

Submission Guidelines For Digital Calculation Plans submitted To URA

General

- 1 Each CAD file contains only one title block.
- 2 “Limit” of the drawing in each CAD file matches the boundary of the title block(i.e. no information is included outside the title block).
- 3 “Last saved view” of the CAD files covers only the title block and information within it.
- 4 “Maximum Extents” view should be shown in the “Last saved view”.
- 5 No external reference files should be referenced by the CAD files submitted (i.e. The external reference files, if any, should be binded before submission).
- 6 No raster images should be attached to the CAD file submitted.
- 7 “Draft Work”/Construction lines should not be included in the CAD files submitted.
- 8 Hatch pattern in CAD files should be kept to minimum.
- 9 No proprietary fonts should be used.
- 10 No hidden CAD layers should be included in the CAD files.
- 11 For “Additions and Alterations” or Amendment proposal, the following colours should be used:

Usage	Colour	DWG Colour Code	DGN Colour Code
Proposed /Additional Elements	Magenta	6	5
Existing /Approved Elements	Cyan	4	7
Deleted Elements	Yellow	2	4

- 12 All polygons demarcate area for calculation should be drawn using lightweight polylines for dwg files and complex shape (or shapes) for dgn files. All area included in GFA calculation should be demarcated and all polygons should be “closed”. All parcellations of area are to be presented by floors and not by individual units.
- 13 Labels represent each area demarcated and tabulation of area calculations should be indicated on top right hand corner of the plan.
- 14 Area included in layer “AREAGFAD” (i.e red polygons) should be within the area in the layer “AREAGFAA” (i.e green polygons).
- 15 Service Ducts without floor slabs and voids are to be indicated clearly with crosses.
- 16 Details calculations on quantum use and secondary use (if applicable) should be incorporated.
- 17 Detailed calculations on area of balconies to be computed over and above the Master Plan allowable gross plot ratio (if applicable) should be incorporated .
- 18 Detailed calculations on area of outdoor refreshment area to be computed over and above the Master Plan allowable gross plot ratio (if applicable) should be incorporated.

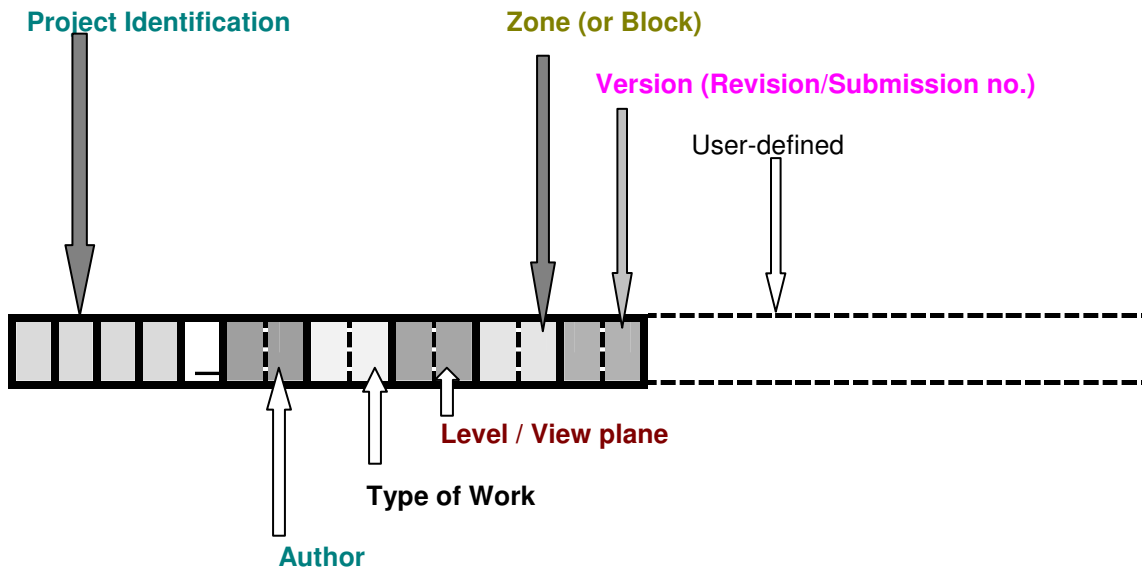
19 A summary of GFA breakdown by floors as indicated are to be incorporated in the site plan.

SUMMARY OF GROSS FLOOR AREA									
Blk No	Storey	GFA (m2)	Breakdown of Gross Floor Area (m2)						
			Commercial	Residential	Hotel	Industry	Warehouse		
1	Basement								
	1st								
	2nd								
	Roof								
	Subtotal								
2	1st								
	2nd								
	3rd								
	Roof								
	Subtotal								
Total									
Quantum(%)									

20 Digital calculation plans for manual submission should be saved in CD-ROM in either AutoCAD DWG (R14 to 2005) or DXF (AutoACAD R14 to 2005) & MicroStation DGN (V7 or V8 format).

File Naming

21 File Naming convention as indicated below should be used:



Project Identification

User-defined field. E.g. MLP01 for Merlion Park Project.

Author

Individual /company /organisation responsible for creating the file. E.g. A- for Architect.

Type of Work

SP Site Plan (If the submission contains only one CAD file with all details Such as site layout and floor layout , then Type of work should be indicated as SP)

FP	Floor Plan (If the CAD file contains floor layout and 'section and or elevation drawing' then Type of Work should be indicated as FP)
FE	Floor plan – elevation view
FX	Floor plan - cross section view
SX	Site cross section view
SE	Site elevation view
SV	Survey Plan
TP	Topo Plan
PP	Land Profile Plan
RD	Road Interpretation plan
DN	Drainage Interpretation plan
RW	Retaining walls
BC	Bin Centres
SN	Substations
LS	Landscaping
LT	Lighting Plan
OA	Other ancillary structure(eg bin centre, Guard house on same CAD File)

Level/View plane

02	2 nd storey
12	12 storey, or typical floor from 12 storey and above
A-	Attic
B2	Basement 2
E2	Elevation 2
M3	Mezzanine 3
R-	Roof
--	Whole project / Site plan
BB	Section BB
NE	Northeast elevation plan
-A	1 st drawing in the submission with multi-levels, multi-View Plane in the same CAD file
-B	2 nd drawing in the submission with multi-levels, multi-View Plane in the same CAD file

Zone or Block

01 for block 1,- - for all blocks

A1 for Zone A1

Version (Revision/Submission no.)

A -	1 st submission
B -	2 nd submission
C -	3 rd submission

CAD layers

22 Format of CAD layer as indicated in Singapore CAD layering standards (CP83 part 1) should be used.

23 Layers with the following element name should be included in the floor plans for GFA calculations:

S/No	Element name		Description of elements	DWG Colour Code	DGN Colour Code
	Main	Sub			
1	AREAGFAA		Area to be included in GFA calculation	3	2
2	AREAGFAD		Area included in layer AREAGFAA but to be excluded from GFA calculation	1	3
3	AREAGFAB		Area of balconies to be computed over and above the Master Plan (MP) allowable gross plot ratio (GPR) - Please see URA circular URA/PB/01/19-DCD & URA/PB/2007/01-DCD for details	94	130
4	AREAGFAR		Area of outdoor refreshment area to be computed over and above the Master Plan allowable gross plot ratio	94	130
5	AREAGFAR		Area to be to be excluded from outdoor refreshment area as in item 5 above	6	5
6	AREAGFAQ		Area to be included in the 60% (minimum) hotel room & hotel related use quantum	4	7
7	AREAGFAQ		Area to be included in the 60% (minimum) industrial use quantum	4	7
8	AREAGFAQ		Area to be computed under the 50% (minimum) prayer quantum	4	7
9	AREAGFAQ		Area to be included in the Business Park White (15%)	4	7
10	AREAGFAQ		Area to be to be excluded from Industrial use quantum, prayer quantum or Business Park white quantum calculation	6	5
11	AREAGFAS		Area to be computed as secondary use in an industrial development	4	7
12	AREAGFAS		Area to be computed as commercial use in a mixed use development	4	7
13	AREAGFAS		Area to be to be excluded from secondary use calculation in an industrial development or commercial use calculation in a mixed use development	6	5

24 Layers with the following element name should be included in the site plans for calculation of Communal Open Space and Building Coverage:

S/No	Element name		Description of elements	DWG Colour Code	DGN Colour Code
	Main	Sub			
1	AREABDBA		Building block area	6	5
2	AREABDBD		Area to be deducted from building coverage	2	4
3	AREACOSA		Communal open space area	4	7
4	AREACOSD		Area to be deducted from communal open space	2	4

25 Layers with the following element name should be included in the proposed plan:

S/No	Element name	Description of elements	DWG Colour Code	DGN Colour Code
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	Main	Sub			
1	ENDOURA-		Plan endorsement	7	0
2	ANOTTBLK		Title block, Scales, Drawing boundary Legend text Company Logo	7 or any other colour	0 or any other colour
3	LNSPBUFF		Green buffer line with dimension , physical buffer line with dimension	94	130
4	LNSPVERG		Planting verge with dimension	94	130
5	RETW----		Retaining walls with dimension	1	3
6	ROAD----		Roadways, Road category text Road Name text Road centre lines Kerbs	14	131
7	ROADWIDL		Road widening lines, Plot Numbers for Road reserve	14	131
8	SDRNRESV		Drainage reserve lines, Plot Numbers for Drainage reserve	5	1
9	SITE----		Site, external works, earth work	7	0
10	SITEBNRY		Site boundary	1	3
11	CADI----		Cadastral information, Lot Number, Lot Boundary	7	0
12	SITEKPLN		Key plan	7	0
13	SITENRTH		North point	7	0
14	SITESTBK		Building setback dimensions	1	3
15	SITEWALL		Boundary wall, site fencing	174	129
16	SITEBLDG		Building Outline	4	7
17	SITEBASE		Basement Outline	214	133
18	TOPOPLVL		Platform level	7	0
19	SPACBLDG		Building plot boundaries, building plot numbers	14	131
20	SPACCOSS		Plot boundaries and plot numbers for communal use/open space	94	130
21	SPAC----		Plot boundaries and plot numbers for right of way/easement, parkway reserve	7	0

26 Layers with the following element name should be included in the Sketch(Floor, Section & Evaluation) plans :

S/No	Element name	Description of elements	DWG Colour Code	DGN Colour Code	
	Main	Sub			
1	ENDOURA-		Plan endorsement	7	0
2	ANOTTBLK		Title block, Scales, Drawing boundary Legend text Company Logo	7 or any other colour	0 or any other colour
3	FLORLEVL		Floor level	7	0
4	RETW----		Retaining walls with dimension	1	3
5	SITENRTH		North point	7	0
6	SITEWALL		Boundary wall, site fencing	174	129
7	TOPOPLVL		Platform level	7	0
8	BEAM----		Beams	4	7
9	COLN----		Column	4	7
10	CPRK----		Cark Parking lots	4	7
11	DOOR----		Door	4	7
12	FLOR----		Floor	4	7
13	GRID----		Grids	4	7
14	LIFT----		Lifts	4	7
15	STRC----		Staircases	4	7
16	WALL----		Walls	4	7
17	WIND----		Windows	4	7