INTERNSHIP REPORT

PREPARATION OF DETAIL DRAWINGS OF DOG LEGGED STAIR CASE AND BIM IN REVIT



# By

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# ASCENT CS GLOBAL

INTERNSHIP REPORT

*A report submitted in partial fulfillment of the requirements for the 2nd Year Internship*

**BACHELOR OF TECHNOLOGY**

**In**

## CIVIL DEPARTMENT

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## ASCENT CS GLOBAL

### Under the Supervision of

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**(Duration : 11.07.2022 to 10.09.2022)**

### S.R.K.R ENGINEERING COLLEGE(A)

**DEPARTMENT OF CIVIL ENGINEERING**

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CERTIFICATE

This is to certify that the **“Summer Internship report”** submitted by **ARANGI ASHOK (REGD:20B91A0117)** is work done by his and submitted during 2021–2022 academic year, in partial fulfillment of the requriements for the award of the Summer Internship Program for **Bachelor of Technology in CIVIL ENGINEERING at** **ASCENT CS GLOBAL, HYDERABAD** from *11.07.2022* to *10.09.2022.*

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**ABBREVATION**

|  |  |  |
| --- | --- | --- |
| **SHORTCUT** | **COMMAND** | **COMMENT** |
| ATT | ATTDEF | Opens attribute definition dialogue box |
| ATTEDIT | ATTEDIT | Edit attribute values for a specific block |
| B | BLOCK | Opens block dialogue box in order to make a block |
| BATTMAN | BATTMAN | Opens block attribute manager |
| BATTORDER | BATTORDER | Displays attribute order dialogue box |
| BC | BCLOSE | Closes the block editor |
| BCOUNT | BCOUNT | Counts the blocks in a drawing |
| BE | BEDIT | Opens the edit block definition dialogue box |
| EATTEXT | EATTEXT | Enhanced attribute extraction wizard to count blocks |
| GATTE | GATTE | Global attribute edit of multiple blocks |
| I | INSERT | Opens insert dialogue to insert a block |
| -I | INSERT | Insert a block by name |
| MINSERT | MINSERT | Insert block in rectangular array |
| REFEDIT | REFEDIT | Edit a block reference in place |
| REN | RENAME | Opens rename dialogue box to rename blocks, layers, etc |
| W | WBLOCK | Write a block - for use in other drawings |
| XLIST | XLIST | Lists type/block name/layer name/color/line type of a nested object in a block or an xref |
| A | ARC | Draw an arc |
| AL | ALIGN | Align an object with another |
| AP | APPLOAD | Opens application load dialogue box |
| AR | ARRAY | Opens array dialogue box |

|  |  |  |
| --- | --- | --- |
| AUDIT | AUDIT | Audit drawing for errors |
| AV | DSVIEWER | Opens ariel view of drawing |
| B | BLOCK | Opens block dialogue box |
| C | CIRCLE | Draw a circle |
| CO | COPY | Copy an object |
| CHA | CHAMFER | Chamfer between 2 non-parallel lines |
| COL | COLOR | Opens select color dialogue box |
| CUI |  | Opens customize user interface dialogue |
| D | DIMSTYLE | Opens dim style manager |
| DC | ADCENTER | Opens design center |
| DI | DIST | Check a distance |
| DIV | DIVIDE | Inserts point node a set division |
| DO | DONUT | Draw a solid donut shape |
| DV | DVIEW | Perspective view |
| E | ERASE | Erase a selection |
| EX | EXTEND | Extend a selection |
| F | FILLET | Draw an arc between 2 intersecting lines |
| FI | FILTER | Opens filter dialogue box |
| FLATTEN | FLATTEN | Converts 3D to 2D |
| G | GROUP | Launches the group dialogue box |
| H | HATCH | Opens hatch and gradient dialogue box |
| I | INSERT | Insert a block |

|  |  |  |
| --- | --- | --- |
| IM | IMAGE | Launches image manager |
| J | JOIN | Joins 2 objects to form single object |
| JPGOUT | JPGOUT | Creates a JPEG file of current drawing |
| L | LINE | Draw a line |
| LA | LAYER | Opens layer manager |
| LE | QLEADER | Draw a leader line (may need to adjust settings) |
| LEAD | LEADER | Leader line with annotation |
| LI or LS | LIST | Display information about objects in a text window |
| LO | -LAYOUT | Creates a new layout tab |
| LTS | LTScale | Change the line type scale |
| M | MOVE | Move a selection |
| MA | MATCHPROPERTIE  S | Match properties of an object |
| ME | MEASURE | Inserts point node at input distance |
| O | OFFSET | Offset a selection |
| OP | OPTIONS | Launches options dialogue box |
| P | PAN | Pan in drawing |
| PE | POLYEDIT | Edit a polyline |
| PL | PLINE | Draw a polyline |
| PLOT | PLOT | Opens plot/print dialogue box |
| PO | POINT | Point marker or node - DDPTYPE to change point style |

|  |  |  |
| --- | --- | --- |
| PR | PROPERTIES | Opens properties dialogue box |
| PRE | PREVIEW | Preview a plot |
| PU | PURGE | Opens purge dialogue box to remove unused elements |
| RE | REGEN | Regenerate the display |
| REC | RECTANG | Draw a rectangle |
| REN | RENAME | Opens rename dialogue box to rename blocks, layers, etc |
| RO | ROTATE | Rotate a selection |
| SP | SPELL | Spell check a selection - ALL to check entire drawing |
| T | MTEXT | Insert multiline text |
| TB | TABLE | Opens insert a table dialogue box |
| TP | TOOLPALETTES | Displays tool palette |
| TR | TRIM | Trim a selection |
| U | UNDO | Undo last command |
| UN | UNITS | Opens units dialogue box |
| V | VIEW | Opens view dialogue box |
| W | WBLOCK | Write a block |
| WHOHAS | WHOHAS | Displays who has a drawing open |
| X | EXPLODE | Explode a selection |
| XR | XREF | Opens x-reference manager |
| Z | ZOOM | Zoom in display - A=All, E=EXTENTS, |

|  |  |  |
| --- | --- | --- |
|  |  | W=WINDOW |
| CTRL+8 | QUICKCALC | Displays the calculator |
| D | DIMSTYLE | Opens dimension style manager dialogue box |
| DAL | DIMALIGNED | Aligned linear dimension line |
| DAN | DIMANGULAR | Angular dimension line |
| DAR | DIMARC | Arc length dimension |
| DBA | DIMBASELINE | Ordinate dimension from baseline of previous dimension |
| DCO | DIMCONTINUE | Ordinate dimension from 2nd extension line of previous dimension |
| DDI | DIMDIAMETER | Diameter dimension for circles and arcs |
| DED | DIMEDIT | Edit dimension text on dimension objects |
| DI | DIST | Check a distance |
| DIMCENTER | DIMCENTER | Creates center mark |
| DLI | DIMLINEAR | Linear dimension |
| DOR | DIMORDINATE | Ordinate point dimension |
| DOV | DIMOVERRIDE | Override dimension style |
| DRA | DIMRADIUS | Radial dimension for circles and arcs |
| ID | ID | Display the co-ordinate values of a point |
| UN | UNITS | Opens drawing units dialogue box |
| A | ARC | Draw an arc with 3 points |
| B | BLOCK | Opens block dialogue box in order to make a block |

|  |  |  |
| --- | --- | --- |
| BO | BOUNDARY | Draw a boundary |
| C | CIRCLE | Draw a circle |
| DO | DONUT | Draw a solid donut shape |
| DT | TEXT | Single line text |
| DIV | DIVIDE | Inserts point node a set division |
| EL | ELLIPSE | Draw an ellipse |
| F | FILLET | Draw an arc between 2 intersecting lines |
| G | GROUP | Opens object grouping dialogue |
| H | HATCH | Opens hatch and gradient dialogue box |
| L | LINE | Draw a line |
| LE | QLEADER | Draw a leader line (may need to adjust settings) |
| LEAD | LEADER | Leader line with annotation |
| ML | MLINE | Draw multilines |
| O | OFFSET | Offset an object by distance |
| PL | PLINE | Draw a polyline - a complex line |
| PO | POINT | Point marker or node - DDPTYPE to change point style |
| POL | POLYGON | Draw a regular polygon 3 to 1024 sides |
| RAY | RAY | Construction line in one direction |
| REC | RECTANG | Draw a rectangle |
| REG | REGION | Region - for shading for example |
| REVCLOUD | REVCLOUD | Revision cloud - note can select a polyline |

|  |  |  |
| --- | --- | --- |
| SPL | SPLINE | Spline or smooth curve along points |
| T | MTEXT | Multi-line text |
| WIPEOUT | WIPEOUT | Masks part of drawing for clarity |
| XL | XLINE | Construction line of infinite length |
| REFEDIT | REFEDIT | Edit an external reference in place |
| XA | XATTACH | Opens select reference file dialogue for attaching Xref |
| D | DIMSTYLE | Opens dimension style manager dialogue box |
| DC | ADCENTER | Opens design center |
| DDPTYPE | DDPTYPE | Opens point style dialogue box |
| LA | LAYER | Opens layer manager |
| TP | TOOLPALETTES | Displays tool palette |
| TS | TABLESTYLE | Opens table style dialogue box |
| F1 | HELP | Opens Autocad help |
| F2 | TEXTSCR GRAPHSCR | Switches between text screen and graphic area |
| F3 | OSNAP | Switches osnap on/off |
| F5 or CTRL+E | ISOPLANE | Cycles through isoplanes |
| F6 or CTRL+D | COORDS | Turns coordinate display on/off |
| F7 or CTRL+G | GRID | Turns grid on/off |
| F8 or CTRL+L | ORTHO | Turns ortho on/off |
| F9 or CTRL+B | SNAP | Turns snap on/off |

|  |  |  |
| --- | --- | --- |
| F10 or CTRL+U | POLAR | Turns polar on/off |
| F11 or CTRL+W | OSNAP TRACK | Turns object snap tracking on/off |
| F12 | DYNMODE | Turns dynamic input on/off |
| AA | AREA | Calculate the area |
| DI | DIST | Calculate a distance and angle |
| DDPTYPE | DDPTYPE | Opens point style dialogue box |
| ID | ID | Display the co-ordinate values of a point |
| LI or LS | LIST | Display information about objects in a text window |
| MASSPROP | MASSPROP | Calculate the region/mass properties of a solid |
| PR | PROPERTIES | Opens properties dialogue box |
| WHOHAS | WHOHAS | Displays who has a drawing open |
| XLIST | XLIST | Lists type/block name/layer name/color/linetype of a nested object in a block or an xref |
| CTRL+0 | CLEANSCREEN | Turns user interface elements on/off |
| CTRL+1 | PROPERTIES | Turns properties on/off |
| CTRL+2 | ADCENTER | Turns design center on/off |
| CTRL+3 | TOOLPALETTES | Turns tool palettes window on/off |
| CTRL+8 | QUICKCALC | Launches calculator window |
| CTRL+A |  | Select all |
| CTRL+C | COPYCLIP | Copies objects to clipboard |
| CTRL+H |  | Turns a group on or off |
| CTRL+J |  | Repeats last command |
| CTRL+N | NEW | Opens create new drawing dialogue box |
| CTRL+O | OPEN | Opens the select file dialogue box |
| CTRL+P | PLOT | Opens the plot dialogue box |
| CTRL+R | CVPORT | Switches between viewports |
| CTRL+S | QSAVE | Opens the save drawing as dialogue box |
| CTRL+SHIFT+ S |  | Save as |
| CTRL+V | PASTECLIP | Pastes data from clipboard to drawing |
| CTRL+X | CUTCLIP | Removes select object from drawing to clipboard |
| CTRL+Y | REDO | Performs the operation cancelled by UNDO |
| CTRL+Z | UNDO | Undoes the last operation |
| CTRL+TAB |  | Switches between open drawings |
| CTRL+PAGE UP |  | Switch up between layout tabs |
| CTRL+PAGE DOWN |  | Switch down between layout tabs |
| ARROW  UP/Down |  | Recall last command |

### 

### ABSTRACT AUTO CAD:-

AutoCAD is the most widely used drawing tool among the similar design drawing products. In the process of drawing different types of design drawings of the same product, there are a lot of repetitive and single work contents. The traditional manual method uses a drawing software AutoCAD drawing graphics with low efficiency, high error rate and high input cost shortcomings and many more. In order to solve these problems, the design of the parametric drawing system of the hot-rolled I-beam (steel beam) cross-section is completed by using the VBA secondary development tool and the Access database software with largecapacity storage data, and the analysis of the functional extension of the plane drawing and the parametric drawing design in this paper. For the secondary development of AutoCAD functions, the system drawing work will be simplified and work efficiency also has been greatly improved. This introduction of parametric design of AutoCAD drawing system to promote the industrial mass production and related industries economic growth rate similar to the standard I-beam hot-rolled products

### REVIT :-

Building information modeling (BIM) starts with Revit. This chapter focuses on the Revit graphical user interface (GUI) and talks about the Revit interface, the Project Browser, and file types and families. It shows how the Ribbon and the tabs flow together, and looks at another feature in the Ribbon panels that allow to reach beyond the immediate Revit interface. When one click the Wall button, a new set of commands appears on the Ribbon. This new set of commands combines the basic Modify commands with a tab specific to his immediate process. Revit has a few similarities to AutoCAD and MicroStation. One of those similarities is the ability to perform simple object selection and to execute common modify commands. There are two ways to select an object: by using a crossing window or by using a box. Each approach plays an important role in how to select items in a mode.

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