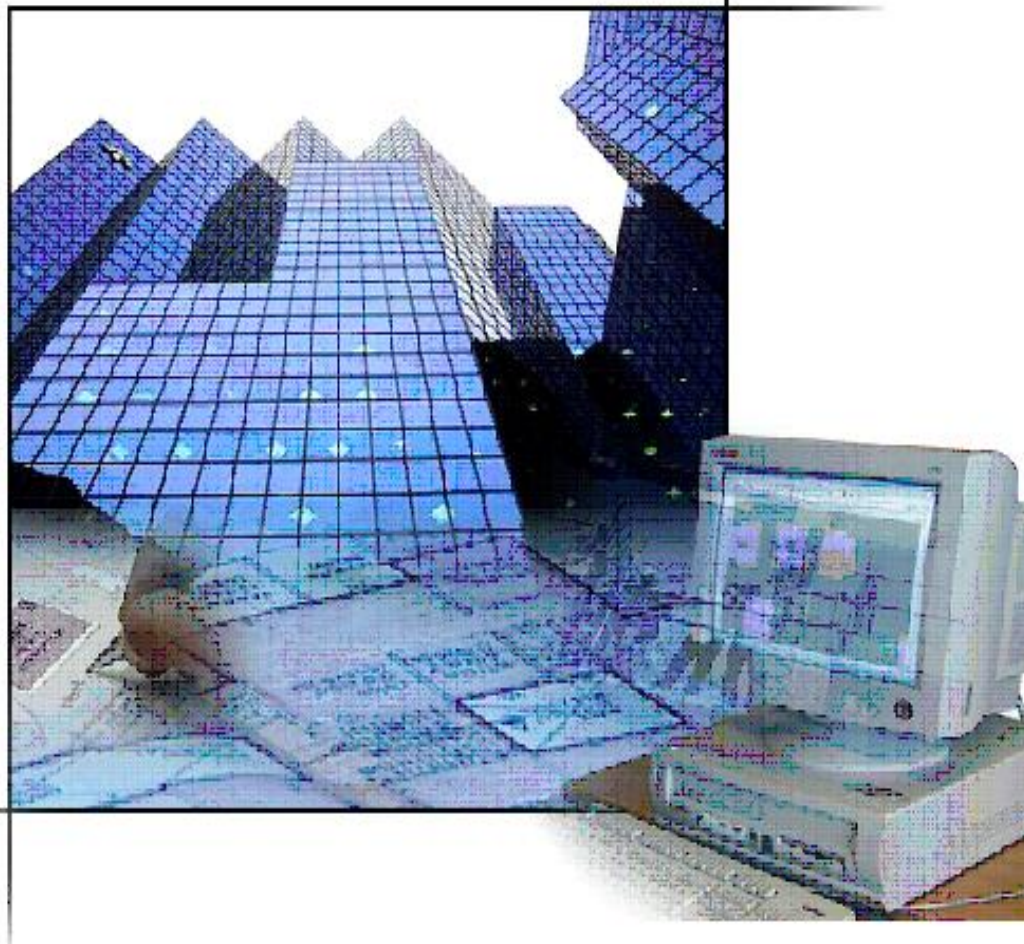PreDCR

Automating Development Control Regulations (AutoDCR) &

Drawing the Architectural plan in drawing format as per AutoDCR Software requirements (PreDCR)

[MC: PREDCR User Manual

Indore Municipal Corporation

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Table of Contents

Introduction

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, 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 whether 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 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 will have to follow some specifications. Following is the list of specifications that the user should follow.

- Plot layout, detailed floor plan and section for all the floors of the building should be there in one AutoCAD drawing file.
- All building items like proposed plot, proposed work, proposed parking etc must **be drawn using closed polyline**.

   (i.e. Every entity must be closed LWPOLYLINE except Steps of the Staircase, Center Line of Internal Road, Railway Line , Sewage line, Water Line, Electric Line and Ground level.).
- Building Sub-Items **must be exactly inside the 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 plot 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, Bed room. .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 plan for each proposed work.

Installation and Registration

System Requirements -

- Pentium IV or better (or compatible processor)
- 2 GB RAM
- Windows 98/2000/XP
- CD-ROM drive
- AutoCAD 2000 and onwards

Installation –

To install PreDCR software on your computer follow the given steps :

1. Insert the supplied PreDCR CD in CD drive of the computer.
2. Run the PreDCR installer by double clicking on file **"PreDCR_Installer.exe"** from the PreDCR CD.
3. Follow the steps in installer wizard to complete the installation.

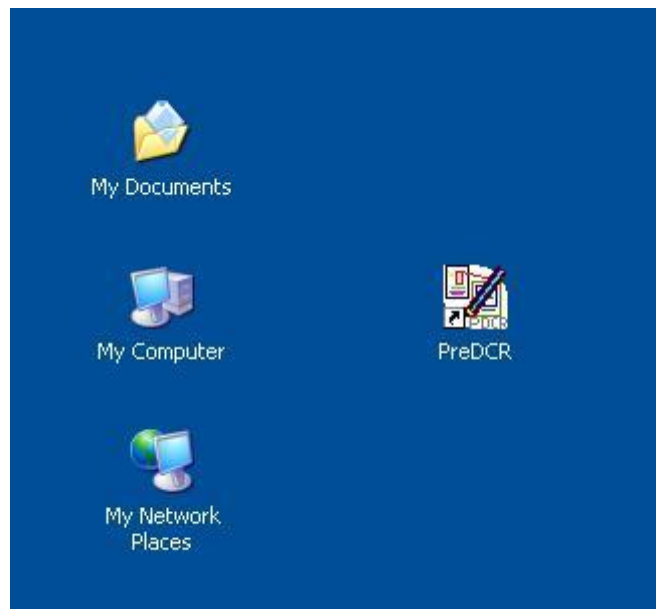After successful installation, a PreDCR shortcut will be placed on your computer desktop as shown below.

Figure 1: PreDCR shortcut on desktop

PreDCR Layer Information:

Layer name	Description	Naming Convention	short command
_Amenity	Draw Amenity space as a closed polyline on _Amenity Layer with text inside it.		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 & other projections will come with floor plans.		AP
_Balcony	Draw a balcony as a closed polyline on _Balcony Layer which is a horizontal projection including parapet to serve as a sitting out place And mark it using Mark->Balcony fromPreDCR menu.		BL
_Building	Building is used to group all floor plans of the same building. Draw a closed poly on _Building Layer enclosing all the floor plans and section of the same building on _Building layer.	Naming Convention will be provided by Tool>Assign Name A (Bld.Name) inside Bldg.Poly & A-1 (Bldg.Name) inside Pwork Poly	BLD
_CarpetArea	A Closed poly with Text on this layer represents a Carpet area or Tenement area. It should cover total area of one Tenement except walls & can be Marked Using PreDCR > Mark > Carpet Area > Splitted Tenament , Slum Development (Sale/Rehab), Normal (Default).		CPT
_Chowk	Draw a chowk as a closed polyline on _Chowk Layer which is an enclosed space permanantly open to the sky within a building at any level. From chowk we take ventilation for habitual rooms.	No need to give name on this layer.	CW
_Column	Column shall be drawn as closed polyline on _Column layer.		COL
_CommFAR	Draw a CommFSI as a closed polyline which is the area covered by a building on all the floors.This FSI polyline mainly used for commerial use bldg.		CMFS
_CompoundWall	Closed polyline of compound wall to be drawn on this layer overlapping plot.	1.5m high compound wall	
_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.	D-1, D-2	DR
_ElectricLine	ElecLine: Electric line will be present in the layout plan and shall pass through plot entity as a non closed polyline.Name of electric line shall start with its voltage capacity and text insertion point shall lie on its polyline.	33 KV High Tension Line	L1

_Elevation	It is an encpsulating polyline to be drawn around the elevation so that it is captured during printing.		EL
_ExistingRoad	Draw existing road which is not as per DP but is being used by the people for very long time inside/intersected with plot. While giving name start text with road -width.		
_ExStructure	Draw a Exstructure as a closed polyline which is a building or structure existing authorisedly before the commencement of these regulation. And mark it using Mark -> Existing structure as 'To be demolished' or 'To be retained' . (It will be inside plot similar to Pwork)		ES
_Floor	Draw a closed poly on Layer _Floor which includes a floor plan.Every floor plan must be Drawn inside _Floor polyline And names must be Assigned to the respective floor plans using Assign name->Floor Name option from PreDCR menu. All Floor poly must contain reference circles which can be inserted using Insert-> Direction Ref Points from PreDCR menu.	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	Draw a SectionFloor as a closed polyline which is the height of that floor (slab top to slab top) This poly is only used for checking floor height. For assigning the name of SectionFloor use Assigne name option from PreDCR menu.	Inside SectionFloor: SECOND FLOOR, THIRD FLOOR, GROUND FLOOR.	SECF
_GroundLevel	Draw the Ground level line as open polyline on Layer _GroundLevel in section which specifies the ground level.	No need to give name on this layer.	GL
_IndFAR	Draw a Industrial FSI on Layer _IndFAR as a closed polyline. Indusrial 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.	No need to give name on this layer.	IFSI
_InternalRoad	Draw internal road with text specifying its width. And draw a center line. And type of that center line must be center line.	7.50 m wd. Internal Road	R2
_LiftWell	Draw a Lift as a closed polyline on Layer _LiftWell And Mark it using Mark->Lift > Hydraulic or Fire Lift.	Give the same name in plan as well in section.	LFT
_LocationPlan	Draw encpsualting polyline aroung location plan on this layer.This is only for reference. No verifications are done by AutoDCR for this layer. It is required during printing.		LCP
_MainPlot	Draw a Plot poly as a closed polyline which is a parcel or piece of land enclosed by definite boundaries.A Plot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall Plot Entity represents a Plan, AutoDCR refer it as "Layout Plan".		PLT
_MainRoad	Draw a MainRoad as a closed polyline on Layer _MainRoad which is abutting the plot. On the site that road is any type of road.such as any highway,	24.00 m wd. Main Road	

|			
	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 should start with its width only.		R1
_Marginline	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 it's own internal use.		L3
_Nala	Draw Nala polygon on this layer.		R4
_NetPlot	No need to draw NETPLOT. This layer is not provided for users. AutoDCR uses '_NETPLOT ' layer for it's own internal use.	No need to give name on this layer.	NPLT
_NotInPossession	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 parking poly as a closed polyline which is on 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.The Car, scooter, cycle polys can be inserted in it using Insert > Parking from PreDCR Menu.		PK
_Passage	Draw Passage as closed polyline on _Passage Layer And mark it using Mark-> Passage > Open Corridor or UnMark (Default). It is for common passages and not for passages inside flat.		PAS
_Podium	Podium shall be drawn on '_Podium' layer as a closed polyline. Podium should be inside plot covering Pworks if any.		POD
_PrintAdditionalDetail	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 during printing.		
_PropWork	ProposedWork is a building profile/outline and shall be drawn inside plot. all detail Building plans (inside building polyline) of all PWork(inside plot polyline) is associated/linked automatically by Auto-DCR by matching its name.		PW
_Ramp	Draw a Ramp poly as a closed polyline in floor plans and/or plot and section. Naming convention for ramp is "---m. long and ---m. high ramp-1". give unique name to each ramp.		
_RecreationalGnd	Draw a closed polyline on "_RecreationalGnd" Layer to represent reservation as recreational space.		OPS
_RefugeArea	Refuge area to be drawn in plan as a closed polyline with text on this layer. Overlapped with FSI layer but outside the FSI poly.		RFG
_ResiFAR	Closed poly on "_ResiFSI" layer represents a Main FSI or Floor FSI used for residential purpose. It will have all the carpet poly inside on that floor.	No need to give name on this layer.	MFS
_RightOfWay	Draw a closed polyline on "_RightOfWay" Layer to represent a Right Of way and text inside it representing its width. Layer should be inside or intersecting with Plot poly.		ROW
_RoadWidening	Draw a road widening polyline as a closed polyline on Layer _RoadWidening which goes from the plot,covering its Area.It should be inside the plot polyline.		R5

_Room	A closed polyline on _Room layer represents a room. This closed polyline contain a text. This text must be on _Room layer. Room to be marked by asigning them names using Assign Name-> room option from PreDCR menu.		RU
_Sanitation	Draw any sanitation entities on this layer. (e.g. Urinal , Wash Basin, Kitchen Sink,....etc..) Insert their text by using PreDCR -> Insert -> Sanitation.		SNT
_Section	Draw a closed polyline on _Section Layer which includes section of the Building with text inside it.		SEC
_SewageLine	Sewage line shall be drawn as a open polyline on this layer.		SL
_SitePlan	Draw encapsualting polyline around site plan on this layer.This is only for reference. No verifications are done by AutoDCR for this layer. It is required during printing.		STP
_SpecialUseFAR	FAR ploy for all other building uses like educational, institutional etc. except Residential, Commercial, Industrial use should be drawn on this layer.		SUF
_StairCase	Draw a closed polyline on Layer _Staircase which shall include Stair of the Building.All Treads should be Drawn as open polylines and should be marked using mark-> Staircase > Free from FSI/Taken in FSI and also Intermediate Landing,Flight Width and Floor Landing should be marked.		STR
_SubStructure	Draw various substructures on "_SubStructure" layer as a closed polyline. And mark it according to the requirement as Mark -> Substructure -> Society Office, etc. from PreDCR menu. Sub-structures can be drawn inside plot or in floor plans.	Name of the SubStructure can be assigned from Mark>SubStructure tool.	SSTR
_Tank	Draw closed polylines on Layer _Tank.UnderGround Water Tank should be drawn inside plot and Overhead Water Tank should be Drawn in Terrace Floor plan.Names should be assigned to Tanks using Assign Name -> Tank from PreDCR menu.		TNK
_Terrace	Draw Terrace as a closed polyline on _Terrace layer which is including parapet wall.		TER
_Tree	Insert tree on required location as per requirement.		TRE
_VentilationShaft	The ducts used for ventilation of toilets WC and bath should be drawn as closed polyline on this layer with its text inside it.		
_Void	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 on void layer.		VD
WaterLine	Draw Water line as a open polyline to show Water supply.		WL
_Window	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.		WND

Commands

1. **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.
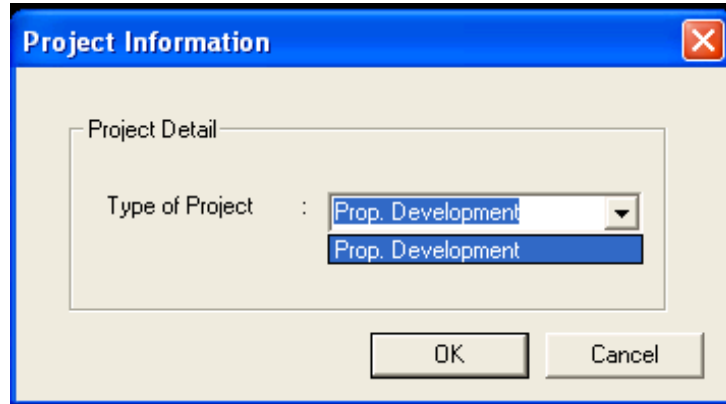
2. **Create AutoDCR Layers (PDCRCL)**: This command will create layers required for AutoDCR and as per the Project Type you have selected.
3. **Fix Poly (PDCRPE):** Use this command once on the final drawing which will process all the polyline on the PreDCR layer and remove extra vertices found on polyline. This command can be used before verifying the drawing using Verify commands.
4. **Verify Drawing:** This command will verify the current drawing as required by DCR specifications.

 a) Verify Close Entities (PDCRVD): Verify that LWPOLYLINE entities on the selected layers are closed and contain one text .
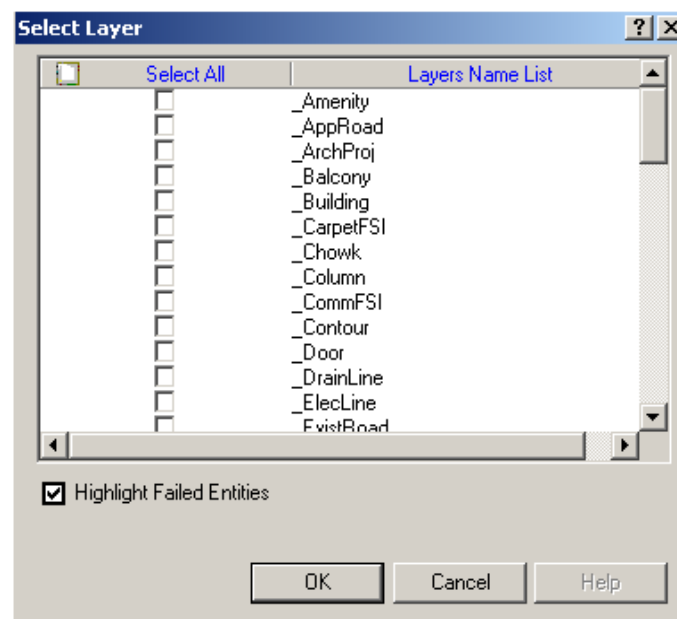
Verify All drawing (PDCRVT): Use this command to verify the layout and building level objects in the current drawing plan.
Major checks are as follows:
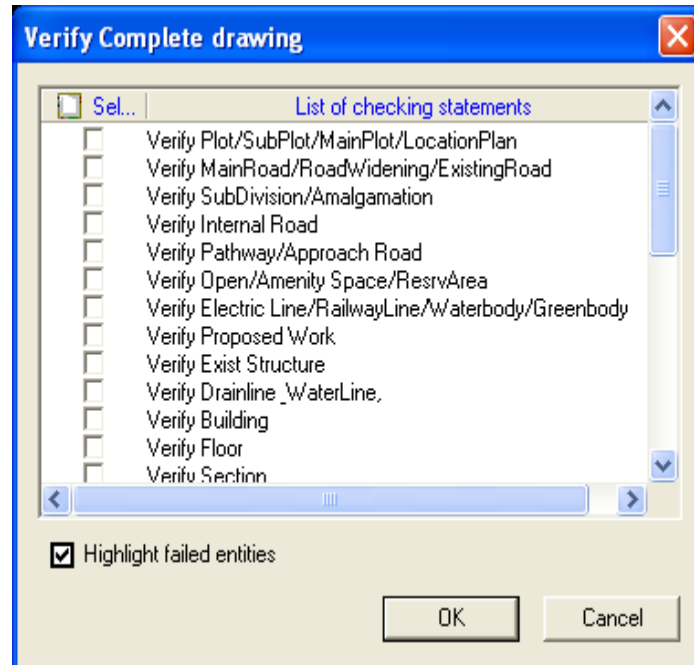
In the "Verify All Drawing Dialog" you can select the layout or building objects to be checked. Then to view the result press OK button. PreDCR will start checking all corresponding objects in the currently open drawing and then display the status as OK or list of failed objects in the dialog as shown 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".
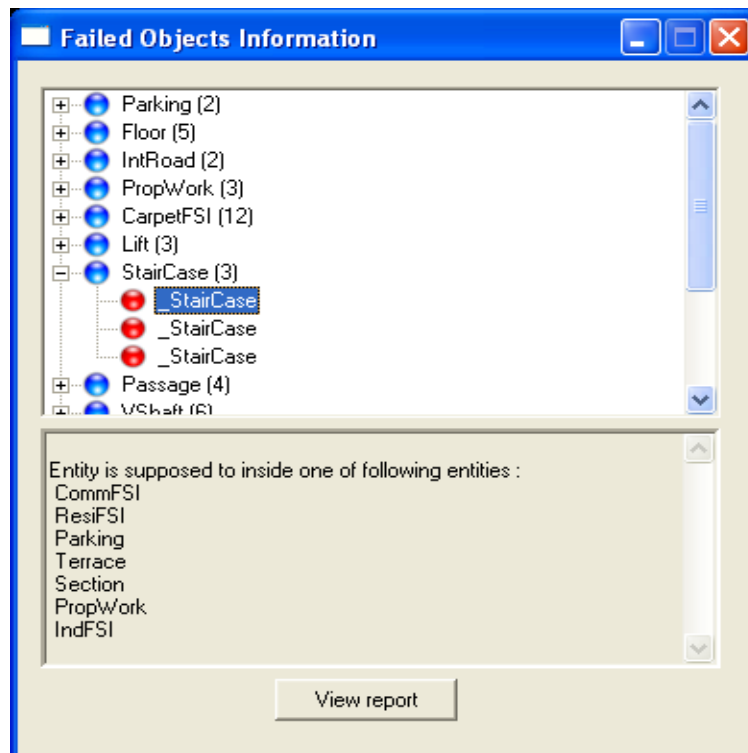
5. **Mark:** Marking adds some extra meaning in entity. Following commands are provided to mark different entities as per requirement.

5a. Propose Work-> Centrally Air-conditioned, Normal (Default): Mark _PropWork polyline as centrally air-conditioned or normal.

5b. Floor In Section-> Parking Beam, Normal: Should be marked in section parking floor as per requirement.

5c. Staircase->No. of Flights (3/4 Flights), Fire Escape Staircase, Fab/Spiral Stair:

Fire Staircase: Mark staircase if it is common.

Fab/Spiral Staircase (PDCRFSB): Mark staircase if it is Fabricated or Spiral.

No. of flights: Mark number of flights in staircase.

5d. Escalators:->Mark escalators in plan.

5e. Staircase landing-> Mark in staircase plan

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

Flight Width (PDCRMFW): Mark line inside staircase as Flight Width.

Floor Landing (PDCRMFL): Mark line inside staircase as Floor Landing.

5f. Lift-> Hydraulic, Fire lift: Mark lift whether hydraulic or fire lift in plan.

5g. Passage-> Open corridor, Unmark: Mark open corridor in plan or unmark it if required.

5h. FAR-> Existing FAR, Normal (Default): To mark the FAR polyline if it is of existing structure or normal.

5i. Carpet Area- > Spiltted Tenament, Slum Development(Sale/Rehab), Normal (Default):

Splitted Tenement (PDCRMSPLTT): Mark Carpet area as Splitted tenement.

Normal (Default) (PDCRMNT): Mark Carpet area as normal.

Slum Development: Mark Carpet area for slum development.

5j. Room > A.C. Room, Normal (Default): Mark if the room is mechanically ventilated as AC room or normal.

5k. Balcony > Enclosed, UnMark (Default): Use to mark enclosed balconies.

5l. Projections > F.Bed,Chajja/Cornice/Weather Shade, Loft, Canopy, Porch, Verandah, Otta, Steps, Normal(Default):

F.Bed (PDCRMBPROJ): Mark Projection as Flower Bed.

Chhajja/Cornice/Wheater Shade (PDCRMCJPROJ): Mark Projection as Chhajja/ Cornice/ Weather shade.

Loft (PDCRMLPROJ): Mark Projection as Loft.

Canopy/Porch (PDCRMCPROJ): Mark Projection as Canopy.

Verandah (PDCRMVPROJ): Mark Projection as Verandah.

Normal (Default) (PDCRUMPROJ): Mark Projection as Normal Architectural projection.

Otta: Mark projection as otta

Steps: Mark projection as steps.

5m. Existing Structure > To be Demolished , To be Retained (Building/Substructure)->

To be demolish (PDCRMREXWD): Mark Existing structure as to be demolished.

To be retained (PDCRMRMREXWC): Mark Existing structure as to be retained.

5n. SubStructure-> Electric Room, Electric Sub-Station, Watchman Cabin, Society Office, Servant Quarter, Sanitary Block, Covered Garage, Open Garage, Rain Water Harvesting, AC Plant room,AHU, Swimming Pool, Septic Tank/Soak Pit, Pump House, Effluent Treatment Plant, Dish Antenna Room, Well,Telephone Installation Room, Entrance Gate, Fitness Center, Suction Tank, Pavillion, Gymnasium, Cub-House, DustBin, Milk/Telephone Booth,Letter Box, Chimney: Draw closed polyline & mark substructure from the list as per requirement.

5o. Margin (PDCRMRGN): Use this command to define or mark the front, sides and rear sides of the plot.
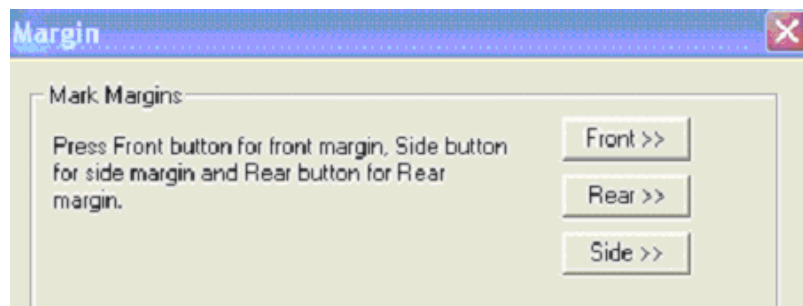
6. Insert
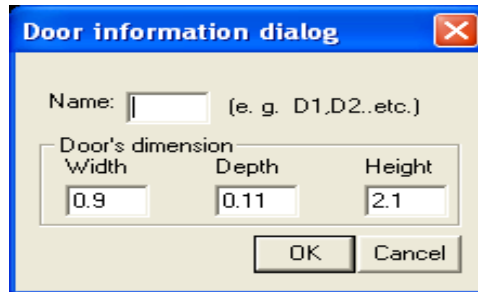
6a. Parking->Car Parking (PDCRICP) ->Use this command to insert car-parking poly at selected point.

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

Cycle Parking (PDCRICY) ->Use this command to insert Cycle parking poly at selected point.
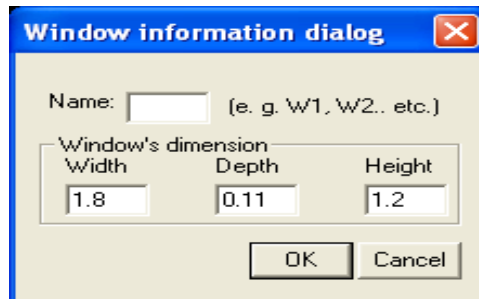
6b. Door (PDCRIDRNAM): Use this command to insert door poly at selected point and with specified size given by user. As soon as you use this command the following Dialog appears.

6c. Window (PDCRIWNDNAM): Use this command to insert window poly at selected point and with specified size given by user.

6d. Direction Reference circles: Insert the direction ref. circles by using Insert menu. Insert that circles in all the plans as well as proposed work at common same place.
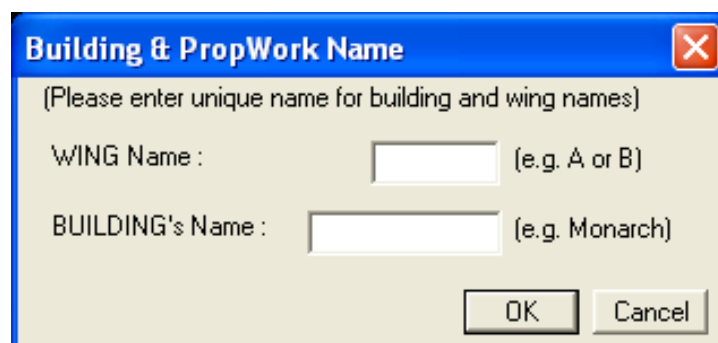
6e. Sanitation text-> Urinal, Wash basin, Drinking water, Washing tap, Ablution tap, Cleaner sink, Kitchen sink, Washing sink: Insert the sanitation text for respective samitation entity.

6f. Tree: Insert tree on the required location.

6g. North Direction: Insert north direction symbol as per the orientation of plot.

7. Assign Name: - There are few naming conventions required by AutoDCR, for which PreDCR provides the following tools:
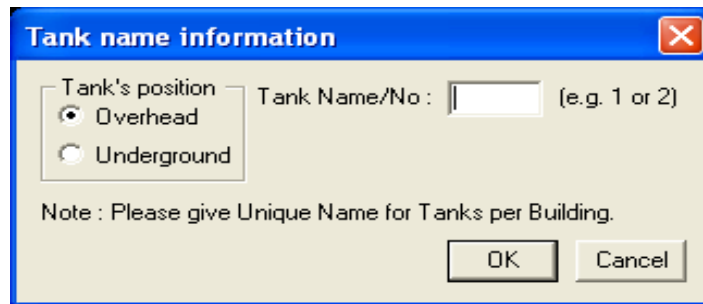
7a. Building and proposed works (PDCRBLDPWNL): Use this command to give name for building poly and its associated proposed works.
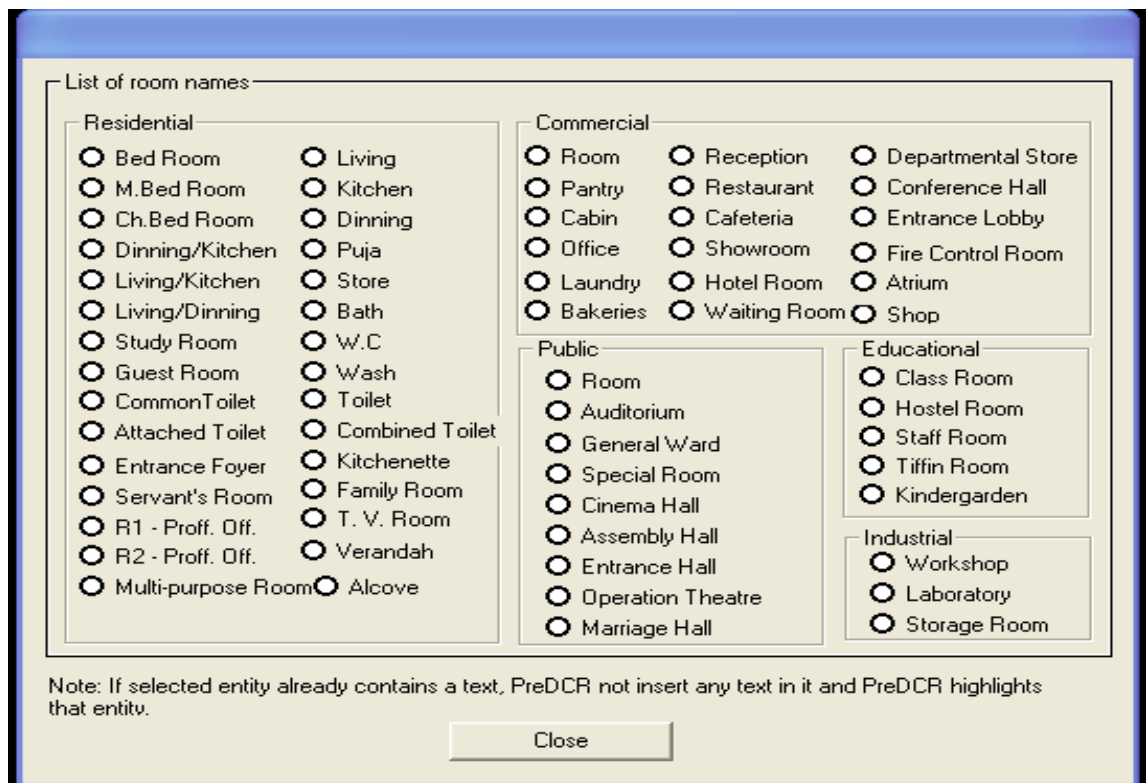
7b. Tank (PDCRTNKNAM): Use this command to give name for Tank poly and its corresponding tanks.

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

7c. Room (PDCRASRUN): Use this command to give different names for Room poly.

7d. Floor Name (PDCRASFLRNAM): Use this command for assigning name to a floor poly and it's corresponding section floor in section poly. **Mezzanine floor plans** also to be assigned using this dialog. The 'section floor' for mezzanine to be drawn inside the container floor of the mezzanine in the Section
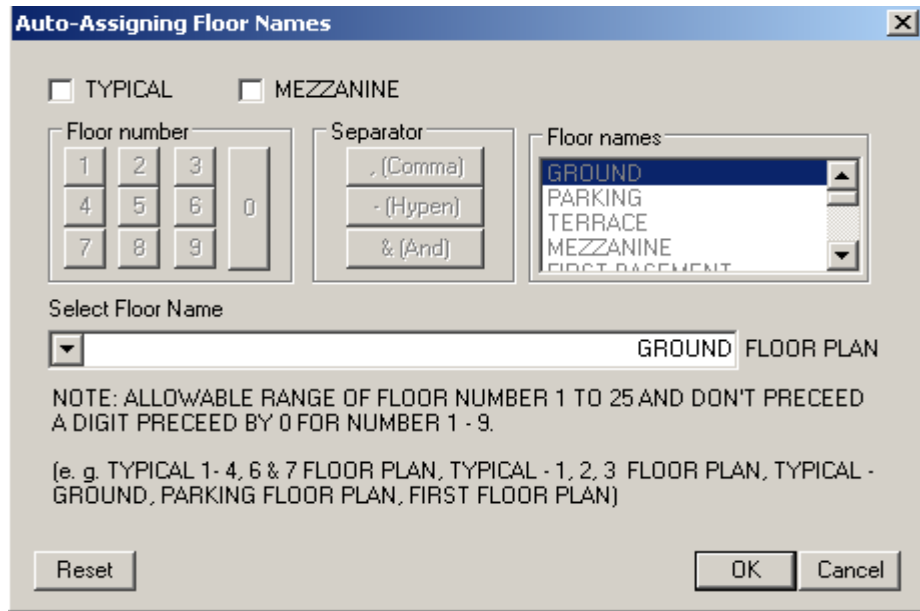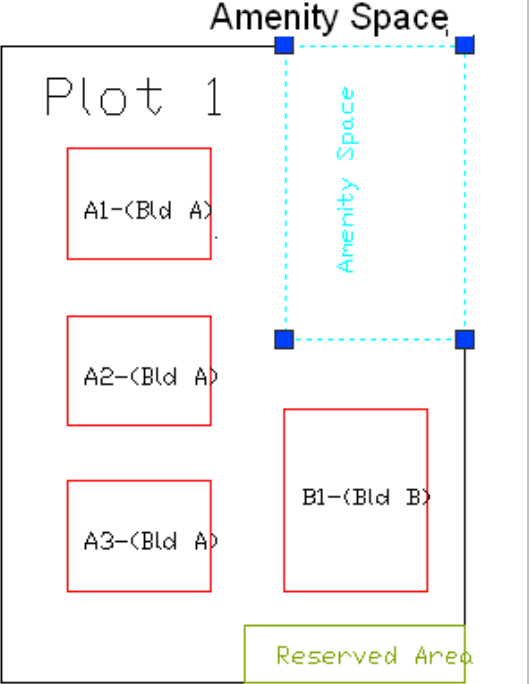
Examples

- Each and every Polyline must be drawn as LWPOLYLINE.
- Every closed polyline must contain a text inside it on the same layer.
  This text will be used as the name of that polyline. As far as possible this name should be unique.

Layer Name	Description	How to draw
_MainPlot	Main Plot will contain all Proposed Works (buildings, wings), open space, Internal Roads, Parking etc. The overall Plot Entity represent a Plan, AutoDCR refers it as **"Layout Plan".**	
_MainRoad	Draw a main road abducting the plot entity with text specifying its width as shown in figure.	

15

_RoadWidening	Draw the road widening polygon on this layer as shown. Make sure that this road widening poly is drawn exactly inside the plot entity. All margin will be automatically drawn and checked from this road widening poly by AutoDCR software.	
_InternalRoad	Draw internal road with text specifying its width as shown in figure.	
_ExistingRoad	Draw existing road on this layer. This existing road can be a D.P. (Draft Planning) or T.P. (Town Planning) road.	
_Nala	Draw Nala boundary on nala Layer.	

_Amenity	Draw Amenity open space as closed polyline for reserved as recreational space on this layer.	

_PropWork	**Proposed Work (PWork):** PWork is a building profile and shall be drawn inside plot. Building plan of all PWork is associated automatically by AutoDCR by matching its name. So for proper association it is requires 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) **Bridge (Wing Connector):** If the wings are connected then it shall be drawn on this layer "_PropWork" with its name and its building's name in bracket as shown in figure. e.g. Bridge1(Monarch)	
_ExStructure	Draw existing structure on this layer as closed poly with text inside it. It should be inside plot.	
_Passage	**Passage:** A closed polyline on _Passage represents a passage. It is a common passage or circulation space including a common entrance hall. This closed polyline contain a text. This text must be on _Passage layer. This text is treated as name of closed polyline.	
_GroundLevel	Draw the Ground level line as open polyline below the plinth as shown above	

Layer Name	Description
_Building	**Building:** Building is used to group all floor plans of the same building. Draw a closed poly enclosing all the floor plans 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.the names can be given by help of the tool Assign Name.
_Floor	**Note**: Insert Direction reference circles from Insert menu. The direction reference circles to be shown on same location in all floor plans as well as in proposed work in plot.

Direction reference Block (_Floor)
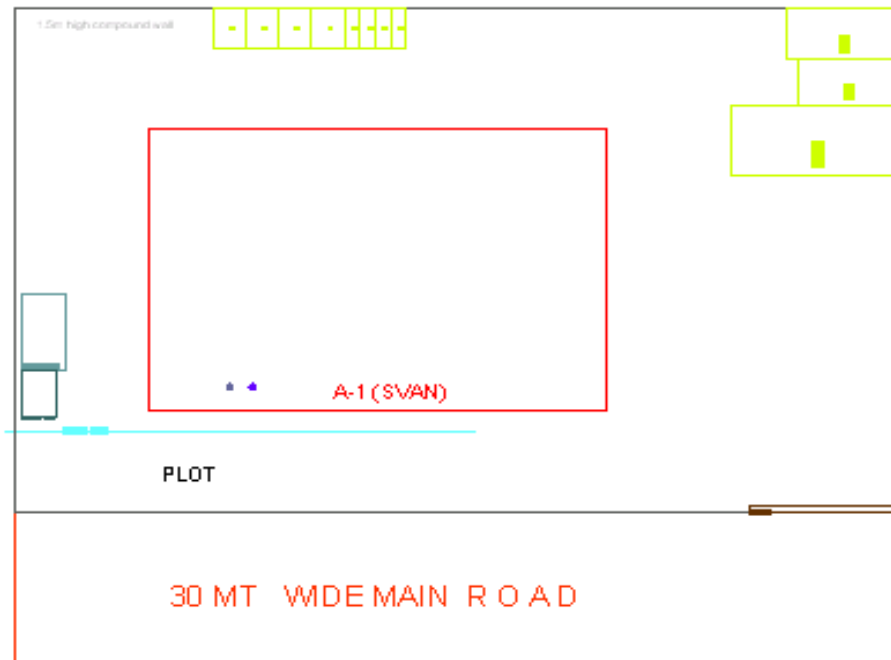
Common reference Block (_RESIFSI)

Floor Poly (_Floor)

_Parking	Parking can be there in floor plan or inside plot entity.	

Parking	Name	e.g.
Car :	CP-*	CP-A, CP-B, CP-C......
Scooter :	SC-*	SC.....
Cycle :	CY-*	CY......
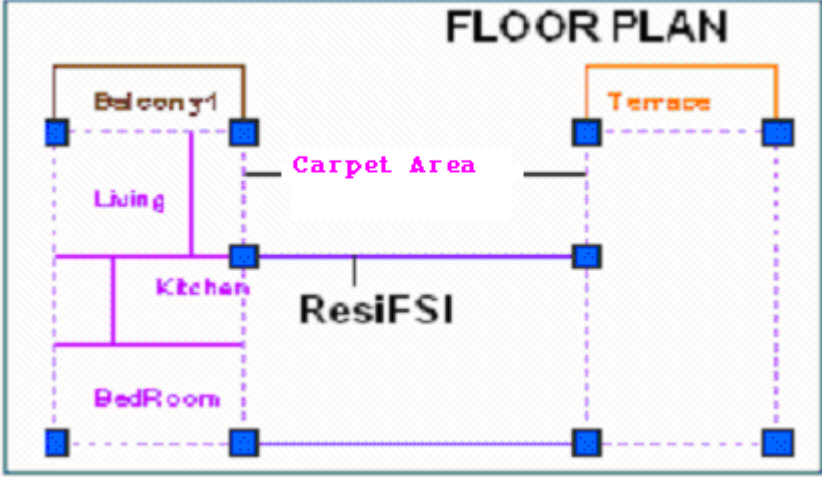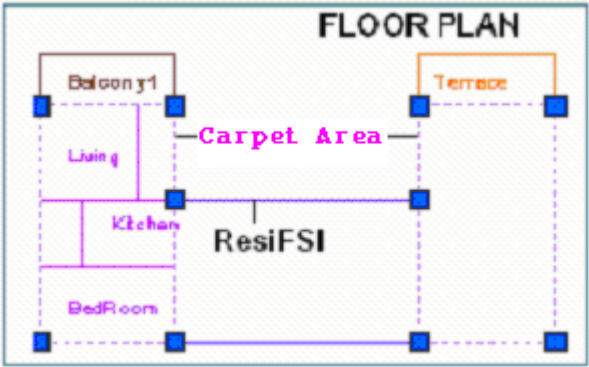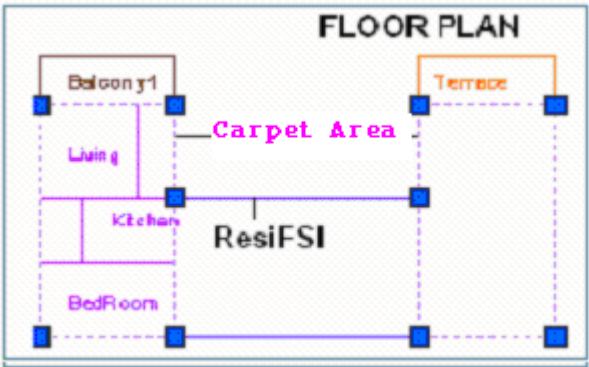
*: Parking Number
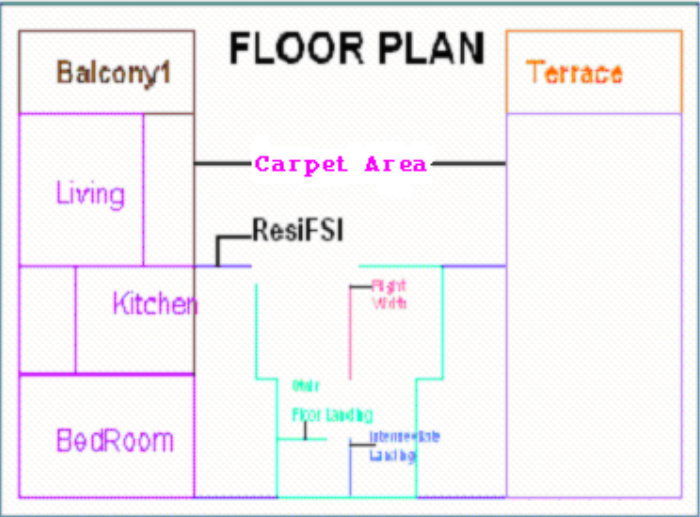
_Terrace	**Terrace:** A closed polyline on _Terrace layer is a terrace. Name of terrace must be inside and on _Terrace layer. Terrace can be present in: **Floor:** It must overlap with CarpetArea and ResiFSI.

19

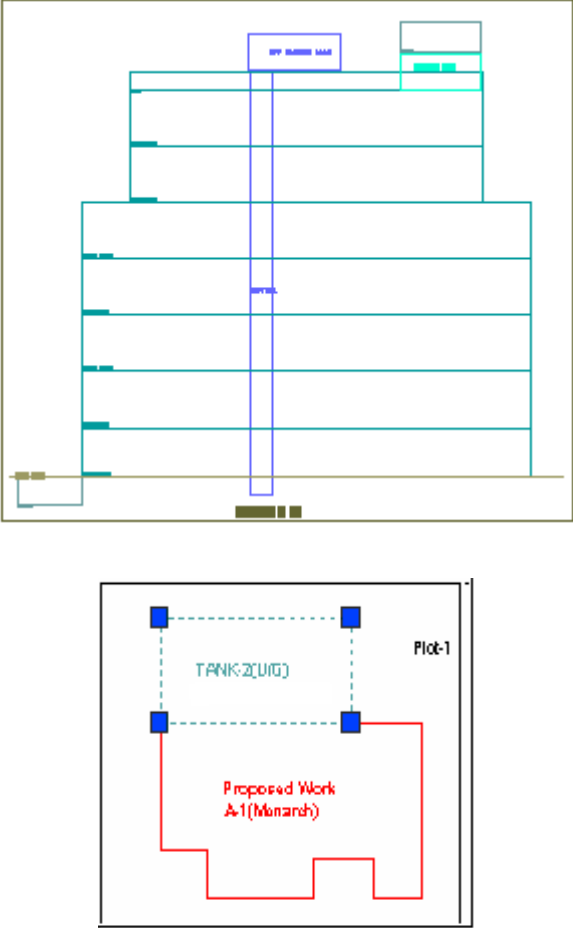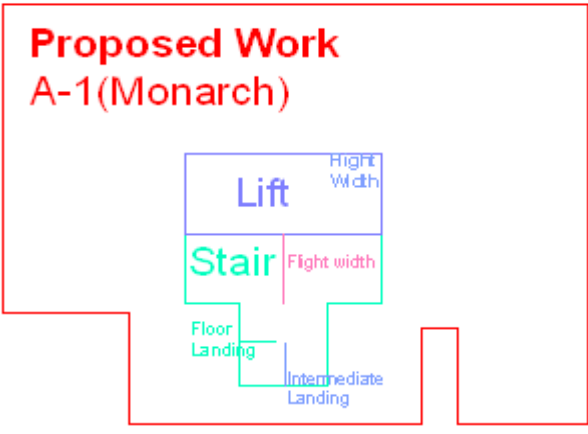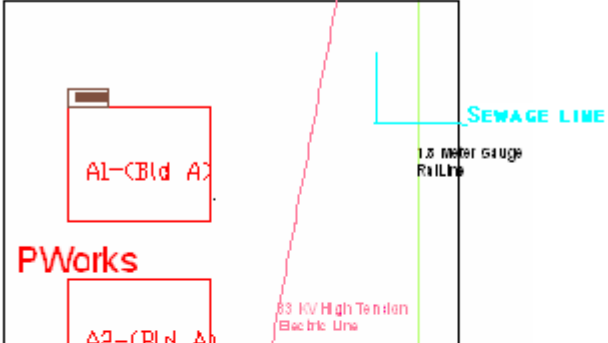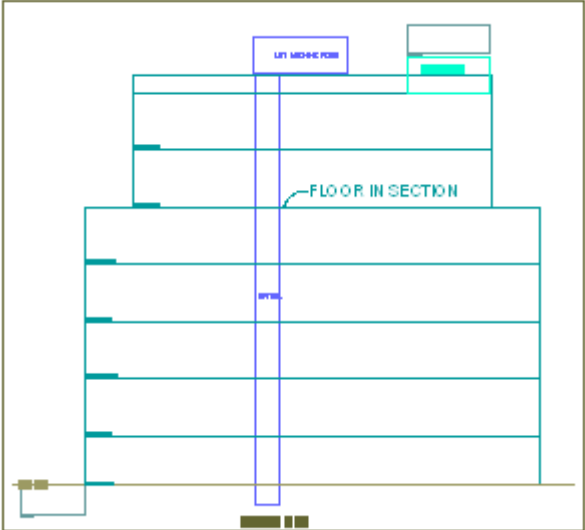|	
_Balcony	Name of balcony must be inside and on _Balcony layer. Balcony can be present in: **Floor:** It must overlap with CarpetArea or FSI.

_ResiFAR	**ResiFAR:** Closed poly on _ResiFAR layer represents Resi floor area. It will have the entire tenement poly inside on that floor. ResiFAR poly must be inside Floor poly. **Note:** This is nothing but the ResiFSI Layer.	
_CommFAR	**Commercial FAR:** Enclose all commercial carpet Area poly inside this commercial FAR poly on this layer.	
_Carpet AREA	**Carpet AREA:** Closed poly on _CarpetArea layer represents a Carpet Area or tenement FSI. It will have the entire room poly inside.	
_Room	**Room:** A closed polyline on _Room layer represents a room. This closed polyline contain a text. This text must be on _Room layer. This text is treated as name of closed polyline. Room must be inside or overlapped Carpet Area FSI.	

_StairCase	**StairCase:** A closed polyline on _StairCase layer represents a stair. This closed polyline contain a text. This text must be on _Stair layer. This text is treated as name of closed polyline. 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>	
_Tank	**Water Tank:** A closed polyline on _Tank layer represents a water tank. **Tank Name:** This closed polyline contain a text and must be in given format. This can also be done by tool **Assign Name>Tank** For e.g.TANK-1 (O/H) TANK-2 (U/G) **Location:** **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.	

_Lift	A closed polyline on _Lift layer represents a lift. This closed polyline contain a text. This text must be on _Lift layer. This text is treated as name of closed polyline. This name should be unique.	
_Chowk	**Chowk:** A close poly shall be drawn on "_Chowk" layer with its name text inside. Chowk can be present in the floor plan and its section in the Section poly but on the same "_Chowk" layer. Chowk will be present in the floor plan and its section inside Section poly but on the same "_Chowk" layer.	
_VentilationShaft	**Ventilation Shaft:** A close poly shall be drawn on "_VentialationShaft" layer with its name text inside. It will be present in the floor plan on the same "_VentilationShaft" layer.	
_Void	**Void:** Void is a closed poly which shall be drawn on "_Void" layer with its name text inside. If the space is not shaft or Chowk then it can be void.	
_WaterLine	**Water Line:** Water line shall be drawn as a open polyline on this layer. It can be shown in the layout plan inside plot.	
_Sewage Line	**Sewage Line:** Sewage line shall be drawn as a open polyline on this layer. It can be shown in the layout plan inside plot.	

22

_ElectricLine	**Electric Line:** Electric line will be present in the layout plan and shall pass through plot entity as a non closed polyline. Name electric line shall start with its voltage capacity and text insertion point shall lies on its polyline. For e.g. 33 KV High Tension Line	
_Section	**Section:** In this closed poly of section draw sections of all floors, stair, inner Chowk, lift, Machine room, Ventilation shaft, water tanks etc. as shown in figure. Also write the name as "Section" in this section poly. This section poly will present inside the building poly.	
_FloorInSection	**Floor In Section:** Floor section poly will present inside the section poly as shown. Name of each floor section will be same as of floor in plan. 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.	

_Terrace		
	TERRACE FLOOR: When terrace floor is present in the project then draw the closed poly on that floor which is on _Terrace layer in Plan. (including parapet wall) Also draw a triangle in section which is on " Floor In Section" layer. (draw parapet height rectangle in this layer)	

Tools

Show Only PreDCR Layers):

1. **All PreDCR layers (PDCRSPL):**
   This command will turn off all the layers in the drawing except PreDCR layers.
2. **Building level layer (PDCRSBL):**
   This command will turn on all the building plan level layers in the drawing.
3. **Layout level layer (PDCRSLL):**This command will turn on all the Layout plan level layers in the drawing.
2. **Show Only DCR Layers (PDCRSDL):**
   This command will turn off all the layers in the drawing except DCR layers.

3. **Show Other Layers (PDCRSOL):**
This command will turn off all the DCR and PreDCR layers in the drawing.

4. **Show All layers (PDCRSAL);**
This command will turn on all layers in the drawing.

5. **Calculate Total Area (PDCRCTA):**
This command will compute the total area of all selected closed polygons.

6. **Calculate Deducted Area (PDCRCDA):**
This command will compute the area of closed polygon after deducting closed polygons found inside.

7. **Get All Inside Poly (PDCRFIP):**
This command will highlight all polygons, found exactly inside selected polygon under test.

8. **Get All Overlapping Poly (PDCRGOP):**
This command will highlight all polygons, which are overlapping with selected polygon under test.

9. **Get All Intersecting Poly (PDCRGIP):**
This command will highlight all polygons, which are intersecting with selected polygon under test.

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

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

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

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

14. **Convert arc into polyline (PDCRCATP):** This tool is used to convert an arc to polyline.

15. **Set Default ACAD version (PDCRSDA):** This command is used to set the default version of AutoCad.