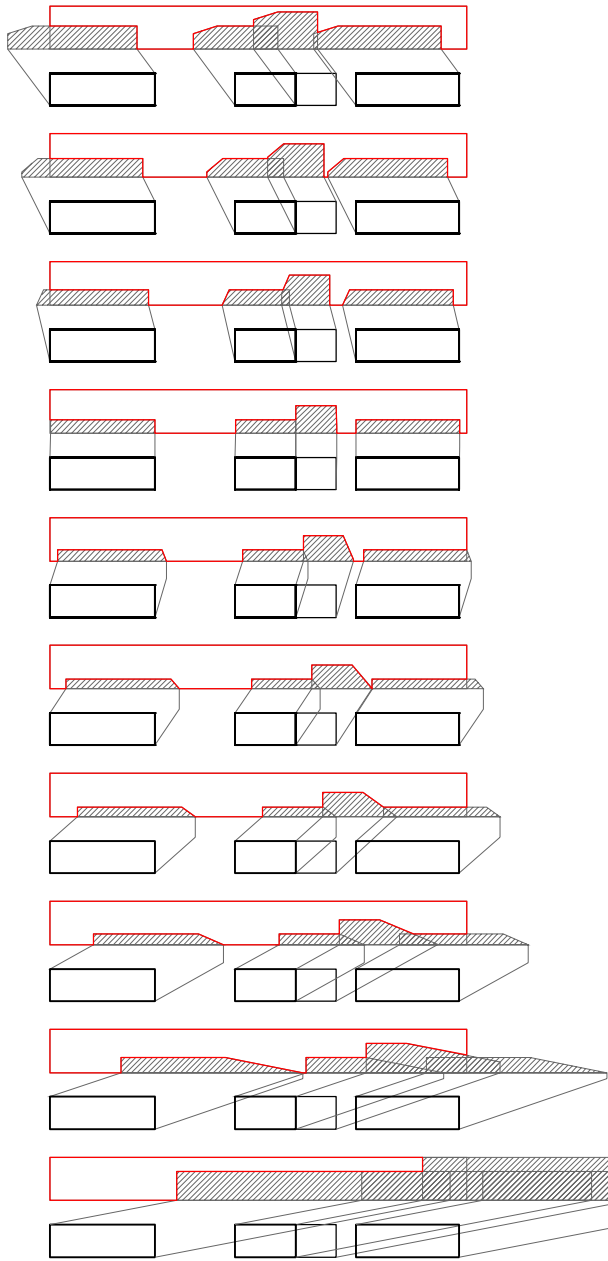
LANE no.4



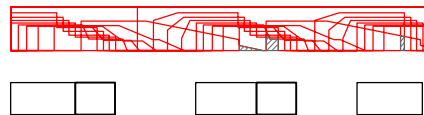
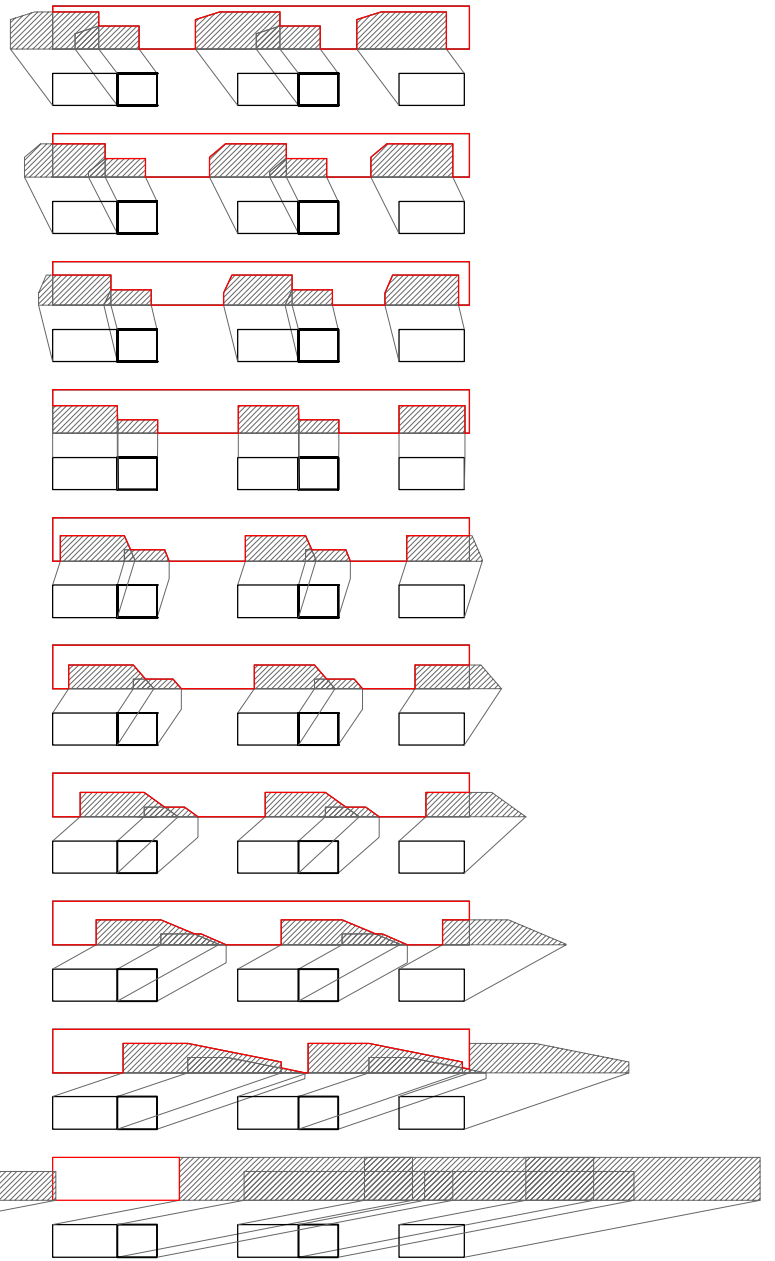
LANE no.5



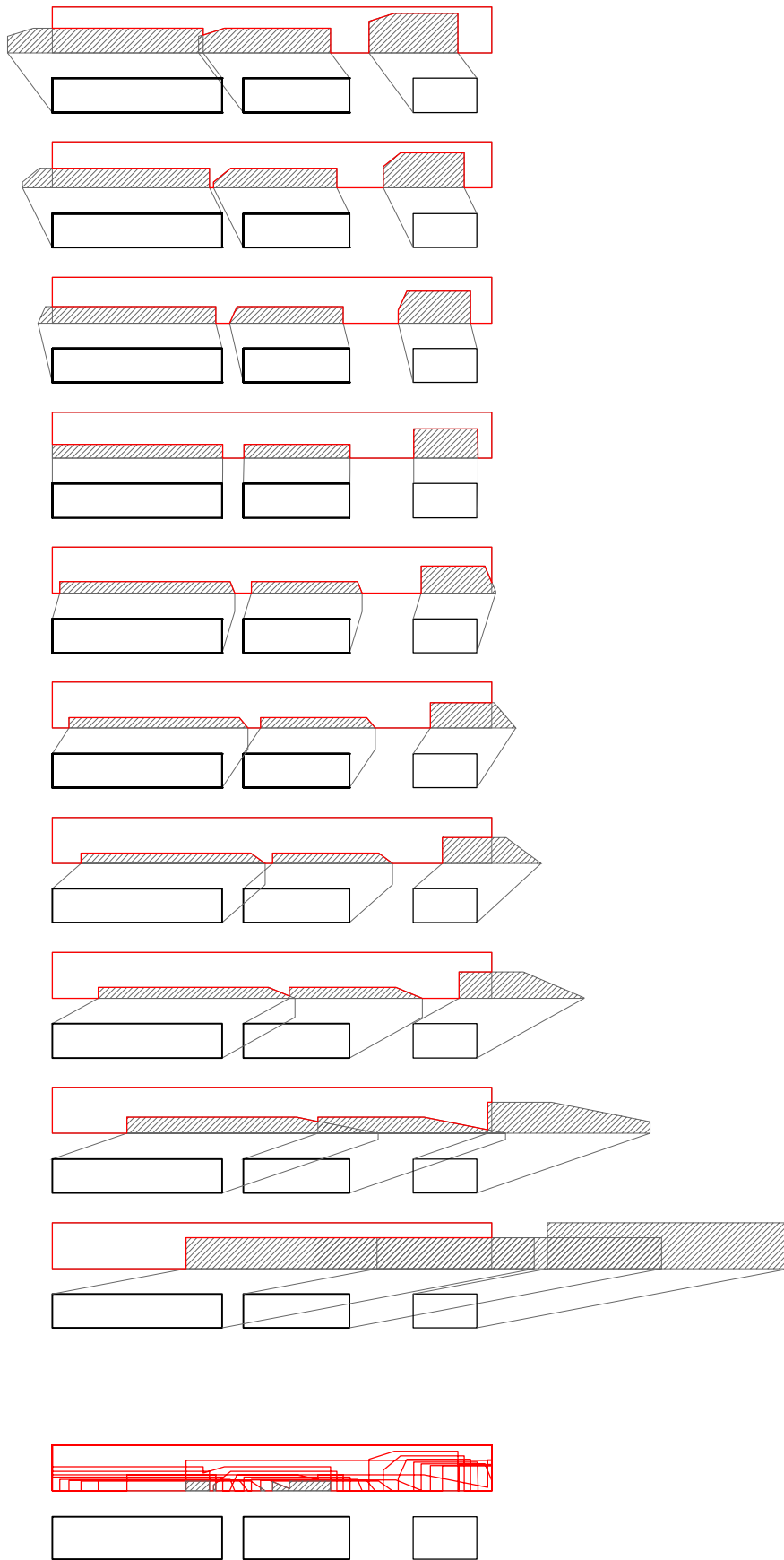
LANE no.6



LANE no.7



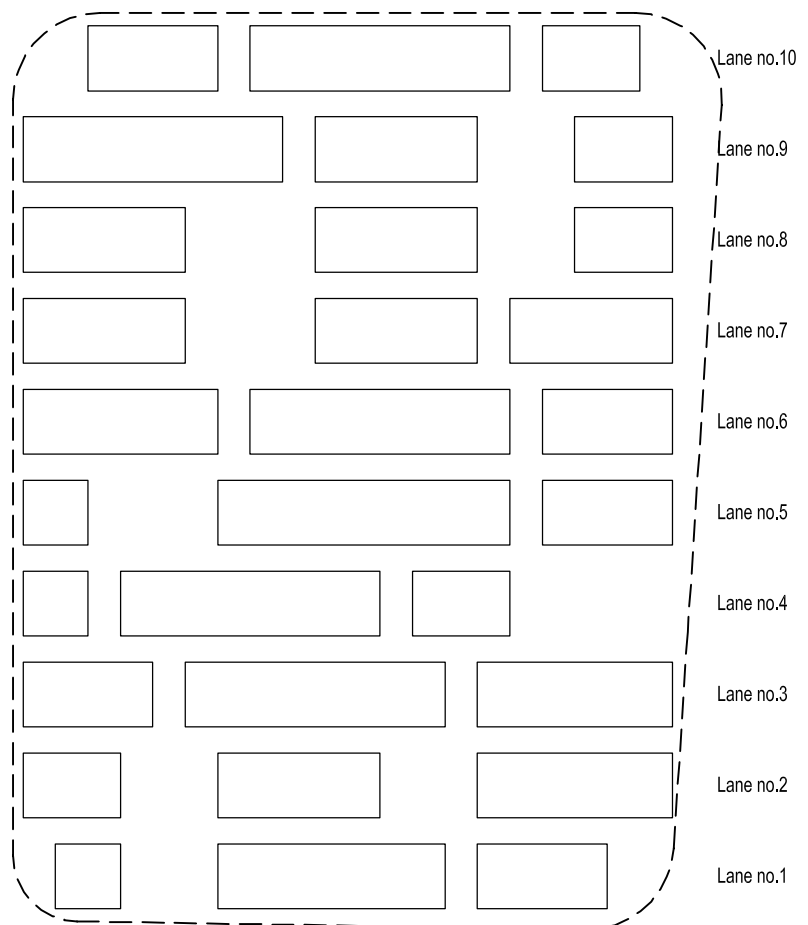
LANE no.8

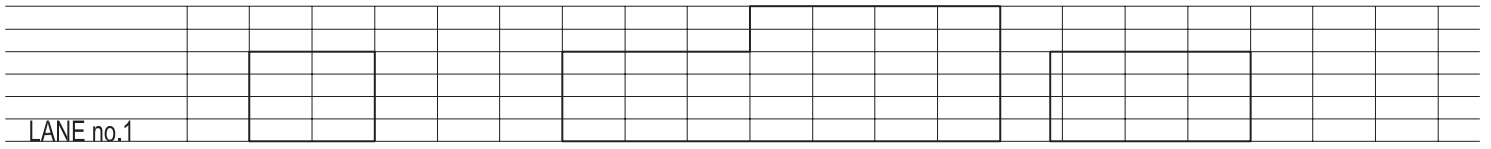
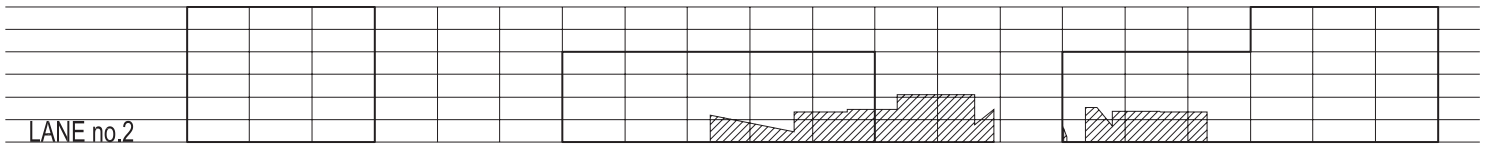
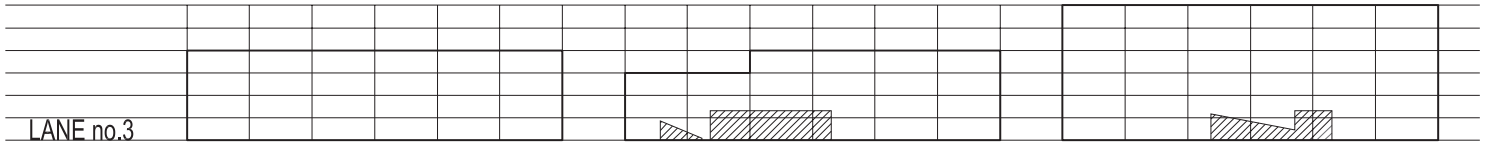
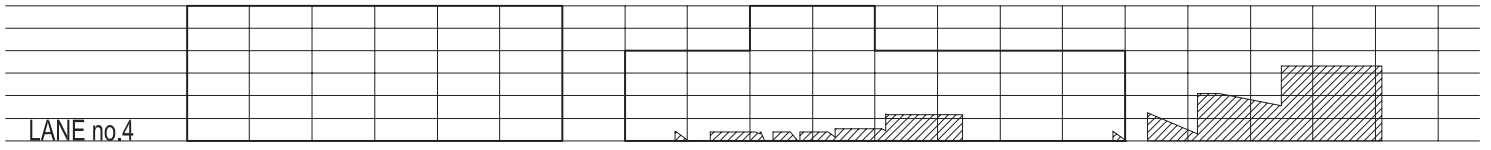
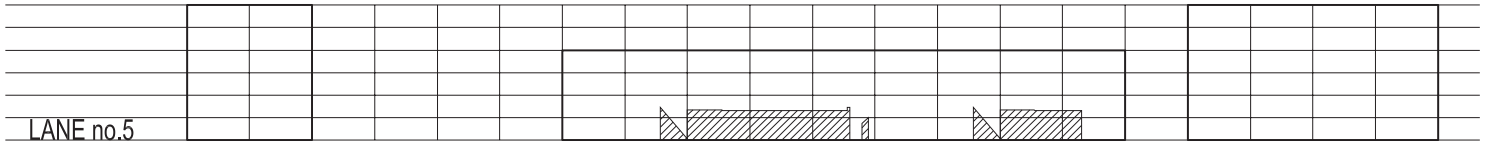
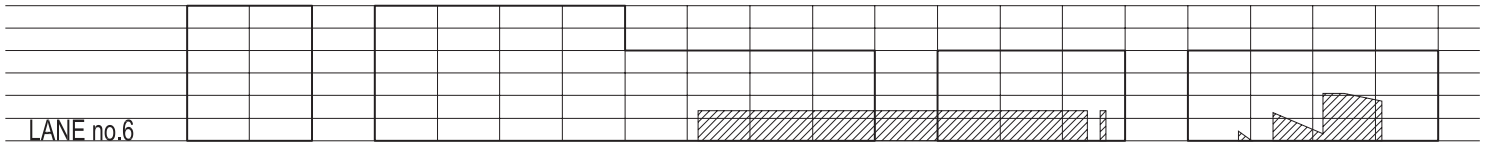
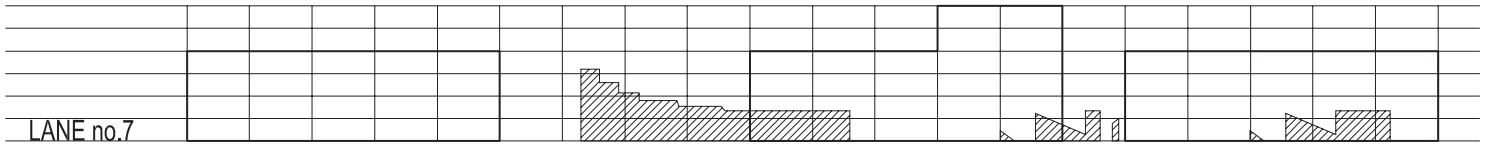
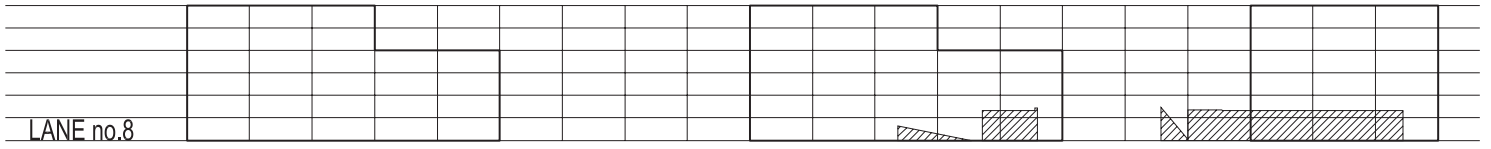
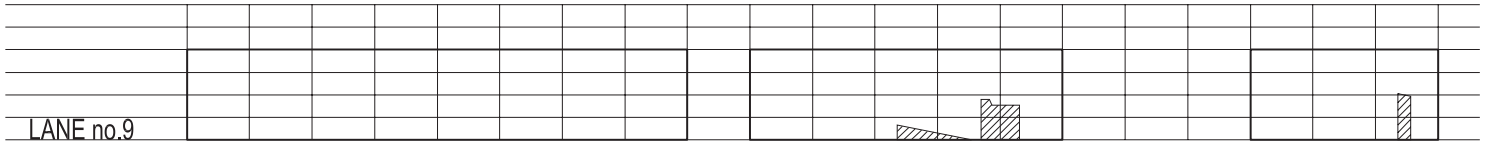
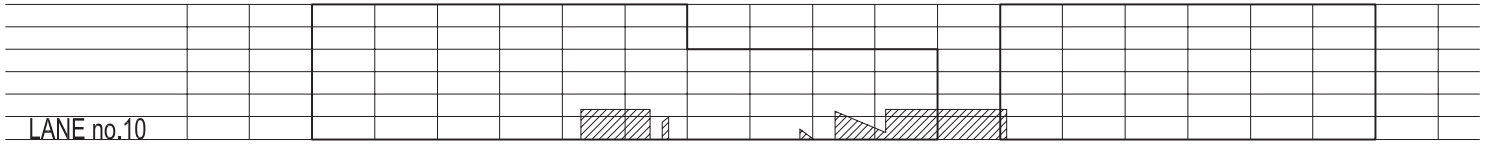


PLOT A ( area : 30600 sqm )

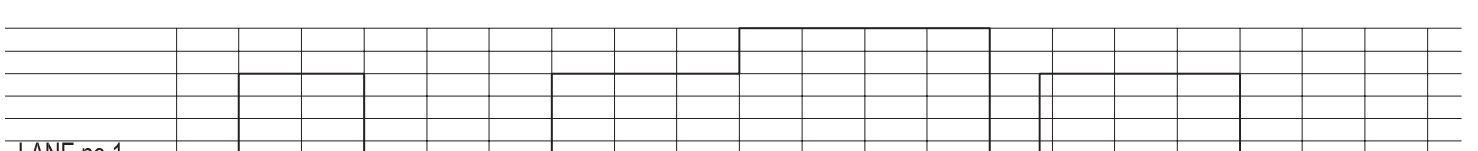
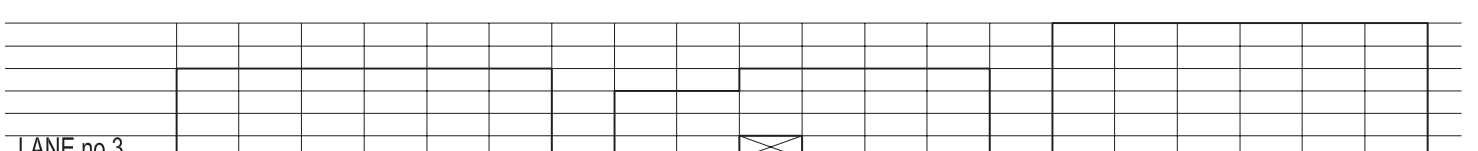
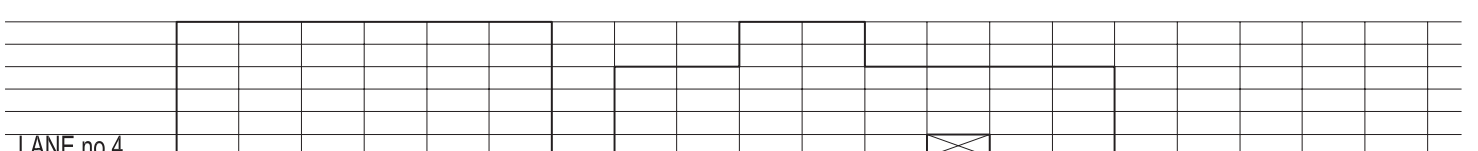
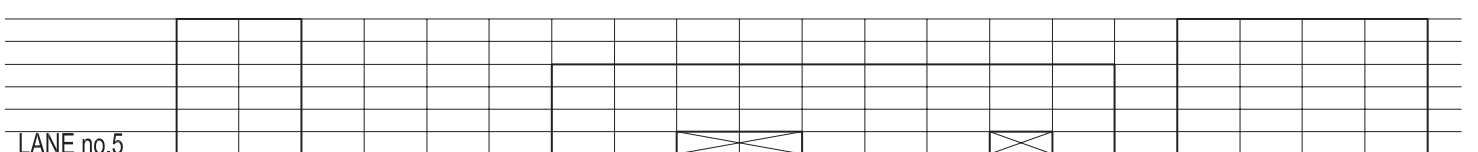
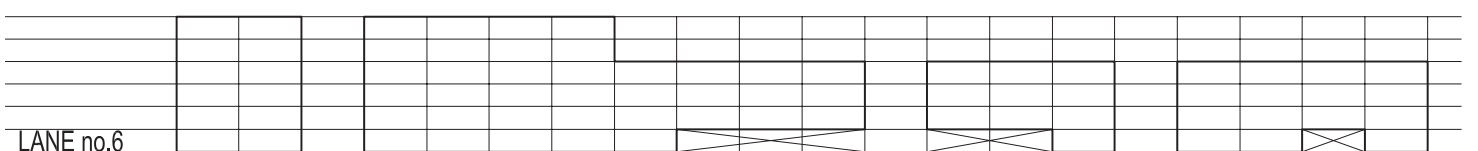
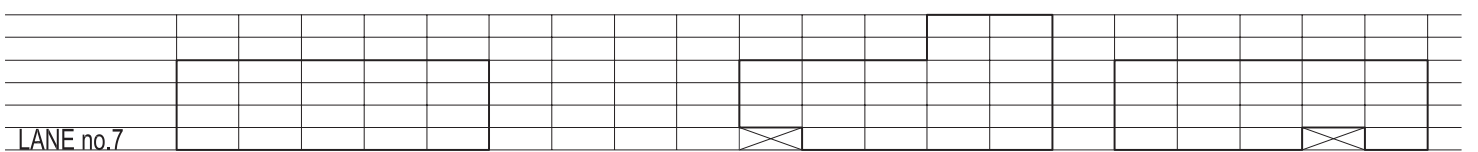
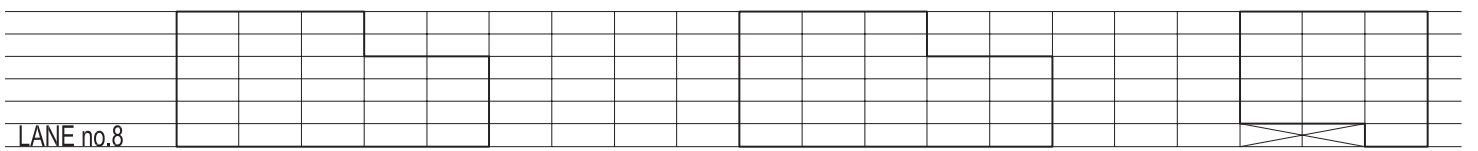
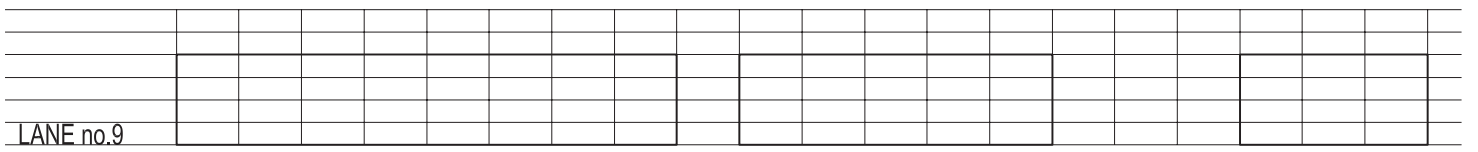
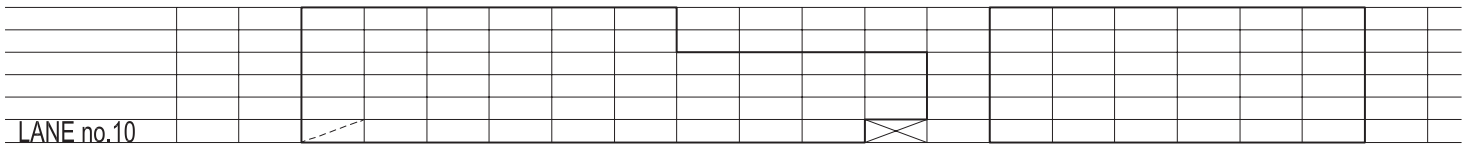
All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m

APPLY SHADOW ANALYSIS ON ELEVATION



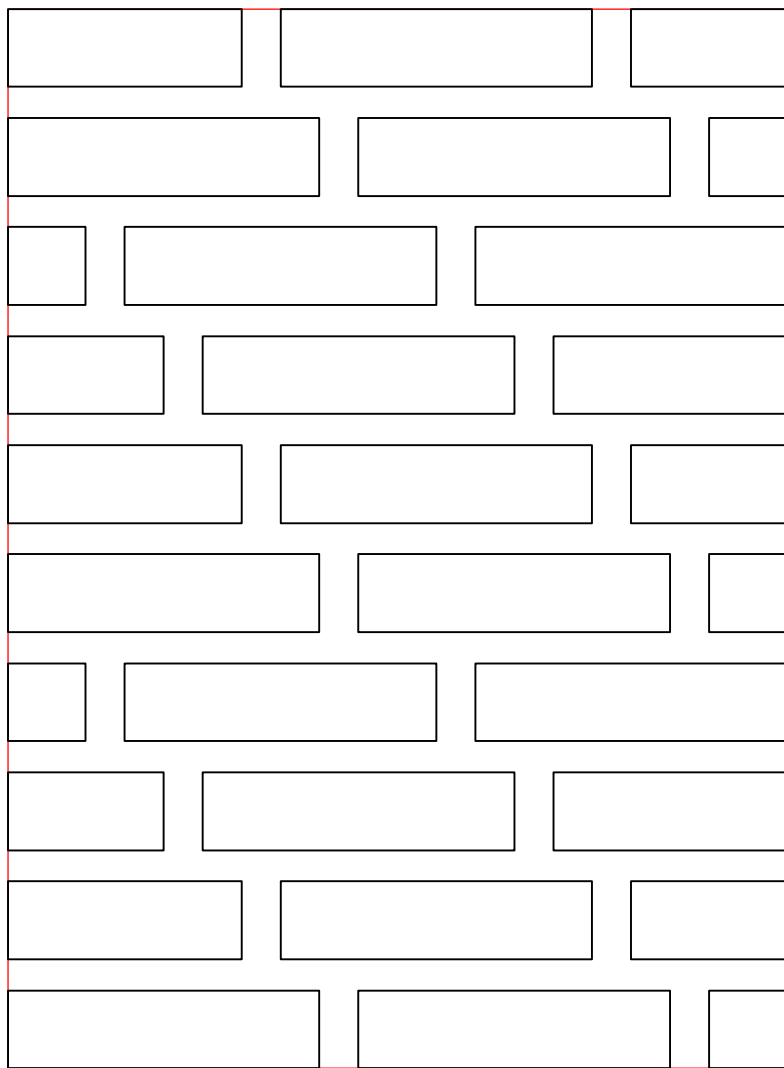




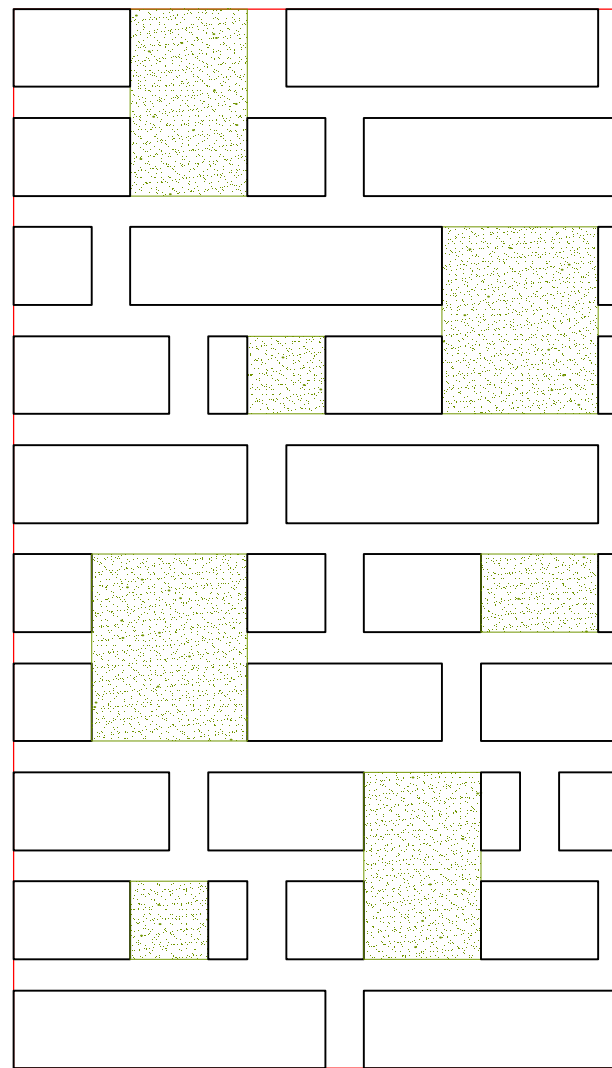


PLOT B ( area : 30370 sqm )

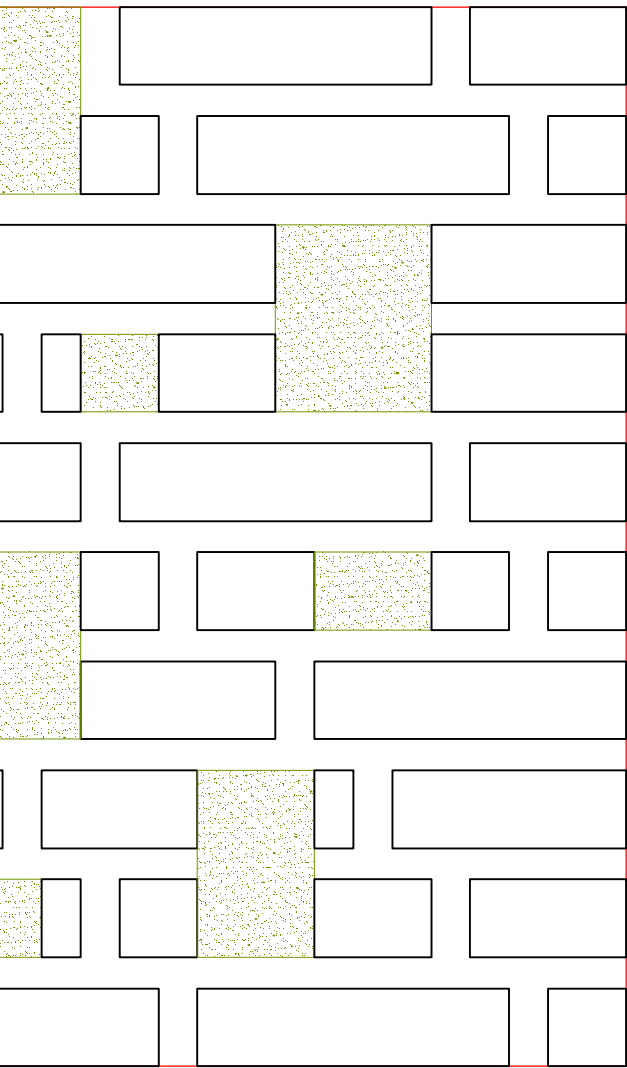
All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m



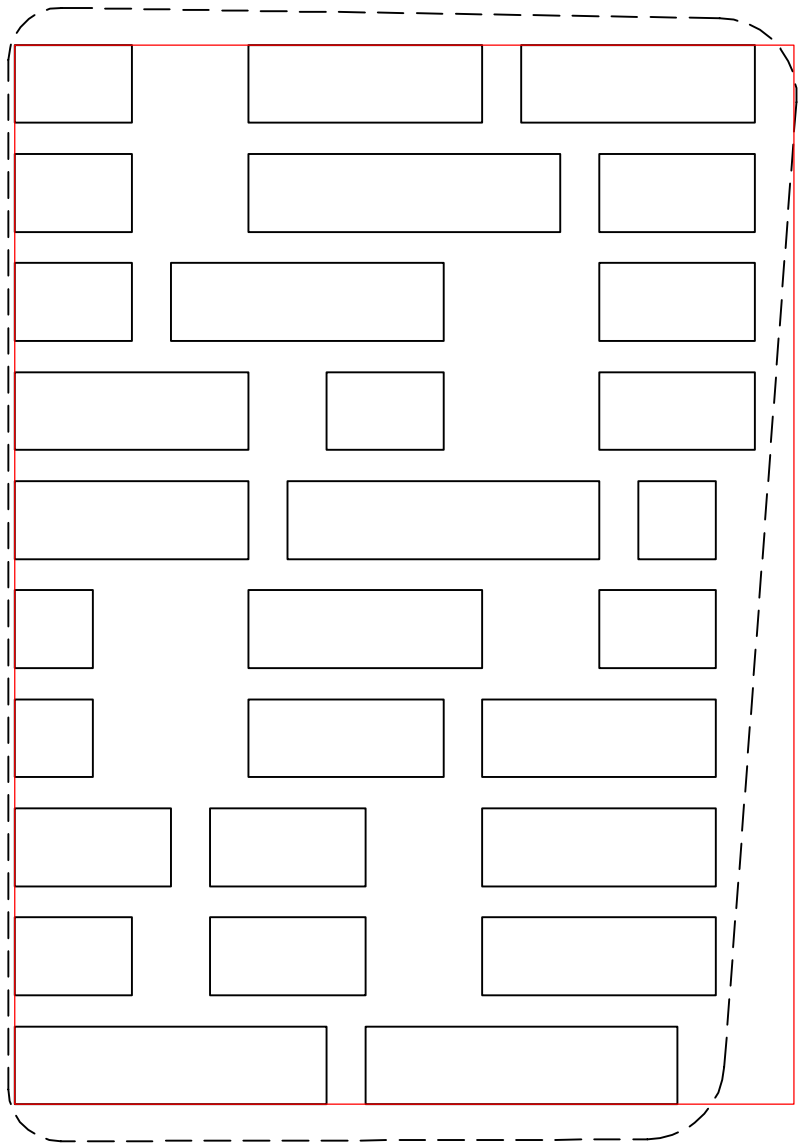
The sequence to get the most units



Introduce the green inner space



in inner space

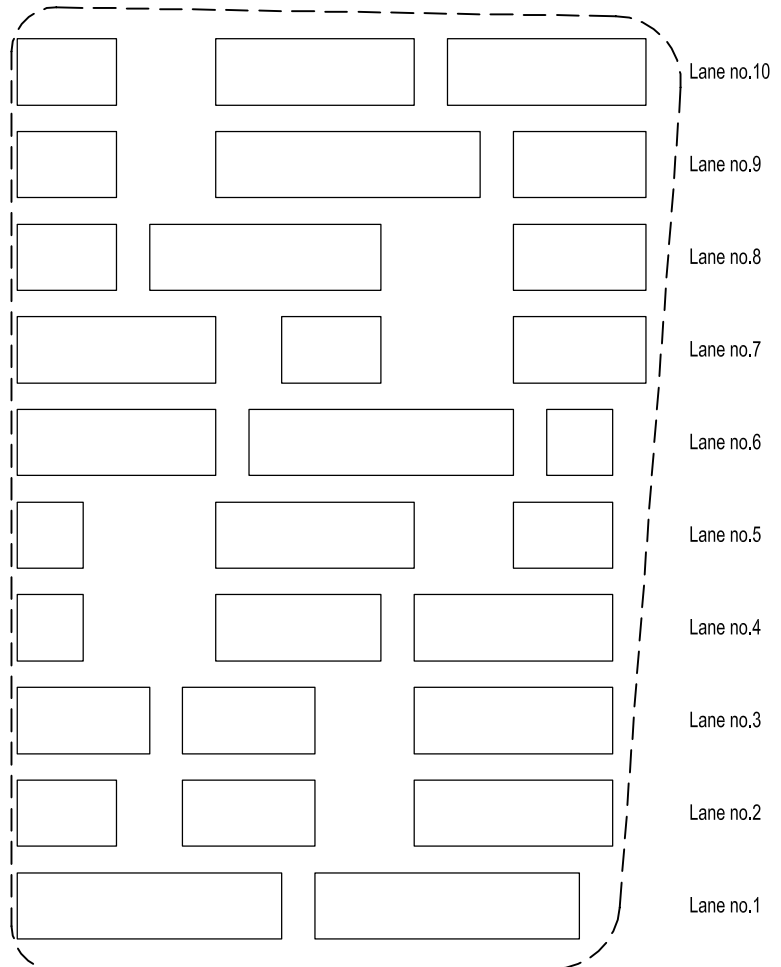


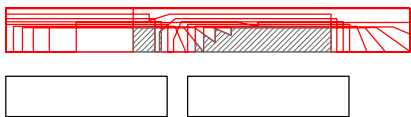
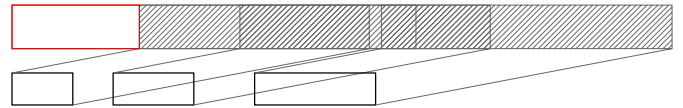
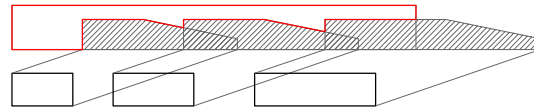
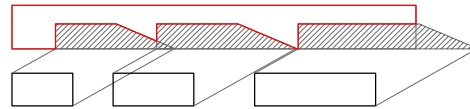
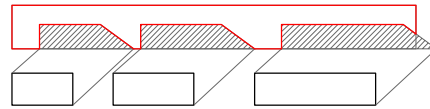
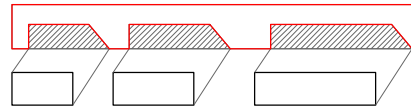
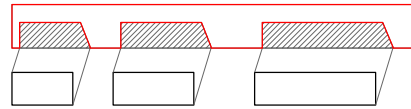
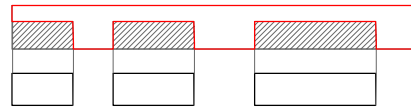
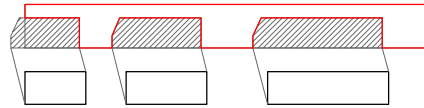
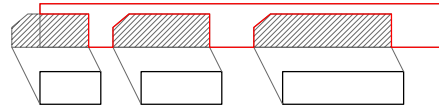
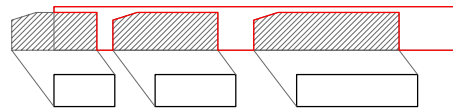
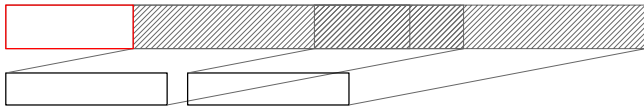
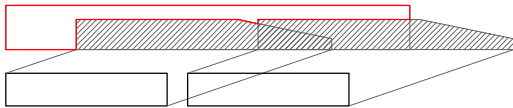
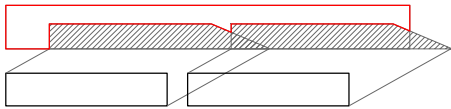
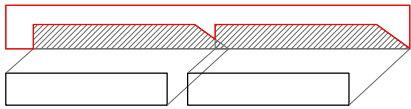
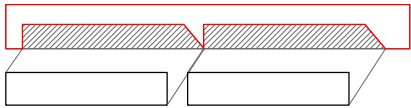
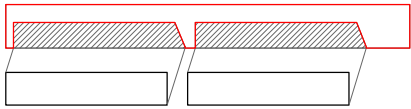
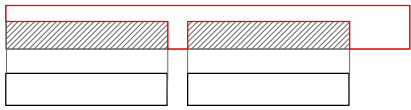
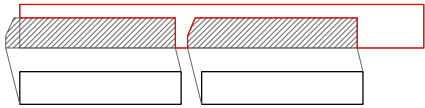
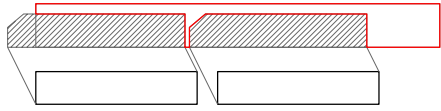
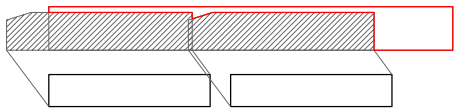
Result

PLOT B ( area : 30370 sqm )

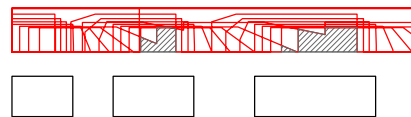
All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m

SHADOW ANALYSIS OF EACH LANE

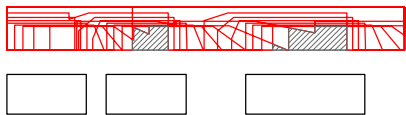
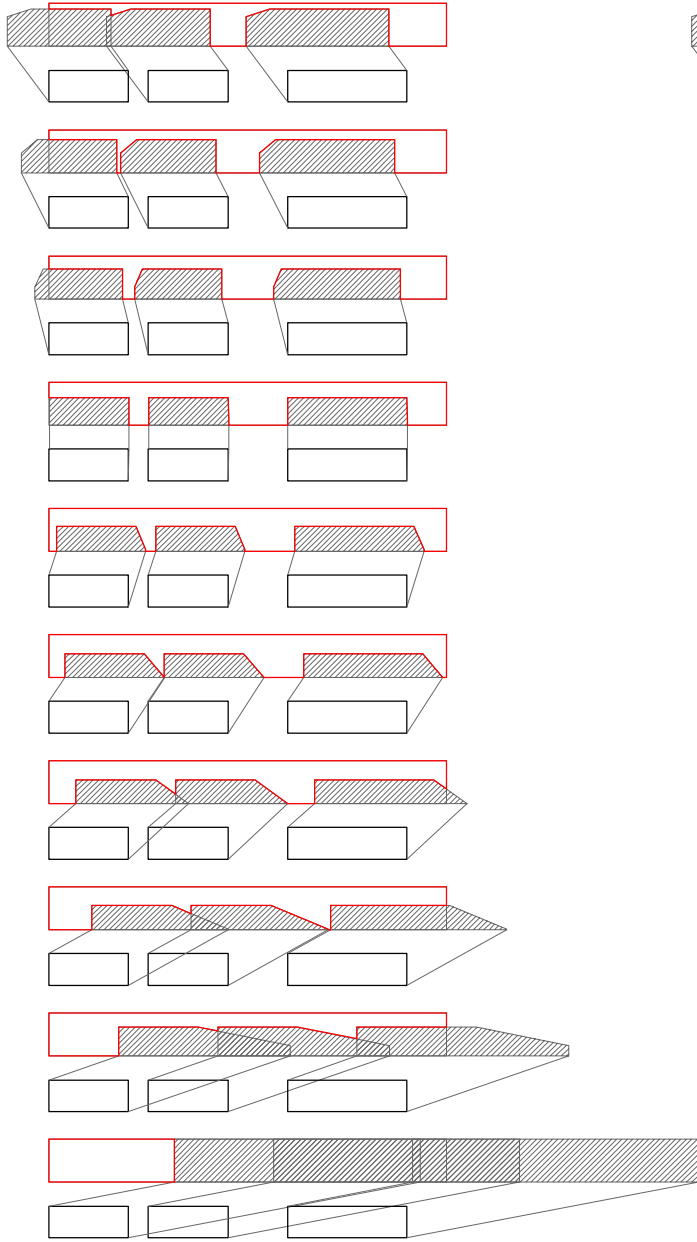




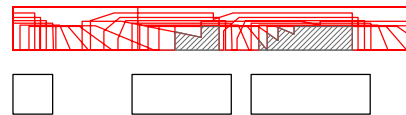
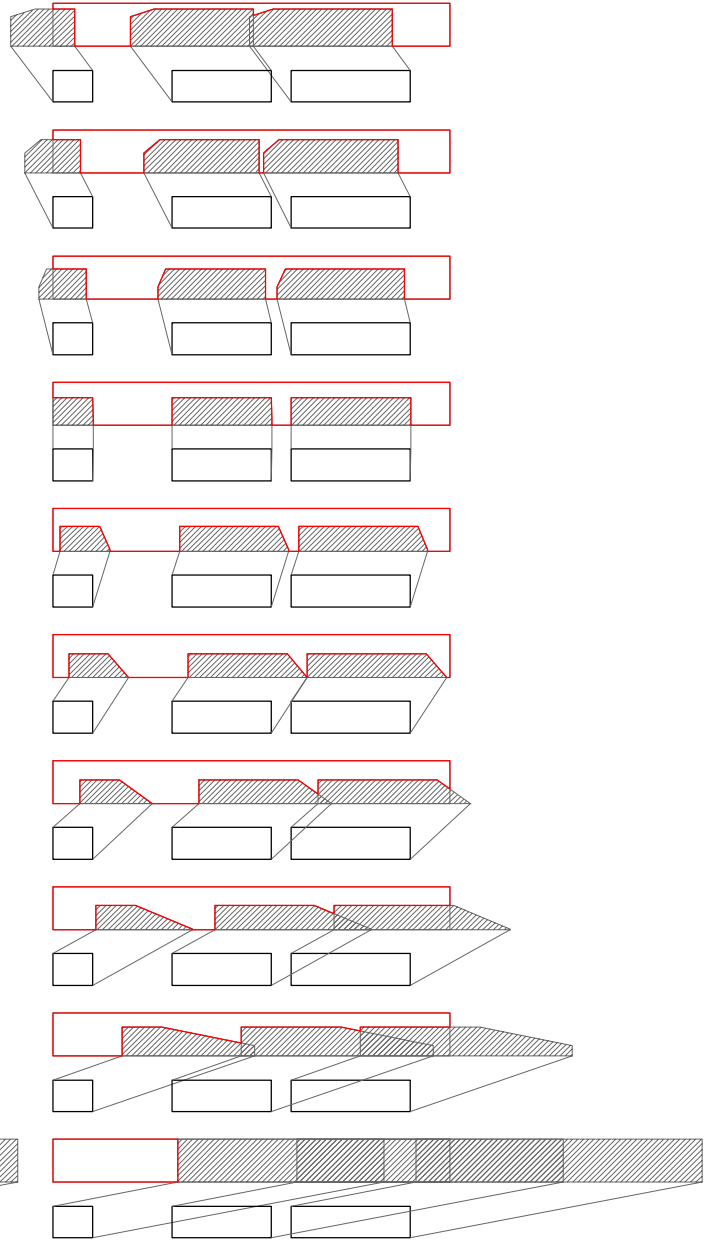
LANE no.1



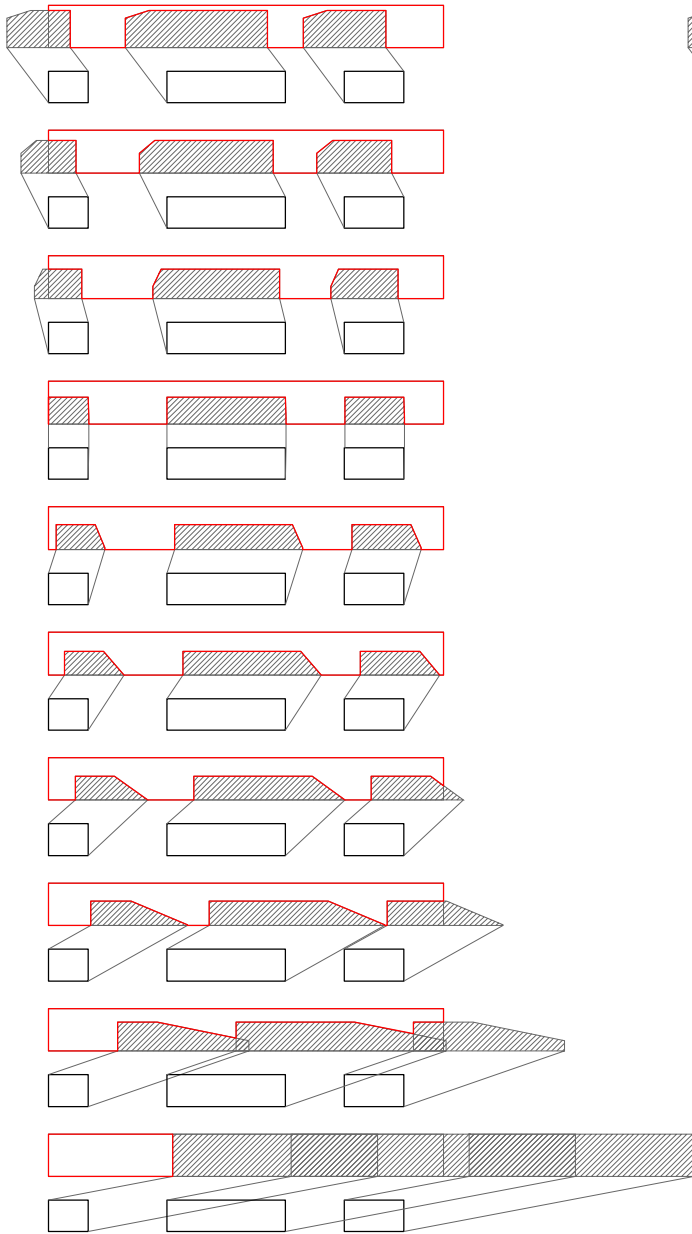
LANE no.2



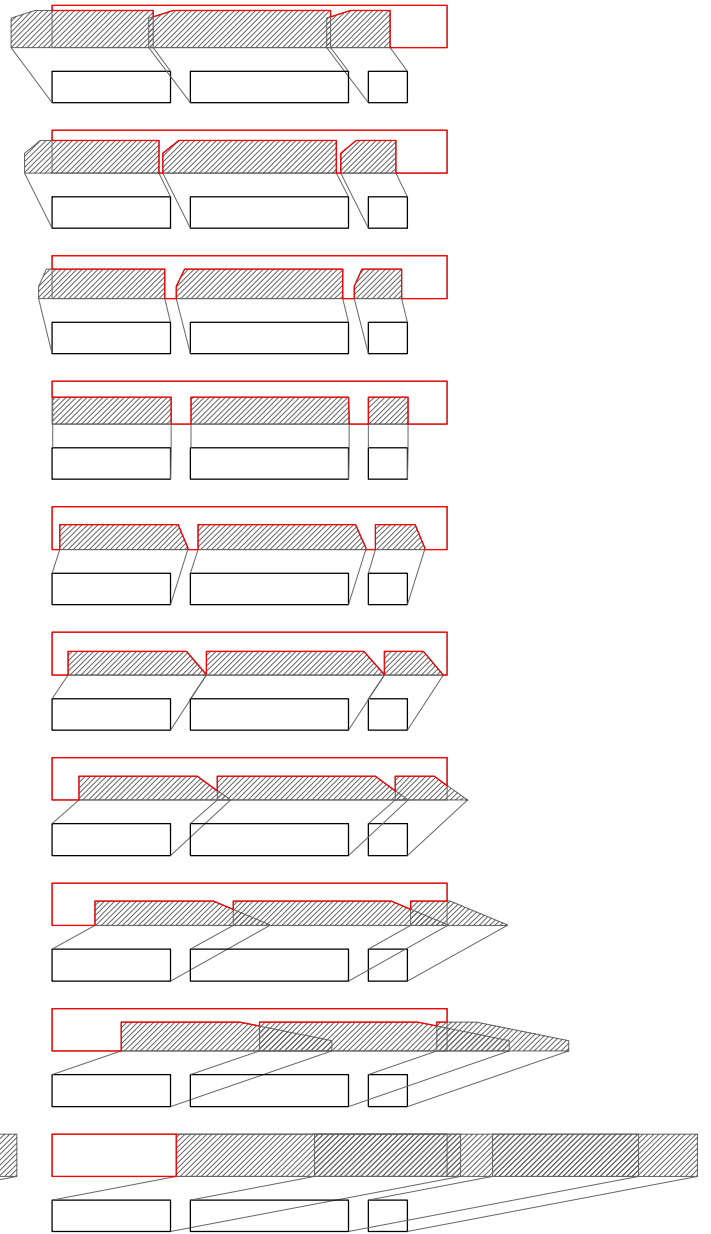
LANE no.3



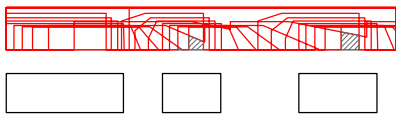
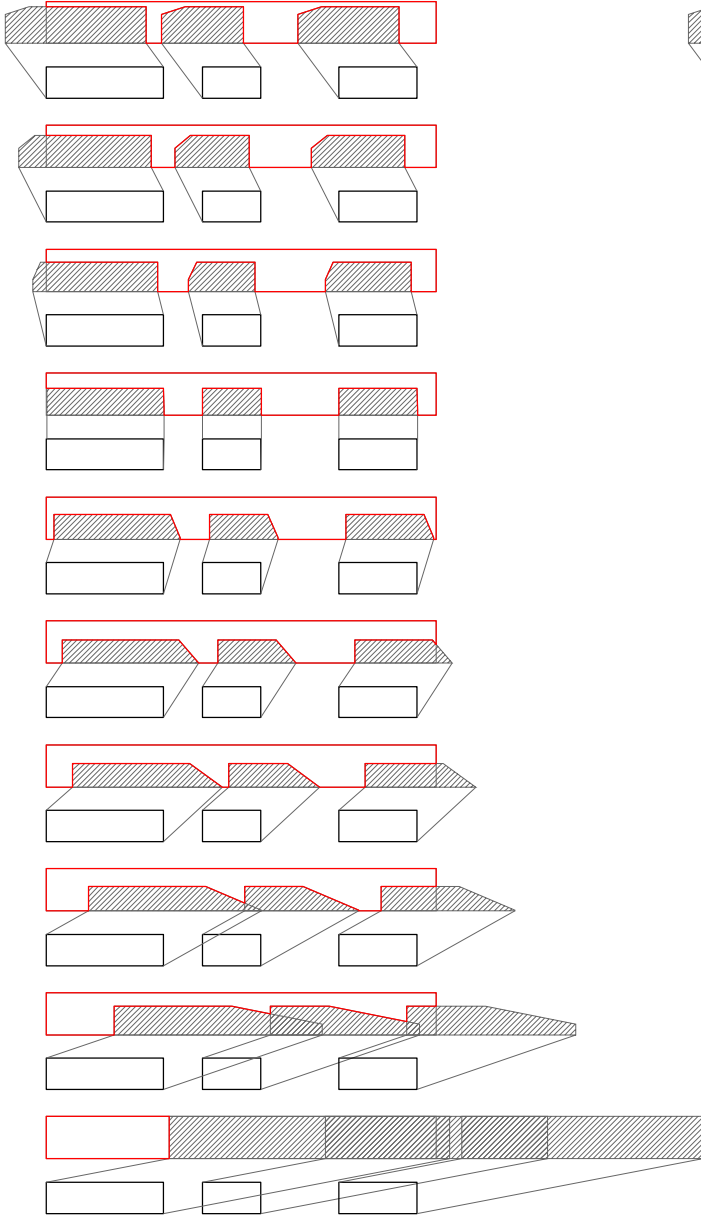
LANE no.4



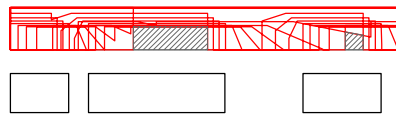
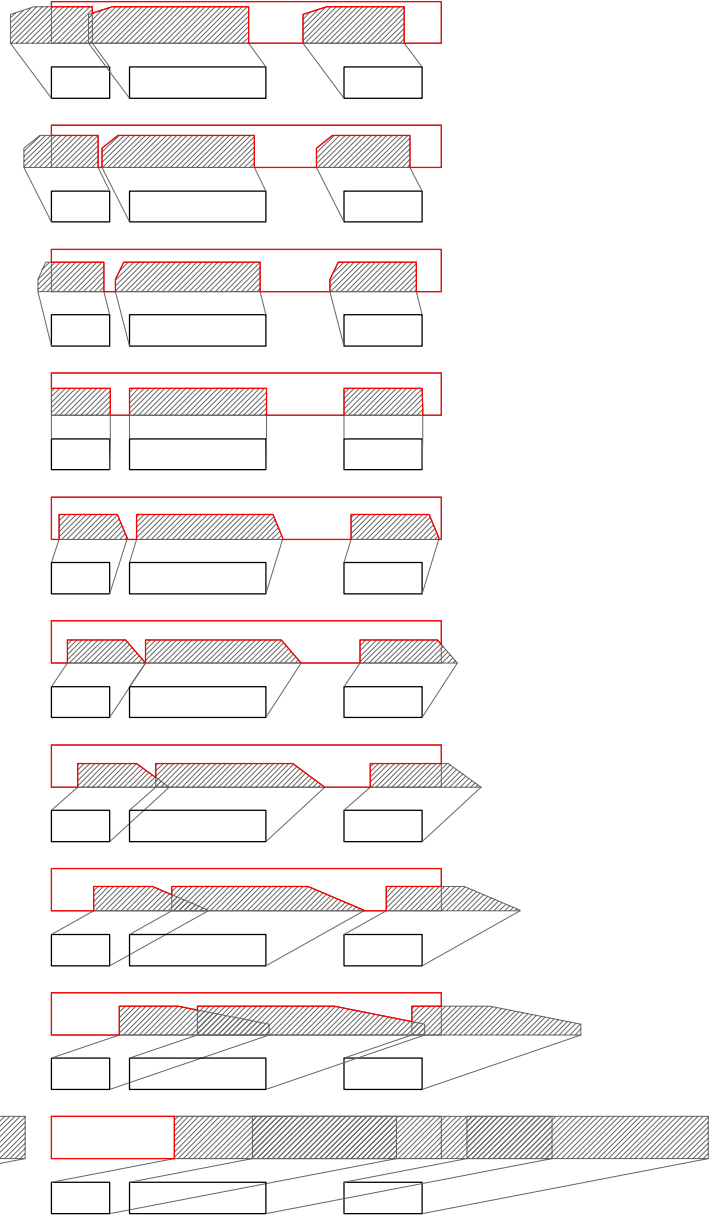
LANE no.5



LANE no.6

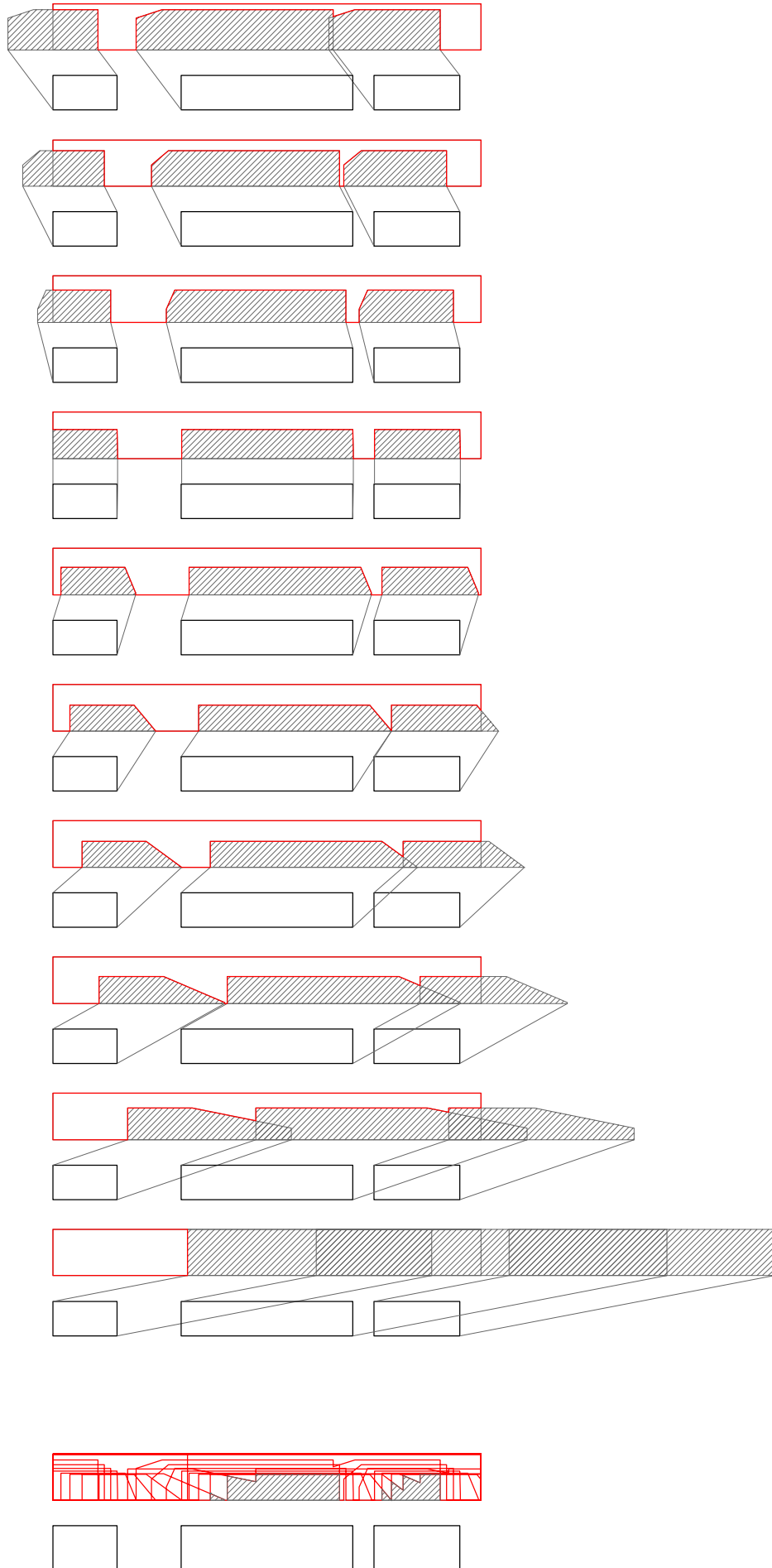


LANE no.7

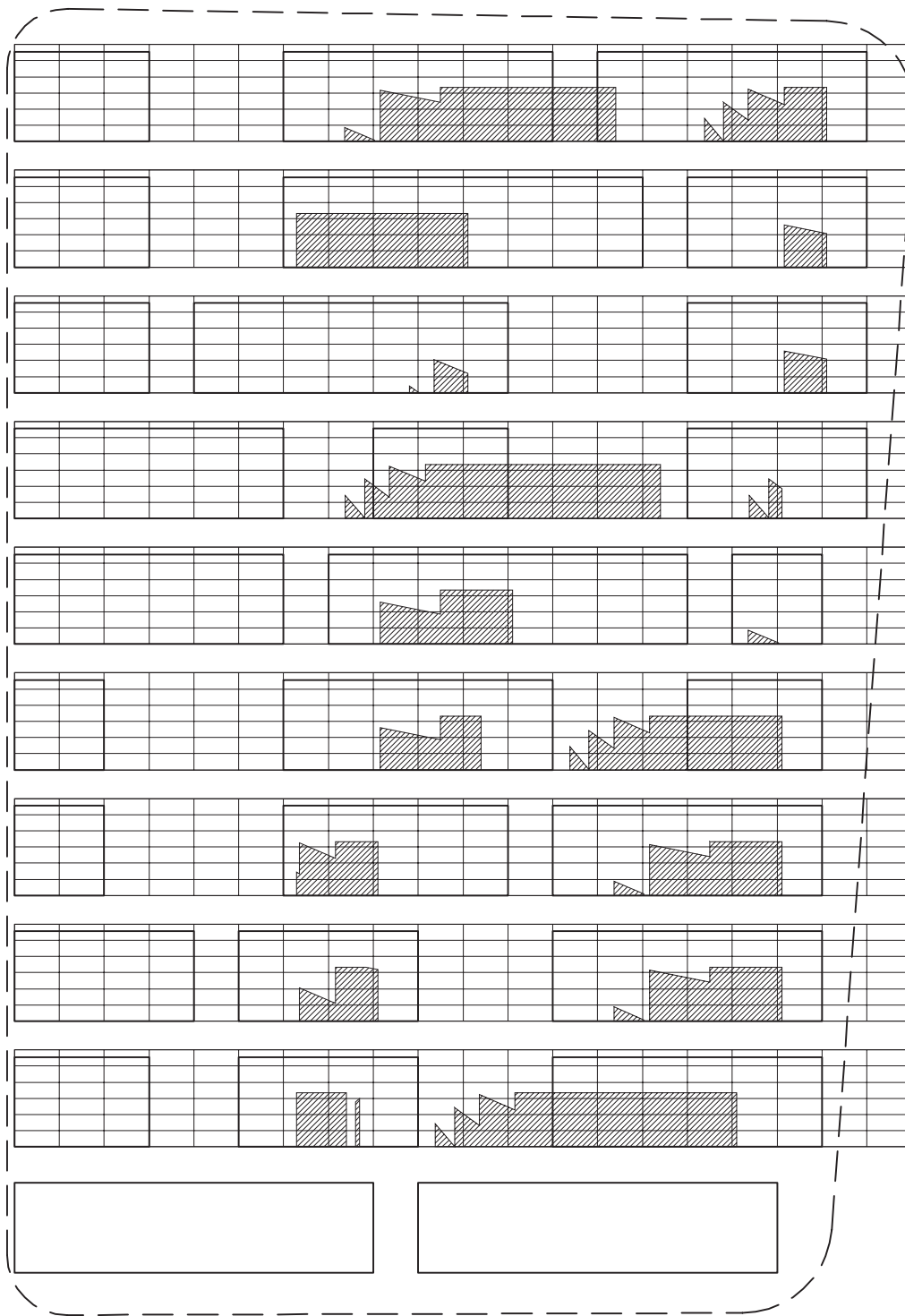


LANE no.8



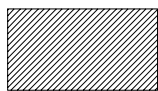
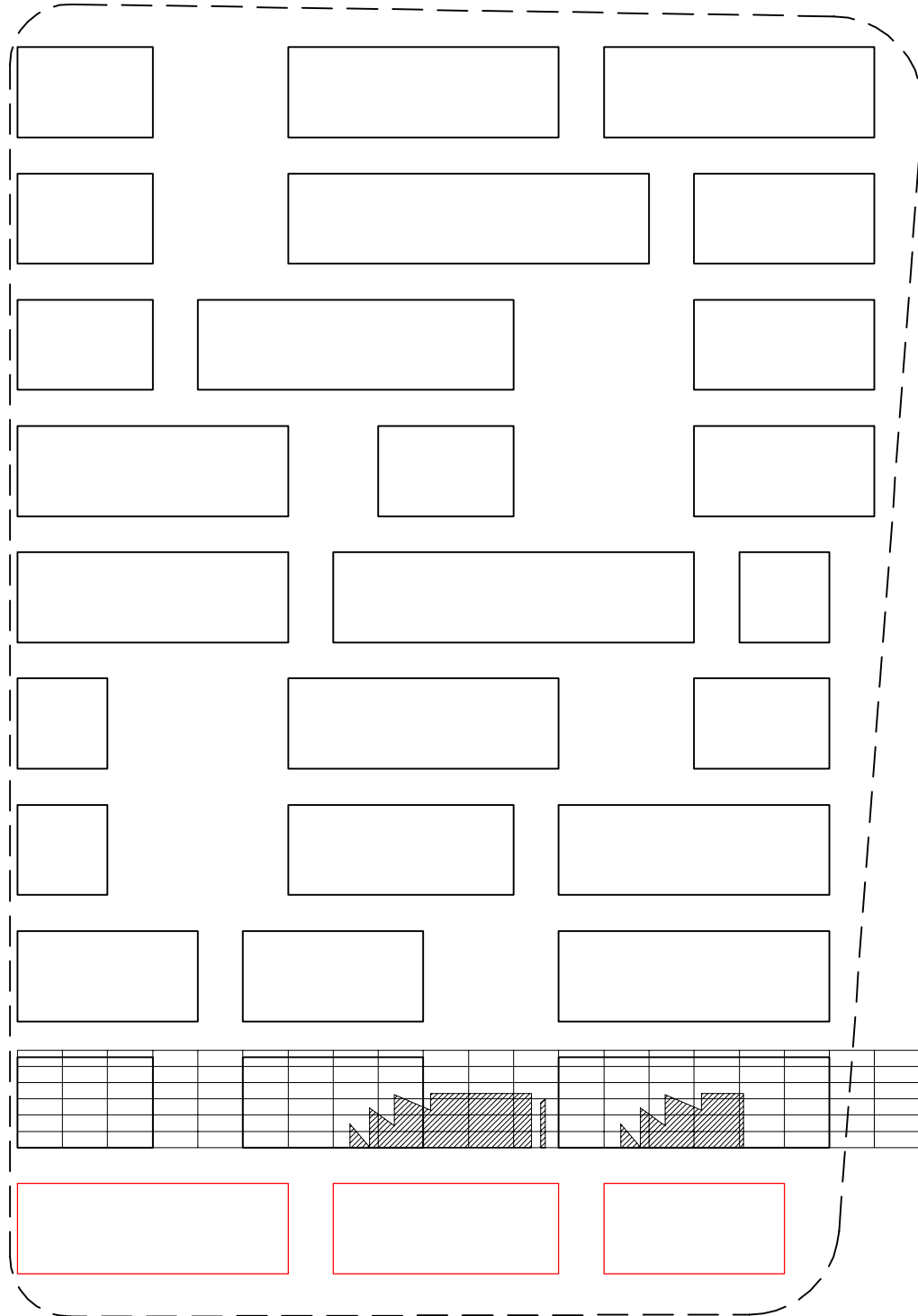


PLOT B ( area : 30370 sqm )  
All blocks are 6 floors



Areas on elevation without sunlight during December 21

PLOT B ( area : 30370 sqm )  
All blocks are 6 floors

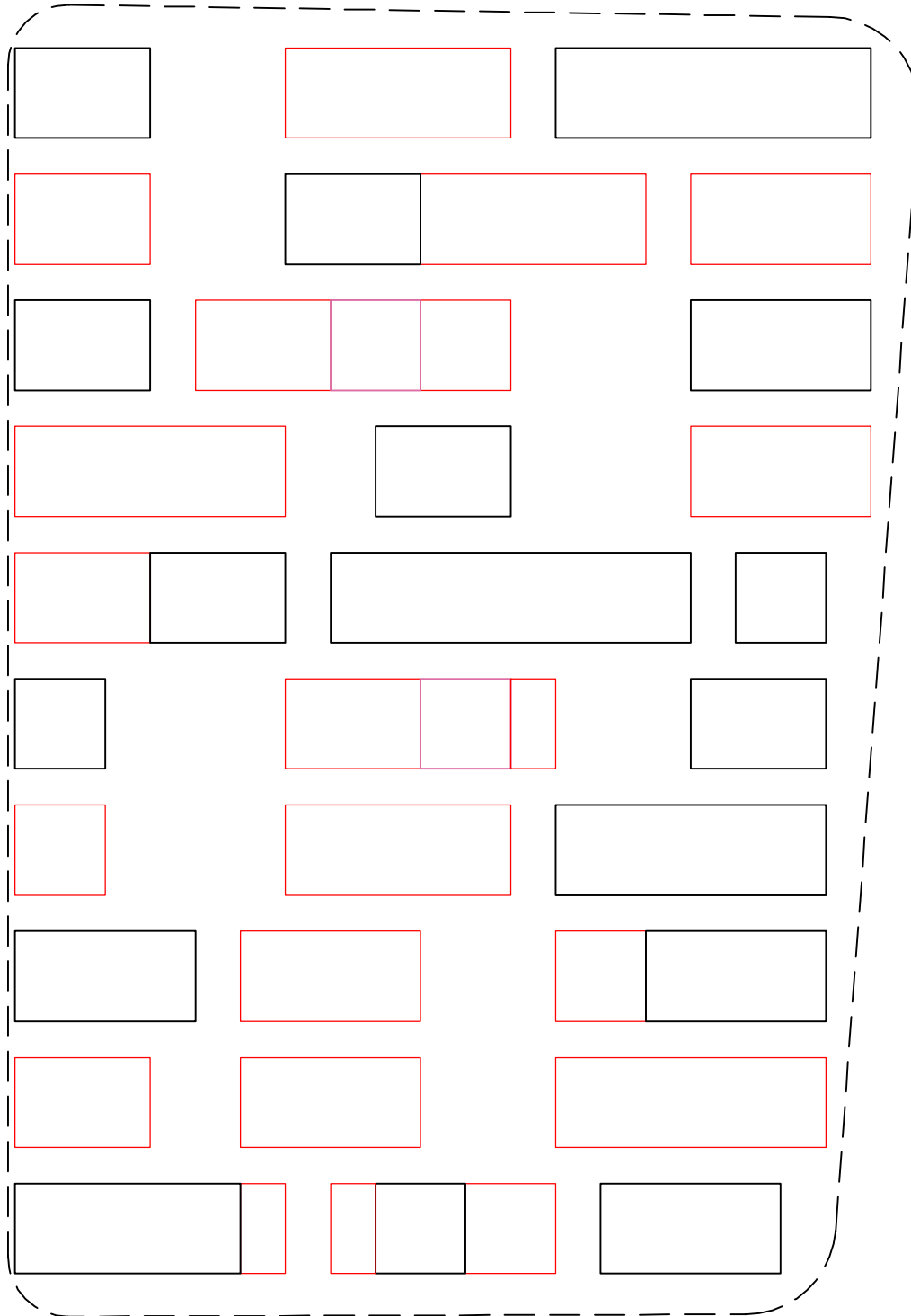


Areas on elevation without sun  
light during December 21



In modification

PLOT B ( area : 30370 sqm )



Block with 6 floors

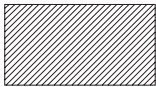
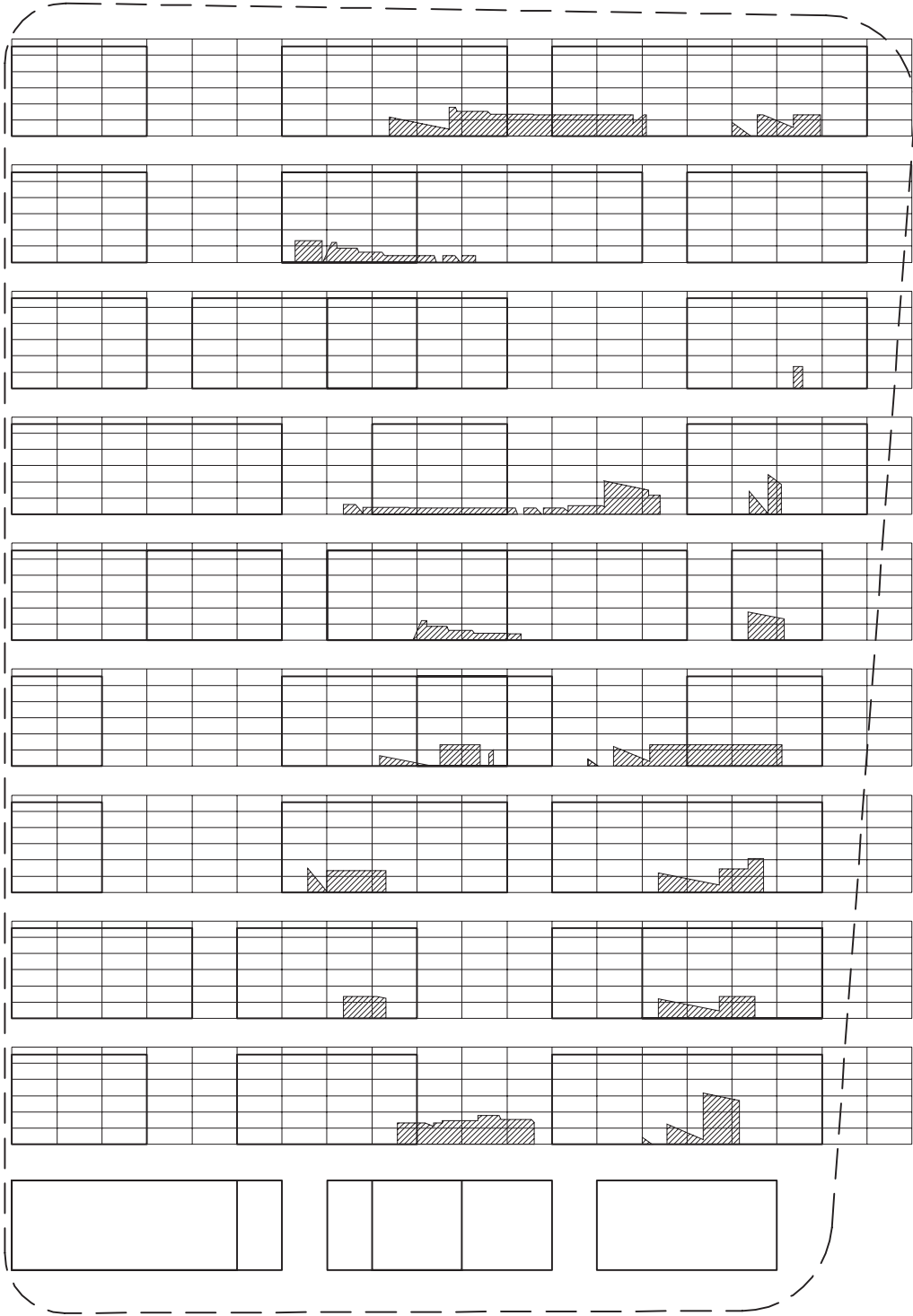


Block with 4 floors

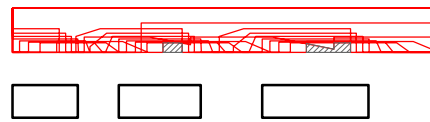
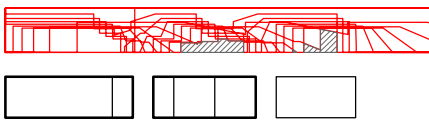
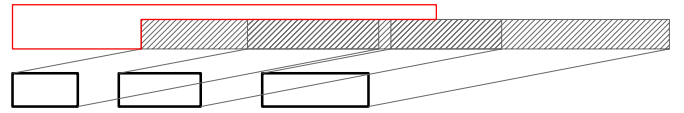
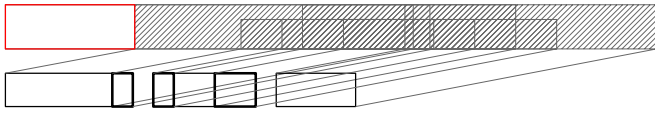
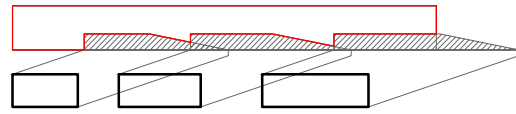
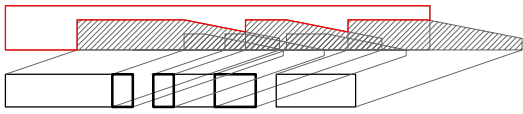
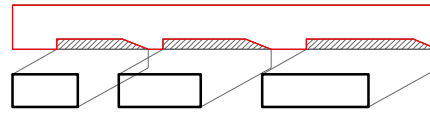
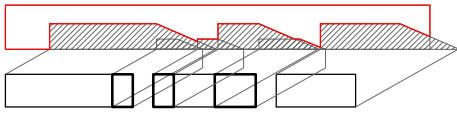
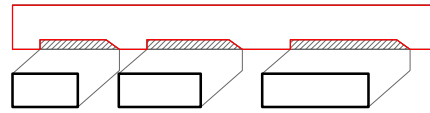
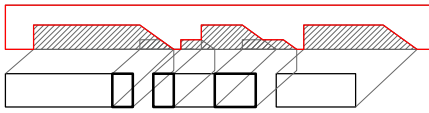
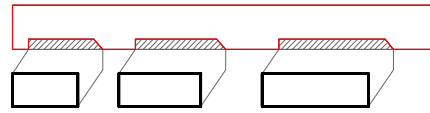
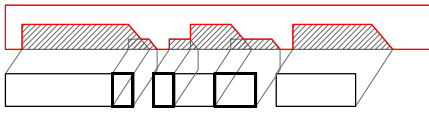
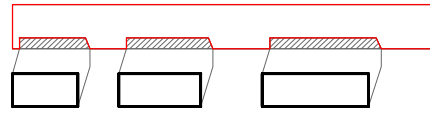
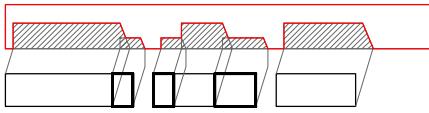
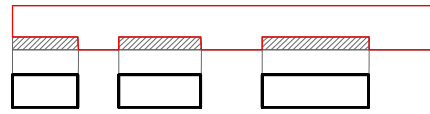
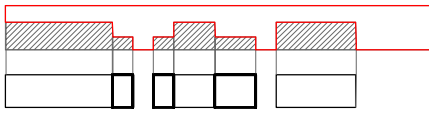
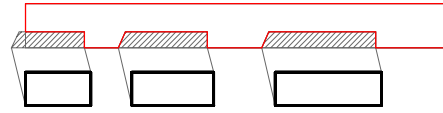
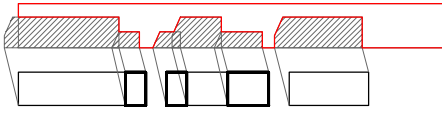
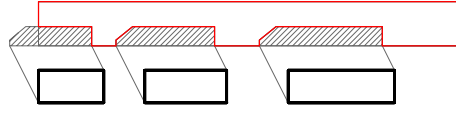
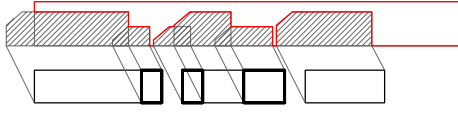
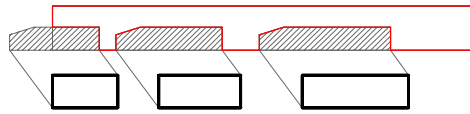
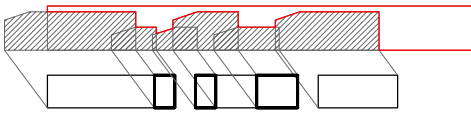


Block with 3 floors

PLOT B ( area : 30370 sqm )

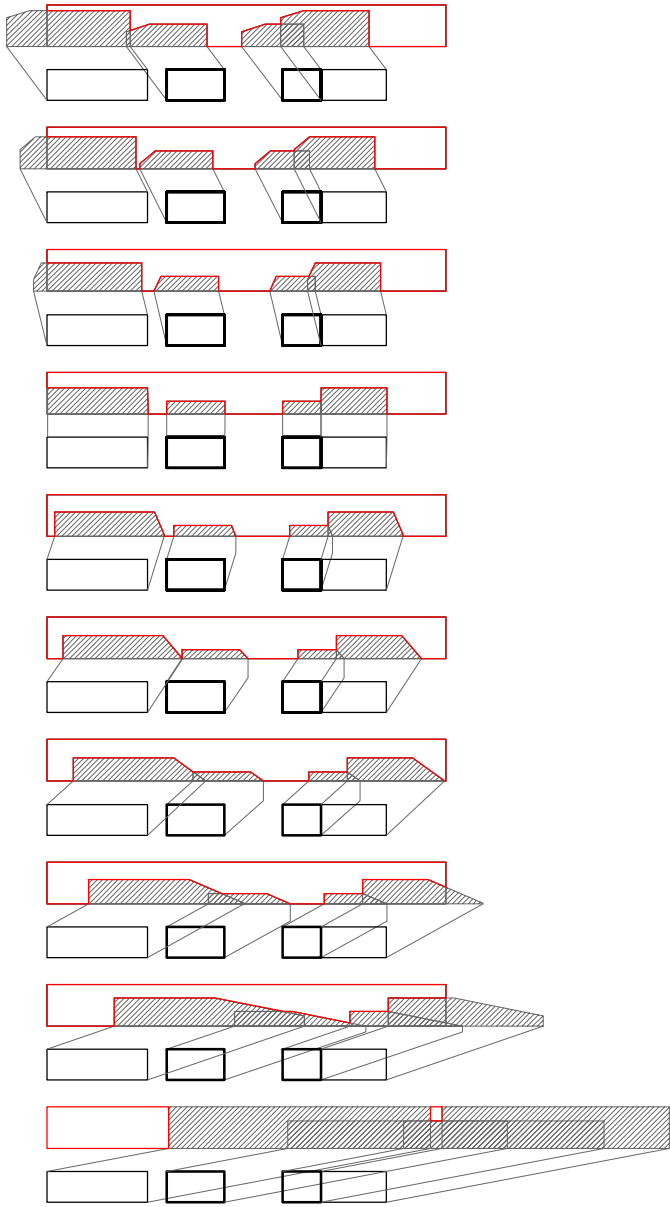


Areas on elevation without sunlight during December 21

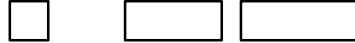
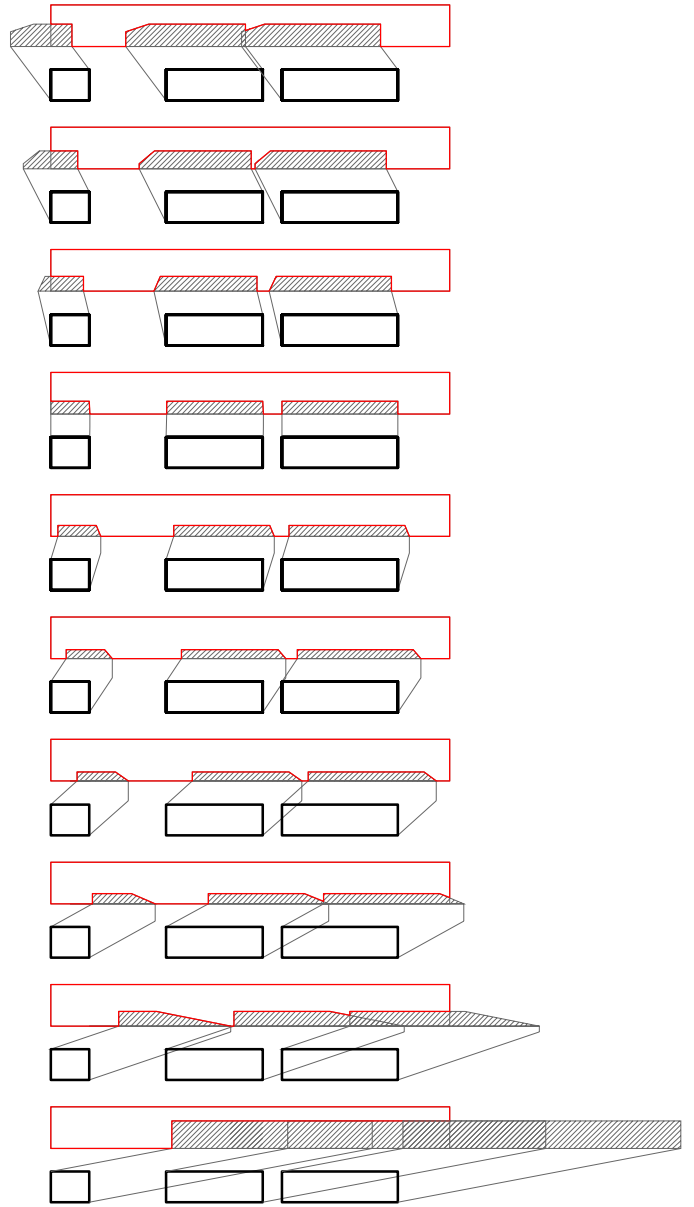


LANE no.1

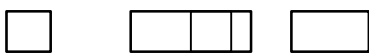
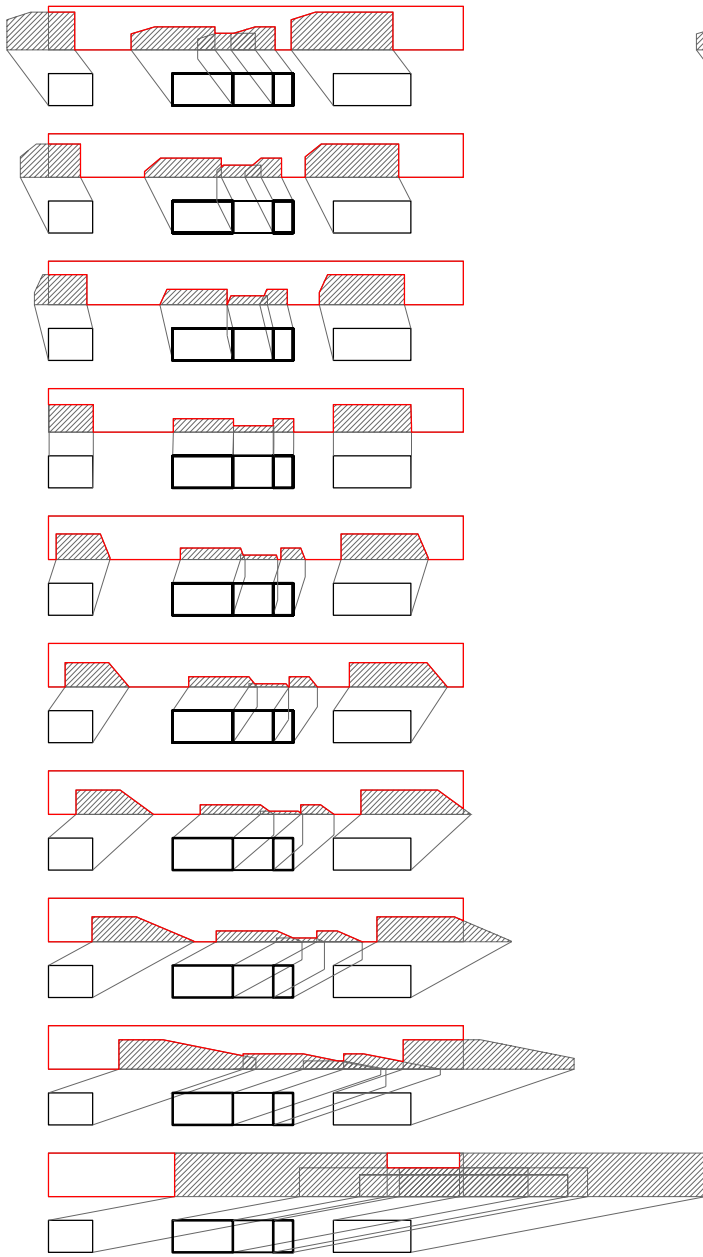
LANE no.2



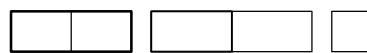
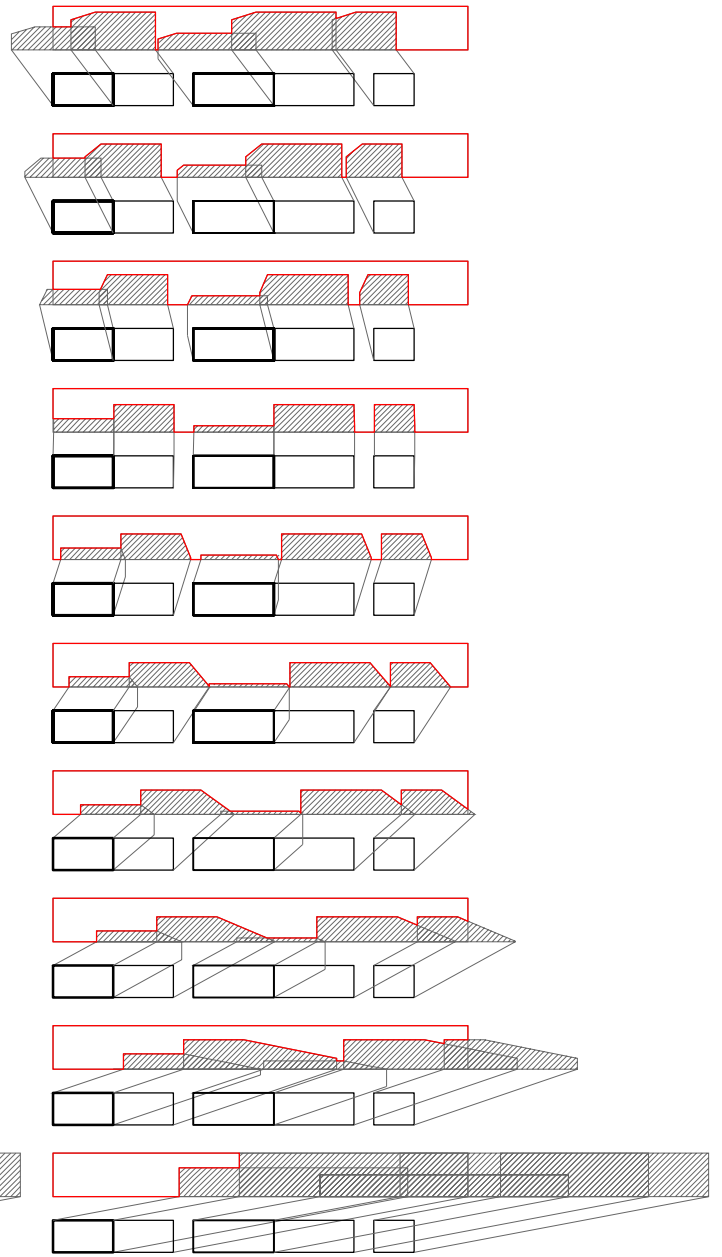
LANE no.3



LANE no.4

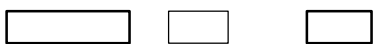
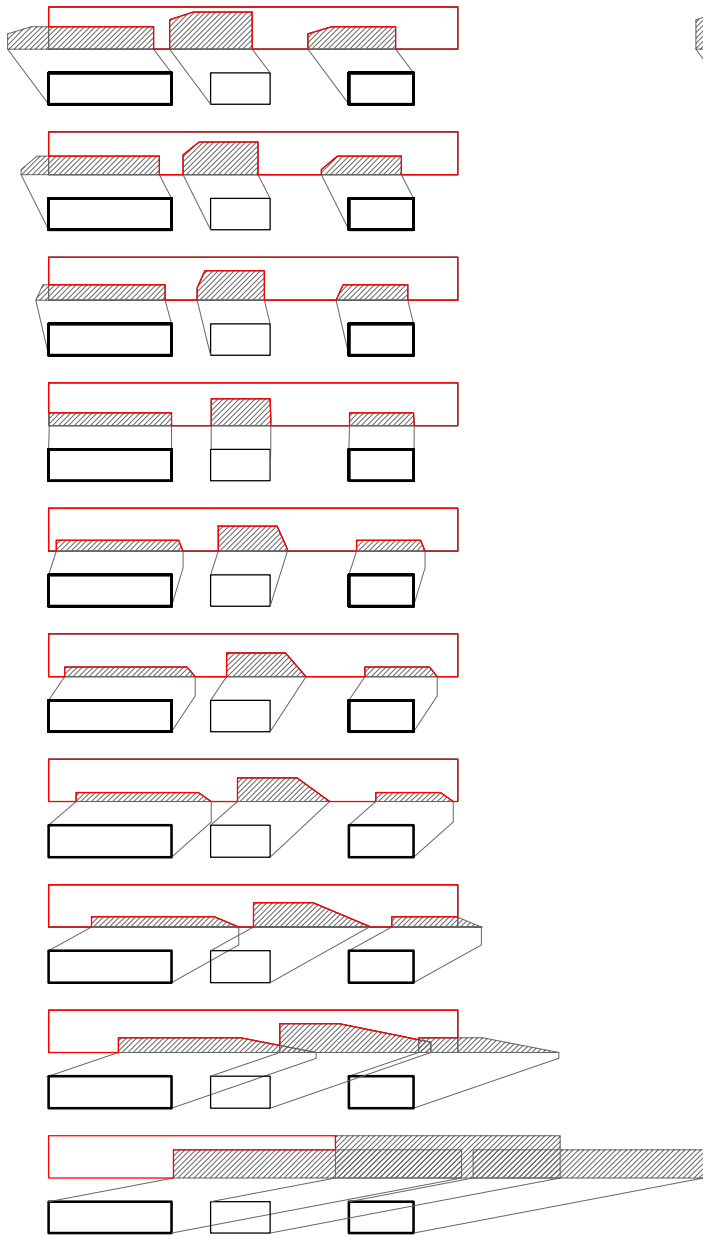


LANE no.5

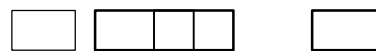
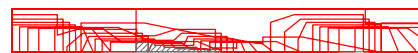
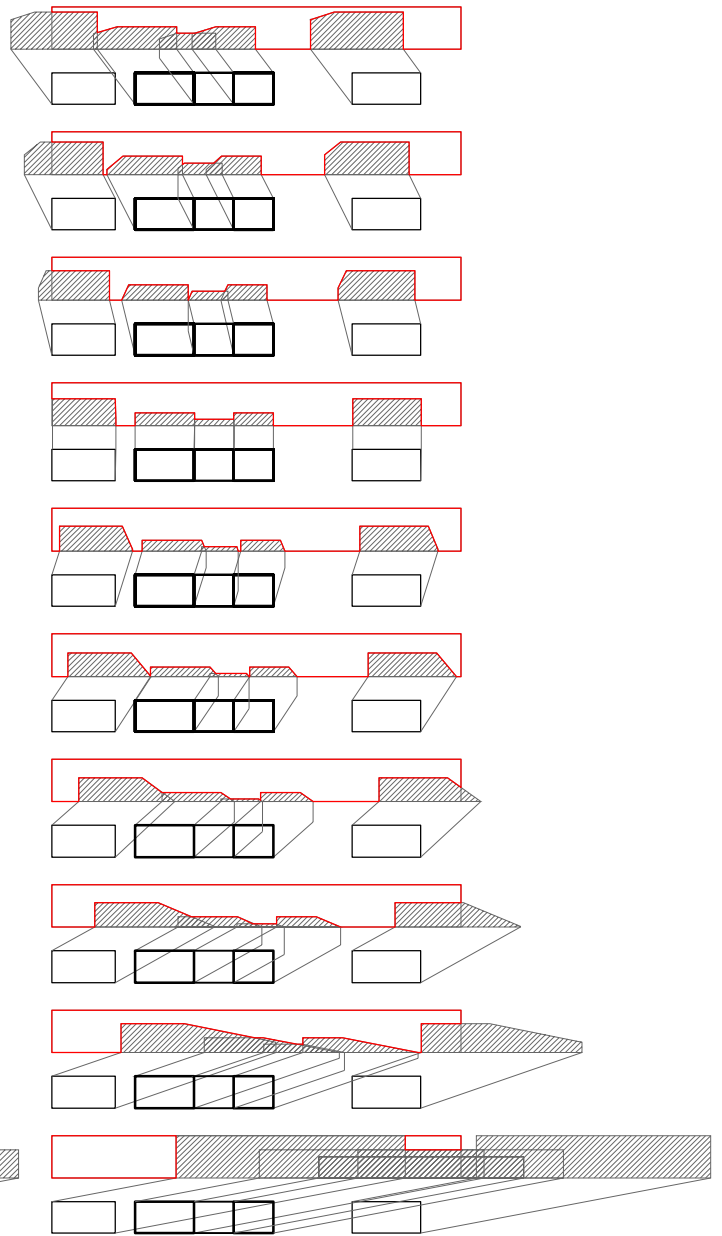


LANE no.6

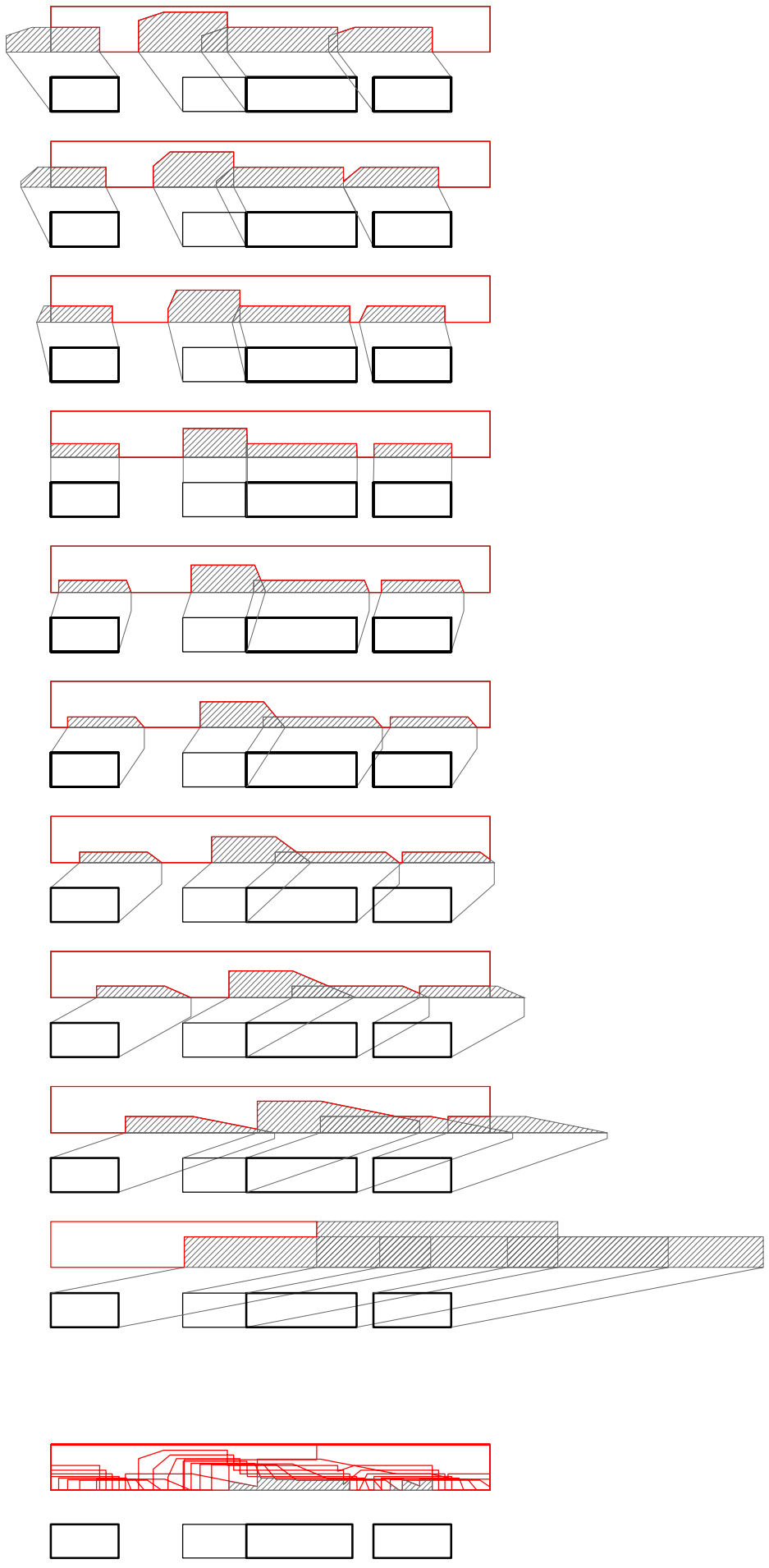




LANE no.7



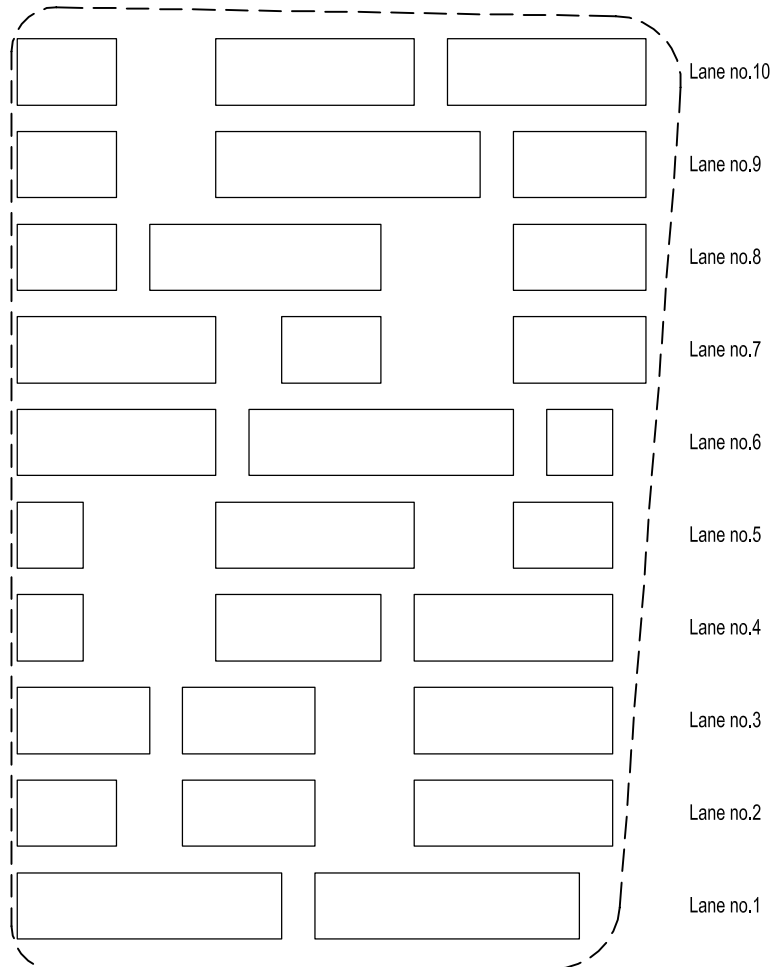
LANE no.8

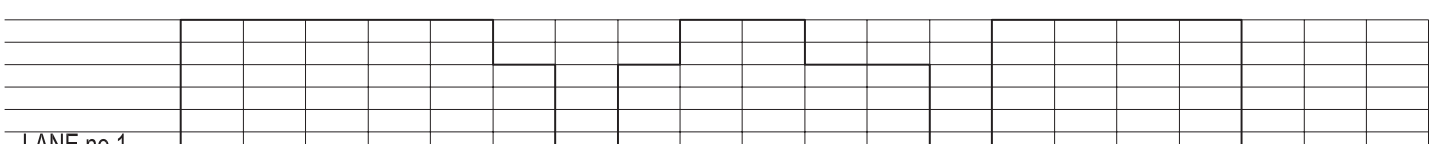
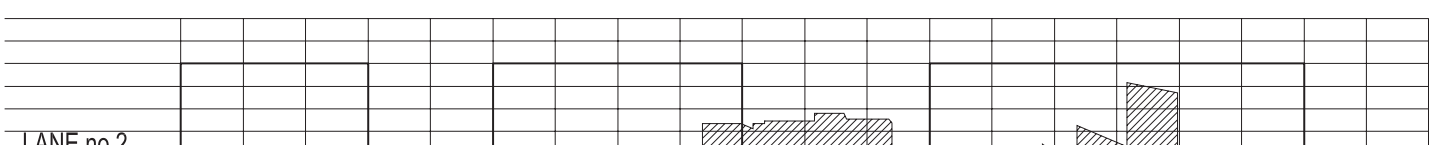
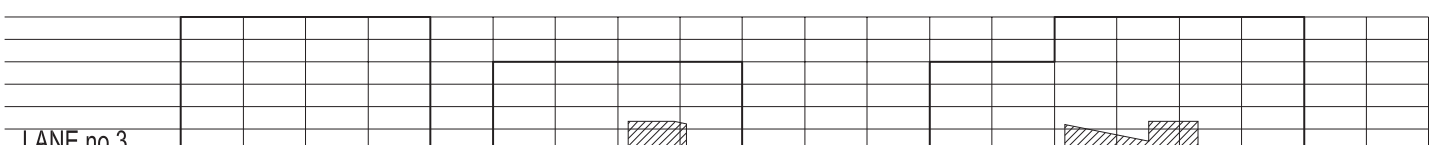
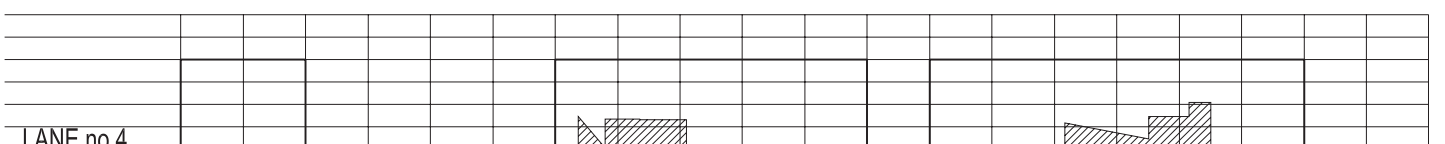
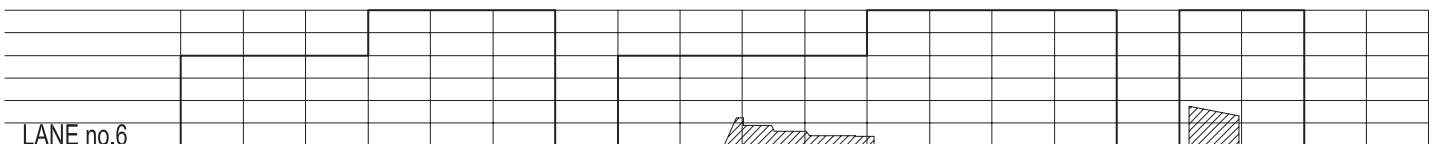
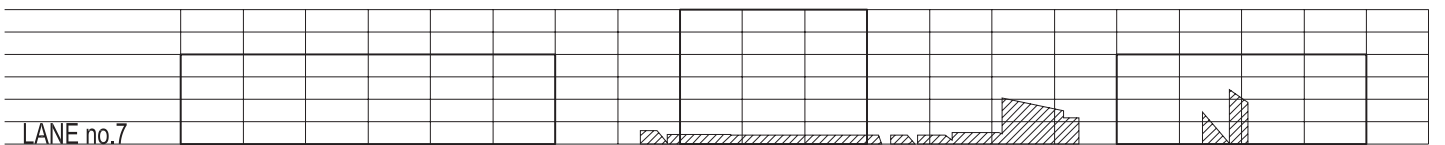
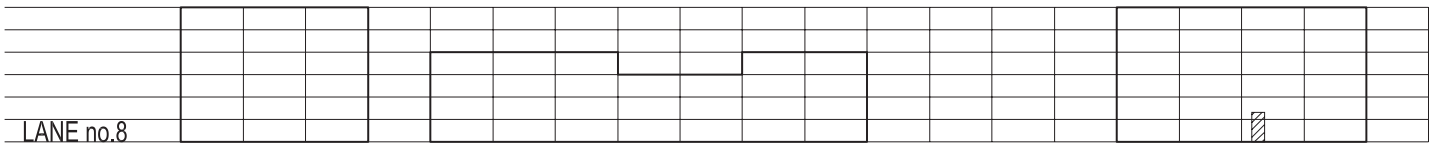
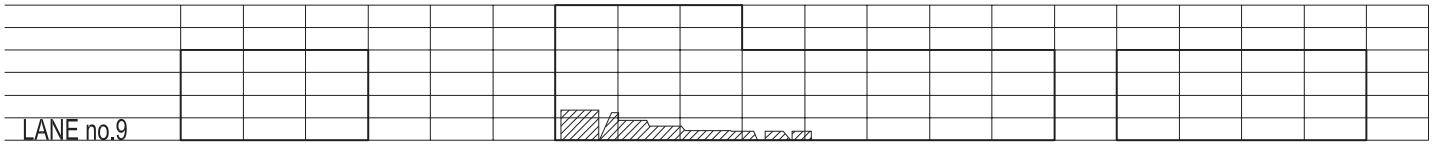
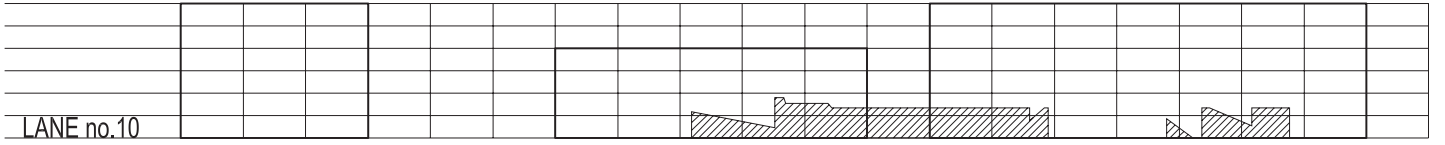


PLOT B ( area : 30370 sqm )

All blocks are 6 floors  
Block dimension : n units x 7.5m x 15m  
Row distance : 6m

APPLY SHADOW ANALYSIS ON ELEVATION

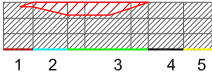




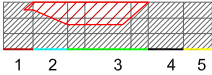


Housing in plot C

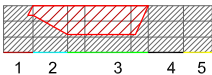
8:00 AM



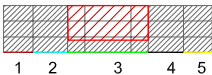
9:00 AM



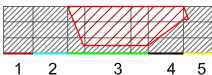
10:00 AM



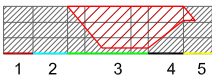
11:00 AM



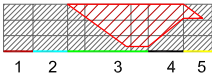
12:00 AM



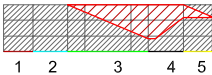
13:00 AM



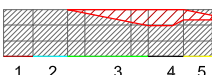
14:00 PM



15:00 PM



16:00 PM



17:00 PM

