

PreDCR Help Manual

Automated Layout Plan Screening & Building Plan Approval System



Department of Town and Country Planning, Indravati Bhawan, Nava Raipur Atal Nagar



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Revision History

Version	Updated By	Date	Approved By	Significant Changes
1.0	Gauri Shelar	23-12-2020	Abhijit Chakravarty	First Baseline Version
1.1	Soumya Saxena	19-02-2021	Abhijit Chakravarty	Revision history table incorporated; Minor formatting corrections made.

Document outline

About the drawing protocol document

Chhattisgarh Municipal Corporation has planned to automate the building plan approval process by introducing the AutoDCR system. AutoDCR software reads the CAD drawings submitted by architects and automatically produces the deviation report based on the control regulations prescribed by CHIPS.

The purpose of this document is to establish a set of guidelines to Architects for preparation of drawings to be submitted for taking Building Permission from CHIPS, Uniformity in the process of drafting of the drawings to be submitted for approval is required for automation of building approval system by introducing AutoDCR system.

The consultants/Architects should prepare the drawings keeping specific objects in specific layers with specific colors and text. The layers required to be generated with explanation of what is required to be drawn on which layer is described in this document. This document serves as a source of information on obtaining level of consistency in drafting and approval process focuses on both the theoretical and practical description of process flow and protocol to be used while preparing drawings for submission at CHIPS for Building Permission. The document explains use of PreDCR utility.

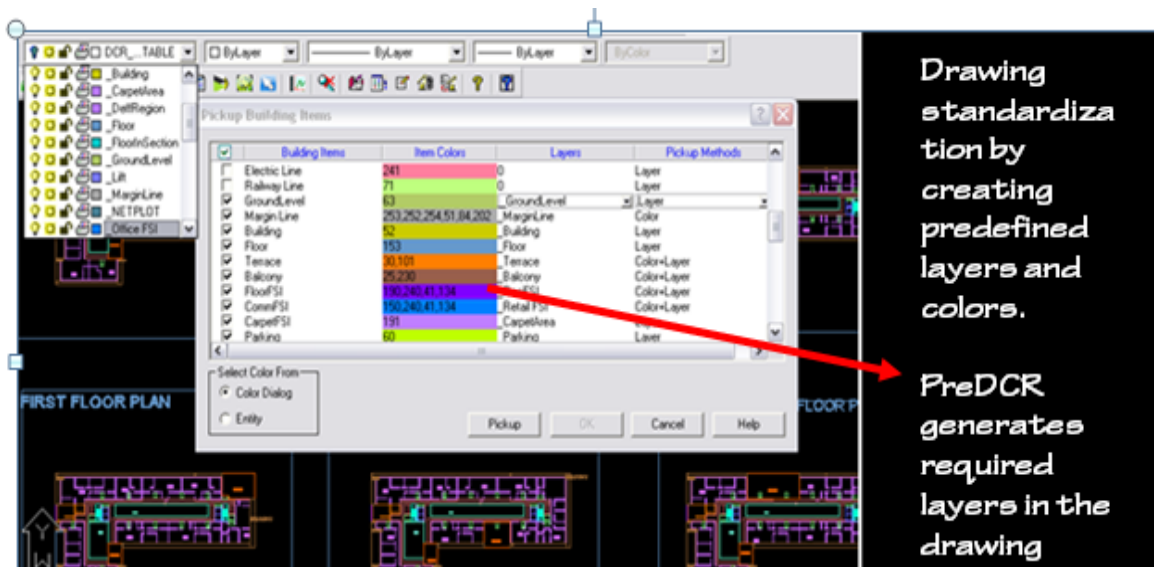
How to read this drawing protocol document?

This document should be read in conjunction with the building byelaws, which will be applicable for approval of a proposal. The reader of this document should have understood the applicable byelaws for scrutiny of a proposal. The reader should also be familiar with AutoCAD terminology and environment for better understanding of the system. It is more exploratory in nature than the specifications and contains sections to explain particular aspect of planning and designing.

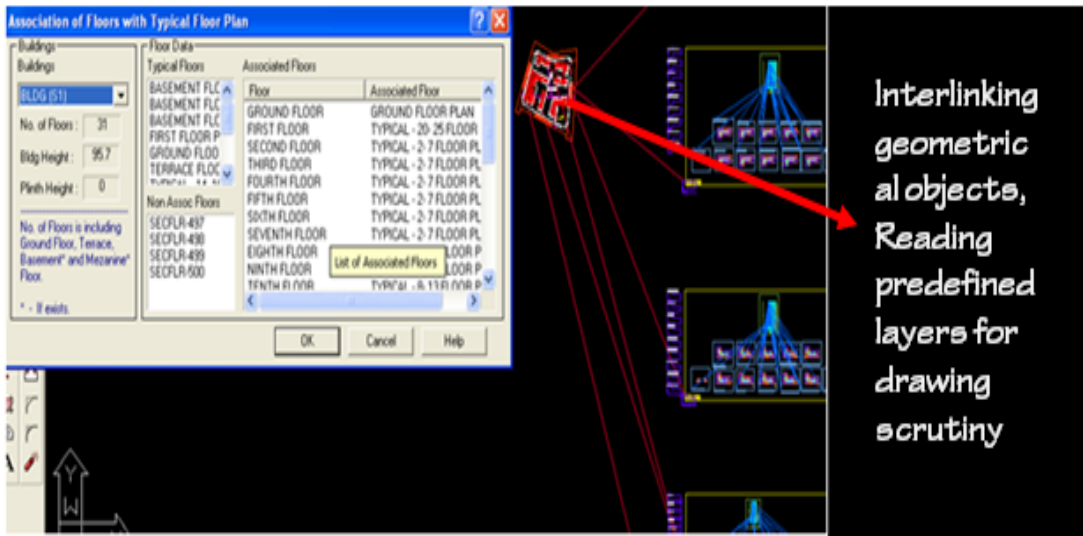
Drawing pre-formatting utility (PreDCR)

Overview

AutoDCR is a unique and innovative approach to automate scrutiny of building proposals by reading CAD drawings. AutoDCR software needs preformatted drawings with some specifications. PreDCR is a software application used to create the architectural plan as per AutoDCR software requirements. It helps in standardization of drawings and helps in reducing time required for preparing submission drawings. It works under AutoCAD environment with additional menu & toolbar.



Using PreDCR commands user can create all the required layers in one click. Once all the layers are created in the drawing user can use AutoCAD commands to draw entities on the corresponding layers with the help of PreDCR software. Short commands are provided to activate any layer in PreDCR. PreDCR also helps in correcting drafting errors in the drawing. At any time, user can verify if the drawn entities are properly closed or not, if proper name text has been written inside all closed poly or not etc. PreDCR will highlight all the failed entities if any.

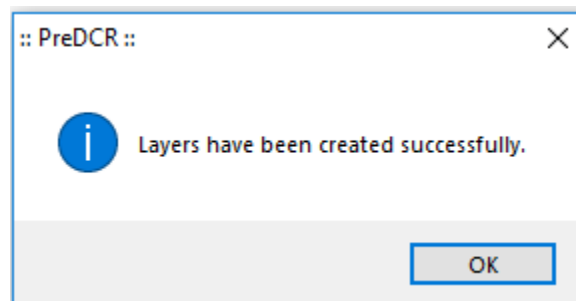


Aims & objectives

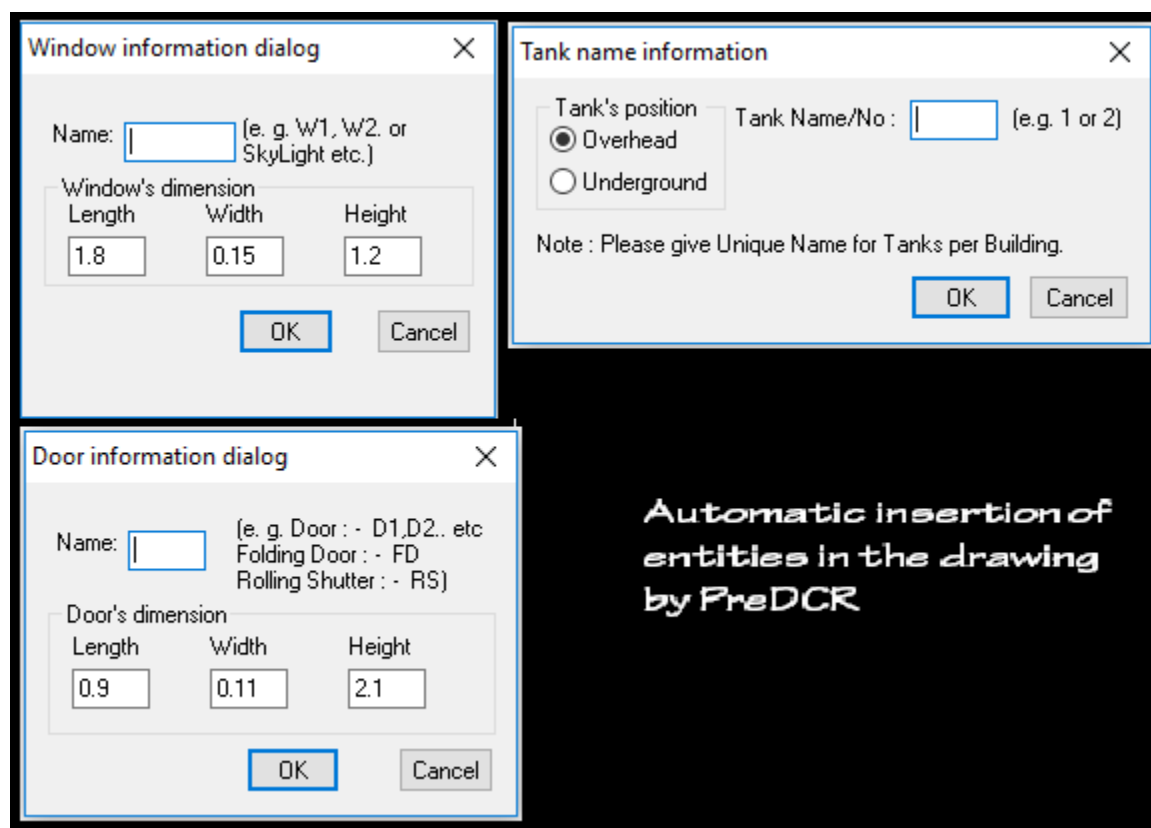
- To bring uniformity and standardization in submission drawing format.
- To create error-free drawing by auto-correction of drafting errors.
- To Increase drafting speed and efficiency
- To reduce drawing data redundancy.
- To remove dimensioning and area calculation requirements from submission drawing format and auto-calculating areas in AutoDCR automatically.

Salient features

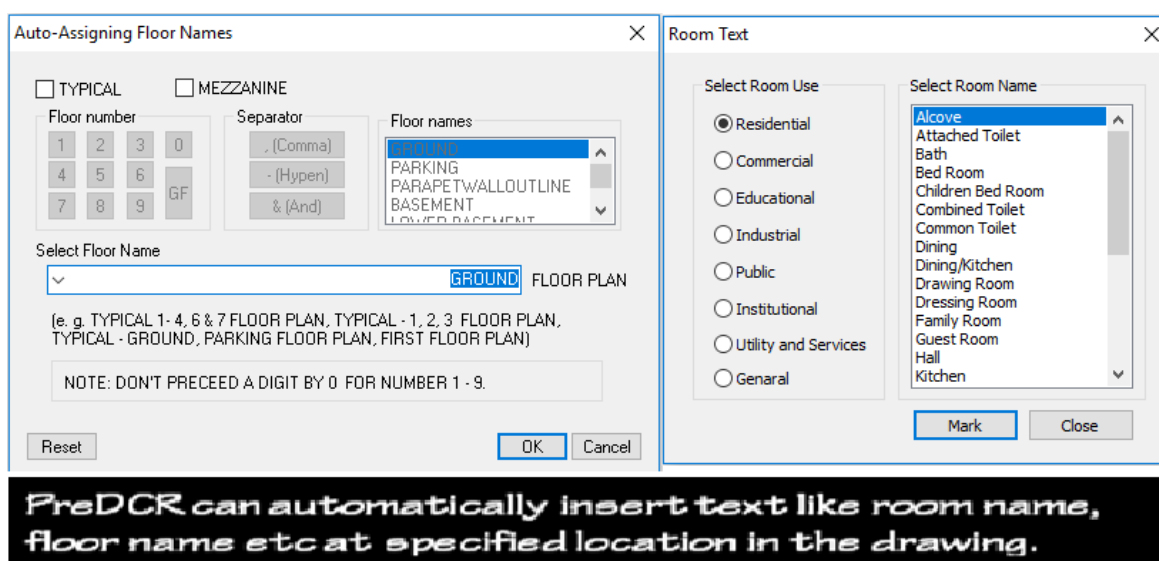
Automatically creating required layers in the drawing



Automatically creating and inserting entites of required size in the drawing: User can define size of entity and insertion point in the the drawing.PreDCR will create and insert entity in the drawing at specified location.



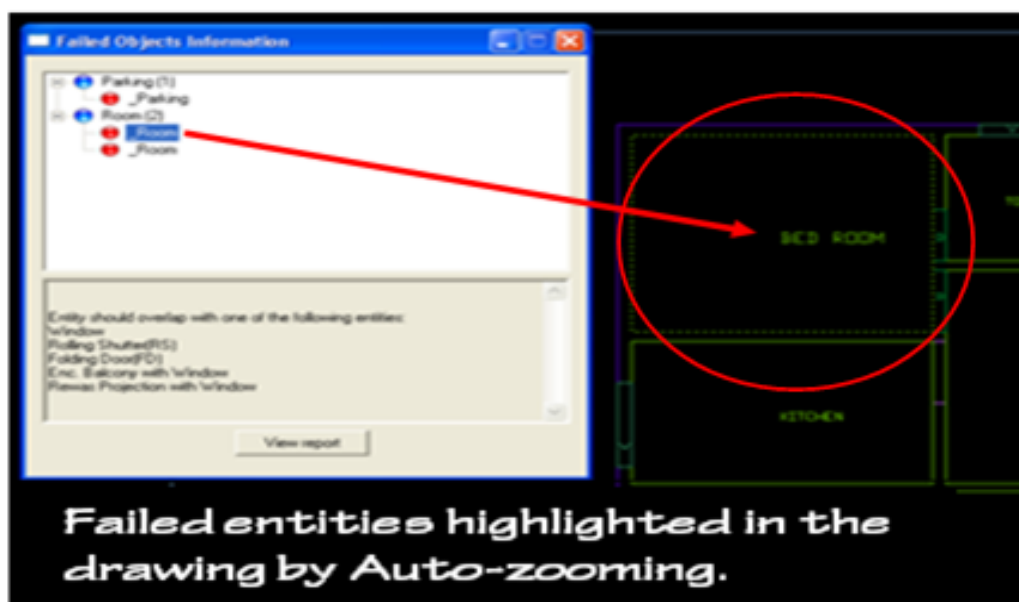
Automatic insertion of required text in the drawing.



Drawing cleaning, refinements of poly lines, text and closed entity verification will be done by PreDCR to eliminate drafting errors.



PreDCR verify and will highlight failed entities in verifications with detailed explanation and Auto-zooming.

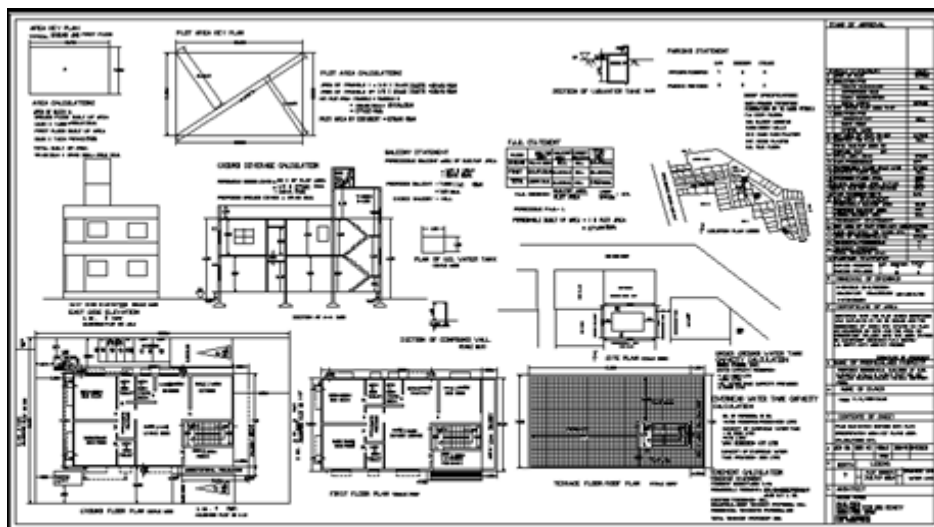


Benefits of PreDCR

- 1) Standardization of submission drawings-Brings uniformity & standardization in submission drawing format. This software will correct some minor drafting errors and provide list of failed entities with Auto-zooming facility so that user can easily locate the failed entities in the drawing.
- 2) Operational ease and convenience-Data redundancy is eliminated from the drawing. Only minimum required entities are to be drawn in the drawing, as most of the data will be auto detected by the system from existing available data.
- 3) Increased speed and efficiency-PreDCR facilitates Auto insertion of many drawing entities like parking, door windows etc. of required size and number. Test auto-insertion facility saves text-typing efforts. Auto-dimensioning and auto-calculation facility saves calculation efforts. Using this software user can create all the required layers at one click.
- 4) Accuracy - Accuracy in area calculations is achieved. Preparing Calculation tables, showing dimensions in the drawing is not required.

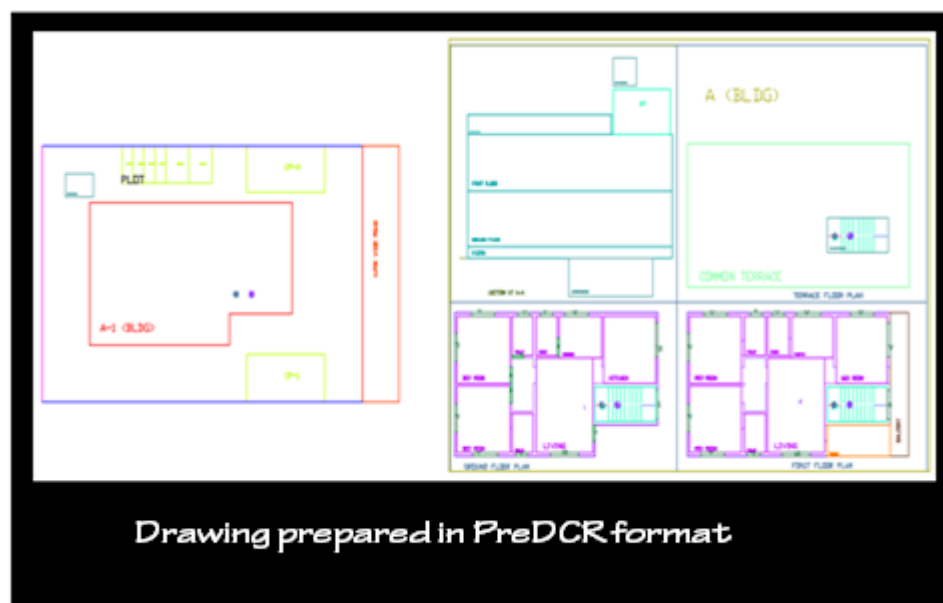
Drawing formats

1) Conventional submission drawing format



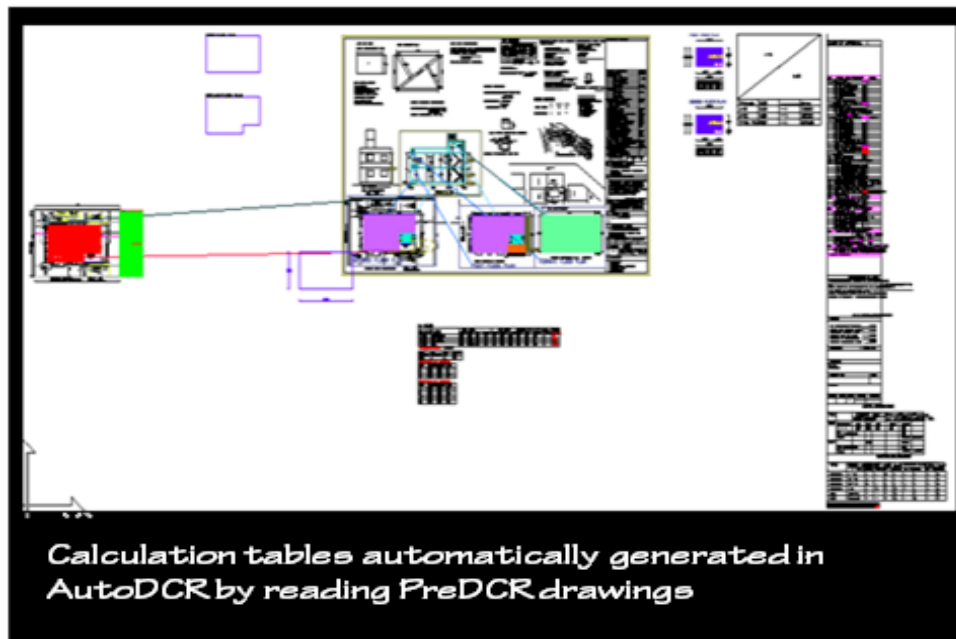
Conventional drawing submission format

2) As per PreDCR format specified by PreDCR



Drawing prepared in PreDCR format

3) After scrutiny of drawing using AutoDCR-



Protocol details

PreDCR is a **software** application used to create the architectural plan as per **AutoDCR** software requirements. It works under AutoCAD environment with additional menu & toolbar.

Using PreDCR commands user can create all the required layers in one click. Once all the layers are created in the drawing user can use AutoCAD commands to draw layout plan.

As per AutoDCR requirement all building items like proposed Plot Boundary, proposed work should be drawn on the corresponding layers. Short commands are provided to activate any layer in PreDCR

At any time user can verify if the drawn entities are properly closed or not, if proper name text has been written inside all closed poly or not etc. PreDCR will highlight all the failed entities if any.

PreDCR can be used to modify/make and verify the existing or new architectural plan as per **AutoDCR** software requirements. Users are free to use AutoCAD commands and or PreDCR commands to achieve the main purpose which is:

Drawing the architectural plan in DWG format as per AutoDCR software requirements.

For automating the process of Development Control Regulations user/draughtsman/architect have to follow some specifications. The following are the list of specifications that the user should follow.

Plot Boundary layout, detailed floor plan and building section for all the floors should be there in one AutoCAD drawing file.

All building items like proposed Plot Boundary, proposed work, proposed parking etc. must **be drawn using closed polyline.**

(i.e. Every entity must be closed LWPOLYLINE except Railway Line , Drain line, Water Line, Electric Line, Dead Wall and Ground level.).

Building Sub-Items **must be exactly inside of outer closed polygon as per their place in architectural plan.**

This means none of the edge or vertex of inside entity should be drawn outside its container entity.

For example, Parking or Open Space poly must be exactly inside the main Plot Boundary poly.

Tools are provided in **PreDCR** to verify this check.

Every Building Sub-Items should be given a specific/unique name (Text or MText entity) on the same layer & inside the entity poly. If name not found, then AutoDCR will generate the name automatically. Naming Conventions should be followed properly.

e.g. Each Room should be given the concerned name Using <Assign Name> function of PreDCR Living, Kitchen, and Bedroom...Etc.

Floor Name: GROUND FLOOR; TYPICAL FLOOR 1, 2 & 5-8; TERRACE FLOOR

Floor Items: Room Names should be given properly without using abbreviations so the software can identify perfect entity. This can be done by Assign name facility provided by the software.

User shall use only following kind of entities for Building Items: -

LWPOLYLINE / TEXT / MTEXT

If in a plan two proposed work are mirrored in that case user should provide two separate building plans for each proposed work.

Installation and Registration

System Requirements

- Pentium IV or better (or compatible processor)
- 4 GB RAM
- Windows 98/2000/ 2007/XP Vista & Windows 7, 8 & 10 {32 bit & 64 bit}
- CD-ROM drive
- AutoCAD 2000 and onwards

Installation

To install PreDCR software on your computer please follow the given steps.

Step 1: Download PreDCR from the Corporation Website.

Step 2: Run the PreDCR installer by double clicking on file "***PreDCR_Installer.exe***"

Step 3: Follow the next steps in installer wizard to complete installation.

After successful installation, a PreDCR shortcut will be placed on your computer desktop as shown below.

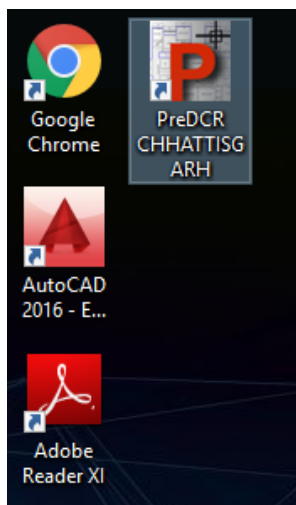


Figure 1: PreDCR shortcut on desktop

Registering and running PreDCR

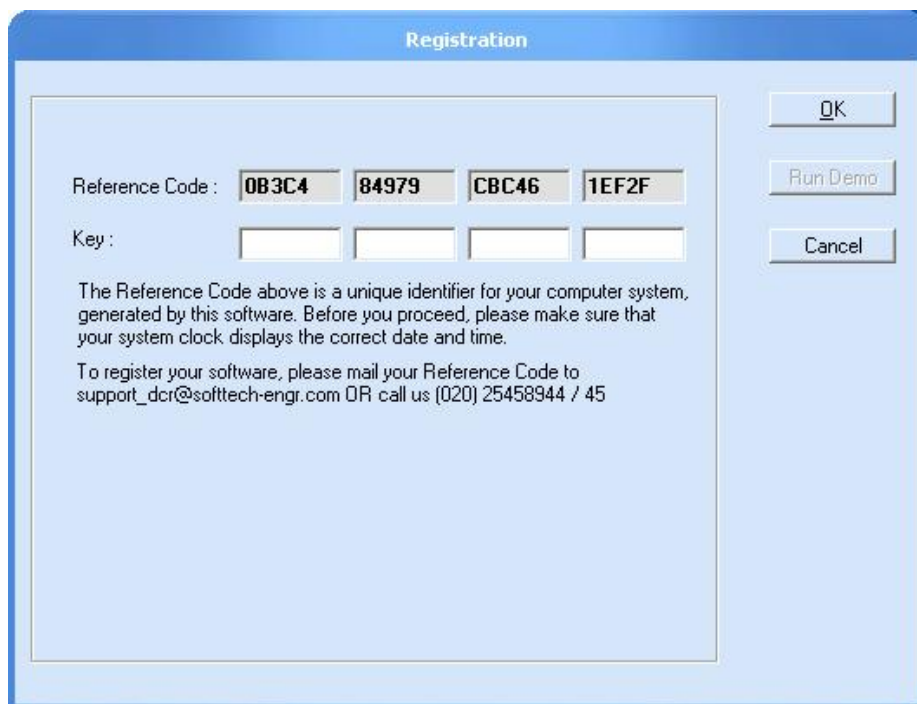
To run PreDCR software follow the given steps.

Step 1: Double click or right click on PreDCR icon and select open menu.

In Fig 1. You can also run it from **Start-->Programs-->SEPL->PreDCR**

Step 2: PreDCR will start under AutoCAD-2000 & onward versions and ask to register the software if you have taken the “**Soft Lock Set of PreDCR**”.

Step 3: Click on **Register** button to register PreDCR. You will see registration form with Reference code and key as shown below in Figure 2.

The image shows a 'Registration' dialog box with a blue title bar. Inside, there are four input fields for a 'Reference Code' containing the values '0B3C4', '84979', 'CBC46', and '1EF2F'. Below these is a 'Key' section with four empty input fields. To the right of the input fields are three buttons: 'OK', 'Run Demo', and 'Cancel'. A text block below the input fields explains that the Reference Code is a unique identifier and provides instructions on how to register the software by email or phone.

Registration

Reference Code : 0B3C4 84979 CBC46 1EF2F

Key :

The Reference Code above is a unique identifier for your computer system, generated by this software. Before you proceed, please make sure that your system clock displays the correct date and time.

To register your software, please mail your Reference Code to support_dcr@softtech-engr.com OR call us (020) 25458944 / 45

OK

Run Demo

Cancel

Figure 2: PreDCR Registration form

Step 4: Now you have to send this Reference Code generated on your computer to given email address support_dcr@softTech-engr.com or contact

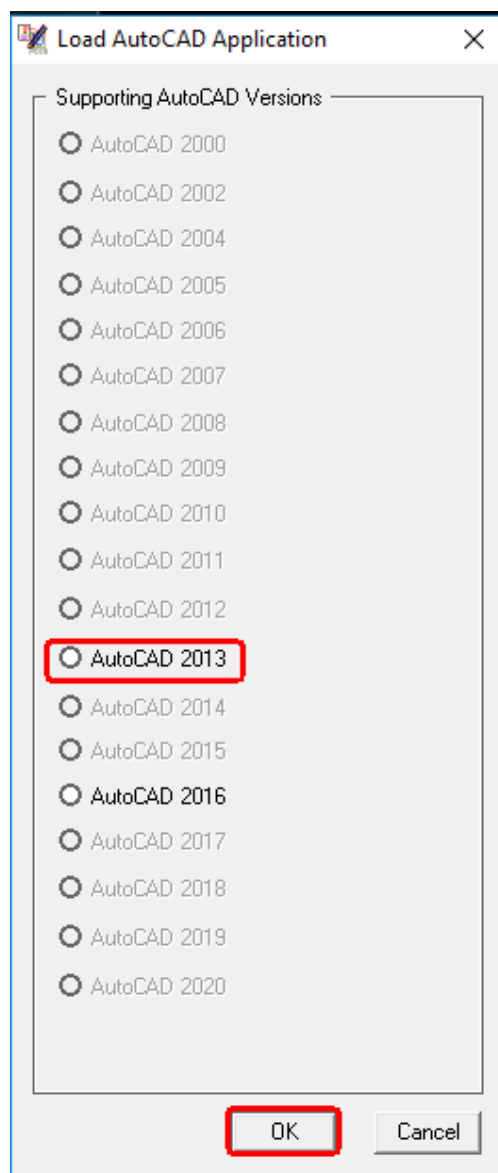
SoftTech Engineers Ltd. on Phone: 2421-7676 / 2421-8747

Against that reference code you can get the **Key** from our office which you have to enter in the blank space provided.

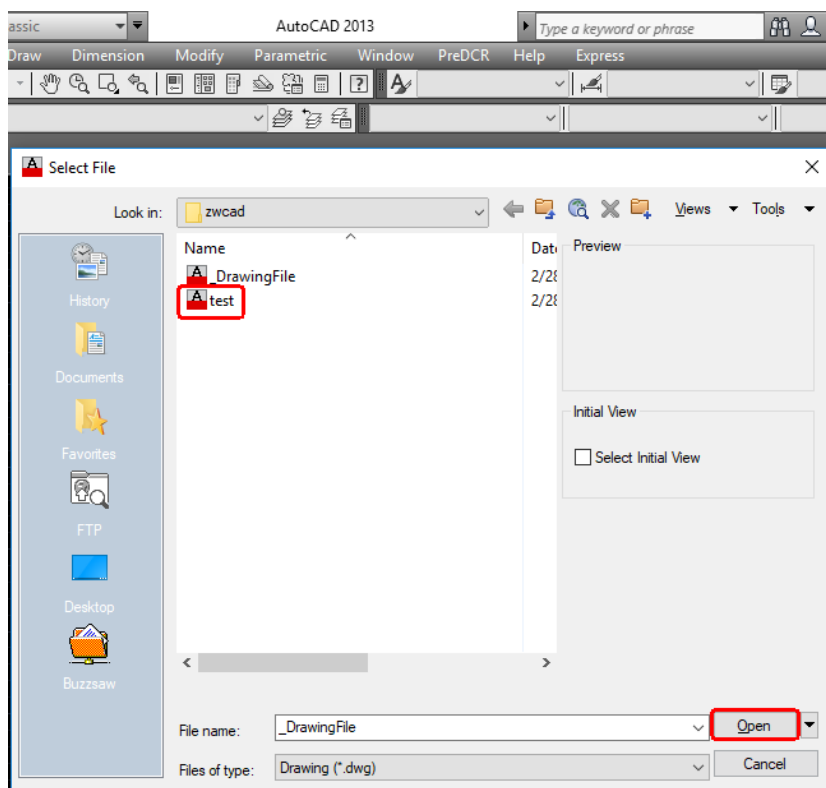
Note: From next time PreDCR will start directly until you format your computer.

Methodology

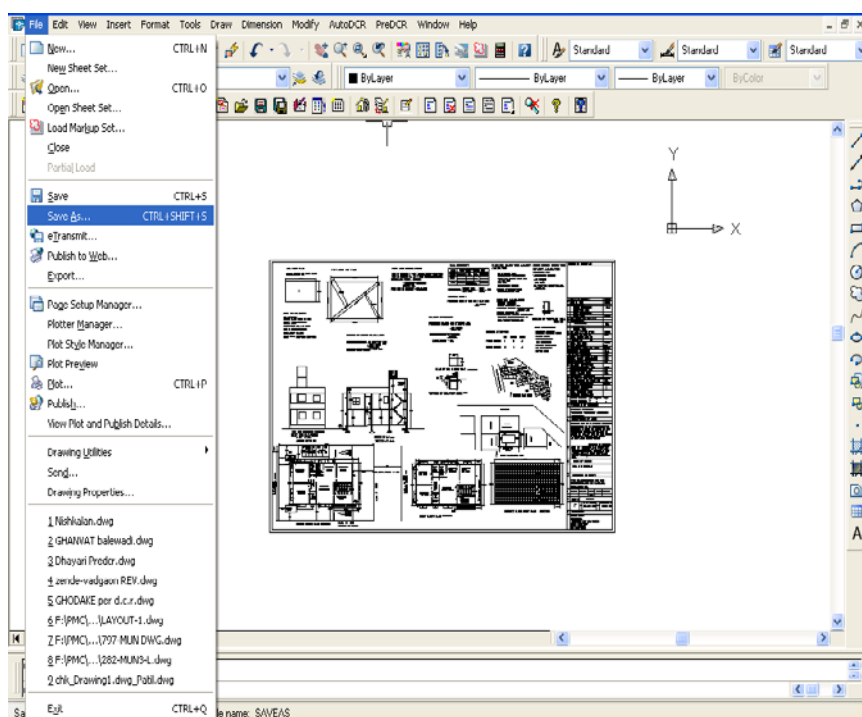
1) Open the PreDCR software for clicking on PreDCR menu on your desktop & select the AutoCAD version & then click on "OK" button.



2) First open test drawing, which is now converting in PreDCR format.

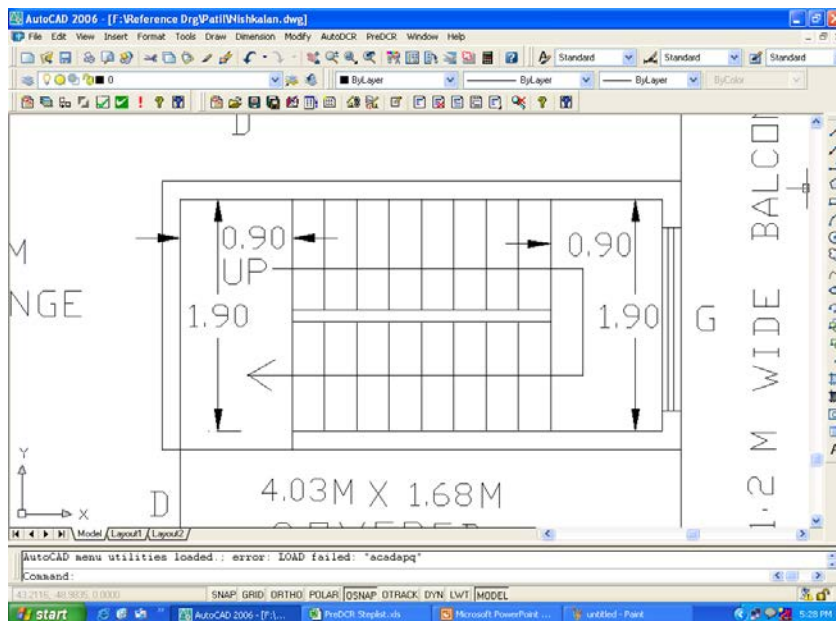


3) Save as your drawing with give some name.

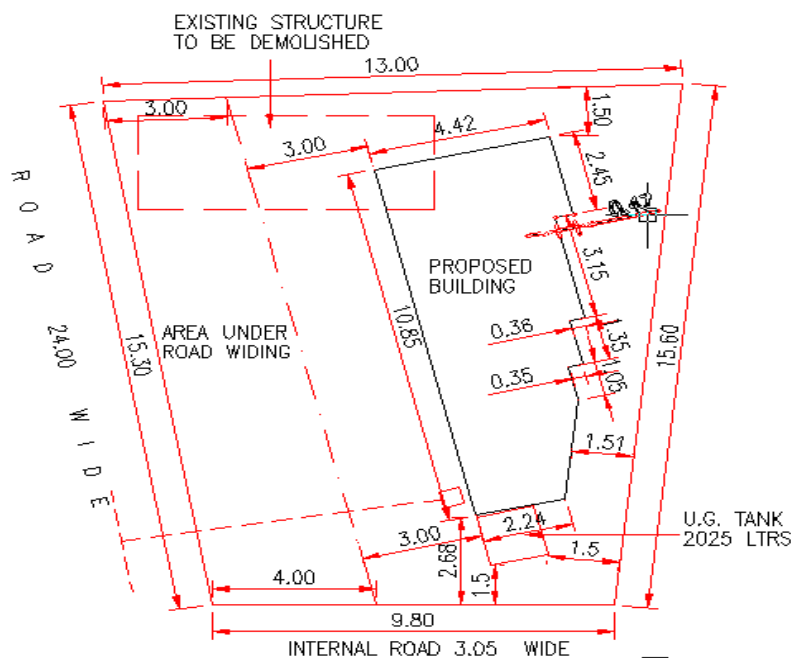


4) Check the scale by using Scale command. If drawing is not in 1: 100 scale, then convert into the

1:100 scale. & then make that drawing in metric scale if it is in other than meter.



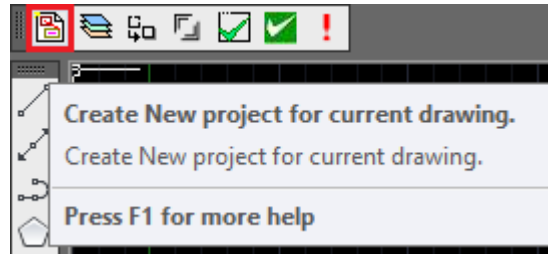
5) Also make the site plan in 1:100 scale.



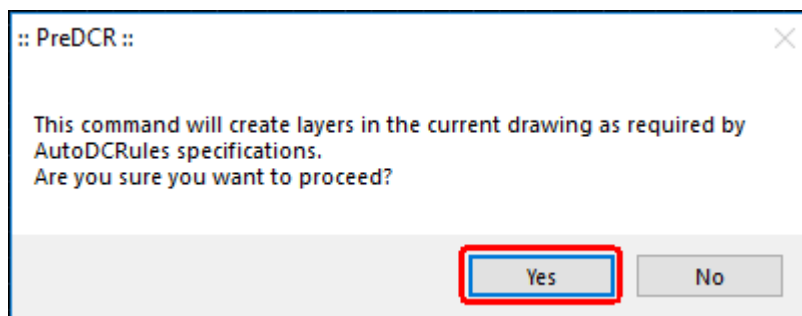
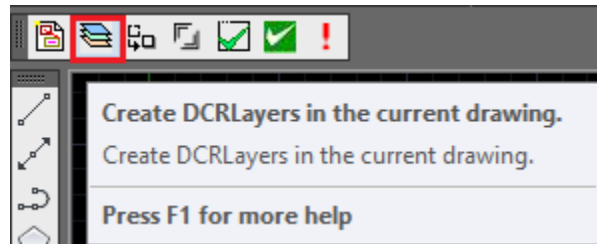
6) By using PreDCR toolbar first select the Type of Project that is " Proposed Development" , "Land Division" or "Plot Boundary ting Layout"

- If Plot Boundary is Already sanctioned & user have to take permission for the buildings only then select "Proposed Development."
- If User having Proposal is Amalgamation or Subdivision then select "Land Division" option from the list.

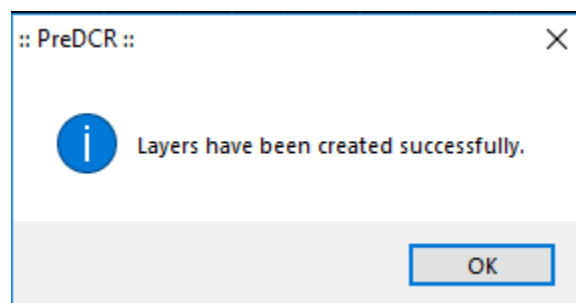
c) If Proposal having a Plot Boundary ting Layout then select that "Plot Boundary ting Layout" option from the list.



7) By using PreDCR toolbar "Create a DCR layer" that is second option in PreDCR toolbar.

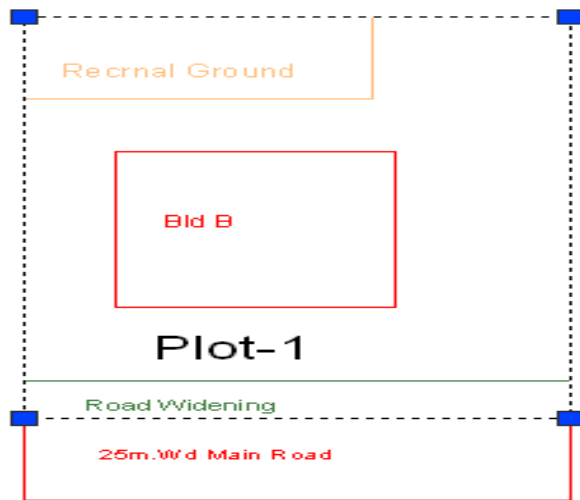


8) Then you will get the list of PreDCR toolbar, then just click on "OK" button. Now all the Layers you will get in Layer Properties managers.

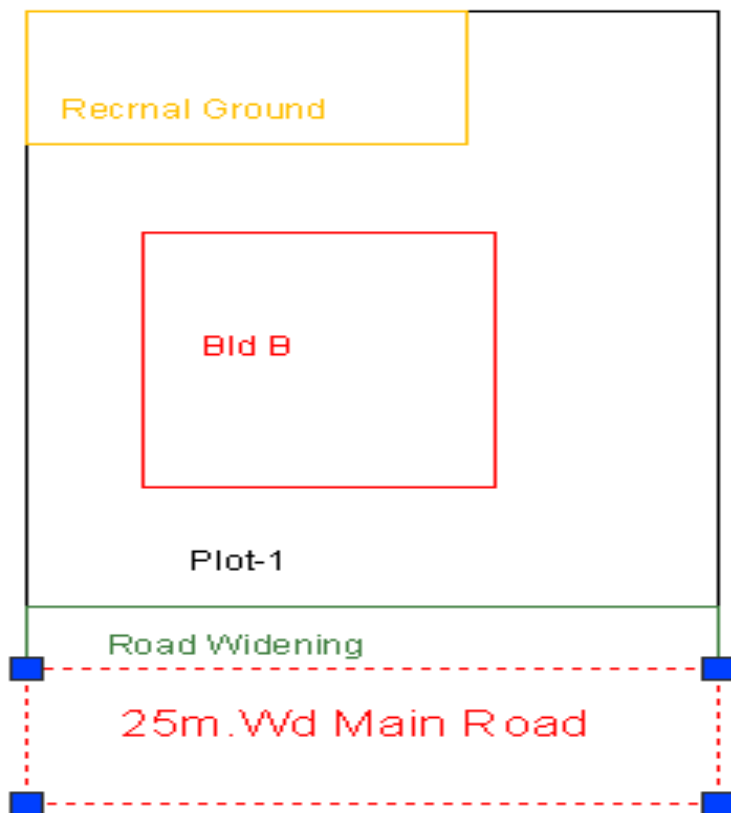


Now Select current Layer is "**_ Plot Boundary**" & Draw a closed polyline on this layer. Also give

the Plot Boundary name on that layer only.

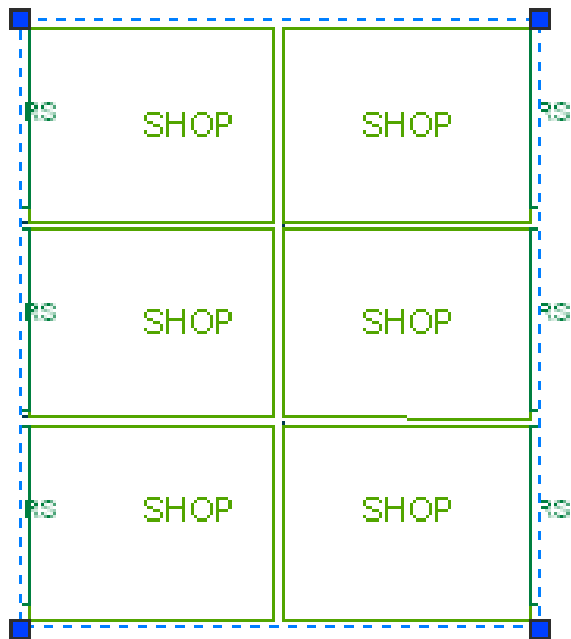


Make the current layer '**_Main Road**' & Draw a road on this layer. Give the Name of road which is starting with its width.



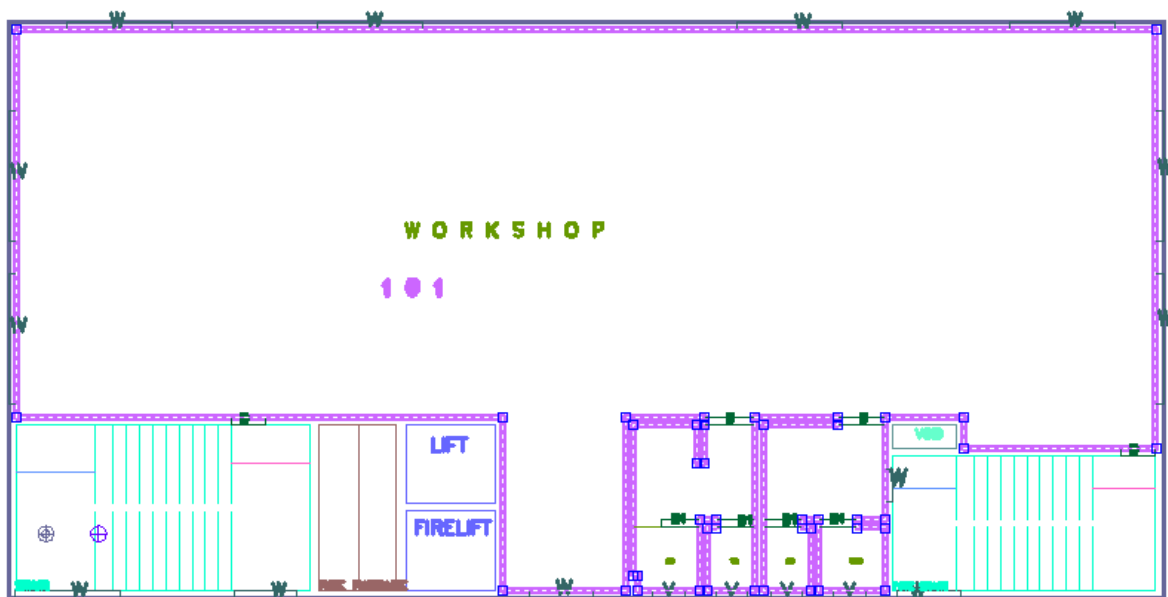
Make the current Layer "**FAR**" as per your project having that use you can select that use of

FAR. E.g. for Residential use - Select “**_ResiFAR**” poly, For Commercial use select “**CommFAR**” poly. & Draw an area key plan line on this layer. No need to give any name on this Layer



Commercial FSI

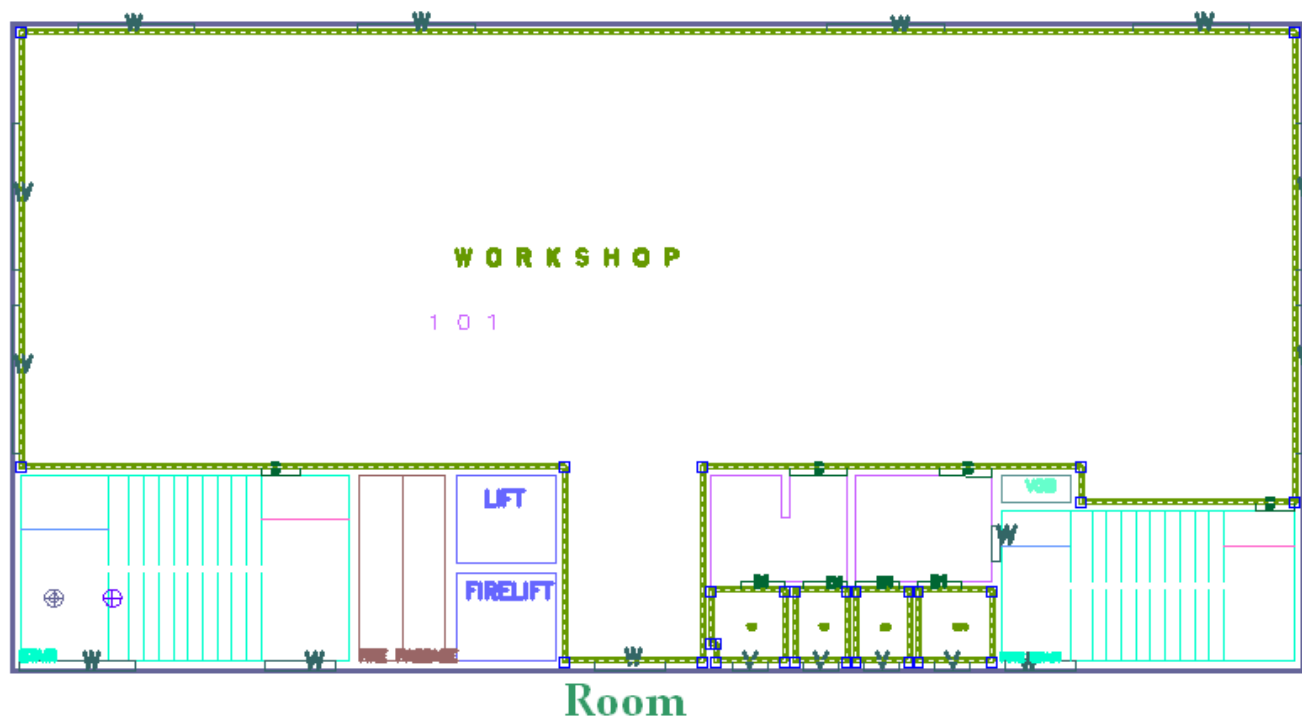
Make the current Layer “**_Carpet Area**” and draw a closed poly on this Layer which having floor area excluding wall area. Also give the name on this Layer. If carpet is splitted no of places but having only one tenement then use the splitted tenement option from PreDCR Mark menu bar.



Carpet Area

Make the current Layer “**_Room**” and draw a closed poly on this layer. If room having rectangle

shape, then you can use rectangle also. Assign the room name for using the assigned name option from PreDCR menu bar.



: Insert the **doors & windows** by using insert option from PreDCR menu bar.

Window information dialog

Name: (e. g. W1, W2, or SkyLight etc.)

Window's dimension

Length	Width	Height
1.8	0.15	1.2

Door information dialog

Name: (e. g. Door : - D1,D2.. etc
Folding Door : - FD
Rolling Shutter : - RS)

Door's dimension

Length	Width	Height
0.9	0.11	2.1

15) Make the current layer "**_Floor**" and draw a boundary outside of each & every floor.



16) Make the current layer "**_Tank**" and draw U/G & O/H tank in plan as well as in section. Assigned this tank name by using Assigned name option from PreDCR menu bar.

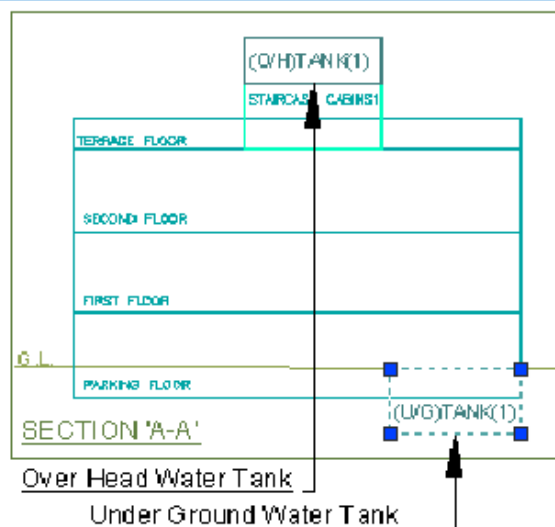
Tank name information [X]

Tank's position
☒ Overhead
☐ Underground

Tank Name/No : T1 (e.g. 1 or 2)

Note : Please give Unique Name for Tanks per Building.

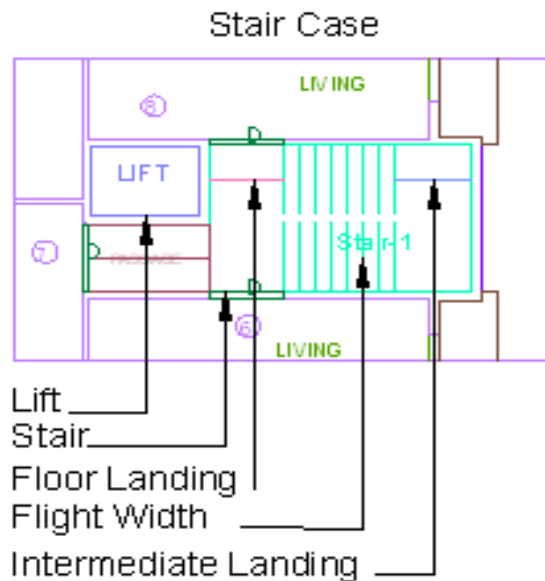
OK Cancel



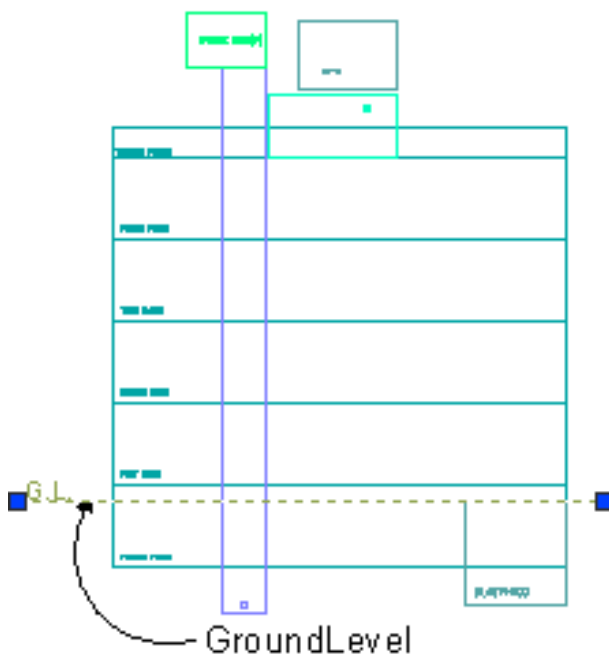
Water Tank

17) Make the current layer "**_Staircase**" and draw all the riser on this layer which is an open

polyline. Also draw two extra line on this layer which is showing a floor landing and intermediate landing. Then mark this landing for using staircase landing option from PreDCR menu. Also mark the staircase which having type. For spiral and fabricated staircase no need to draw riser & landing marking.

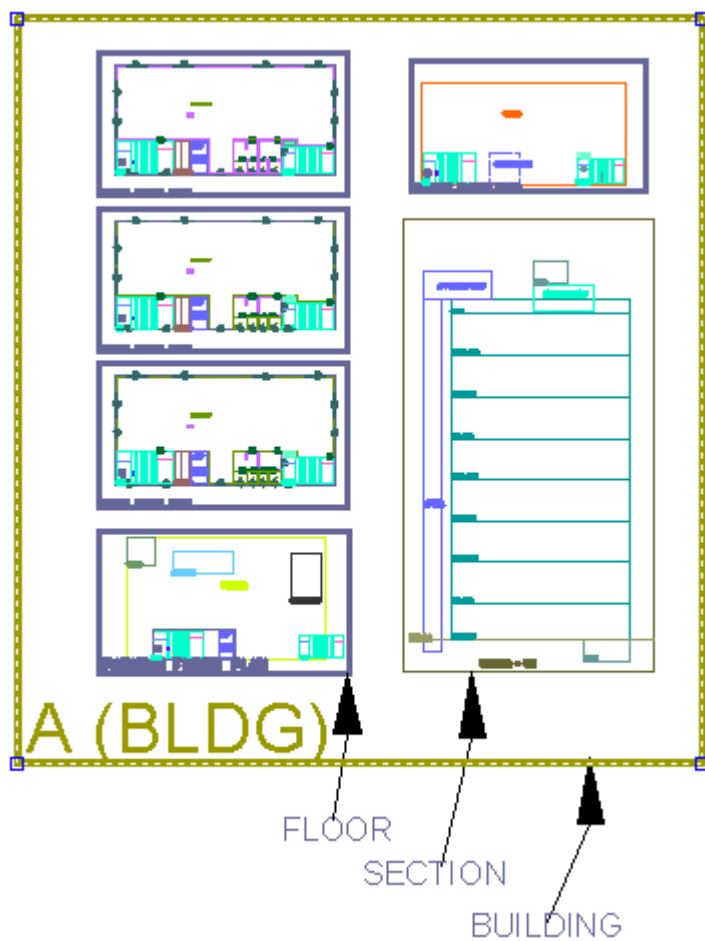


18) Make the current layer is "**_Ground Level**" and draw an open polyline on this layer which is place below the plinth level.



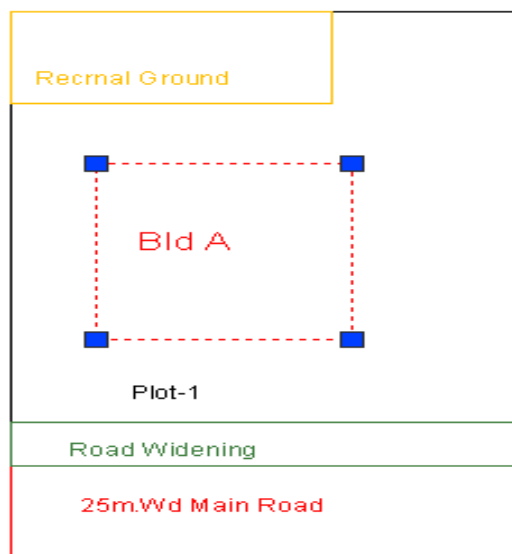
Make the current layer is "**_Building**" and draw a boundary on this layer which is having a

group of all the floors with section

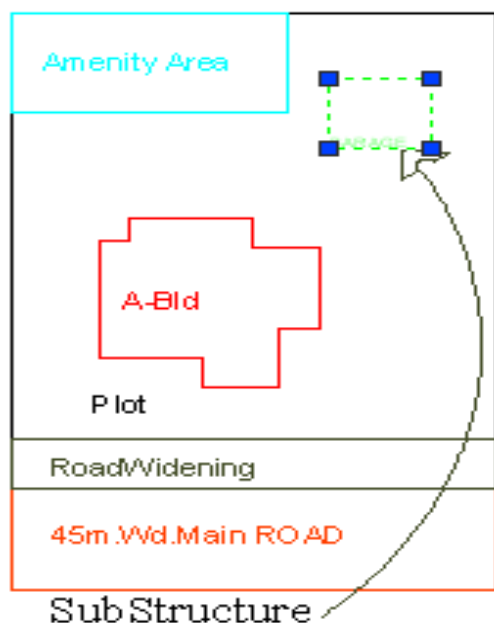


Make the current layer is "**_ProposedWork**" and draw a total coverage on this layer. Assigned

this proposed work by using "PreDCR->Assigned name -> Building & proposed work from PreDCR menu.

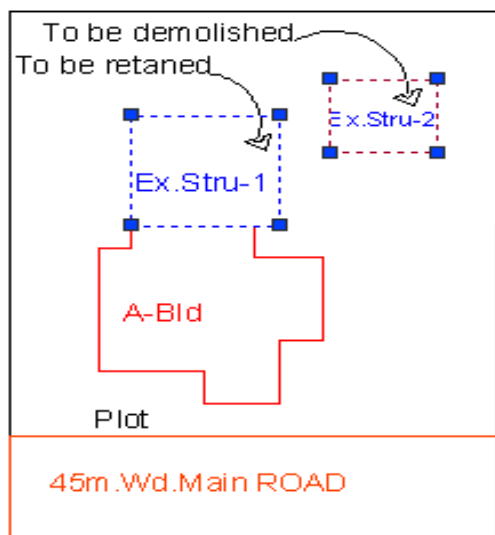


If project having any Substructure, then draw a closed polyline on "**_Substructure**" layer. Also mark this substructure by using "PreDCR-> Mark-> Substructure from PreDCR menu bar.



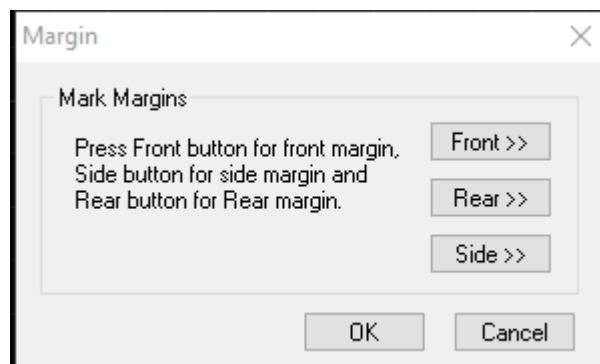
If project having any Existing structure, then draw a closed polyline on "**_Exstructure**" layer.

Also mark this Exstructure by using "PreDCR-> Mark-> Exstructure from PreDCR menu bar.

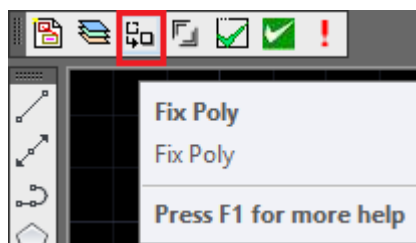


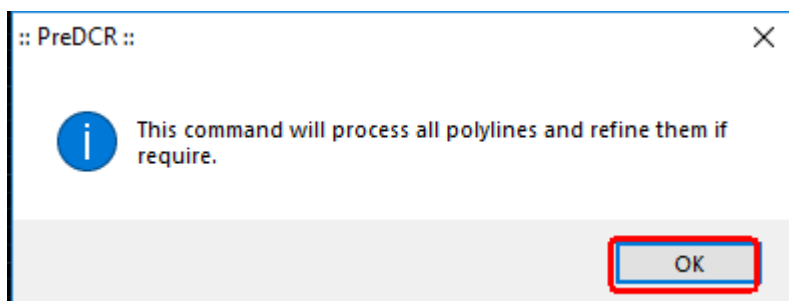
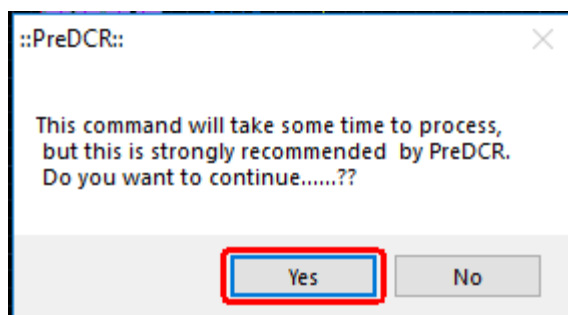
Existing Structure

Mark the margins by using Mark-> margin from PreDCR menu bar

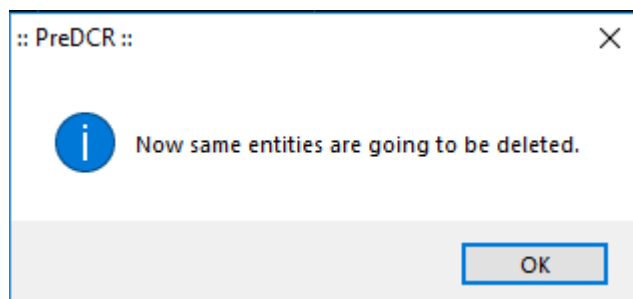


After converting all the Layers, use the "**Fix poly**" option from PreDCR menu bar.

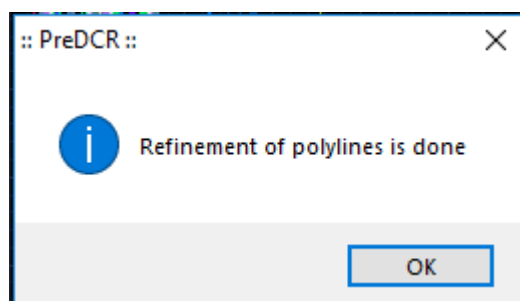




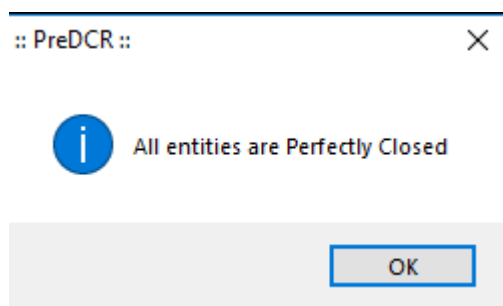
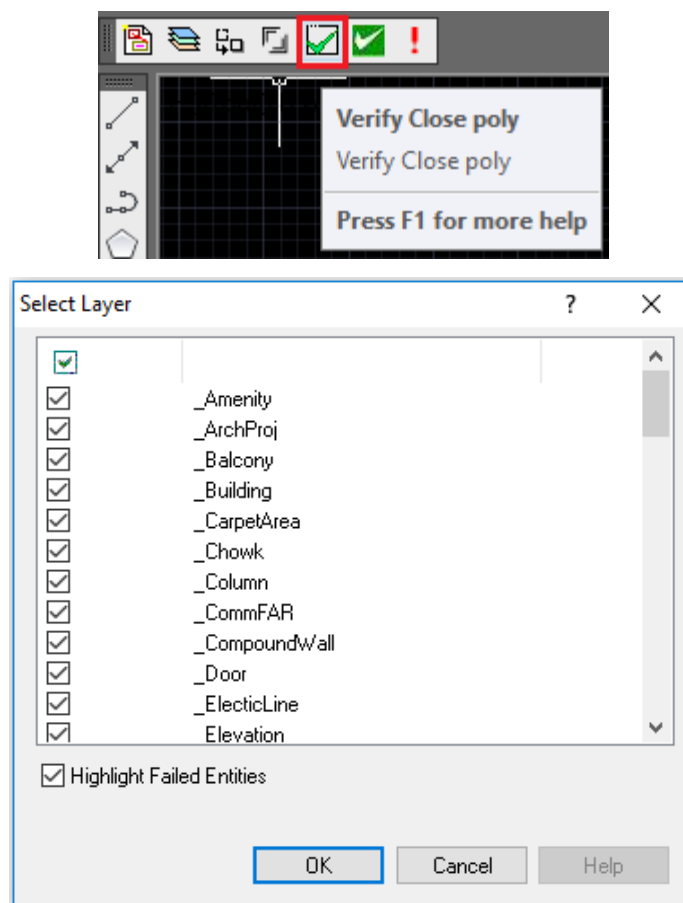
Just click on "OK"



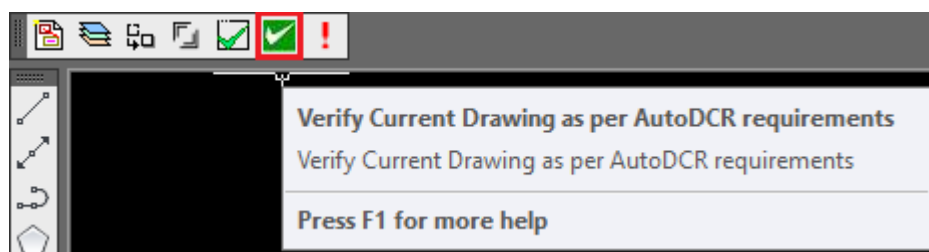
Just click on "OK"

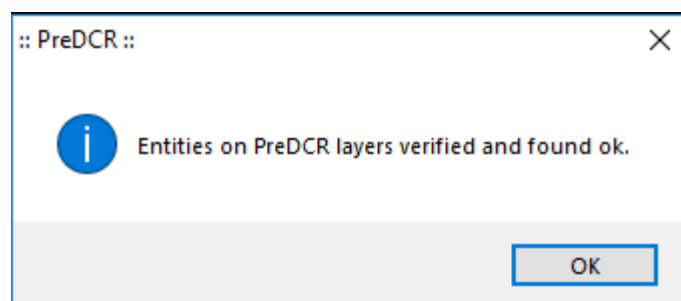
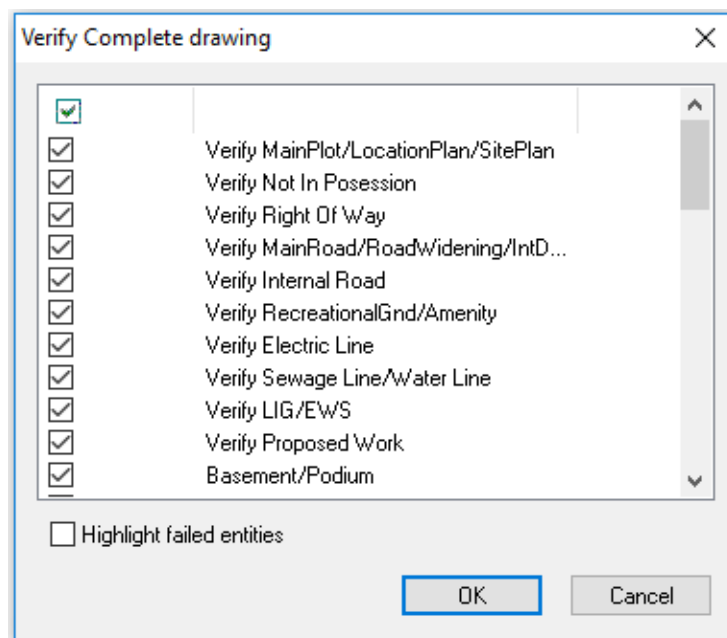


When you will get this message "Refinement of Polyline is done" then select the **"Verify Closed poly"** option from PreDCR menu.

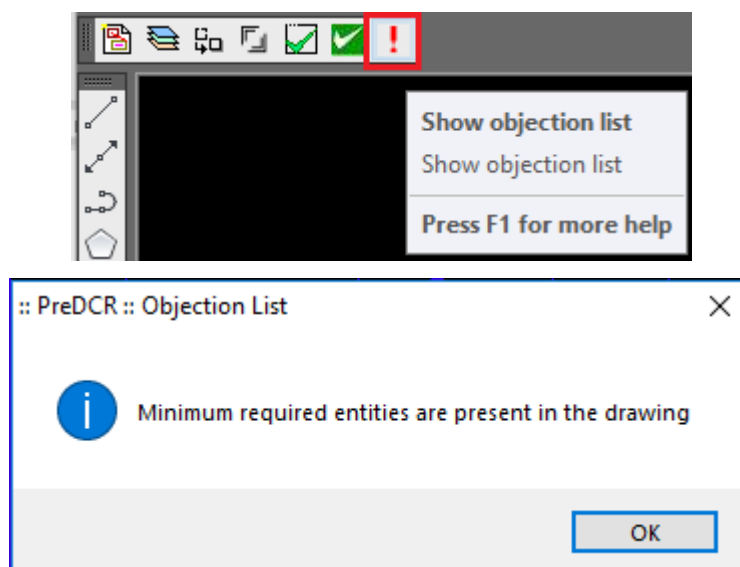


: When you will get these message "Entities on PreDCR Layers are verified and found o.k." then only you can submit a softcopy of your drawing to the Corporation.





27) Also check the "**Objection list**" which user are missing to convert in PreDCR layer.



PreDCR Layer Information

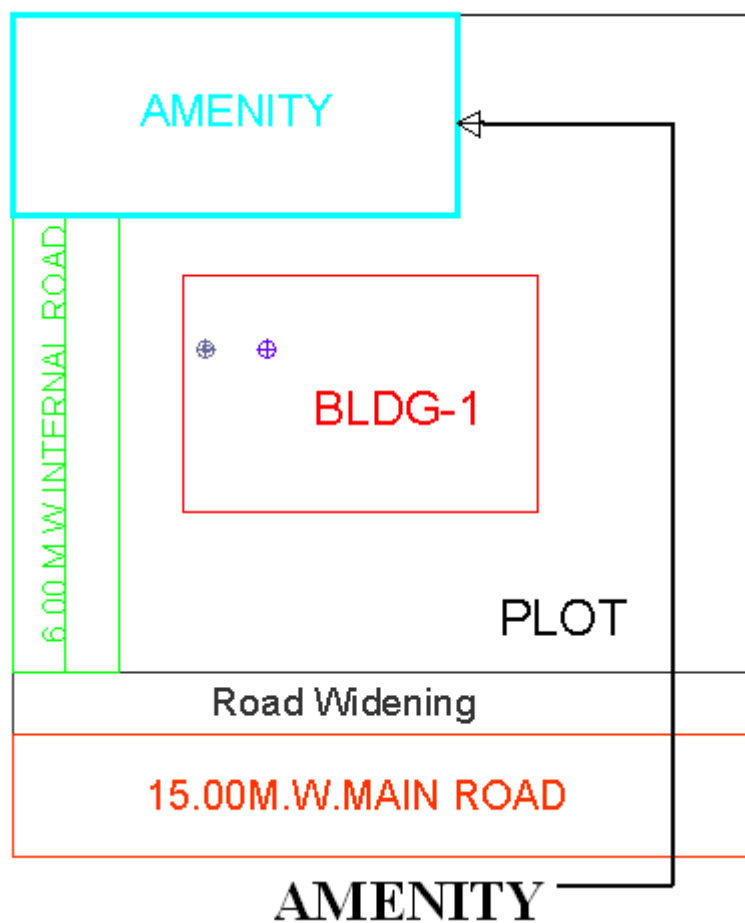
Amenity

Description :

Draw Amenity space as a closed polyline, which is reserve for utilities, services and conveniences.

Shortcut Command : AMN

How to draw :



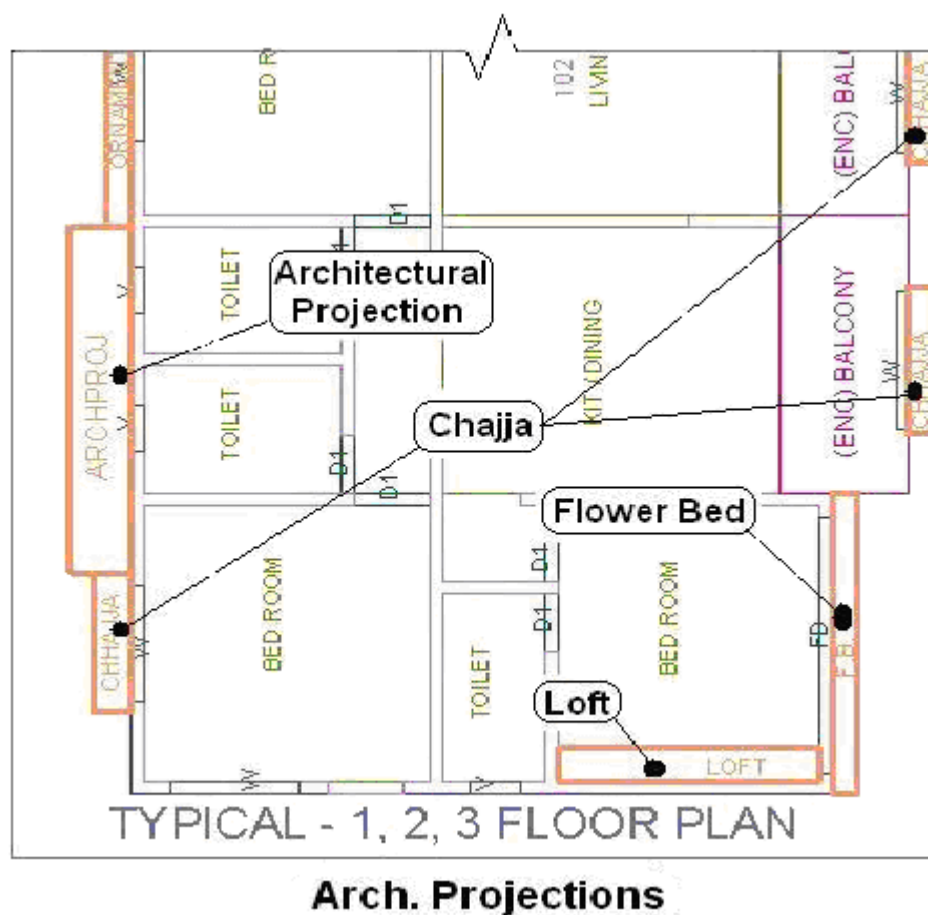
_ArchProj

Description :

- This layer is used to represent various Architectural Projections in your Plan. Draw a closed Polyline for Architectural Projections, and mark it using **Mark->Projection** from PreDCR menu, according to requirements. Canopy/porch will come in Plot Boundary & other projections will come with floor plans.

Shortcut Command:- AP

How to draw : -



_Balcony

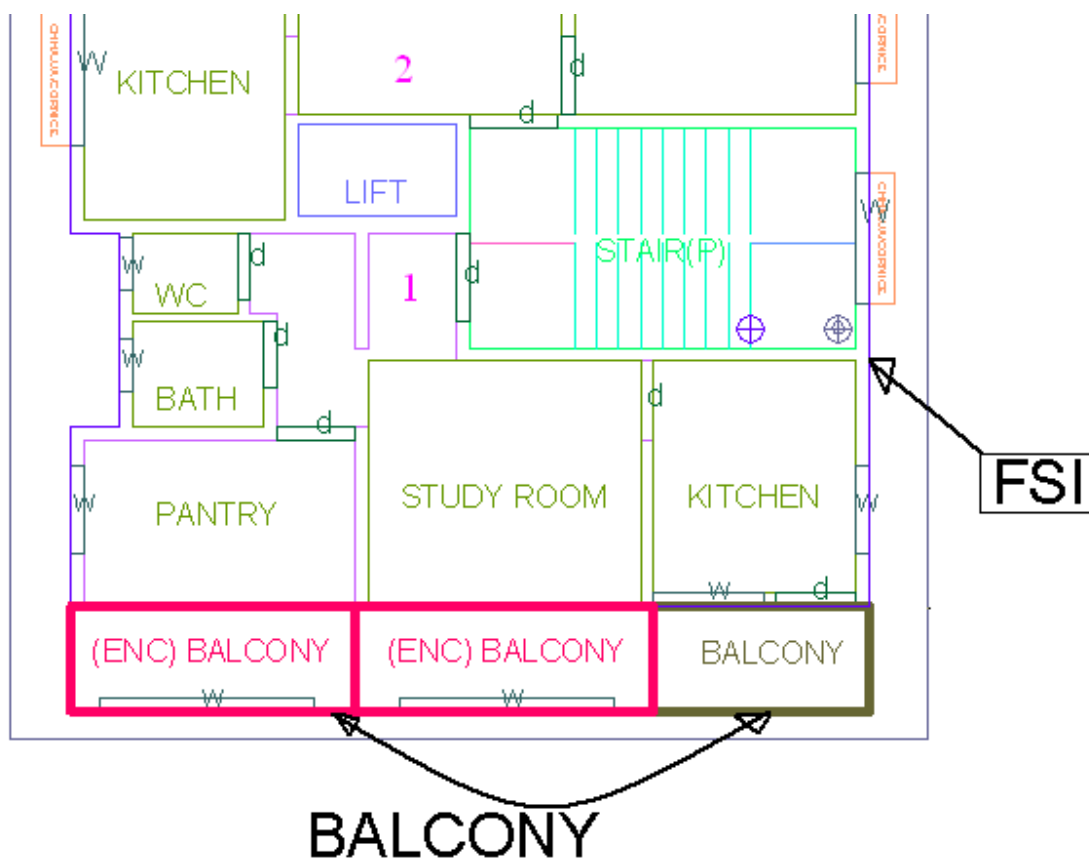
Description :

Draw a balcony as a closed polyline which is a horizontal projection including parapet to serve as a sitting out place. Name of balcony must be inside and on _Balcony layer.

Shortcut Command : BL

How to draw : -

_Balcony:-



The balcony can be present in:

Plot: It must overlap with Pwork (if not enclosed)

Floor: It must overlap ResiFAR.

Building

Description :

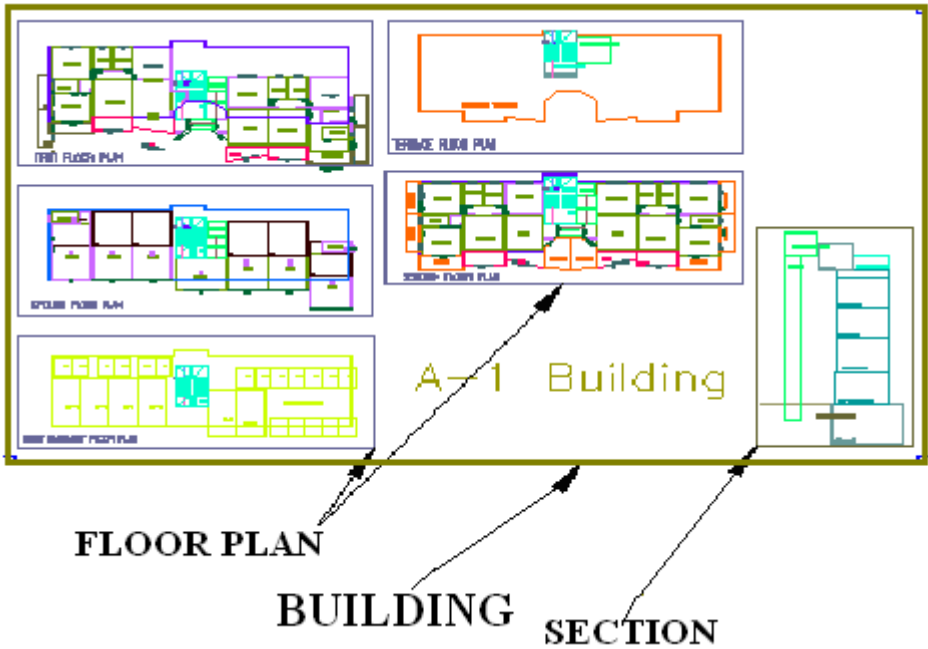
Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans and section of the same building on _Building layer. Note: As written above, dimension or area of this building poly has no meaning in AutoDCR. This is just a logical group of all floors of the same building. If the building plan of multiple PWorks or wings are same, then building name shall be as given in table below.

Building names can be.

1	"A(Monarch)"	Pwork "A" has building plan "Monarch".
2	"A,B(Monarch)" or "A&B(Monarch)"	Wings A, B have same building plan "Monarch".
3	"A-C(Monarch)"	Wings A, B, C have same building plan "Monarch".
4	"A1-A3(Monarch)"	Wings A1, A2, A3 have same building plan "Monarch".

Shortcut Command : BLD

How to draw :



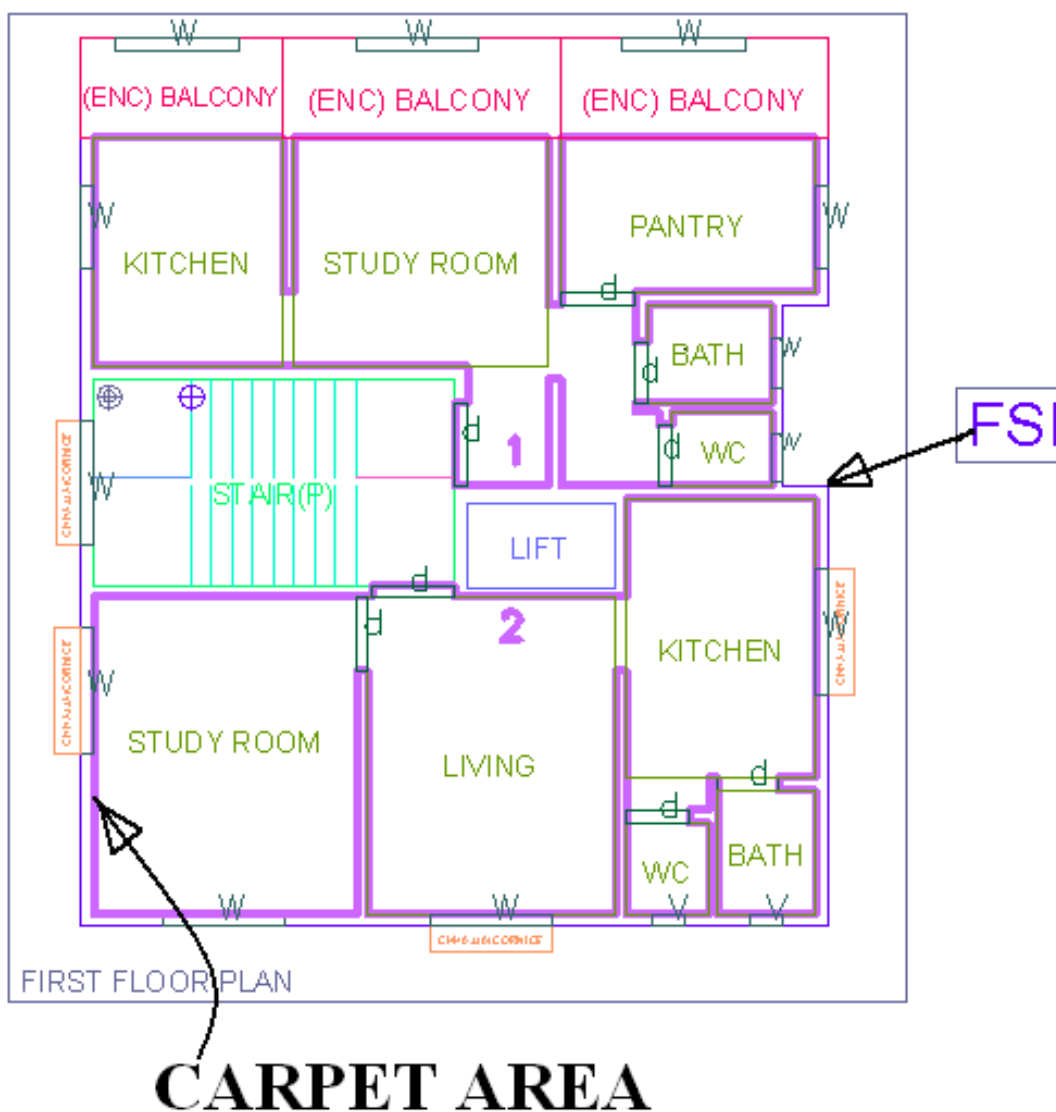
_Carpet area

Description :

Draw carpet area as a closed polyline, which is a net usable floor area within a building excluding that covered by the walls, or any other areas specifically exempted from floor space index computation in these regulations.

Shortcut command : CPT

How to draw : -



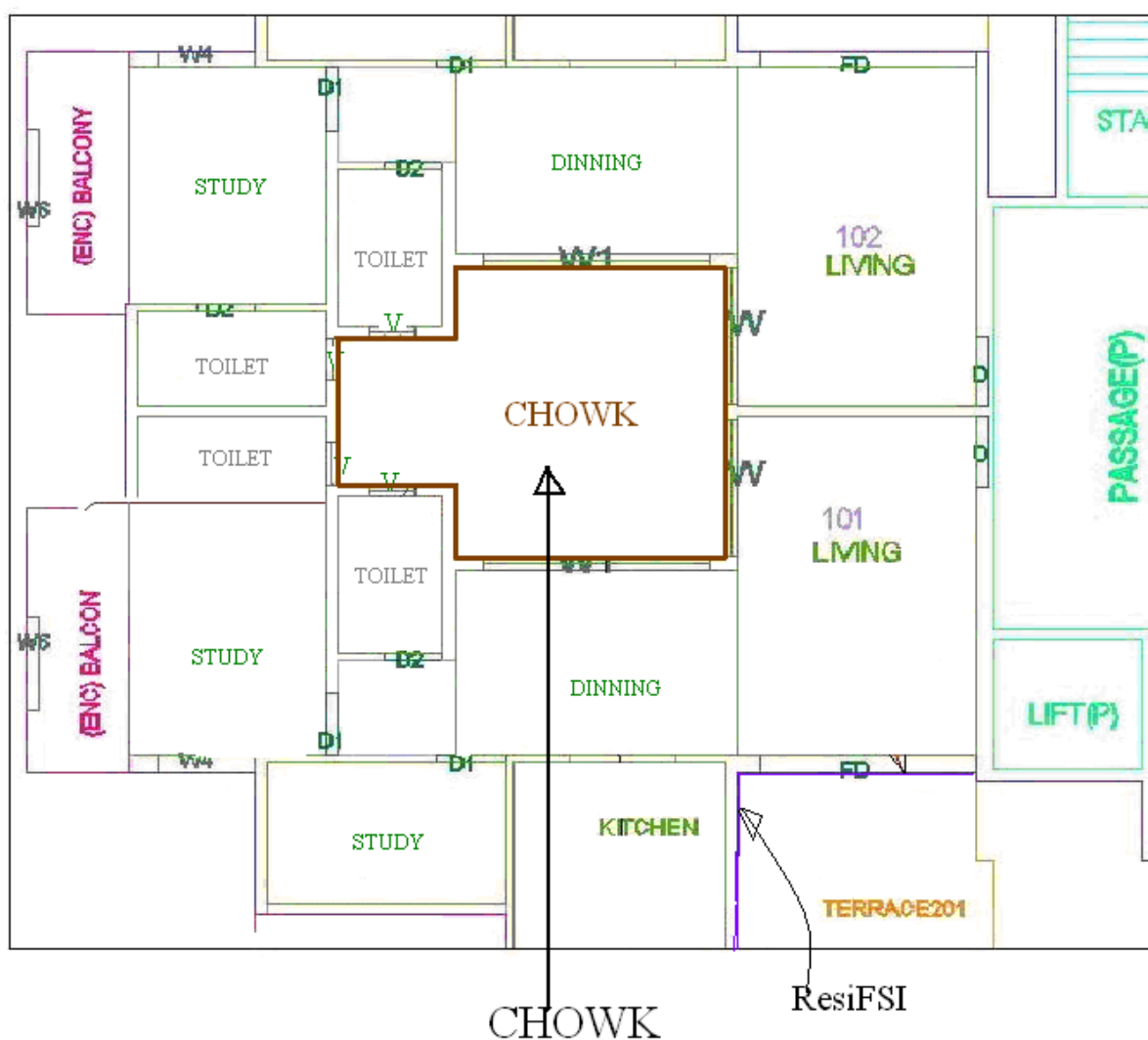
_Chowk

Description :

Draw a Chowk as a closed polyline, which is an enclosed space permanently open to the sky within a building at any level. From Chowk we take ventilation for habitual rooms.

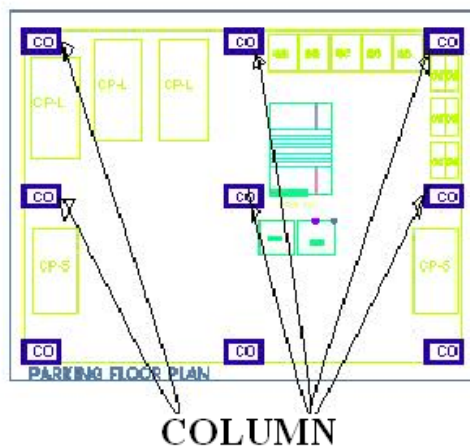
Shortcut Command : CWK

How to draw :

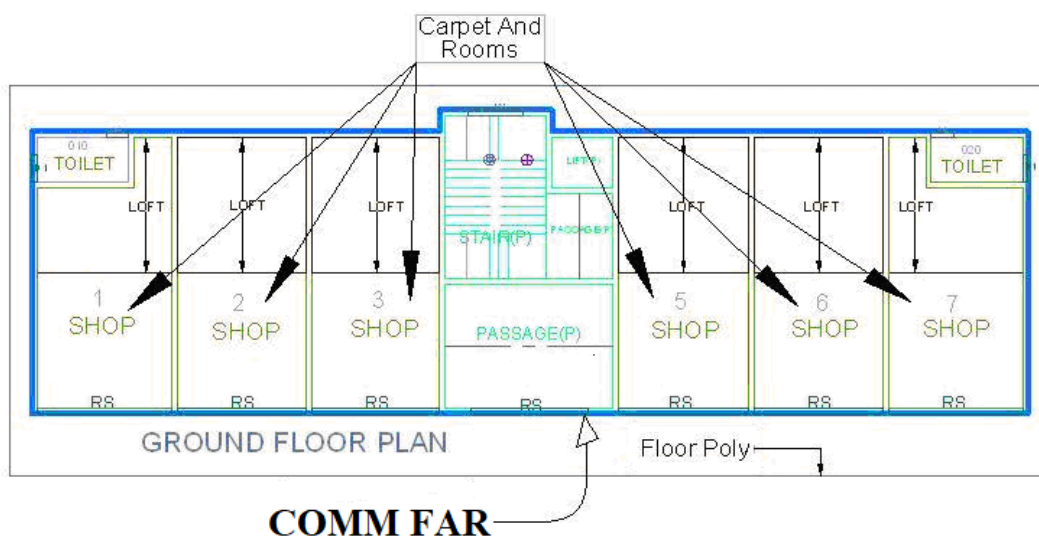


_Column**Description :**

Column shall be drawn as closed polyline on this layer.

Shortcut Command : COL**How to draw: -****_CommFAR****Description:**

Draw a CommFAR as a closed polyline, which is the area covered by a building on all the floors. This FAR polyline mainly used for commercial use bldg.

Shortcut Command : CMFS**How to draw:**

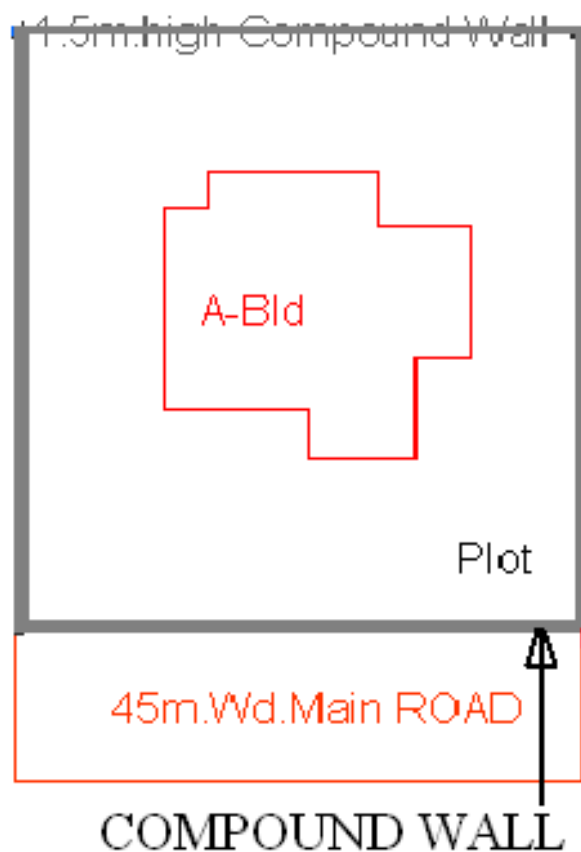
_CompoundWall

Description :

Open polyline of compound wall to be drawn on proposed compound wall with text started with compound wall height. E.g. 1.5m. High Compound Wall

Shortcut Command : CW

How to draw : -



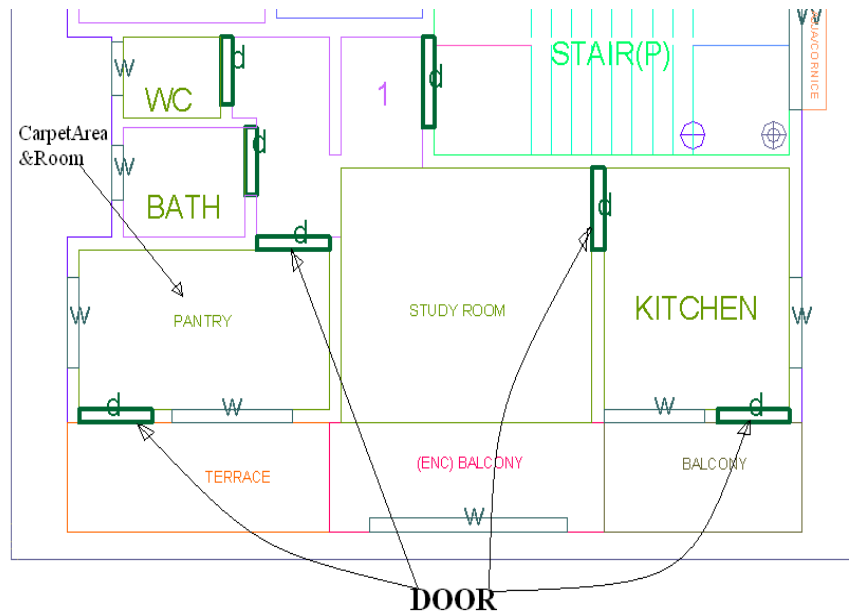
_Door

Description :

Door is a closed Polyline, which is drawn on “_Door” layer. Besides, you can insert a particular size poly for Door using **Insert->Door** from PreDCR menu.

Shortcut Command : DR

How to draw : -



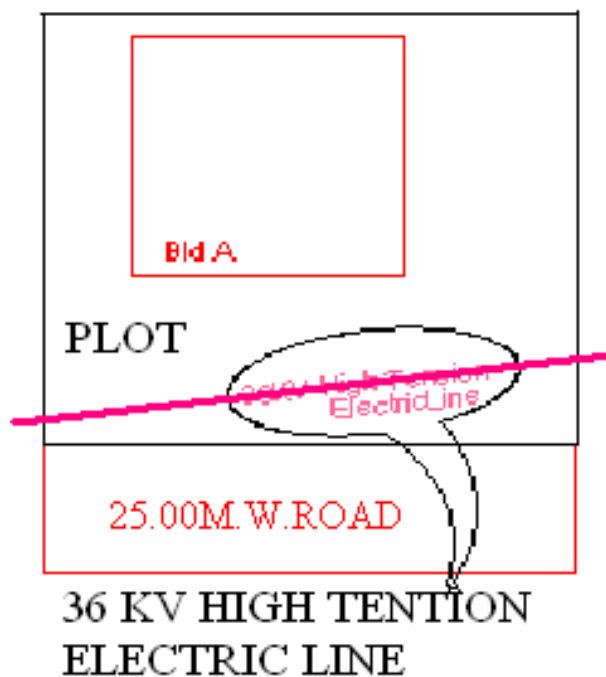
_ElectricLine

Description : -

Electric line will be present in the layout plan and shall pass through Plot Boundary entity as a non-closed polyline. Name electric line shall start with its voltage capacity and text insertion point shall lie on its polyline. E.g. 33 KV High Tension Line.

Shortcut Command : LI

How to draw : -



_Elevation

Description :

Elevation to be drawn in _Elevation layer only for printing purpose. No regulations will be checked by reading this layer. The drawing on this layer need not be drawn using polylines.

Shortcut Command : EL

How to draw:-

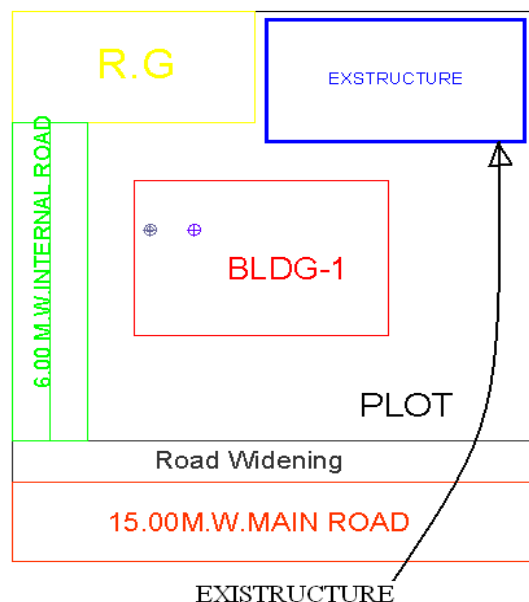


_ExStructure

Description: - Draw an Exstructure as a closed polyline, which is a building, or structure existing authorized before the commencement of these regulation. And mark it using **Mark -> Existing structure** as 'To be demolished' or 'to be retained'.

Shortcut Command : EX

How to draw :-



_EWS

Description: -

Draw a EWS area on “_EWS” as a closed poly line, which area is left for economically weaker section.

How to draw :-

Draw a closed poly line on _EWS layer in floor plan.

_Floor

Discription:

Draw a Floor as a closed polyline to the boundary of the lower surface in a story on which one normally walk in a building and including mezzanine floor. The floor at ground level with a direct access to a street or open space shall be called the ground floor. The floor above it shall be termed as Floor 1 with the next higher floor being termed as Floor 2 and so on upward. For giving the name of each floor use the assign named option from the PreDCR menu. Also, draw each floor separately. While giving name to the typical floor then use a typical option from **Assigned name -> Floor name** option from PreDCR menu bar.

Shortcut Command : FLR

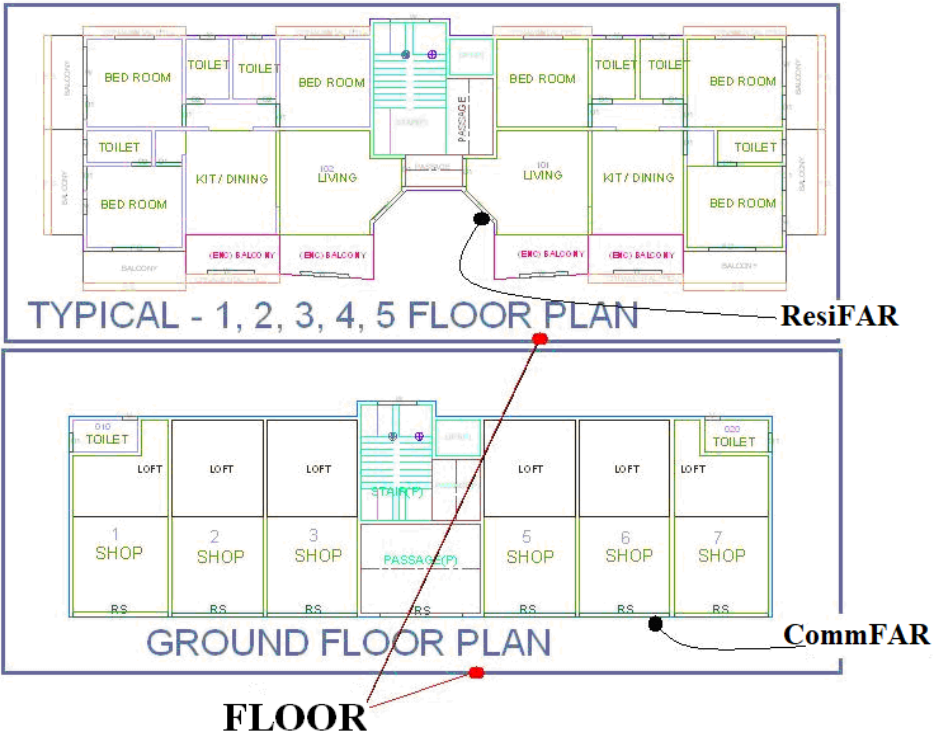
Reference Circle: - All Floor poly must contain a circle with its center on common point for whole building on layer "_ResiFAR". Usually it can be placed inside either Common Lift or stair/Inner Chowk, as their locations are common for all floors.

Floor Name: - Floor name will be taken from text inside floor poly and on same layer.

A floor plan is automatically associated/linked by AutoDCR software with one or more floor section poly in Section plan. This is done by matching name of Floor Plan and Floor In Section so both must be same.

Typical Floor	Non-Typical
"TYPICAL" X "FLOOR PLAN"X: Floor numbers in specific format (, or & or -)	X "FLOOR PLAN" X: Direct Floor's Name
e.g.: TYPICAL 1,2 FLOOR PLAN TYPICAL 1-4 FLOOR PLAN TYPICAL 2&3 FLOOR PLAN	e.g. GROUND FLOOR PLAN FIRST FLOOR PLAN SECOND FLOOR PLAN

How to draw :-



FloorInSection :

Description :

Draw a FloorInSection polyline as a closed poly of section boundary, which contain all floors with stair cabin, Lift machine room, water tanks etc. as shown in the figure. Also, write the name as "Section" in this section poly.

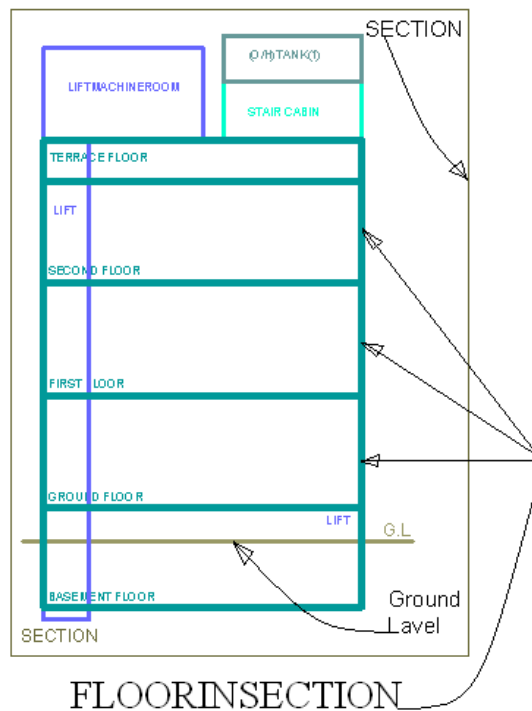
In this closed poly of section, draw sections of all floors with stair cabin, inner Chowk, Lift machine room, Ventilation shaft, water tanks etc. as shown in the figure.

Also, write the name as "Section" in this section poly.

This section poly will present inside the building poly.

Shortcut Command : SEC

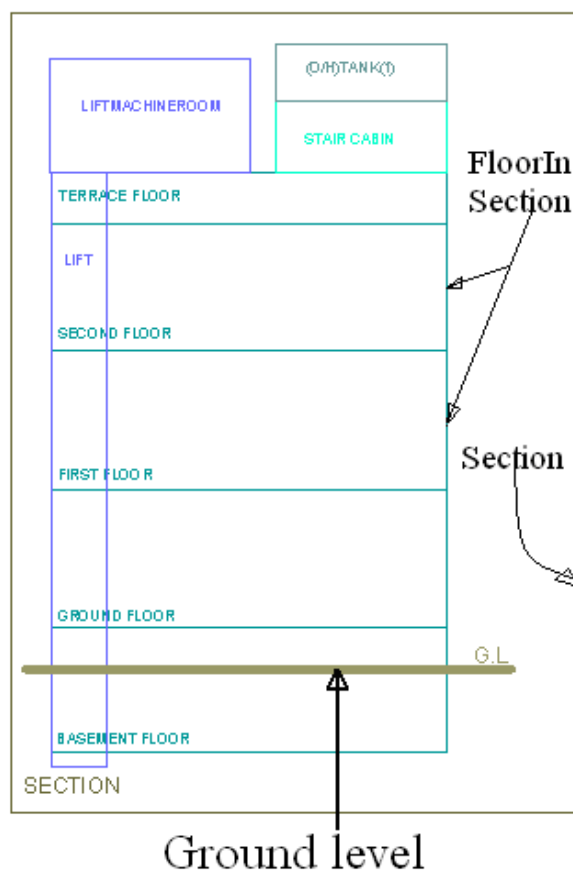
How to draw : -



GroundLevel

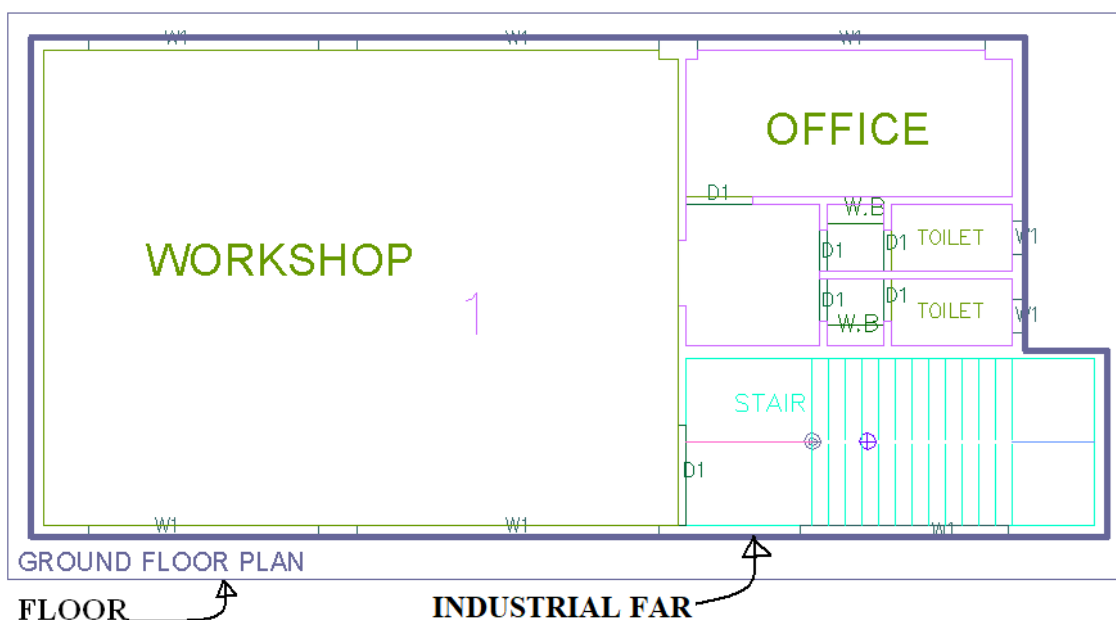
Description :

Draw the Ground level line as open polyline in section .It is used for checking a total building height from this line.

Shortcut Command : GL**How to draw : -****IndFAR****Description :**

Draw an IndFAR as a closed polyline (area key plan line in the submission drawing) which is the area covered by all the floors. Industrial building means building or part thereof wherein products or material are fabricated, assembled or processed such as assembly plants, laboratories, power plants, refineries, gas plants, mills, dairies and factories. This polyline should be excluding balcony & terraces area.

Shortcut Command :IFSL**How to draw : -**



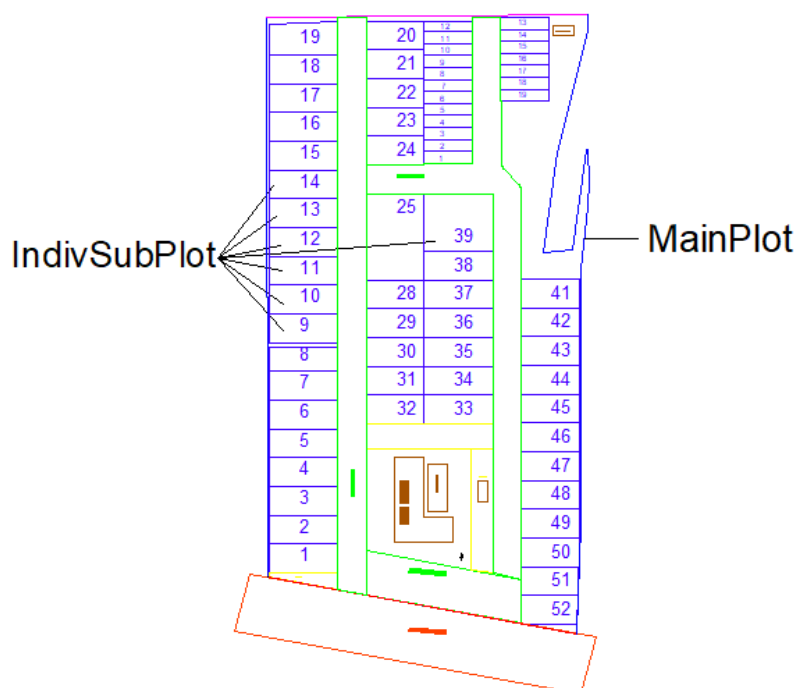
_IndivSubPlot

Description :

For plotting layout draw individual subplots having unique text on '_IndivSubPlot' layer inside main plot.

Shortcut Command : IP

How to draw :-



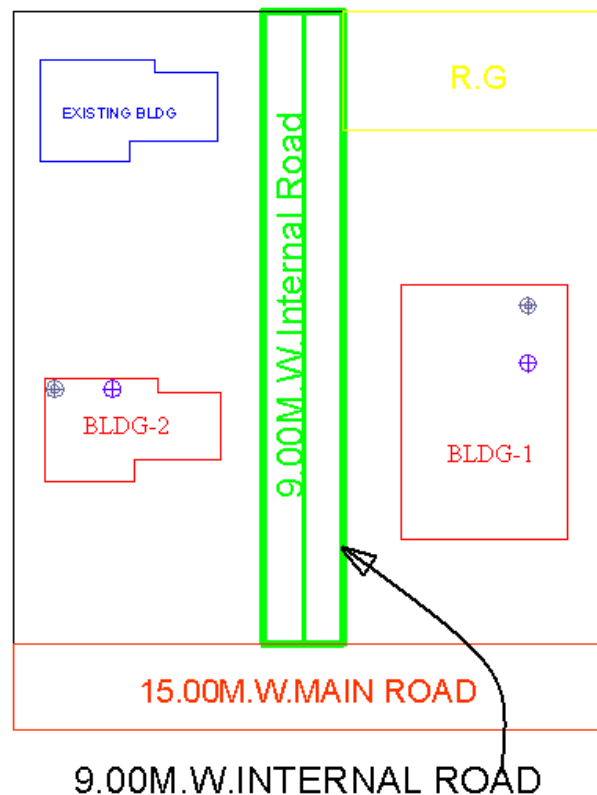
_InternalRoad

Description :

Draw internal road with text specifying its width as shown in figure. And draw a centerline. And type of layer of the centerline must be centerline (Type of the Layer).

Shortcut Command : R2

How to draw : -



_LiftWell

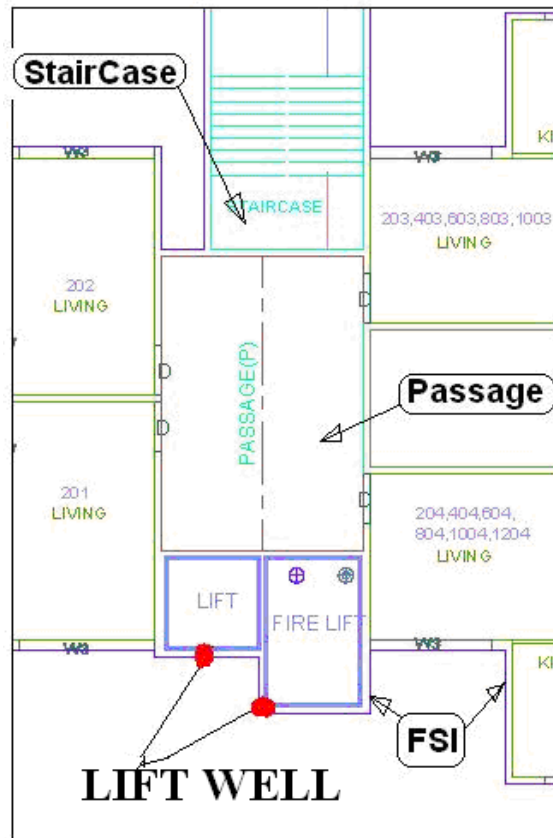
Description :

Draw a Lift as a closed polyline, which is a mechanically guided car, platform or transport for persons and materials between two or more levels in a vertical or substantially vertical direction. If fire lift is provided, then use the marking of “Fire lift” option from **Mark -> Lift -> Fire Lift**. Fire

Lift means a special lift designed for the use of fire service personnel in the event of fire or other emergency.

Shortcut Command : LFT

How to draw :



Layer: _LIG

Description :

Draw LIG area in _LIG layer as close poly line which is left for Lower Income Group.

How to draw :

It should be Inside of Floor or Plot.

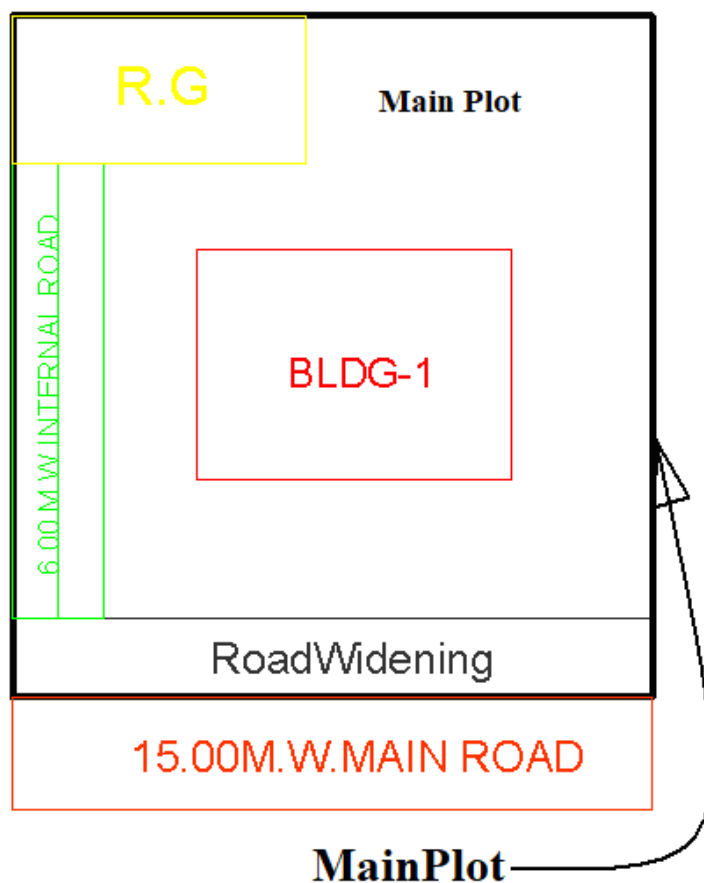
_Location Plan

Description :

Location plan if any to be drawn on this layer. This is only for reference. AutoDCR does no verifications for this layer so not compulsory.

Shortcut Command : LCP**MainPlot****Description:**

Draw a Main Plot poly as a closed polyline, which is a parcel or piece of land enclosed by definite boundaries. A Main Plot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall Main Plot Entity represent a Plan, AutoDCR refers it as 'Layout Plan'. The overall Main Plot Entity represent a Plan, AutoDCR refer it as "**Layout Plan**".

Shortcut Command: PLT**How to draw :-**

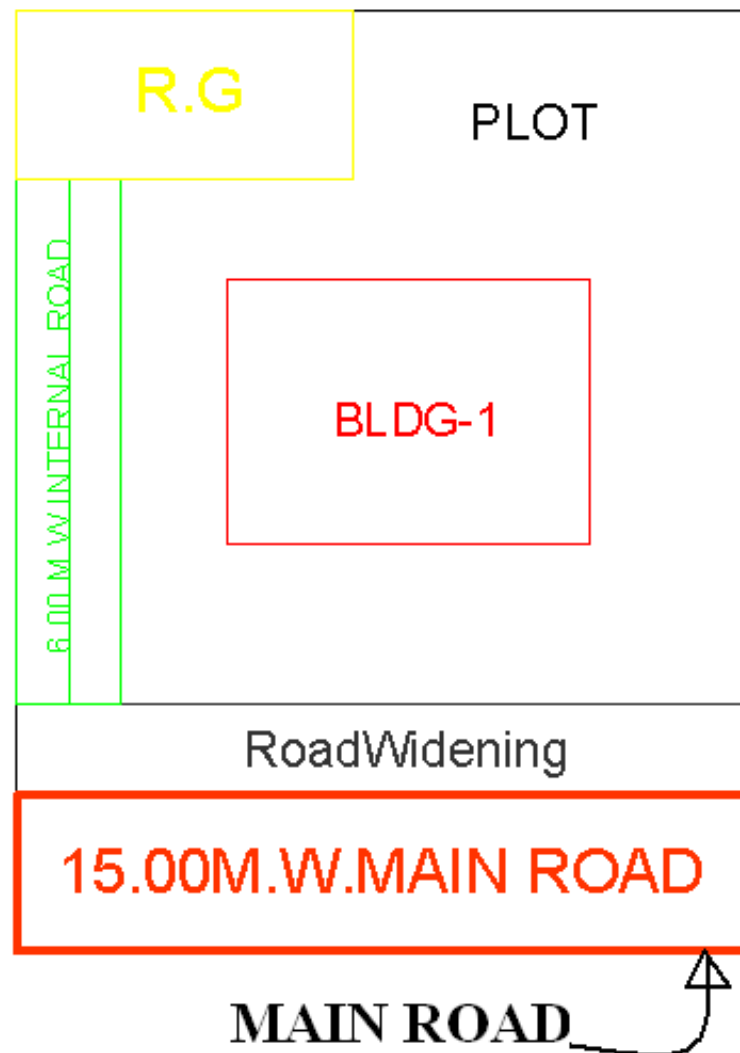
MainRoad

Description :

Draw a MainRoad as a closed polyline, which is abutting the Plot Boundary. On the site, that road is any type of road. Such as any highway, street, lane, etc. over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme. Road name start with its width only.

Shortcut Command : R1

How to draw : -



_MarginLine

Description :

No need to draw Margin Line, just use **Mark Margin** tool for it. This layer is not provided for users. AutoDCR uses '_MarginLine' layer for its own internal use.

_NETPLOT

Description :

No need to draw NETPLOT BOUNDARY. This layer is not provided for users. AutoDCR uses '_NETPLOT BOUNDARY ' layer for its own internal use.

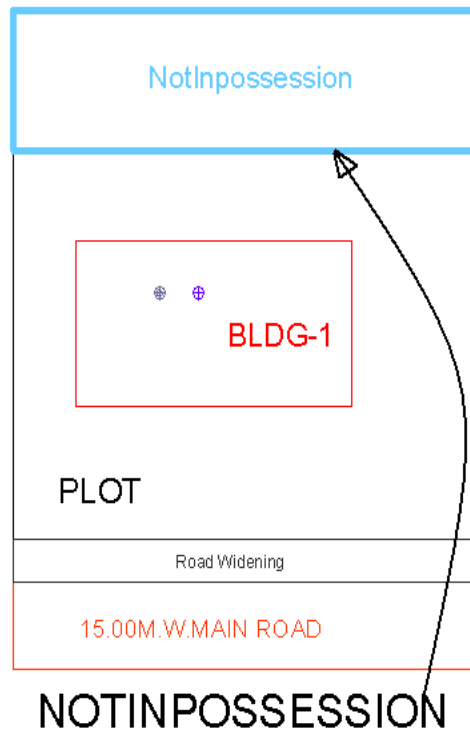
_NotInPossession :-

Description :

Plot Boundary area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.

Shortcut Command: NIP

How to draw :-



Parking

Description :

Draw a parking poly as a closed polyline, which is an enclosed covered or open area sufficient in size to park vehicles. This closed polyline shall contain a text on same _Parking layer. This text is treated as name of parking. Insert the parking by using an **Insert-> parking** option.

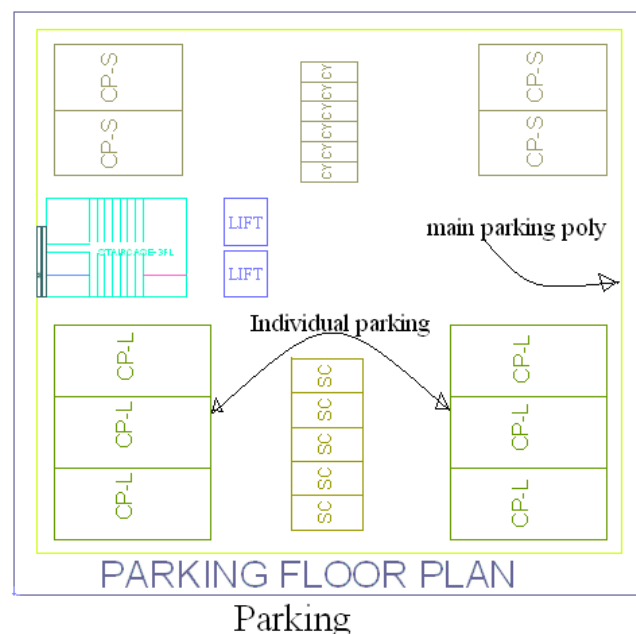
Shortcut Command : PK

Parking Name :

This closed polyline shall contain a text on same _Parking layer. This text is treated as name of parking. On this layer, you can group and insert any number of parking.

Parking	Name
Car	CP
Scooter	SC
Cycle	CY
Loading/Unloading	LD

How to draw : -



Passage

Description :

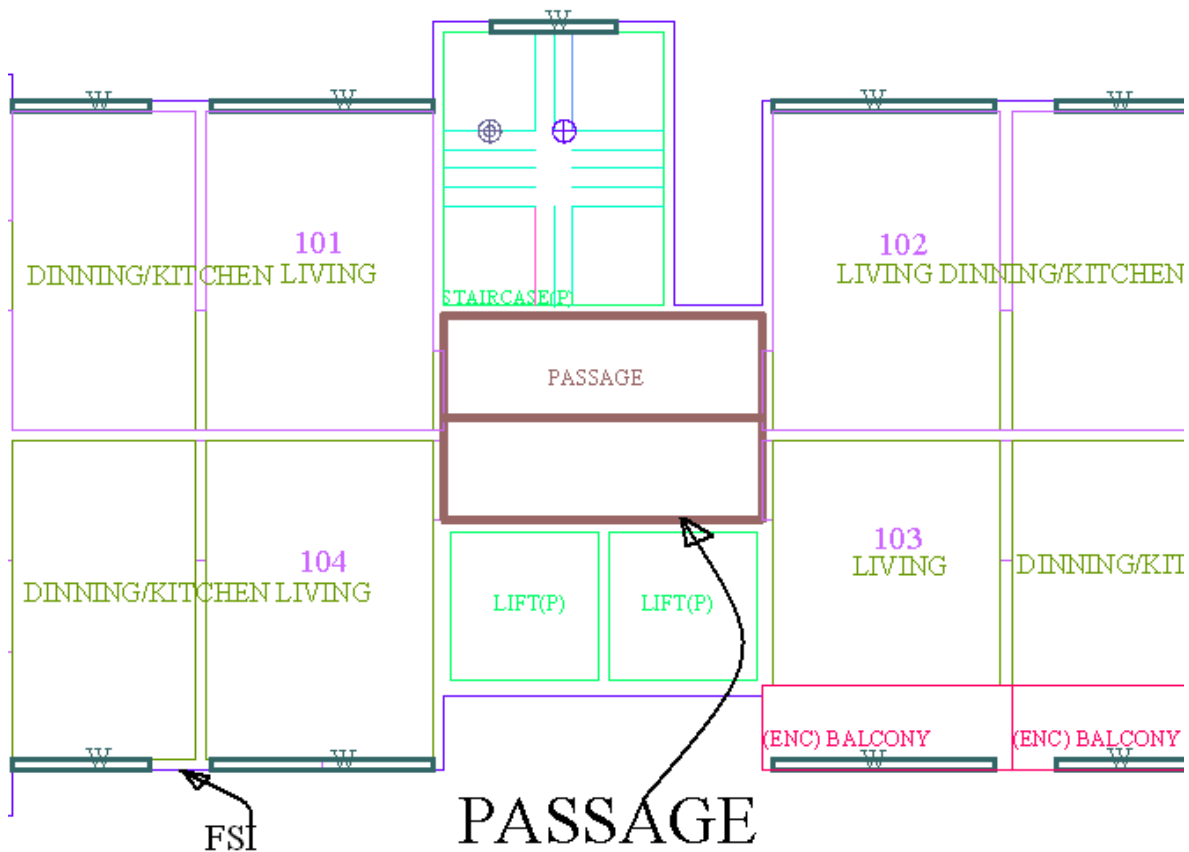
A closed polyline on Passage represents a passage. It is a common passage or circulation space including a common entrance hall. This closed polyline contains a text. This text must be on "Passage" layer. This text is treated as name of closed polyline.

Centre Line:

- All Passage poly must contain an Open Polyline inside that closed poly representing centerline on "Passage" Layer. However, line type of centerline must be 'Center line'.

Shortcut Command : PAS

How to draw: -



Layer: _PlotSurroundingDetails

Description :

Show abutting details on “_PlotSurroundingDetails” layer which is around your property where site is going to propose. For ex. Plot no, road width, etc.

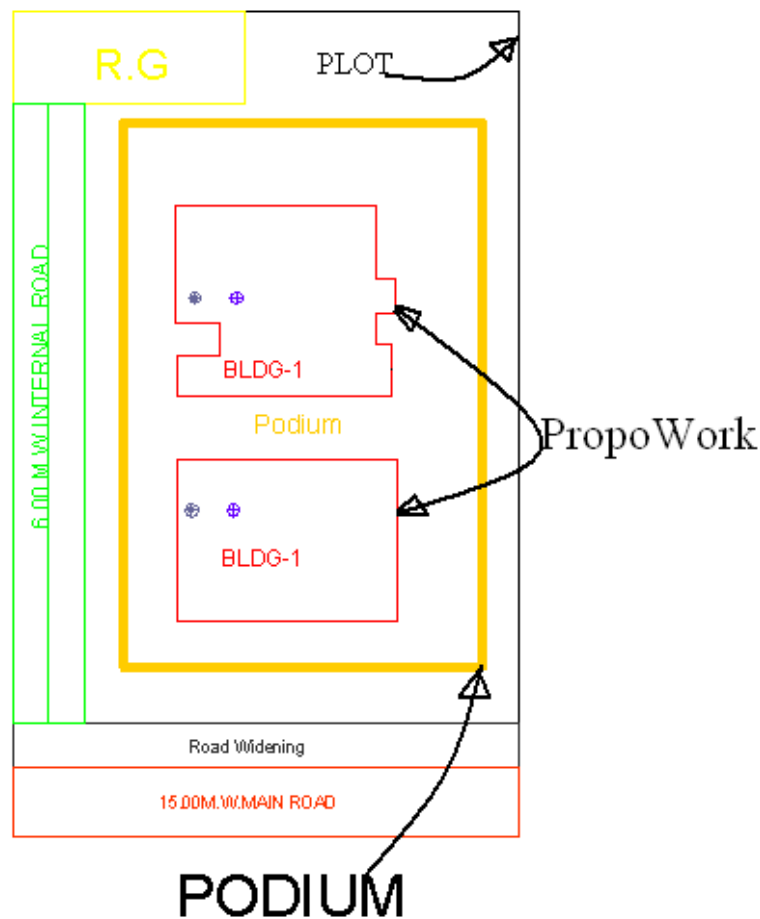
_Podium

Description :

Podium shall be drawn on '_Podium' layer as a closed polyline. Podium should be inside Plot Boundary covering proposed works if any.

Shortcut Command : POD

How to draw :-



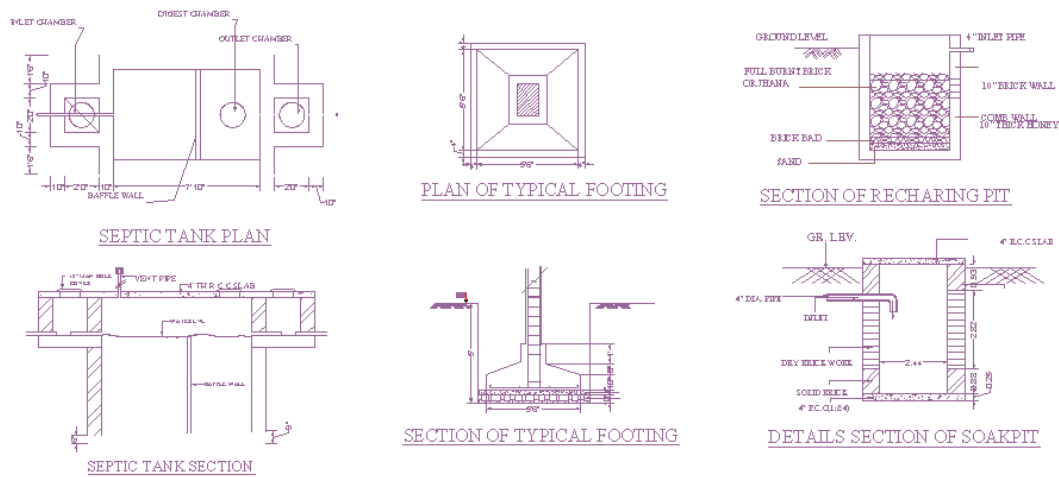
PrintAdditionalDetail

Description :

PrintAdditionalDetail layer----apart from the layers specified by PreDCR, any other information which user wants to display in final approval print shall be drawn on ___this layer

Shortcut Command : POD

How to draw :-



PropWork

Description :

Proposed Work is a building profile/outline and shall be drawn inside Plot Boundary. All detail Building plans (inside building polyline) of all Pwork (inside Plot Boundary polyline) is associated/linked automatically by Auto-DCR by matching its name.

So, for proper association it is required to follow specific standard as given.

XY (Z)

X is Wing name.

Y is wing number.

Z is Building name.

For example, if there are four wings A1,A2 & B1,B2 in building named "Monarch" then proposed work names shall be -

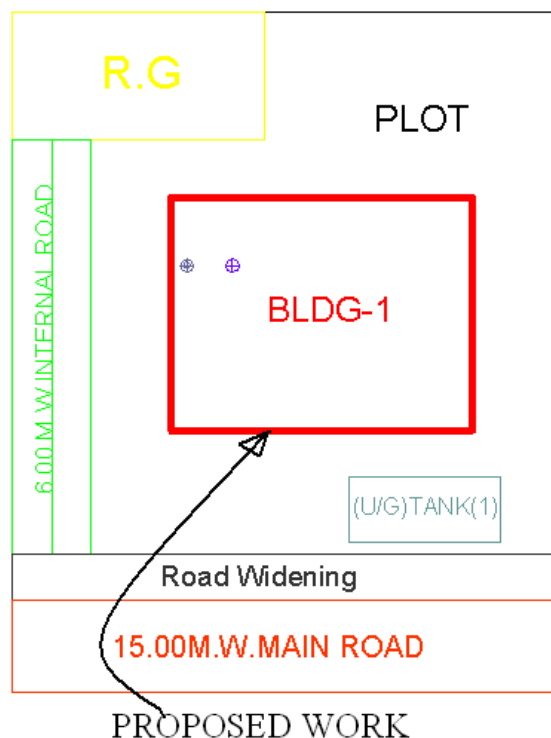
A1 (Monarch), A2 (Monarch)

B1 (Monarch), B2 (Monarch)

Reference Circle: All Pwork poly must contain two circles (of any size) with its center on common point for whole building. First on layer of any FAR and second on Layer “_Floor”. These reference circles to be inserted from **PreDCR** -> **insert-->Direction ref circles** at the same location in all the floors as well as Pwork in Plot Boundary. Usually they can be placed inside either Common Lift or Stair/Inner Chowk (because generally their location is same on all floors). Reference circles are used by the software for overlapping all floor plans.

Shortcut Command:- PW

How to draw :-



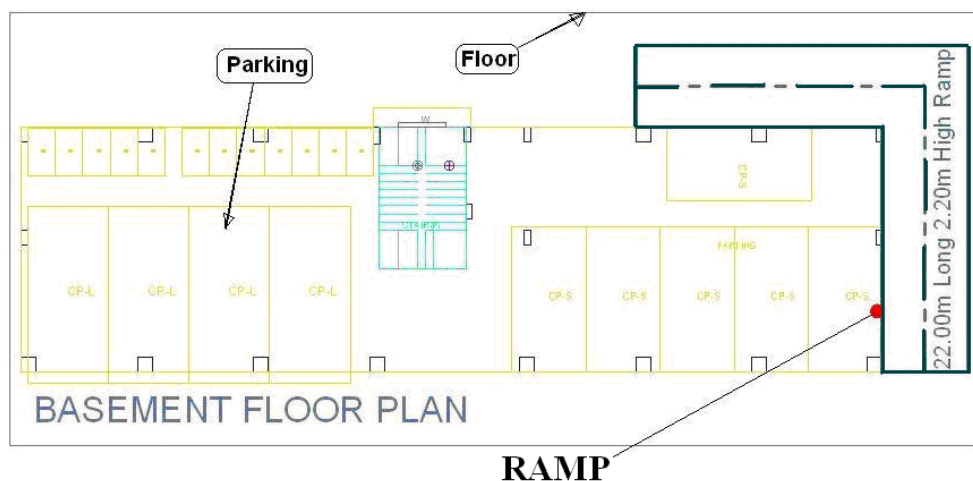
Ramp

Description :

Draw a Ramp poly as a closed polyline in floor plans and/or Main Plot. Naming convention for ramp is "---m. long and ---m. high ramp-1". Give unique name to each ramp.

Shortcut Command :- RP

How to draw :-



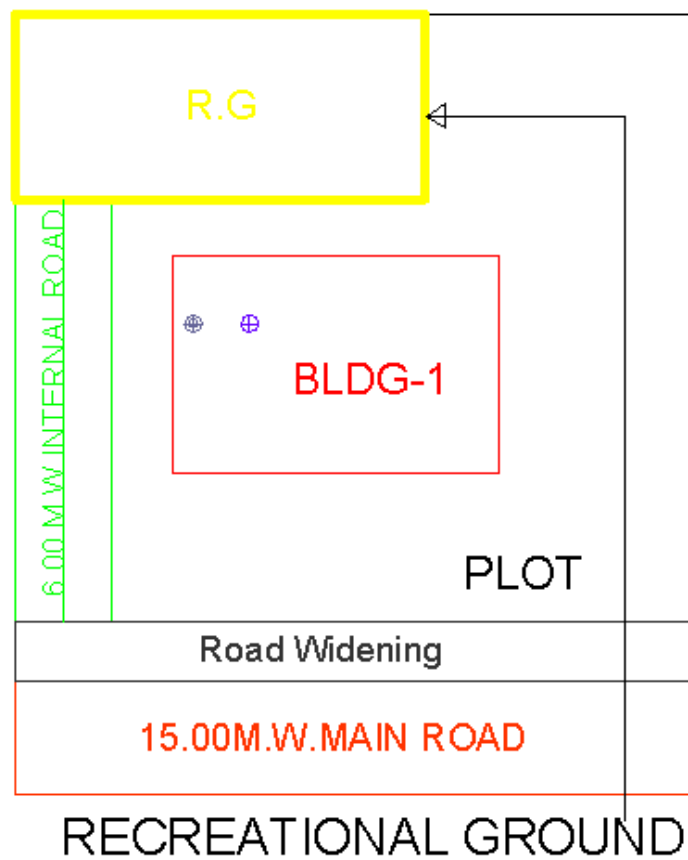
RecreationalGnd

Description :

Draw Recreational Ground as closed polyline reserved as recreational space on this layer. With text on same layer.

Shortcut Command : OPS

How to draw :-



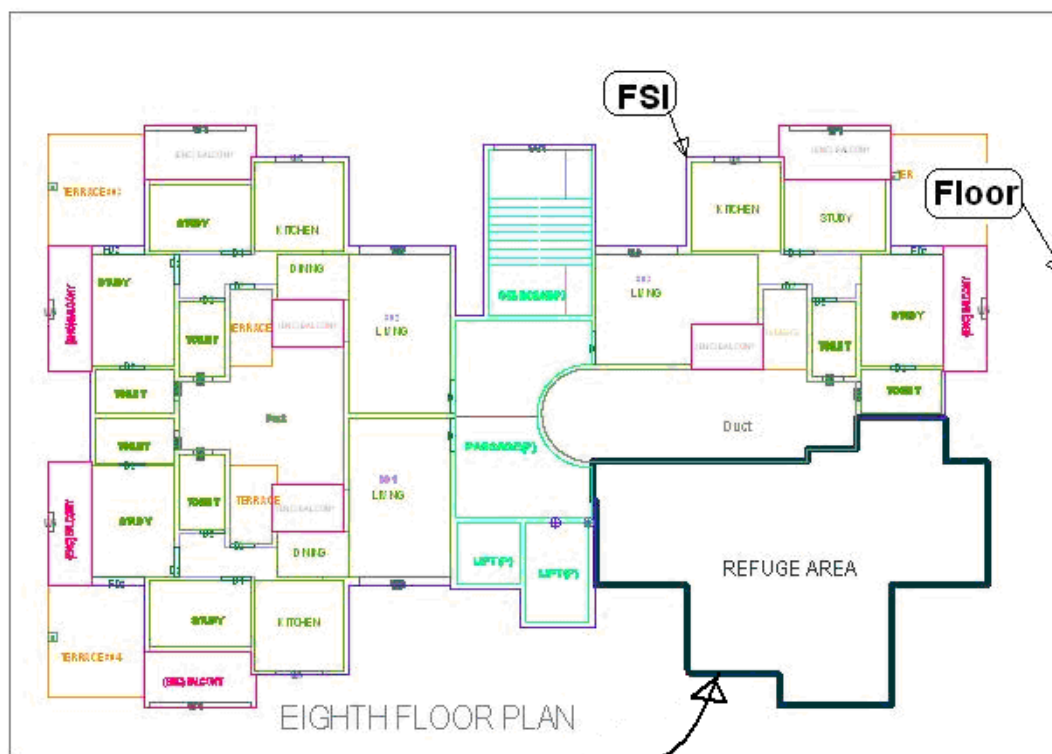
RefugeArea:-

Description :

Refuse area to be drawn in plan as a closed polyline with text on this layer. Overlapped with FAR layer but outside the FAR poly.

Shortcut Command :

How to draw :



REFUGE AREA

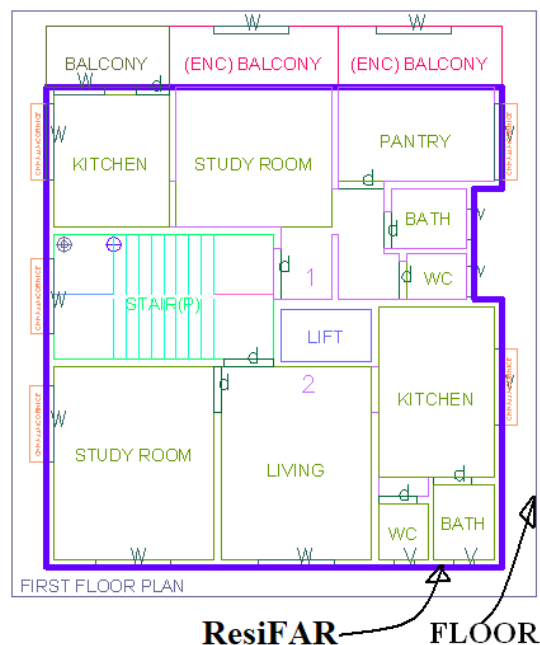
ResiFAR

Description : -

Draw a ResiFAR as a closed polyline, which is the area, covered by a building on all the floors. This FAR polyline only used for residential use building or floor. ResiFAR poly must be inside Floor poly.

Shortcut Command : MFS

How to draw : -



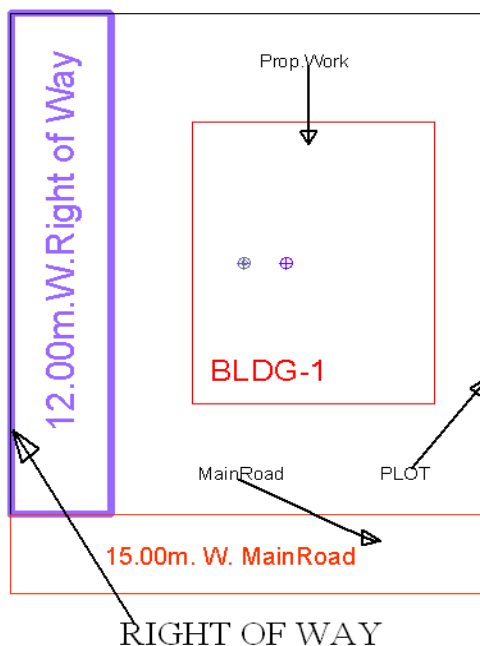
_RightOfWay

Description :

Draw a closed polyline on “_RightOfWay” to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with Plot poly

Shortcut Command :ROW

How to draw :



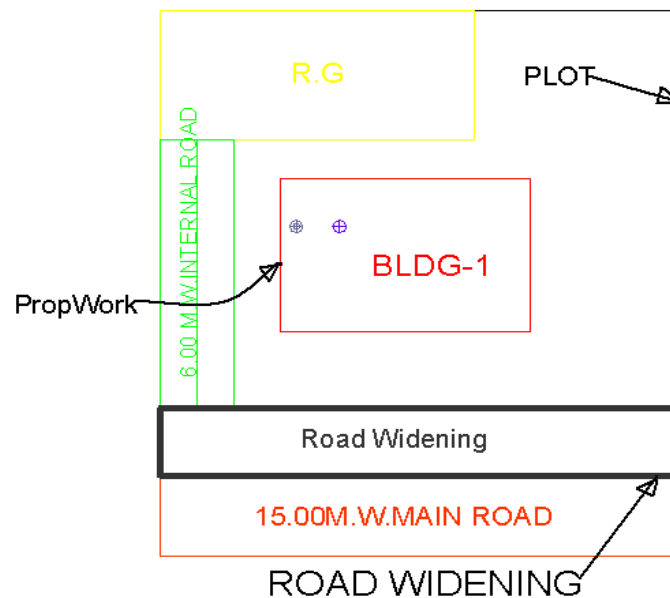
RoadWidening

Description :

Draw a road widening polyline as a closed polyline, which the Plot Boundary area is going to the road, that area should be draw on this layer. It should be inside the Plot Boundary polyline.

Shortcut Command : R5

How to draw : -



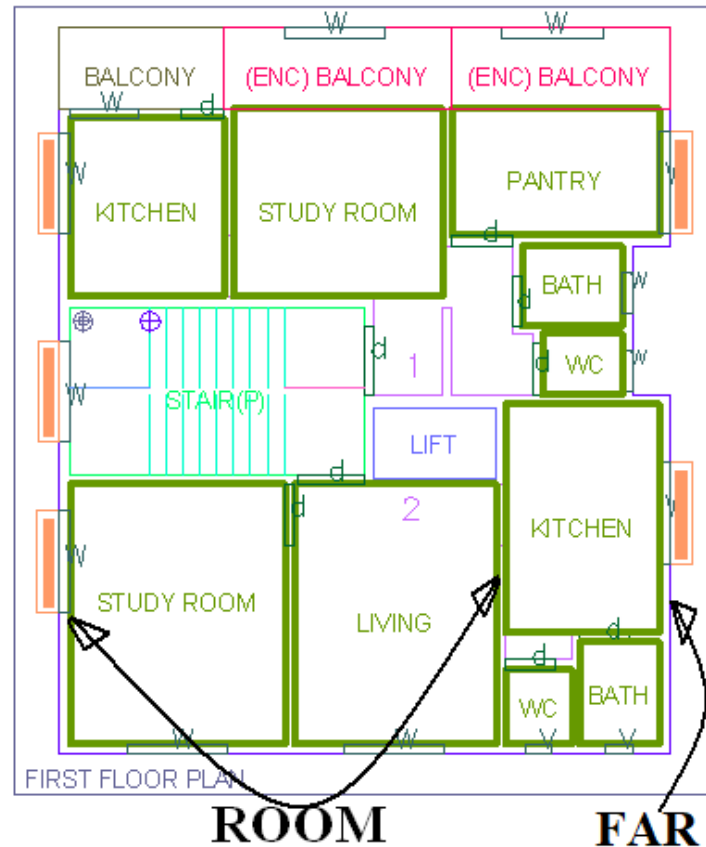
Room

Description :

A closed polyline on _Room layer represents a room. This closed polyline contains a text. This text must be on _Room layer. Room to be marked by assigning them names using **Assign Name-> room** option from PreDCR menu.

Shortcut Command : RU

How to draw : -



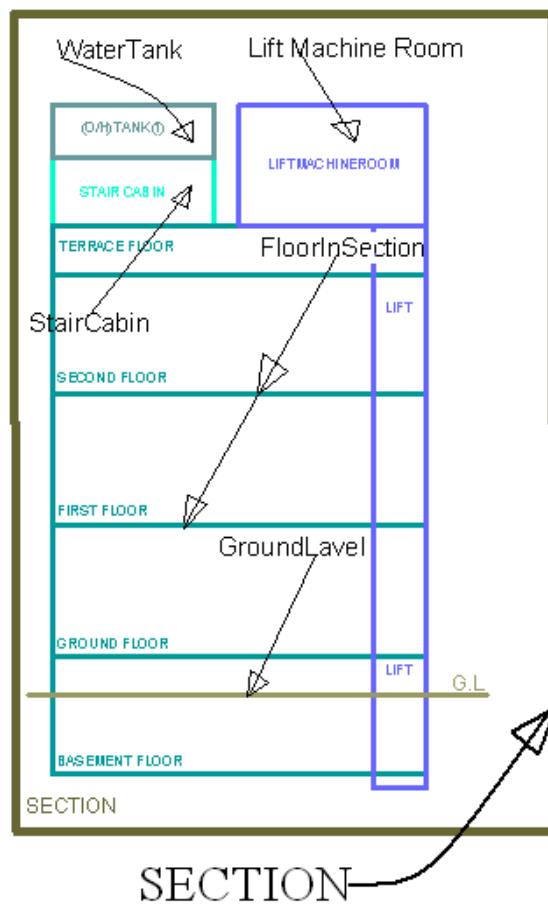
Section

Description :

Draw a Section polyline as a closed poly of section boundary, which contain all floors with stair cabin, Lift machine room, water tanks etc. as shown in the figure. Also, write the name as "Section" in this section poly. In this closed poly of section, draw sections of all floors with stair cabin, inner Chowk, Lift machine room, Ventilation shaft, water tanks etc. as shown in the figure. Also, write the name as "Section" in this section poly. This section poly will present inside the building poly.

Shortcut Command : SEC

How to draw : -



_SectionLine

Description:

Draw an open polyline on “_SectionLine” layer to show a section in floor plan as well as in layout.

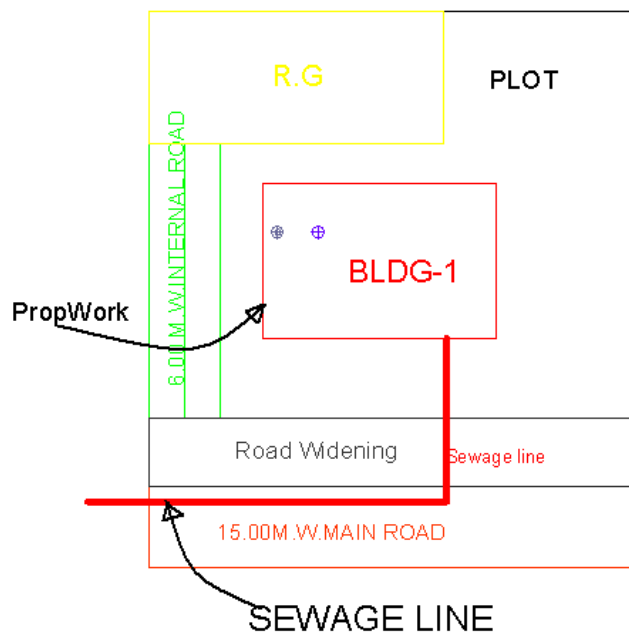
_SewageLine

Description: -

Drain Line shall be drawn as an open polyline on this layer.

Shortcut Command : L5

How to draw : -



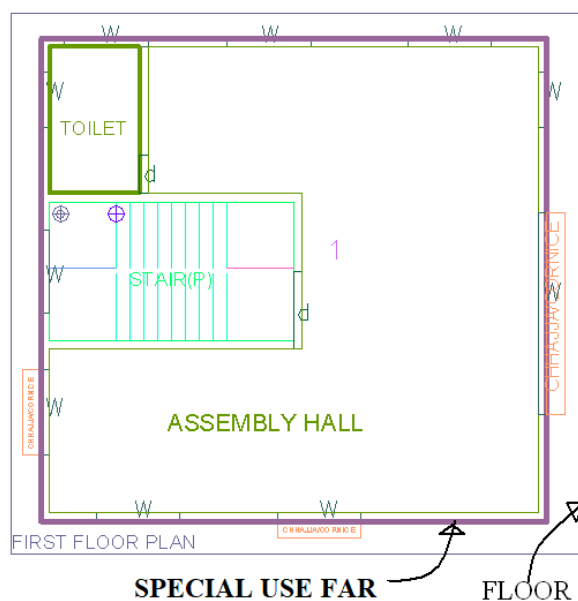
SpecialUseFAR

Description :-

FAR poly for all other building uses like educational, institutional etc. except ResiFAR, CommFAR & IndFAR use should be drawn on this layer.

Shortcut Command : SUF

How to draw : -



_StairCase

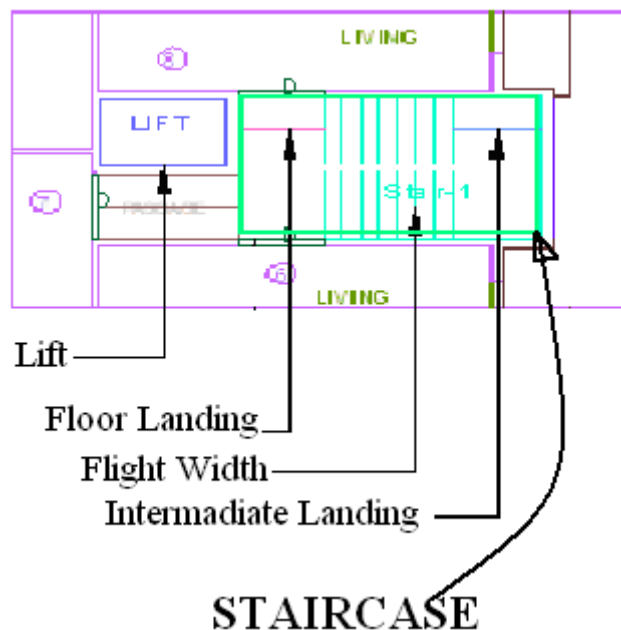
Description :

StairCase: On this layer, Each StairCase poly shall have three lines for Flight Width, Intermediate Landing and Floor Landing on same layer. Mark this open polyline by using **Mark-> Staircase** option from PreDCR menu. Also, draw in plan all the treads on this layer, which is an open polyline.

This closed polyline contains a text. This text must be on _Stair layer. This text is treated as name of closed polyline. On this layer, Each StairCase poly shall have three lines for Flight Width, Intermediate Landing and Floor Landing on same layer This can be mark by tool **Mark > StairCase > intermediate landing** etc.

Shortcut Command : STR

How to draw : -



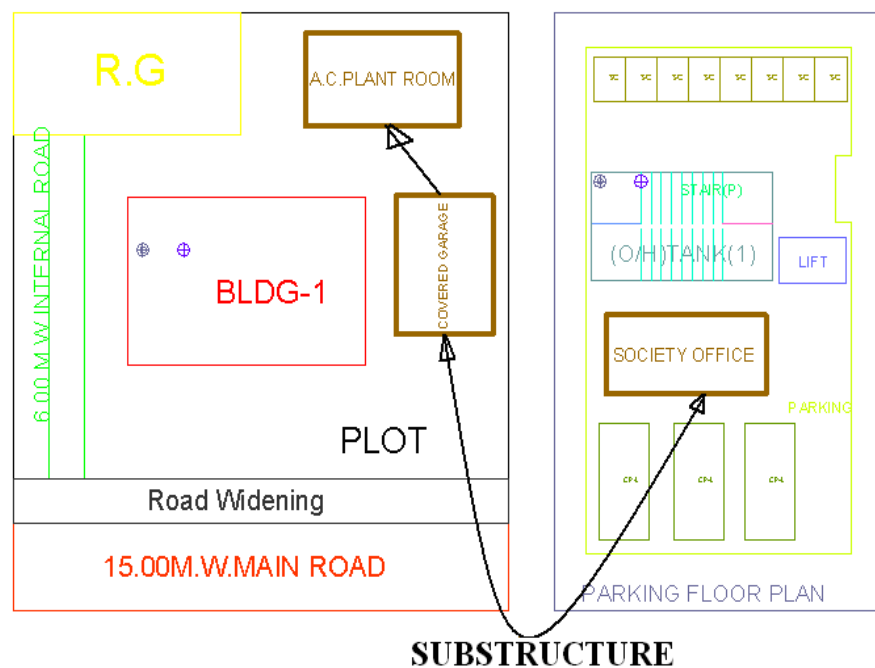
_SubStructure

Description :

Draw various substructures on "_Substructure" layer as a closed polyline. And mark it according to the requirement as **Mark -> Substructure -> Society Office**, from PreDCR menu. Sub-structures can be drawn inside Plot Boundary or in floor plans.

Shortcut Command : SSTR

How to draw : -



_Tank

Description :

A closed polyline on _Tank layer represents a water tank. Under Ground tank can be drawn in Floor or Layout plan. If it is drawn in Floor plan, then it should be at bottom of GROUND FLOOR. Overhead tank can be drawn in TERRACE FLOOR. Tank should be drawn as per internal size or dimensions. Both the tank also draws in section also.

Tank Name: - This closed polyline contains a text and must be in given format. This can also be done by tool Assign Name>Tank

Tank Name+ Type +Capacity

Tank Type	Text
Overhead water tank	(O/H)
Underground water tank	(U/G)

For e.g.

TANK-1 (O/H)

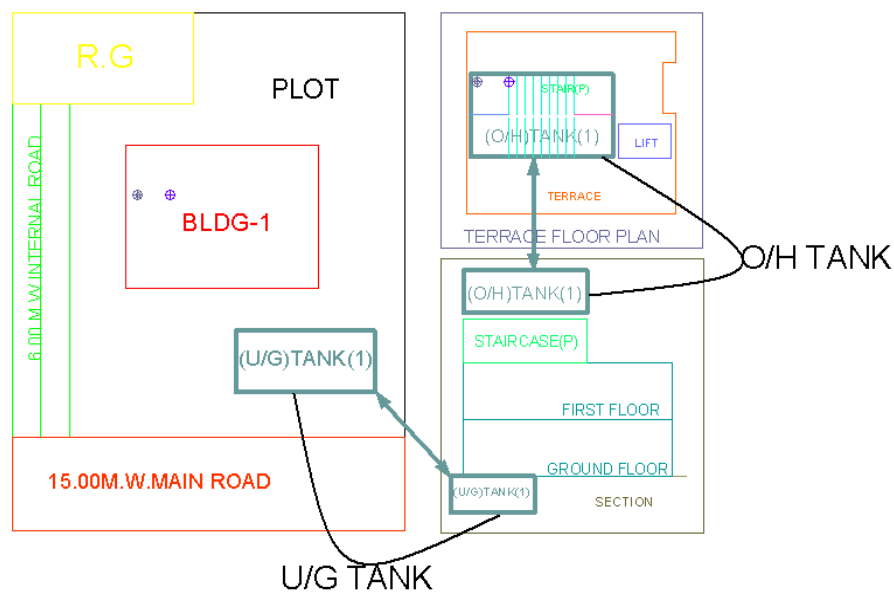
TANK-2 (U/G)

Under Ground tank can be drawn in Floor or Layout plan. If it is drawn in Floor plan, then it should be at bottom of GROUND FLOOR.

Overhead tank can be drawn in TERRACE FLOOR. Usually, it is drawn on StairCase poly in TERRACE FLOOR.

Shortcut Command : TNK

How to draw : -



Terrace

Description:

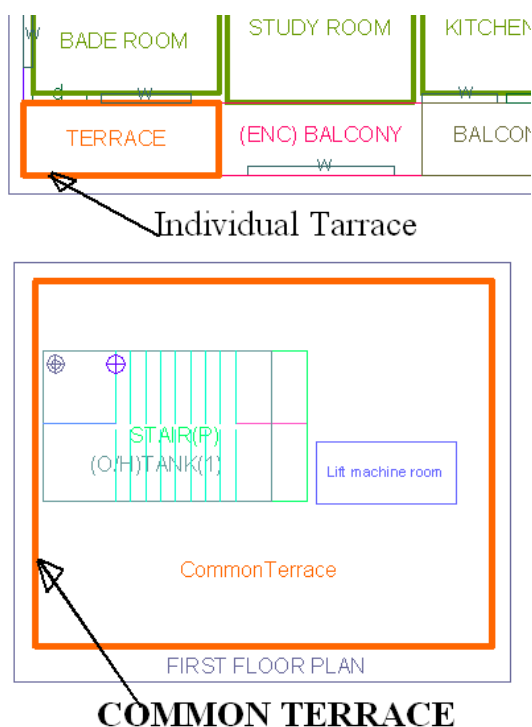
Draw a Terrace as a closed polyline on _Terrace layer, which is including parapet wall.

Terrace can be present in:

Floor: It must be outside the ResiFAR.

Shortcut Command : TER

How to draw : -



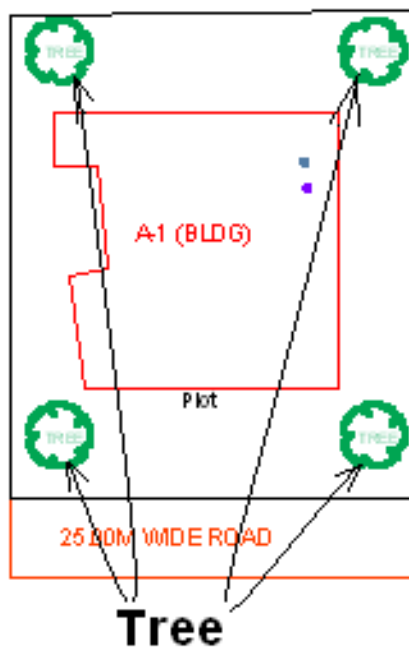
Tree

Description :

Trees can be shown on _Tree layer if required to be shown for plantation requirement in plot.

Shortcut Command : TRE

How to draw :



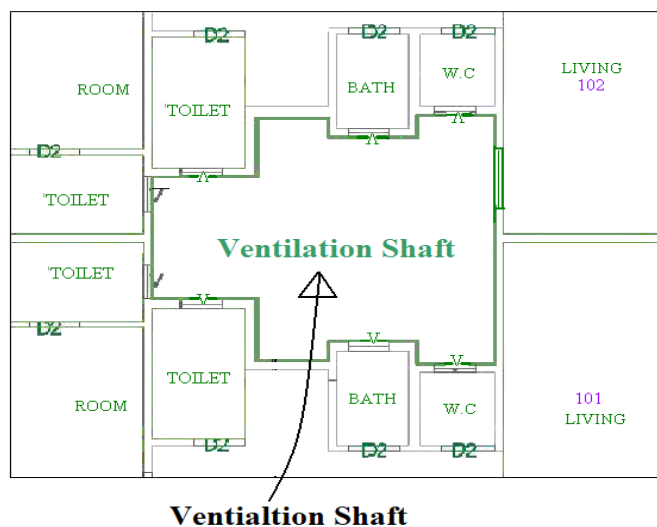
_VentilationShaft

Description :

Draw Ventilation shaft/duct area as a closed Polyline with Text. Inside FAR Area on Ventilation Shaft Layer. Only those shafts from which ventilation for habitable room is not taken should be drawn on this layer.

Shortcut Command:- VS

How to draw :



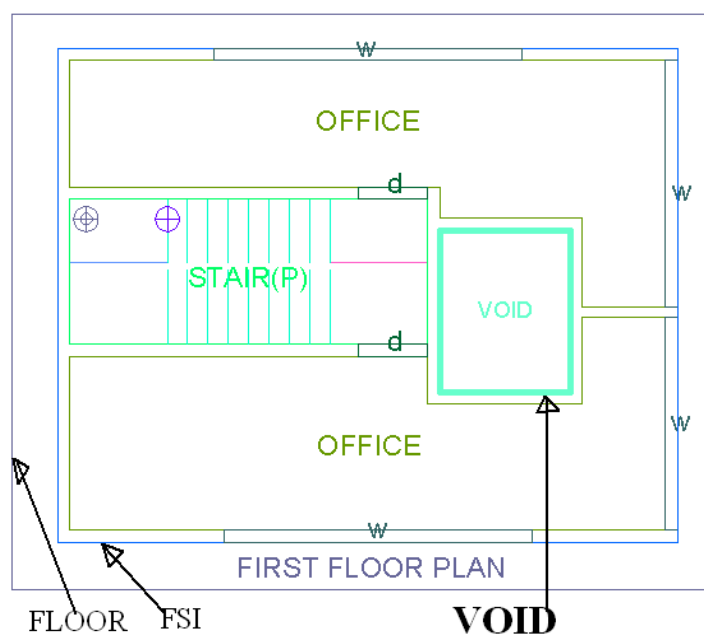
_Void

Description :

If the space is not Chowk, then it can be void. All ducts (where ventilation is not taken) and double height rooms can be drawn in void layer.

Shortcut Command : VD

How to draw : -



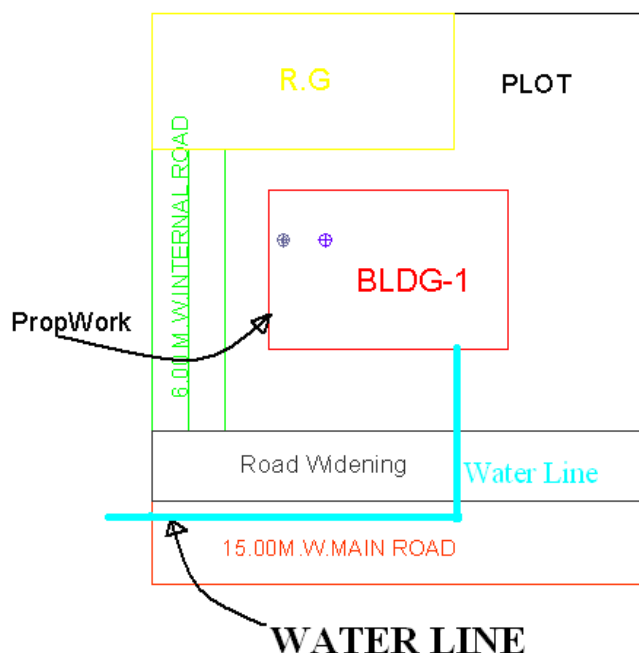
_WaterLine

Description :

Draw a Water line as an open polyline to show Water supply.

Shortcut Command : WL

How to draw : -



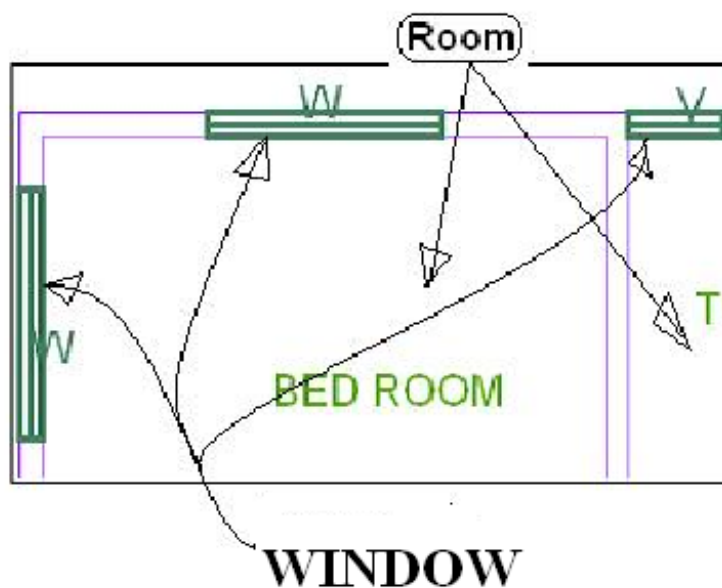
_Window

Description :

Window is a closed Polyline, which is drawn on "_Window" layer. Also, you can insert a particular size poly for Window using **Insert->Window** from PreDCR menu.

Shortcut Command : WND

How to draw : .



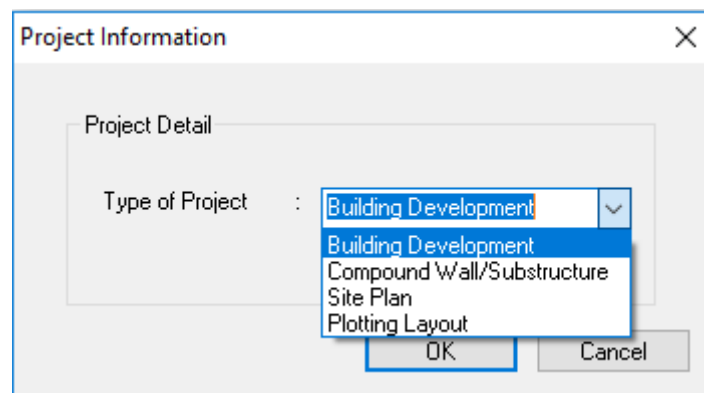
Commands

Create New Project (PDCRNWP):

This command will Create New project for current drawing.

Here you have to select Type of Project as
Proposed Development.

Note: It is always compulsory to add your drawing to new Project.



Create DCR Layers (PDCRCL):

This command will create layers required for PreDCR AutoDCR as per the Project Type, you have selected.

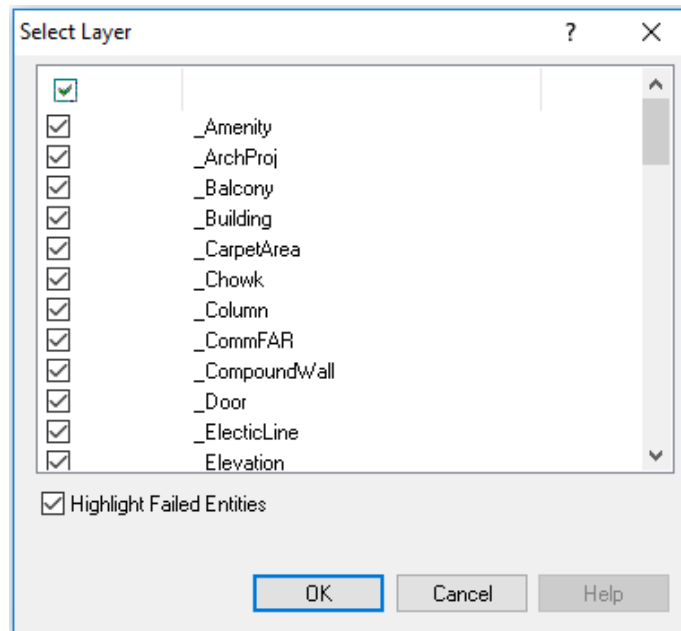
Fix Poly (PDCRPE):

Use this command once on the final drawing, which will process all the polyline on the PreDCR layer and remove extra vertices found on polyline. This command can be used before verifying the drawing using Verify commands.

Verify Drawing:

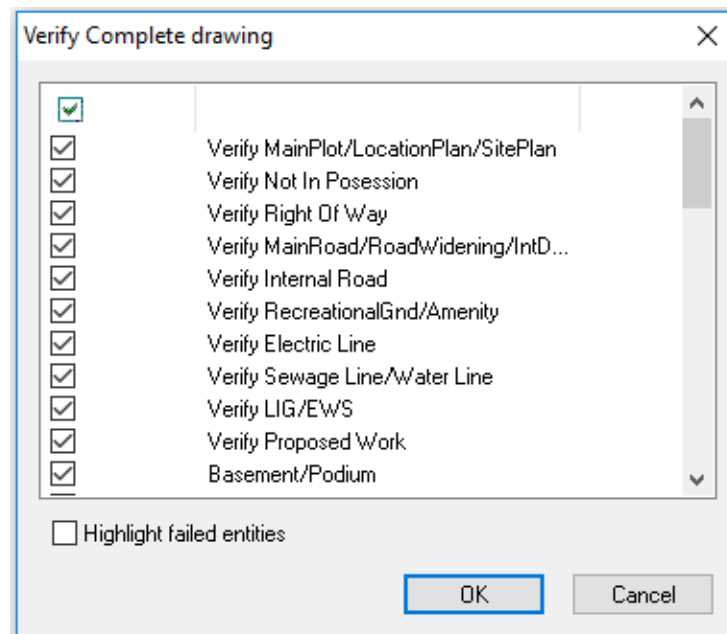
This command will verify the current drawing as required by DCR specifications.

a) Verify Close Entities (PDCRVLD): Verify that LWPOLYLINE entities on the selected layers are closed and contain one text.



B) Verify all drawing (PDCRVLT): Use this command to verify the layout and building-level objects in the current drawing plan.

Major checks are as follows:



In the "Verify All Drawing Dialog", you can select the layout or building objects to be checked. Then to view the result press OK button. PreDCR will start checking all corresponding objects in the currently open drawing and then display the status as OK or list of failed objects in the dialog as shown in Figure. Failed Object Information.

Check if these entities are drawn as closed LWPOLYLINE.

Name text is given to all objects.

Entities are placed exactly inside their parent objects (container).

Naming conventions are followed properly.

c) Objection List (PDCROLST): This command gives the list of all minimum required entities, which are not there in your drawing. If all required entities found, then it gives a message that "minimum required entities are present in drawing".

Markings

Marking adds some extra meaning in entity. Following commands are provided to mark different entities as per requirement.

Mark-> Proposed Work -> Centrally Air-Conditioned -> If building is, containing centrally Air-Conditioned then marked proposed work by using this menu.

Mark-> Proposed Work -> Normal (Default)

Mark-> Floor in Section -> Beam -> If Beam is proposed in floor in section then marked beam by using this menu.

Mark-> Stair Case-> No of flight -> 3 flight 4 flight (PDCRSCFAB): Mark staircase as a no of flight 3-flight or 4-flight

Mark-> Stair Case-> Staircase (Default) -> 3 flight 4 flight (PDCRSCFAB): Mark line inside staircase as a no of flight 3flight 4flight.

Mark-> Stair Case-> Open Staircase -> 3 flight 4 flight (PDCRSCFAB): Mark line inside staircase as a no of flight 3flight 4flight.

Mark-> Stair Case->Fire Escape Staircase: Mark line inside staircase as a fire escape staircase

Mark-> Stair Case-> Fab /Spiral Staircase: Mark line inside staircase as a Fabricated or spiral staircase.

Mark->Road widening Taken in FAR or Unmark (default) (PDCRMRVIFAR): Mark-> Road widening as a to be Added in FAR or Unmark (default)

Mark->Escalators: Mark staircase poly as Escalator.

Mark->Intermediate Landing (PDCRMIL): Mark line inside staircase as intermediate Landing.

Mark->Stair Case Landing->Flight Width (PDCRMFW): Mark line inside staircase as Flight Width.

Mark->Stair Case Landing->Floor Landing (PDCRMFL): Mark line inside staircase as Floor Landing.

Mark->Lift--> Unmark (Default) (Default) (PDCRLTP) > Mark->Lift--> Unmark (Default).

Mark->Lift--> Hydraulic (PDCRLHTP)> Free from FAR OR Taken in FAR > Mark Lift as Hydraulic & it is free from FAR or taken in FAR.

Mark->Lift--> Fire Lift (PDCRFL): Mark Lift as fire if fire lift is provided.

Mark->Ramp--> Ramp for Handicap: Mark Ramp as Handicap Ramp in Floor/Pwork.

Mark->Ramp--> Unmark (Default): Mark Unmark (Default) Ramp in Floor/Pwork.

Mark->FAR-> Existing FAR (PDCRCONES): Mark FAR Poly as Existing FAR.

Mark->FAR->Normal (Default) (PDCRUMFAR): Mark FAR Poly as Normal FAR.

Mark->Carpet Area->Splitted Tenement (PDCRMSPLTT): Mark Carpet Area as Splitted tenement.

Mark->Carpet Area->Slum Development->Sale: Mark Carpet Area as Sale tenement.

Mark->Carpet Area->Slum Development->Sale: Mark Carpet Area as rehab tenement.

Mark->Carpet Area->Normal (Default): Mark Carpet Area as Normal (Default) tenement.

Mark->Parking->Two-stacked, three-stacked four-stacked (PDCRUMENCBL): mark parking as an two stacked, three stacked and four stacked

Mark->Projection-- >

Mark->Projection->Chhajja (PDCRMCJPROJ): Mark Projection as Chhajja.

Mark->Projection->Loft -> (PDCRMLPROJ): Mark Projection as Loft in floor plan as well as in section.

Mark->Projection->Canopy (PDCRMCBPROJ): Mark Projection as Canopy.

Mark->Projection->Porch (PDCRMCBPROJ): Mark Projection as Porch.

Mark->Projection->Verandah (PDCRMCBPROJ): Mark Projection as a Verandah.

Mark->Projection->Otta (PDCRMOPROJ): Mark Projection as An Otta.

Mark->Projection->Steps (PDCRMSPROJ): Mark Projection as a Steps.

Mark->Existing Structure->**to be demolish (Default)** (PDCRMRMREXWC): Mark Existing structure as to be Demolish.

Mark->Existing Structure ->To Be Retained ->Building or Substructure (PDCRMREXWD): Mark Existing structure as to be Retained Building or Substructure.

Mark->SubStructure-> Electric Meter Room (PDCRMER): Mark Substructure as an Electric meter room.

Mark->SubStructure-> Electric Sub-Station (PDCRSS): Mark Substructure as an Electric Sub-Station.

Mark->Substructure->**Watchman Cabin** (PDCRMTRAN): Mark Sub Structure as a watchman cabin.

Mark->Substructure->**Society Office** (PDCRMOR): Mark Sub Structure as a Society office.

Mark->SubStructure->**Servant Quarter** (PDCRMSQ): Mark Sub Structure as a servant quarter.

Mark->SubStructure->**Sanitary Block** (PDCRMSB): Mark Sub Structure as a sanitary block.

Mark->SubStructure ->**Covered Garage** (PDCRMGRJ): Mark Sub Structure as a garage when garage is covered.

Mark->Substructure -> **Rain Water harvesting** (PDCRRWH): Mark Sub Structure as a **Rain** Water harvesting

Mark->Substructure -> **A.C Plant Room** (PDCRACP): Mark Sub Structure as An A.C Plant Room.

Mark->Substructure -> **A.H.U** (PDCRAHU): Mark Sub Structure as A.H.U.

Mark->Substructure -> **Swimming Pool** (PDCRMSP): Mark Sub Structure as a Swimming Pool

Mark->Substructure -> **Septic Tank/Soak pit** (PDCRST): Mark Sub Structure as a Septic Tank/Soak pit

Mark->Substructure ->**Pump House->** (PDCRMPR): Mark Sub Structure as a Pump House.

Mark->Substructure ->**Effluent Treatment Plant/ STP** (PDCRMETP): Mark Sub Structure as An Effluent Treatment Plant/ STP.

Mark->Substructure ->**Dish Antenna room** (PDCRMSPT): Mark Sub Structure as a Dish Antenna room.

Mark->Substructure -> **Well** (PDCRMSPT): Mark Sub Structure as a Well.

Mark->Substructure ->**Telephone Installation room** (PDCRMSPT): Mark Sub Structure as a Telephone Installation room.

Mark->Substructure -> **Entrance gate** (PDCRMSPT): Mark Sub Structure as an Entrance gate.

Mark->Substructure -> **Fitness Centre** (PDCRMSFC): Mark Sub Structure as a Fitness Centre.

Mark->Substructure -> **Suction Tank**: Mark Sub Structure as a Suction Tank.

Mark->Substructure -> **pavilion** (PDCRMSPL): Mark Sub Structure as a Pavilion.

Mark->Substructure -> **Gymnasium** (PDCRMSGM): Mark Sub Structure as a Gymnasium.

Mark->Substructure -> **Club House** (PDCRMSCH): Mark Sub Structure as a Club House.

Mark->Substructure -> **Dustbin** (PDCRMSDB): Mark Sub Structure as a Dustbin.

Mark->Substructure -> **Milk/Telephone Booth** (PDCRMSMTB): Mark Sub Structure as a Milk/telephone Booth.

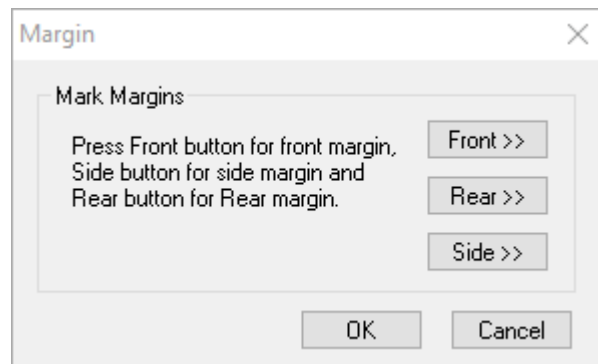
Mark->Substructure -> **Letter Box** (PDCRMSLB): Mark Sub Structure as a Letter Box.

Mark->Substructure -> **Chimney** (PDCRMSCM): Mark Sub Structure as a Chimney.

Mark->Substructure -> **Storage** (PDCRMSSG): Mark Sub Structure as a Storage.

Mark->Substructure -> **Godown** (PDCRMMSGD): Mark Sub Structure as a Godown.

Mark->Margin (PDCRMRGN): Use this command to define or mark the front, sides and rear margins of the Plot Boundary.



Insert entities

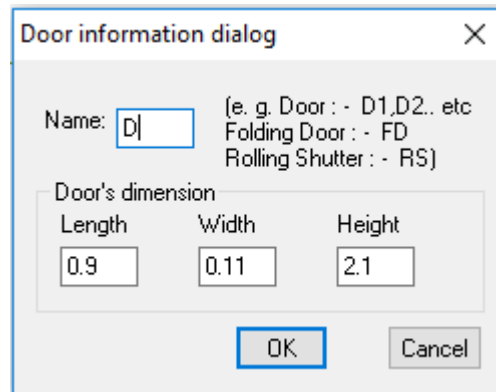
Insert->Parking-> Car (PDCRICP) -> Use this command to insert car-parking poly of at selected point.

Insert-> Parking-> Scooter (PDCRISP) ->Use this command to insert Scooter parking poly at selected point.

Insert-> Parking-> Cycle (PDCRICY) ->Use this command to insert Cycle parking poly at selected point.

Insert->Parking-> Loading/Unloading (PDCRIVP) -> Use this parking -> Loading/Unloading.

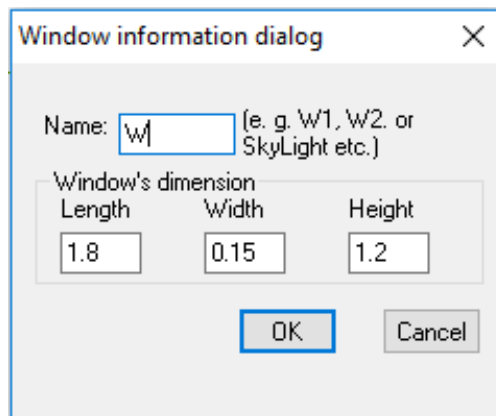
Insert->Door (PDCRIDRNAM): Use this command to insert door poly at selected point and with specified size given by user. As soon as you use this command, the following Dialog appears.



The 'Door information dialog' box contains the following fields and options:

- Name:** A text input field containing 'D'. To the right, a list shows examples: '(e. g. Door : - D1,D2.. etc', 'Folding Door : - FD', and 'Rolling Shutter : - RS)'.
- Door's dimension:** A section containing three input fields:
 - Length:** 0.9
 - Width:** 0.11
 - Height:** 2.1
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Insert->Window (PDCRIWNDNAM): Use this command to insert window poly at selected point and with specified size given by user.



The 'Window information dialog' box contains the following fields and options:

- Name:** A text input field containing 'W'. To the right, a list shows examples: '(e. g. W1, W2. or SkyLight etc.)'.
- Window's dimension:** A section containing three input fields:
 - Length:** 1.8
 - Width:** 0.15
 - Height:** 1.2
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Insert->Common Reference Circle (PDCRIWC): Use this command to insert Common reference circle. Insert these circles in all the floor plans as well as in proposed work at the common place (e.g. Lift or Stair) of all the floors.

Insert->Direction Reference Circle (PDCRIWC): Use this command to insert direction reference circle. Insert these circles in all the floor plans as well as in proposed work at the common place (e.g. Lift or Stair) of all the floors.

Insert->Tree: Use this command to insert Tree. Insert Tree in Plot Poly.

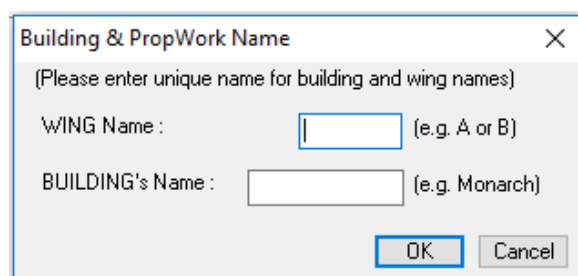
Insert->North Direction: Use this command to insert North Direction. Insert it Plot Poly.

Insert->Staircase UP/DN Direction: Use this command to insert UP/DN Direction in Staircase.

Assign Name

There are few naming conventions required by AutoDCR, for which PreDCR provides the following tools:

Assign Name->Building and proposed works (PDCRBLDAPWNL): Use this command to give name for building poly and its associated proposed works.



Building & PropWork Name

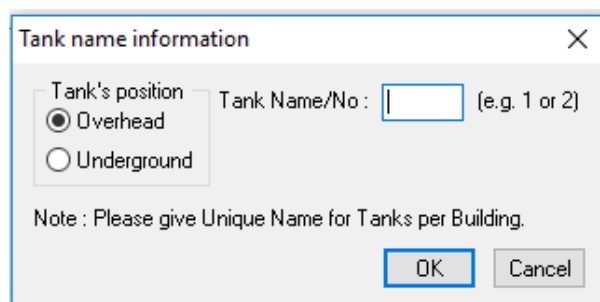
(Please enter unique name for building and wing names)

WING Name : (e.g. A or B)

BUILDING's Name : (e.g. Monarch)

OK Cancel

Assign Name->Tank (PDCRTNKNAM): Use this command to give name for Tank poly and its corresponding tanks.



Tank name information

Tank's position

☒ Overhead

☐ Underground

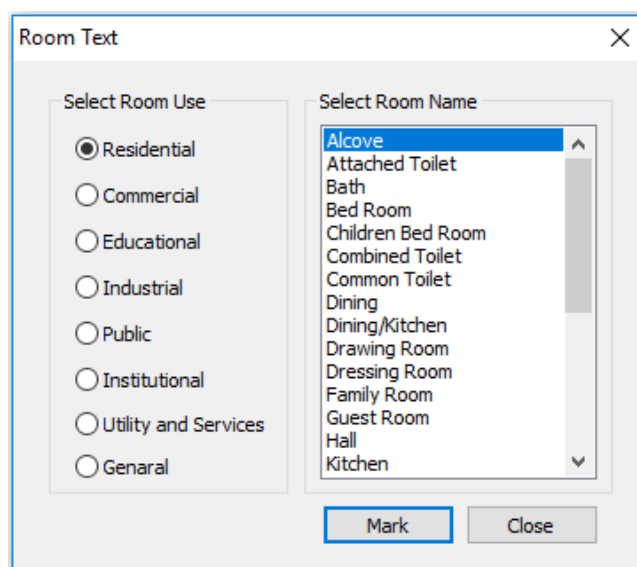
Tank Name/No : (e.g. 1 or 2)

Note : Please give Unique Name for Tanks per Building.

OK Cancel

Fill in the dialog and select the tank poly drawn in plan and the same drawn in section

Assign Name->Room (PDCRASRUN): Use this command to give different names for Room poly.



Room Text

Select Room Use

☒ Residential

☐ Commercial

☐ Educational

☐ Industrial

☐ Public

☐ Institutional

☐ Utility and Services

☐ Genaral

Select Room Name

Alcove

Attached Toilet

Bath

Bed Room

Children Bed Room

Combined Toilet

Common Toilet

Dining

Dining/Kitchen

Drawing Room

Dressing Room

Family Room

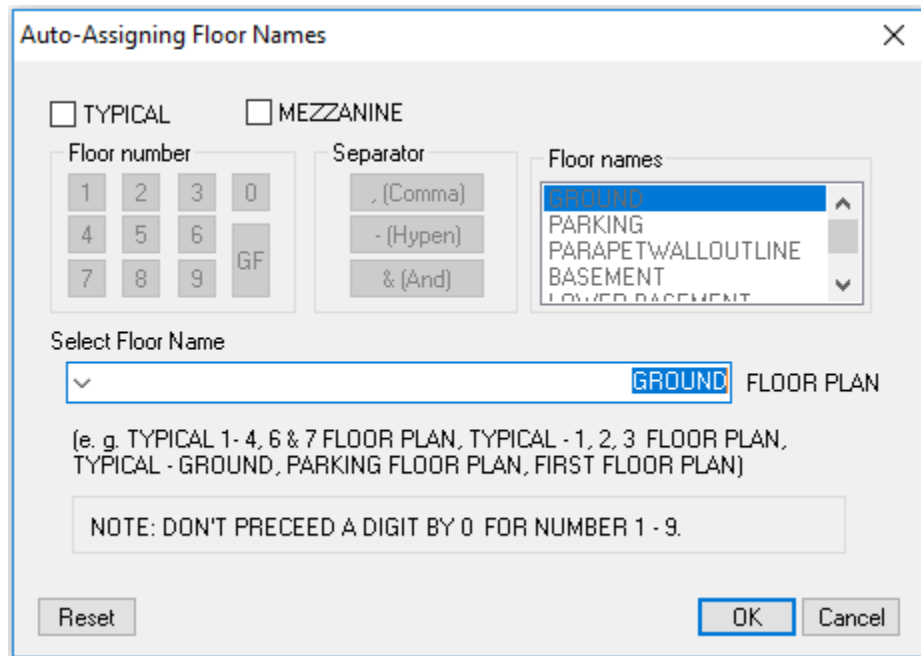
Guest Room

Hall

Kitchen

Mark Close

Assign Name->Floor Name (PDCRASFLRNAM): Use this command for assigning name to a floor poly and its corresponding floor in section poly in section.



Tools

All/Remover Tool Tip (PDCRTOOLTIP):

This command will activate the tool tips for PreDCR layers.

Show Only DCR Layers:

All PreDCR layers (PDCRSPL):

This command will turn off all the layers in the drawing except PreDCR layers.

Building level layer (PDCRSBL):

This command will turn on all the building plan level layers in the drawing.

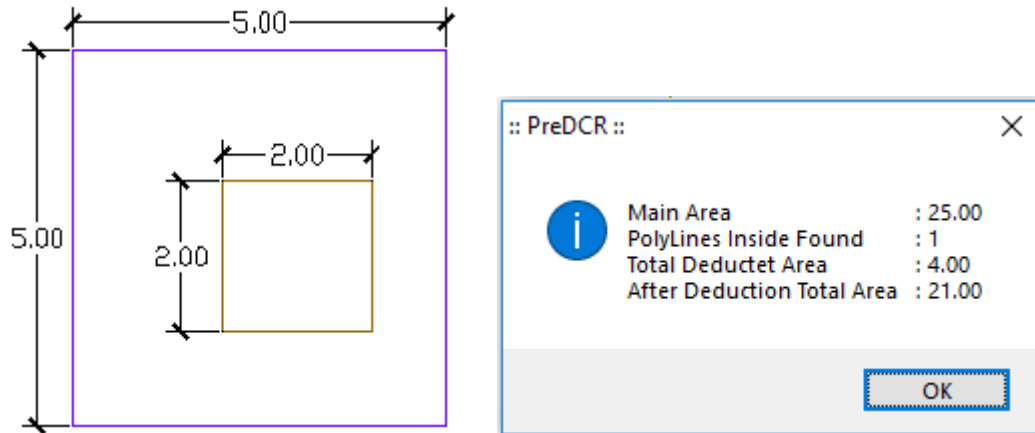
Layout level layer (PDCRSLL): This command will turn on all the Layout plan level layers in the drawing.

Show all layers (PDCRSAL):

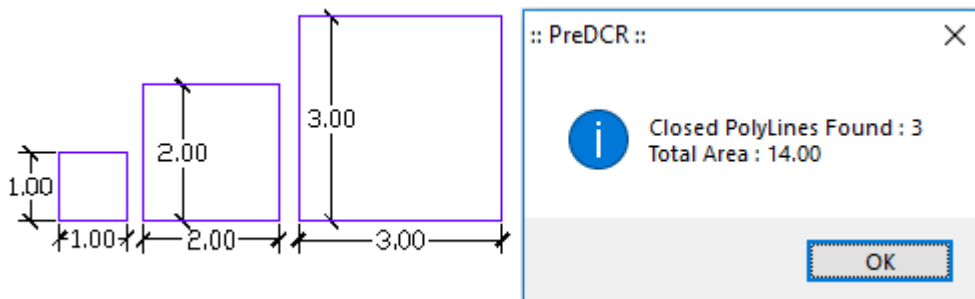
This command will turn on all layers in the drawing.

Calculate Deducted Area (PDCRCDA):

This command will compute the area of closed polygon after deducting closed polygons found inside.

**Calculate Total Area (PDCRCTA):**

This command will compute the total area of all selected closed polygons.

**Get All Inside Poly (PDCRFIP):**

This command will highlight all polygons, which found exactly inside selected polygon under test.

Get All Overlapping Poly (PDCRGOP):

This command will highlight all polygons, which are overlapping with selected polygon under test.

Get All Intersecting Poly (PDCRGIP):

This command will highlight all polygons, which are intersecting with selected polygon under test.

Find Open Entities (PDCRFNDO): Highlight open entities on PreDCR layers.

Find Closed Entities (PDCRFNDC): Highlight closed entities on PreDCR layer.

Spelling check (_spell): This tool is used for spelling checking.

Find Object (PDCRFOB): This command zoom & highlight object of a given handle.

Shortest distance (PDCRFSD): This command will find the shortest distance between two entities.

Set Default ACAD Version (PDCRSDA):

PREDCR SHORT-CUT COMMANDS

Layer name	Description	Naming Convention	short command
_Amenity	Draw Amenity space as a closed polyline, which is reserve for utilities, services and conveniences.		AMN
_ArchProj	This layer is used to represent various Architectural Projections in your Plan. Draw a closed Polyline for Architectural Projections. And mark it using Mark->Projection from PreDCR menu, according to requirements. Canopy/porch will come in Plot Boundary & other projections	Mark -> Projections -> Chhajja	AP

	will come with floor plans.		
_Balcony	Draw a balcony as a closed polyline which is a horizontal projection including parapet to serve as a sitting out place. Name of balcony must be inside and on _Balcony layer.	If Balcony is Enclosed Than Mark -> Balcony -> Enclosed Balcony	BL
_Building	Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans and section of the same building on _Building layer. Note: As written above, dimension or area of this building poly has no meaning in AutoDCR. This is just a logical group of all floors of the same building. If the building plans of multiple PWorks or wings are same, then building name shall be as given aside.	Naming Convention will be provided by Tool>Assign Name A (Bldg. Name) inside Bldg.Poly & A-1 (Bldg. Name) inside Pwork Poly	BLD
_Carpetarea	Draw carpet area as a closed polyline which is a net usable floor area within a building excluding that covered by the walls or any other areas specifically exempted from floor space index computation in these regulations.	If Carpetarea is Splitted – Tenement. Mark-> Carpetarea-> normal (default)	CPT

_Chowk	Draw a Chowk as a closed polyline, which is an enclosed space permanently open to the sky within a building at any level. From Chowk we take ventilation for habitual rooms		CWK
_CommFAR	Draw a CommFAR as a closed polyline, which is the area, covered by a building on all the floors. This FAR polyline mainly used for commercial use bldg.	No need to give name on this layer.	CMFS
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping Plot Boundary.	1.5m high compound wall	CW
_Door	Door is a closed Polyline, which is drawn on “_Door” layer also, you can insert a particular size poly for Door using Insert->Door from PreDCR menu.	Insert-> Door	DR
_Elect line	Electric line will be present in the layout plan and shall pass through Plot Boundary entity as a non-closed polyline. Name electric line shall start with its voltage capacity and text insertion point shall lie on its polyline.	33 KV High Tension Line	L1
_Elevation	Draw Elevation on this layer and must be present in Building Poly.		
_EWS	Draw EWS are on this layer.		

_ExStructure	Draw an Exstructure as a closed polyline, which is a building, or structure existing authorized before the commencement of these regulation and mark it using Mark -> Existing structure as 'To be demolished' or 'To be retained'.	Mark-> Existing Structure-> To be Demolished OR To be Retained	ES
_Floor	Floor poly should be drawn as a closed Polyline with Text on same Layer. This is just a logical Group of all floor Entities. Floor Name: Floor Plan will be automatically link with Section by matching the Floor Name. Hence all names to be given using <Assign Name> function	Naming Convention will be Provided by Tool>Assign Name>Floor name. Name of floor should be in given format: TYPICAL-1,4 FLOOR PLAN TYPICAL-1-5 FLOOR PLAN TYPICAL-2&3 FLOOR PLAN Ground Floor Plan.	FLR
_FloorInSection	Description: - Draw a Floor Inspection as a closed polyline which is the height of that floor (slab top to slab top) This poly only used for checking floor height. For assigning, the name of FloorInSection then used Assigned name option for PreDCR tool menu.		SECF

	1. Name of each floor section will be same as of floor in plan. 2. For one typical floor plan multiple floor section will be there. For e.g. for one typical floor plan for 1-3 floors there will three sections shall be drawn with name "First Floor Plan", "Second Floor Plan" and "Third Floor Plan" respectively.		
_GroundLevel	The Ground level line should be drawn as an open polyline in the section poly. Prop.Ht. will be considered from GroundLvl Polyline	No need to give name on this layer.	GL
_IndFAR	Draw a closed FAR Polyline, which is used as an Industrial Purpose.	No need to give Name on this layer.	IFAR
_IndivSubPlot	For plotting layout draw individual subplots having unique text on '_IndivSubPlot' layer inside main plot.		R3
_InternalRoad	Draw each Internal Road as a closed Polyline with Centre Line (Ltype-CentreLine) & single text inside it.	7.50 m wd. Internal Road	R2
_LiftWell	Draw a Lift as a closed polyline which is a mechanically guided car, platform or transport for persons and materials between two or more levels in a vertical or substantially vertical direction	Naming Convention will be provided by Tool<Mark>Lift If fire lift is	LFT

	Fire Lift means a special lift designed for the use of fire service personnel in the event of fire or other emergency.	provided, then use the marking of " Fire >Hydraulic or Unmark (default)	
LIG	Draw EWS are on this layer.		
_Location plan	Location plans if any to be drawn on this layer. This is only for reference. AutoDCR does no verifications for this layer so not compulsory.		LCP
_MainPlot	Description: - Draw a MainPlot poly as a closed polyline, which is a parcel or piece of land enclosed by definite boundaries. A MainPlot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall MainPlot Entity represent a Plan, AutoDCR refer it as " Layout Plan ".		PLT
_MainRoad	Draw Main Road as a closed Poly with Text, which should be abutting with the Plot Boundary closed Poly. (Note: Road width must be written at the starting of Text)	24.00 m wd. Main Road	R1

_Margin line	Margin Polylines will be created by PreDCR by using Tool "Mark>Margins" (User need not do anything on this layer.)		L3
_Net Plot	No need to draw NETPLOT. This layer is not provided for PreDCR users.	No need to give name on this layer.	NPLT
_NotInPossession	Main Plot area which is not in possession or which is not in proposal to be drawn as a closed polyline on this layer.		NIP
_Parking	Draw a closed Polyline for Parking on "_Parking" Layer. You can also use Insert function to insert desired Parking Poly in your drawing.	Insert-> Parking->Car/Scooter/Transport Vehicle/Visitor Parking (Car) OR Loading/unloading	PK
_Passage	Draw a closed polyline on "_Passage" Layer to represent passage with Centre Line (Ltype-CentreLine) & single text inside it. (Note: If Premium for Passage is going to be Paid, Passage should be marked by using Tool "Mark"	Mark > Passage > covered Passage.> Free from FAR or Taken in FAR. Mark > Passage > Open Corridor Mark > Passage > Fire Escape Passage.	PAS
Plot Surrounding-Details	Show abutting details on "_PlotSurroundingDetails" layer which is around your property where site is going to propose.		

	For ex. Plot no, road width, etc.		
_Podium	Draw a closed polyline on “Podium” to represent Podium. It should be shown in the layout and not in floor plans.		POD
_PrintAdditionalDetail	Description: - Any additional details apart from details provided on all other PreDCR layers can be drawn on this layer. These details may not be necessary for actual scrutiny process but can be used as additional supporting information.		ADET
_PropWork	Pwork is a building profile and shall be drawn inside Plot Boundary. Draw a closed polyline for Proposed Work on “_PropWork” Layer.	Tools > Assign Name > Building and PropWork.	PW
_Ramp	Draw a Ramp as a closed polyline with Centerline (L-type-Centre) & Text inside it in Plan.	10.0m long 1.5m high Ramp	RP
_RecreationalGnd	Description: - Draw Open space as closed polyline reserved as recreational space on this layer. With text on same layer.		OPS
_RefugeArea	A closed polyline with Text around the refuge area should be drawn on same Layer. Refuge area should be outside		RFG

	overlapped with FAR (ResiFAR, CommFAR) poly.		
_RefugeChute	Draw RefugeChute area on this layer.		
_ResiFAR	Draw a ResiFAR as a closed polyline, which is the area, covered by a building on all the floors. This FAR polyline only used for residential use Bldg or floor.	No need to give name on this layer.	MFS
_RightOfWay	Description: - Draw a closed polyline on “_RightOfWay” to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with main Plot poly.		ROW
_RoadWidening	Road Acquisition/Road Widening area shall be drawn as a closed Polyline with Text on same layer inside Main Plot Entity. Margin will be generated & checked from RoadWidening Poly by AutoDCR software.		R5
_Room	A closed polyline for each room with its text inside should draw on this layer. Text should be given using <Assign Name> function	Assign Name > Room	RU
_Section	Section poly should be drawn as a closed Polyline with Text on same Layer. It is used to group all		SEC

	Sectional detail like FloorInSection, Plinth, Stair cabin, Tank etc. (This is just a logical Group of Sectional Entity). (Note: Area or size of Floor doesn't have any meaning in AutoDCR)		
_Sewageline	Description: - Drain/Sewage Line: - Sewage line shall be drawn as an open polyline on this layer.		L5
_Skyway	Draw Skyway area on this layer.		
_SpecialUseFAR	A closed poly represents another than Residential, commercial or Industrial use FAR or Floor FAR. It will cover whole area, which is considered in FAR Area per Floor.		SUF
_StairCase	Total Staircase area should be drawn as a closed polyline with text inside it. This Main Stair Poly should contain Intermediate Landing, Floor Landing & Each Tread as an open polyline. Intermediate & Floor Landing Poly can be Marked by PreDCR Tool "Mark>Staircase>Int. or Floor Landing" (Note: If Premium for Staircase is going to be Paid, Staircase should be marked by using Tool "Mark>Staircase>Free from FAR"	Mark-> Stair Case-> No. of flight >3 Flight or 4 Flight Fire Escape Staircase OR Fab/Spiral Stair Staircase and Common Stair Mark-> Staircase Landing-> Flight Width, Intermediate & Floor Landing.	STR

_SubStructure	Substructures, which are allowed in Margins or Layout & Free from FAR, should be drawn as a closed polyline with text inside it.	Name of the SubStructure can be assigned from Mark>SubStructure	SSTR
_SubWay	Draw Subway on this layer.		
_Tank	Tank clear size should be drawn as a closed Polyline with Text on this Layer in Floor Plan or Plot Boundary as well as Section with same Text. (Note: It should be in proper Naming convention, which is Provide by PreDCR by using Tool.	Assign Name>Tank	TNK
_Terrace	Closed polylines around the terraces to be drawn on this layer. If the terrace is used commonly by all tenements mark it as Common Terrace else, it will be treated as Individual by default.		TER
_tree	Description: - Insert Tree form Insert option. It must present inside of MainPlot.	Insert-> tree	
_VentilationShaft	Description: - Draw VentilationShaft/duct area as a closed Polyline with Text. Inside FAR Area on _ArtiVentiShaft Layer. Only those shafts from which ventilation for habitable room is not taken should be drawn on this layer.		VS
_Void	If the space is not Chowk, then it can be void. All ducts (where ventilation is not taken) and double		VD

	height rooms can be drawn in void layer.		
_Waterline	Draw an open polyline on “_WaterLine” to represent water lines.		L4
_Window	Draw a closed polyline on “_Window” Layer to represent window. You can also use Insert tool to insert window poly for particular size.	Insert > window	WND

Specifications to be followed-

The drawing entities should be drawn on Automatic layers created by using PreDCR.

Plot Boundary layout, detailed floor plan and building section for all the floors should be there in one AutoCAD drawing file.

All building items like proposed Plot Boundary, proposed work, proposed parking etc. must be drawn using closed polyline.

(i.e. Every entity must be closed LWPOLYLINE except Railway Line , Drain line, Water Line, Electric Line, Dead Wall and Ground level.)

Building Sub-Items must be exactly inside of outer closed polyline as per their place in architectural plan.

This means none of the edge or vertex of inside entity should be drawn outside its container entity. For example, Parking or Open Space poly must be exactly inside the main Plot Boundary poly. Tools are provided in PreDCR to verify this check.

Every Building Sub-Items should be given a specific/unique name (Text or MText entity) on the same layer & inside the entity poly. As far as possible, this name should be unique. If name not found, then AutoDCR will generate the name automatically. Naming Conventions should be followed properly.

e.g. Each Room should be given the concerned name Using <Assign Name> function of PreDCR Living, Kitchen, and Bedroom. Etc. Floor Name: GROUND FLOOR; TYPICAL FLOOR 1, 2 & 5-8; TERRACE FLOOR. Floor Items: Room Names should be given properly without using

abbreviations so the software can identify perfect entity. This can be done by Assign name facility provided by the software.

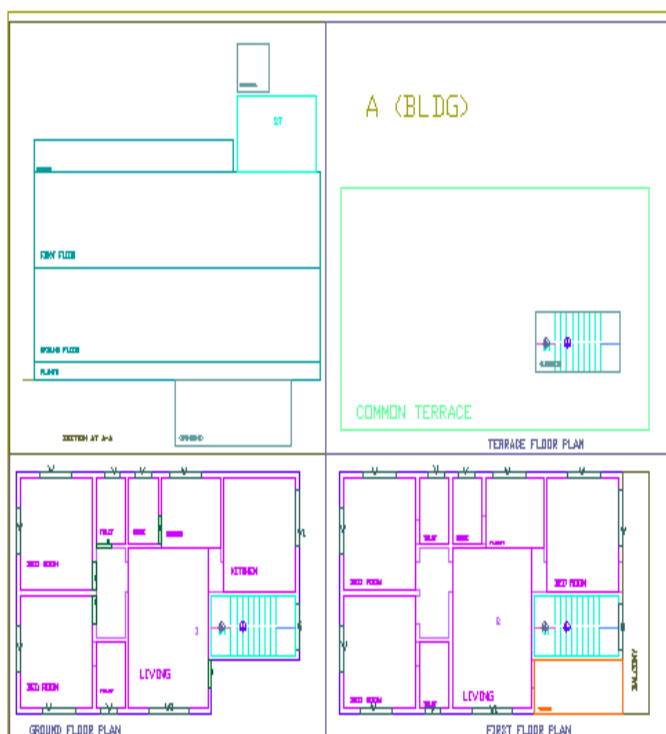
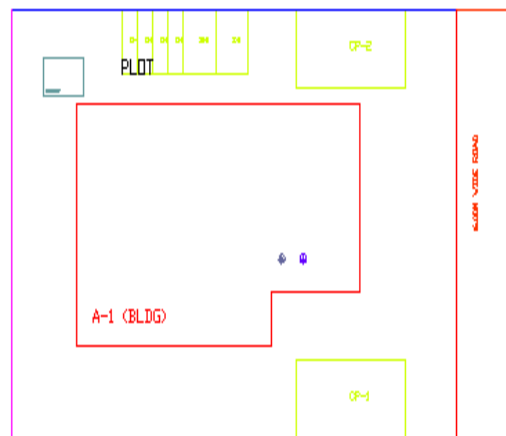
User shall use only following kind of entities for Building Items: -

LWPOLYLINE / TEXT / MTEXT

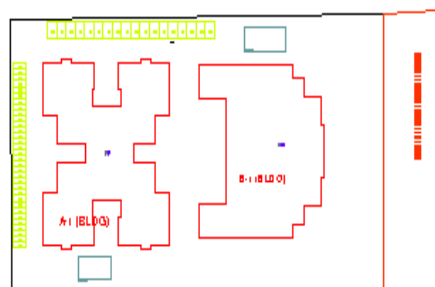
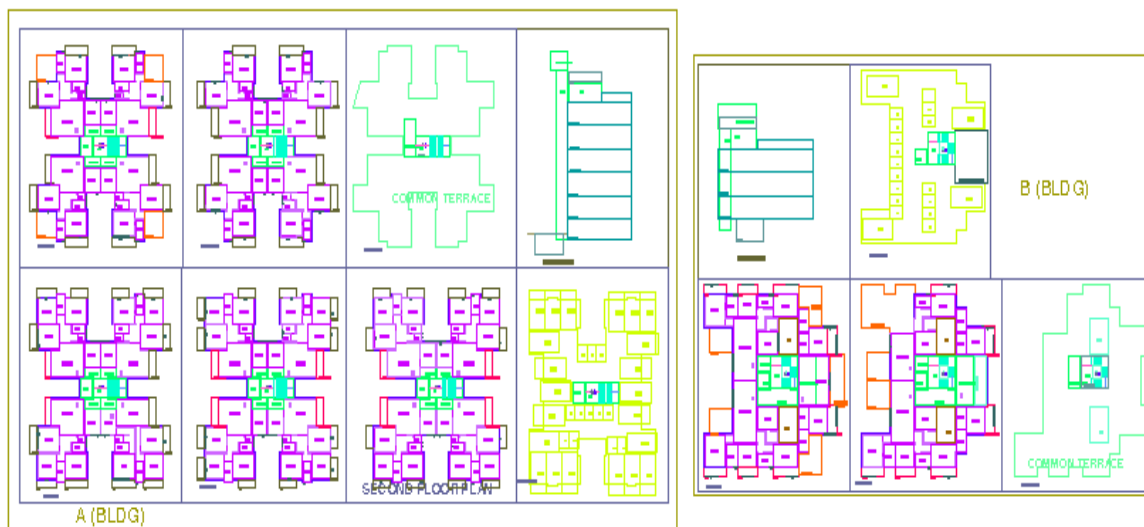
If in a plan two proposed work are mirrored in that case user should provide two separate building plans for each proposed work.

Sample cases

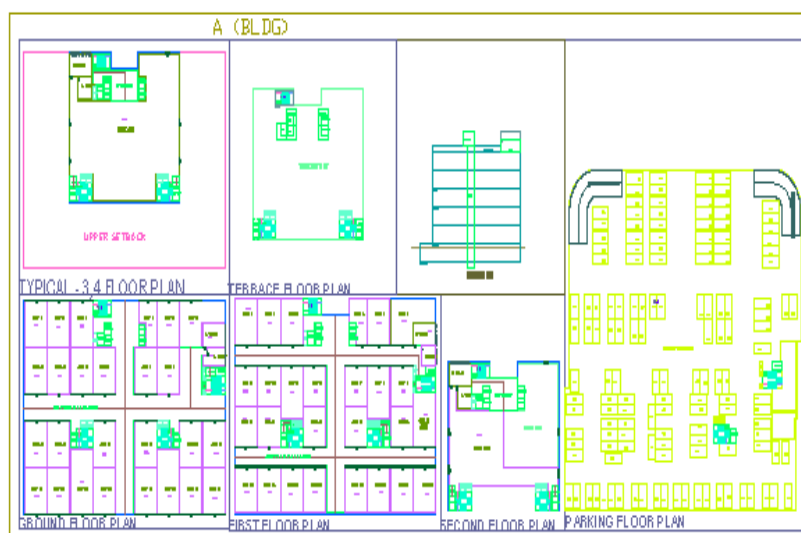
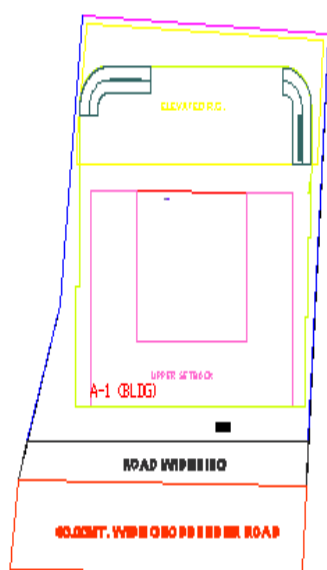
Residential Bldg (Row house)



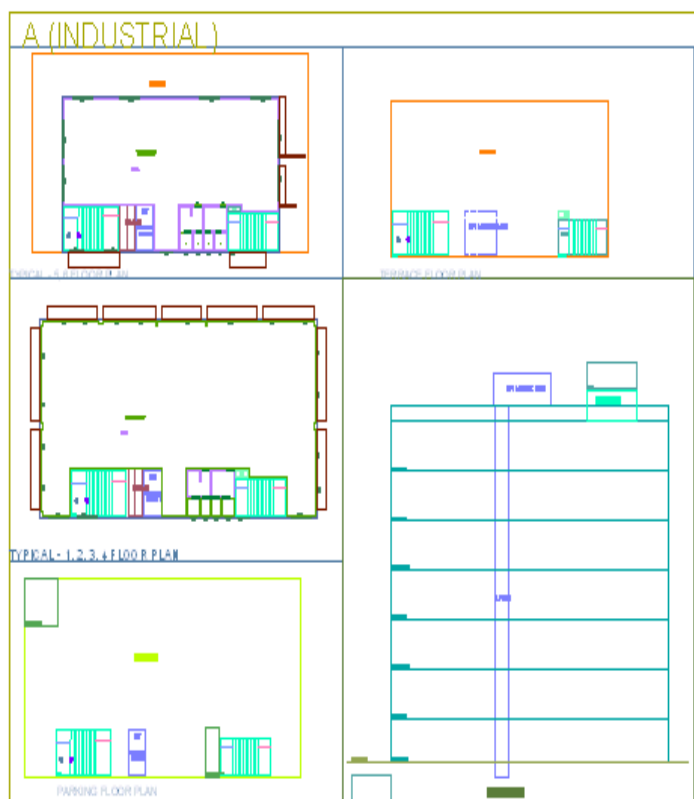
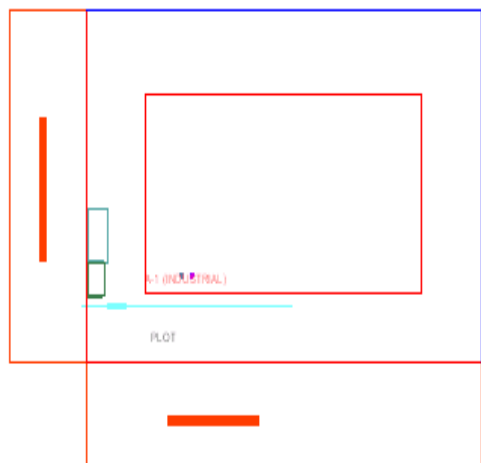
Residential bldg. (Single Detached with two buildings)



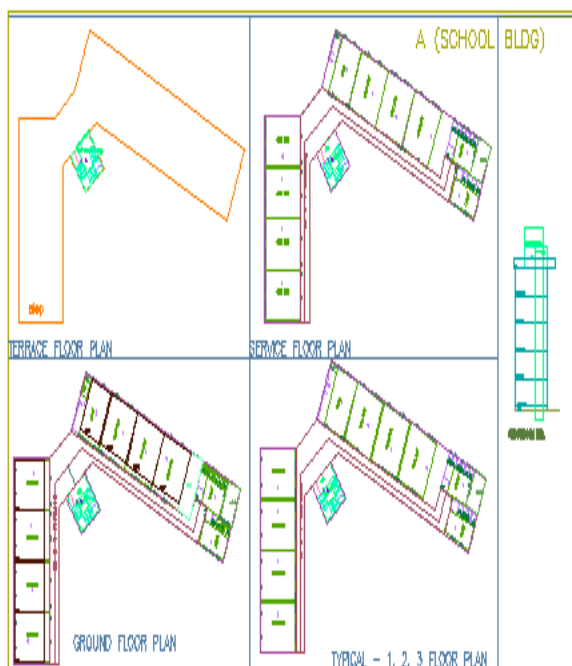
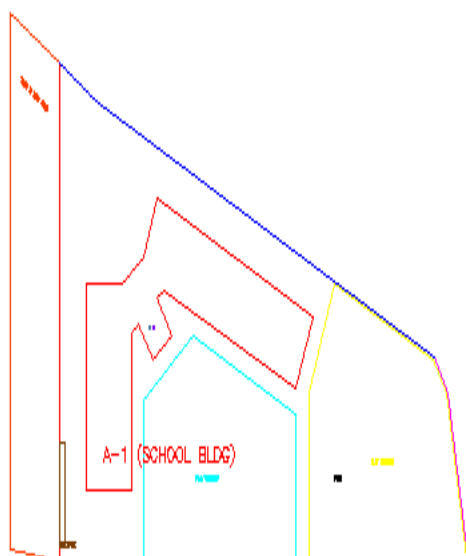
Commercial building



Industrial Building



Special building (School bldg.)



Meaning of various PreDCR Messages

"Entity contain more than one text"

It means Entity on this layer contain more than one text. So, remove the extra text. PreDCR need only one text for one entity.

"Entity not contain any text"

It means this entity not having any name/text, so give the name to this entity on this layer

"Polyline is not in a proper format"

It means Highlighted polyline not drawn properly. So, redraw that polyline & check the properties of that polyline.

"Entity is not closed"

It means the highlighted entities not a closed polyline so close it by using 'pedit' command.

"Entity is supposed to inside one of the following entities"

It means this highlighted entity should be present inside the one of the entities present in the given list"

"Entity is supposed to touching one of the following entities"

It means this highlighted entity is supposed to be touched one of the entities in given list

"Entity should be outside overlapped with following entities"

It means the highlighted entity should be outside overlapped with one of the entities in the given list.

"Entity must contain one of following entities"

It means any one layer should be present inside in this entity which is listed.

Following sub entities are not found inside:

Direction Ref Point on layer _Floor,

Type: BLOCK, Color: By Layer Status:

Common Point on layer _ResiFAR,

Type: BLOCK, Color: By Layer Status:

It means insert the direction reference circles in side of those entities.

"The corresponding Building not found with same name"

It means that proposed work not having building with same name. So assigned that building with having same name of proposed work.

"Mark Substructures using PreDCR mark Substructure tool"

It means mark the substructure by using mark -> Substructure menu. Do not type substructure name manually.

"The lift machine room not found in building"

It means lift machine room having name not same in Plan & in section.

"The lift poly is not supposed to be touch lift machine room"

It means Lift machine room should be touched to lift poly in the section.

'Invalid objects, Please Try again'

It means if user marking balcony as an enclosed but selecting layer of terrace then this message is getting. If selected entity is incorrect then invalid objects message are showing. So, select correct layer for particular of that layer marking only

"Section not found"

It means If all the floor plans are drawn but one of them in section floor are missing to converting floor in section layer then this message are getting. So, draw all the floor plans with floor in sections.

"The corresponding entities not found in section"

It means that listed entities are not present in the section so show that entities in the section.

"The corresponding entities not found in floor"

It means that listed entities are not present in the floor so show that entities in the floor plan.

"Two Tanks should not have same Name"

It means that two tanks not having a same name. So, assigned two tanks by using Assigned

name PreDCR menu.

This is the last page of the document.