

Manual for Computer Aided Draughting (CAD)

School Property Database

Prepared for
Ministry of Education
August 1999

Manual

*Manual for Computer Aided Draughting
(CAD)*

Prepared for

Ministry of Education

By

Beca Carter Hollings & Ferner Ltd

August 1999

Table of Contents

1	INTRODUCTION	3
2	SYSTEM STRUCTURE.....	3
3	INFORMATION TO BE INCLUDED	4
3.1	Title Block (all drawings)	4
3.2	Site Plan	4
3.3	Block Plan(s).....	4
4	CAD SYSTEM REQUIREMENTS	5
5	FILE STRUCTURE AND NAMING.....	5
5.1	External Reference (Xref) File.....	5
5.2	Site Plan Drawing File.....	5
5.3	Block Plan Drawing File(s).	5
5.4	Diagram of Drawing Structure.....	6
6	DRAWING CONSTRUCTION	7
6.1	Drawing Appearance	7
6.2	Title Block.....	9
6.3	Step 1: Create the External Reference (Xref).....	10
6.4	Step 2: Create the Site Plan Drawing File	12
6.5	Step 3: Create the Block Plan Drawing File(s).....	13
7	REVISION OF EXISTING DRAWINGS.....	15

8	CUSTOMISED AUTOCAD TOOLS.....	16
8.1	Menu and Lisp Files.....	16
8.2	Step 1: Create the External Reference (Xref).....	16
8.3	Step 2: Create the Site Plan Drawing.....	18
8.4	Step 3: Create the Block Plan Drawing	18
8.5	Key to Toolbar Buttons	19
9	FILE PROTECTION	21
10	INFORMATION TRANSFER	21
10.1	Ministry of Education District Office Address.....	21
APPENDIX A	SAMPLE TITLE BLOCKS	23
APPENDIX B	SAMPLE DRAWINGS	24
APPENDIX C	COMPUTER FLOPPY DISK (3 1/2")	25

Manual Prepared By

Gavin Thomas

Signed _____

Manual Reviewed By

Peter F. Davies

Signed _____

Helen M Ferner

Signed _____

1 Introduction

The Ministry of Education Property Management Division is responsible for all state primary and secondary schools in New Zealand.

Currently the Ministry has CAD computer files and associated paper prints for drawings of all schools. These can be related directly to a computer based Property Management Information System (PMIS).

The following manual shows how CAD drawings of schools shall be updated to maintain consistency with drawings prepared for the School Survey Project (1999) by Beca Carter Hollings and Ferner Limited.

This Document also includes:

- Sample drawings (Appendix A and Appendix B)
- Prototype files for new CAD drawings (Appendix C)
- Customised tools for producing new CAD drawings in AutoCAD R14. (Appendix C and Section 7)

2 System Structure

Drawings are named by use of their associated unique school profile number.

The CAD drawings are structured to supply overview information about the site and building locations at a specific school. Each School has drawings of two types:

Site Plan, giving overall layout and location of the school.

Block Plans, of which there may be several. These show individual buildings in greater detail.

An External Reference drawing, layers, line types and hatching are used to further differentiate elements within the drawing. Refer Section 6 of this document.

Existing drawing files may also include scanned images. The School Survey 1999 was carried out from scanned archive drawings. These source drawings remain in the drawing file as scanned images.

Please note that existing drawings may have different colour assignments for some layers. Some colour assignments have been changed since the School Survey 1999, to make the drawings more visible on computer screens.

3 *Information to be included*

3.1 Title Block (all drawings)

The title block on all drawings shall include the following:

- School Name
- School Profile Number
- Drawing Number and Description
- Drawn Scale
- Revision, Description, Draughtsperson and Date

3.2 Site Plan

The Site Plan for each school shall include the following:

- Overall school layout showing legal boundaries
- Entrances, major roads bounding the site and their names.
- Outlines of recreational areas, playing fields and hard court areas.
- Location of all buildings, including adjacent school houses and hostels.
- PMIS Building codes, associated with the relevant buildings. This will include Community maintained Buildings and Early Childhood Centres where they exist.
- Ancillary Buildings: pump sheds, tractor sheds, and incinerators.
- Approximate location of carparks in the school and their number.
- Building external features: covered ways, ramps.

If available, the following can be added

- Site orientation with North point.
- Service roads on the site.

3.3 Block Plan(s)

The Block Plan(s) for each school shall include the following:

- Location of all buildings, including adjacent school houses and hostels.
- PMIS Building codes, associated with the relevant buildings. This will include Community maintained Buildings and Early Childhood Centres where they exist.
- Room identification numbers.
- Details including internal partitions, doorways, toilets and urinals.
- Building external features: covered ways, ramps.

If available, the following can be added

- Site orientation with North point.

4 *Cad System Requirements*

All CAD files shall be produced using the following format.

- Suitable Microsoft Operating System
- AutoCAD Release 14, AutoCAD LT 97 or compatible software.
- Draw all of school in Model Space
- Insert all of the Title Block in Paper Space

The Ministry of Education uses AutoCAD LT 97 software.

5 *File Structure and Naming*

Prototype CAD files are available on floppy disk, refer Appendix C.
Name all files with an eight-digit file number, extension .DWG

5.1 External Reference (Xref) File.

Each school shall have one drawing file, containing all of the school drawing in Model Space. This is the External Reference Drawing.

External Reference File Name: *Profile No.-X01.DWG* e.g. 4725-X01.DWG

5.2 Site Plan Drawing File.

Contains:

- Xref file attached in Model Space.
- Title Block attached in Paper Space
- Appropriate Xref layers displayed to show Site Plan information

Site Plan File Name: *Profile No.-001.DWG* e.g. 4725-001.DWG

5.3 Block Plan Drawing File(s).

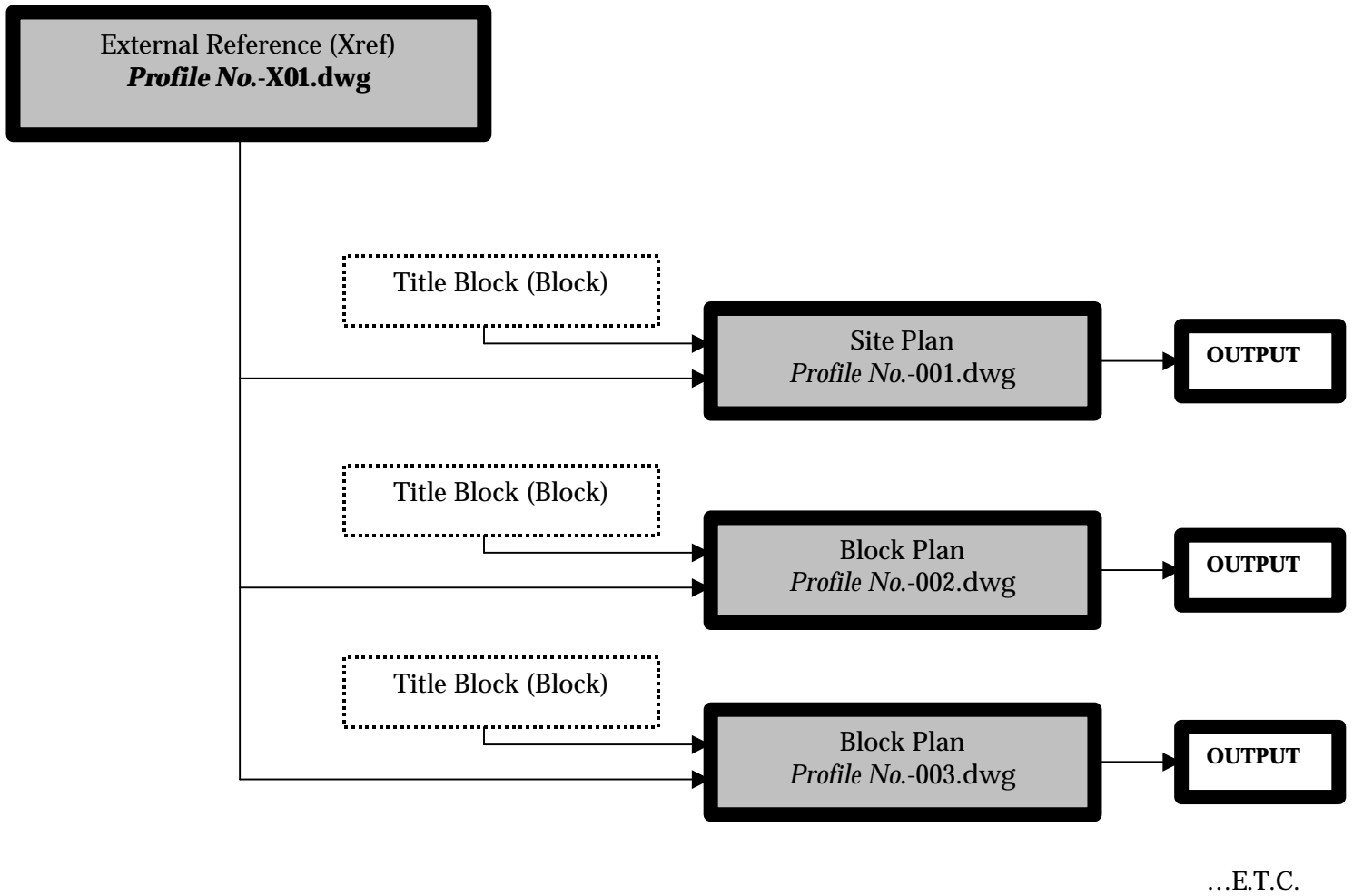
Contains:

- Xref file attached in Model Space.
- Title Block attached in Paper Space
- Appropriate Xref layers displayed to show Block Plan information

Block Plan File Name:	<i>Profile No.-002.DWG</i>	e.g. 4725-002.DWG
	<i>Profile No.-003.DWG</i>	e.g. 4725-003.DWG
	<i>Profile No.-004.DWG</i>	e.g. 4725-004.DWG

NB: If space permits, Block Plan information may be displayed on the Site Plan Drawing at 1:250 scale, in an additional separate Paper Space viewport.

5.4 Diagram of Drawing Structure



6 Drawing Construction

All layers, linetypes and text styles are already provided in the prototype cad files listed in Appendix C and attached on floppy disk. Use these prototypes to ensure conformity with this drawing manual.

It is recommended that you draw the plans in the following order.

- Step 1:** Create the Xref from prototype MOE-PROT
- Step 1a:** Draw the Block Plan features in the Xref
- Step 1b:** Draw the Site Plan features in the Xref
- Step 2:** Create the Site Plan drawing from prototype SITE-001 file (with the Xref & Title Block attached).
- Step 3:** Create the Block Plan drawing file from prototype BLOC-002 (with the Xref & Title Block attached).

6.1 Drawing Appearance

6.1.1 Scales

- All drawing in xref to be drawn full size in millimetres
- Select an appropriate scale for the Site Plan drawing (SPS).
- Permissible scales are 1:250, 1:500, and 1:1000.
- All Block Plan drawings to be at 1:250 scale.
- Ensure that the drawing scale is correctly recorded in the Title Block.

6.1.2 Linetypes

- Assign all linetypes by layer.
- Set Linetype Scale to 10 in Paper Space
- Set Linetype Scale to 10 times Drawing Scale in Model Space

AUTOCAD LINETYPE	PURPOSE
Dashed	Covered ways
Continuous	General drawing

Refer Sections 6.3 and 6.4 of this document for linetype assignment of each layer.

6.1.3 Colours

Assign colours by layer. Use only the following AutoCAD colours. Plotting pen width and linetype are also provided.

AUTOCAD COLOUR		PLOTTED PEN SIZE INKJET PRINTER	PLOTTED PEN SIZE LASER PRINTER	PLOTTED LINETYPE
1	Red	0.18	.01	7
3	Green	0.5	0.003	7
4	Cyan	0.70	0.020	7
5	Blue	0.25	0.01	7
6	Magenta	0.25	0.01	7
7	(B/W)	0.25	0.01	7

Refer Sections 6.3, 6.4 and 6.5 of this document for colour assignment of each layer.

6.1.4 Text

General Text

Text Style:	Romans
Font File:	Romans.shx
Rotation:	0
Width Scale Factor:	1.0
Obliquing Angle:	0
Generation:	Normal

Block Labels, Road Names

Text Style:	Swiss
Font File:	Swis 721 Blk BT
Rotation:	0
Width Scale Factor:	1.0
Obliquing Angle:	0
Generation:	Normal

Refer Sections 6.5 of this document for height, layer and colour assignment of text.

6.2 Title Block

The Title Block itself is a block entity named Title (Title.dwg).

The Title Block Attributes are in a block entity named Attrib (Attrib.dwg).

Within each of these blocks, individual object Colour is defined by entity

DRAWN OBJECT	LAYER	COLOUR	LINETYPE
	0	7 (B/W)	Continuous
All Title Block All Title Block Attributes	Titleblock	4 (Cyan)	Continuous

- The title block is present in both the prototype files: Site Plan (SITE-001) and Block Plan (BLOC-002), and is also available separately as the files Title.dwg and Attrib.dwg. Refer Appendix C and attached floppy disk.
- Sample title blocks are shown in Appendix A

6.3 Step 1: Create the External Reference (Xref)

- Use the Prototype Drawing MOE-PROT.dwg to begin the drawing. (Located on attached floppy disk, refer Appendix C). This will ensure the drawing conforms to this document.
- The Xref drawing is made up of Block Plan layers and Site Plan layers.
- All of the drawing should be in Model Space.

6.3.1 Step 1a: Draw the Block Plan Features

Set Scale to Block Plan Drawing Scale (1:250)

- Draw buildings, internal walls, and covered ways as required.
- Label buildings as required
- Circulation spaces such as hallways, foyers, etc. shall not be numbered.
- DO NOT draw non full height partitions, e.g. toilet cubicle partitions, cupboards
- Insert the following blocks as required, on the correct layers

DESCRIPTION	BLOCK NAME	LAYER
Toilet Pan	TOILET	Sanitary-Features
Urinal	URINAL	Sanitary-Features

Block Plan Specific Layers

DRAWN OBJECT	SIZE	LAYER	COLOUR	LINETYPE	NOTES
		0	7 (B/W)	Continuous	
		Defpoints	7 (B/W)	Continuous	
Building Outline	750 wide Polyline	Bldg-Outline	3 Green	Continuous	<ul style="list-style-type: none"> • Show door openings approx. 750 wide
Internal Wall	375 wide Polyline	Bldg-Intwalls	7 (B/W)	Continuous	<ul style="list-style-type: none"> • Show door openings approx. 750 wide • Do not non-full height partitions, cupboards
Covered Ways Fly-out lines	0 width line	Bldg-Features-Ext	7 (B/W)	Dashed	
Toilets Block: TOILET	Scale = 1	Sanitary-Features	7 (B/W)	Continuous	
Urinals Block: URINAL	Scale = 1	Sanitary-Features	7 (B/W)	Continuous	
Block Labels Room Numbers	Style: Swiss Height: 1875 Style: Romans Height: 875	Bldg-Block-Text-Block Bldg-Room-Numbers	3 Green 1 Red *	Continuous Continuous	<ul style="list-style-type: none"> • Refer Section 8.2. • Refer Section 8.2. • Do not number circulation spaces (covered ways, hallways etc.)
General Text	Style: Romans Height: 625	Bldg-Features-Text	7 (B/W)	Continuous	<ul style="list-style-type: none"> • Refer Section 8.2.

6.3.2 Step 1b: Draw the Site Plan Features

Set Scale to Site Plan Drawing Scale (SPS)

- Draw site, pool and playing area outlines as required.
- Label pool, playing areas, carparking, roads and buildings as required.
- Insert the following blocks as required, on the correct layers

DESCRIPTION	BLOCK NAME	LAYER
Parked Car	CARP1	Carparking

Site Plan Specific Layers

DRAWN OBJECT	SIZE	LAYER	COLOUR	LINETYPE	NOTES
		0	7 (B/W)	Continuous	
		Defpoints	7 (B/W)	Continuous	
Image or DXF.		Scan-Vector	253	Continuous	<ul style="list-style-type: none"> • Scanned image • For drawings from existing plans.
Site Boundary	0.375 x SPS wide Polyline	Site-Features	4 Cyan		
Road Names	Style: Romans Height: 7.0 x SPS	Site-Features	4 Cyan	Continuous	
Block Labels	Style: Romans Height: 7.5 x SPS	Bldg-Block-Text-Site	4 Cyan	Continuous	<ul style="list-style-type: none"> • Duplicate Block Text
Swimming Pool Outline	0.1 x SPS wide Polyline	Pool	1 Red *	Continuous	
Swimming Pool Text	Style: Romans Height: 3.5 x SPS	Pool-Text	1 Red *	Continuous	<ul style="list-style-type: none"> • Type POOL within pool outline
Playing Area Outline	0.1 x SPS wide Polyline	Playingarea-Outline	4 Cyan	Continuous	
Playing Area Text	Style: Romans Height: 3.5 x SPS	Playingarea-Text	1 Red *	Continuous	<ul style="list-style-type: none"> • PAVED PLAYING or GRASS PLAYING and numbering
Car Parking Block: CARP1	Scale = 1	Carparking	7 (B/W)	Continuous	<ul style="list-style-type: none"> • Rotation to suit
Car Parking Text	Style: Romans Height: 2.5 x SPS	Carparking	7 (B/W)	Continuous	<ul style="list-style-type: none"> • No. of CARPARKS

* - Layer colour has changed since 1999 School Survey. Refer Section 2.

6.4 Step 2: Create the Site Plan Drawing File

- Begin the site plan drawing with prototype drawing Site-001.dwg. It has Title Block (Title) and Title Attributes (Attrib.) inserted in Paper Space at 0,0.
- Save as Site Plan File Name *Profile No-001.dwg*
- Insert the Xref *Profile No.-X01* at 0,0 in Model Space.
- Make a Viewport in Paper Space
- If available, show site orientation by inserting the North Point Block “NTHP” in Model Space at appropriate Location, Scale and Orientation.

6.4.1 Paper Space, Title Block Attributes

Fill in the following:

- Name of School
- School Profile Number
- Title: **Site Plan**
- Scale
- Drawn and Date
- Checked and Date
- Drawing Number: **Profile No.-001** (e.g. 4725-001) as per File Name.
- Revision No.
- Revision No., Description, By, Checked and Date. (In revision box).

6.4.2 Layers

DRAWN OBJECT	LAYER	COLOUR	LINETYPE
	0	7 (B/W)	Continuous
Paper Space Viewport	Defpoints	7 (B/W)	Continuous
	Revisions	7 (B/W)	Continuous
North Point: “NTHP”	Site-Features	4 (Cyan)	Continuous
Title Block	Titleblock	7 (B/W)	Continuous
Title Block Attributes			
Xref Drawing Profile No.-X01	Xref	7 (B/W)	Continuous

6.4.3 Frozen Layers

Freeze the following Xref layers in the Site Plan

LAYER	COLOUR	LINETYPE
<i>Profile No-X01</i> bldg-block-text-block	3 (Green)	Continuous
<i>Profile No-X01</i> bldg-room-numbers	1 (Red) *	Continuous

* - Layer colour has changed since 1999 School Survey. Refer Section 2.

6.5 Step 3: Create the Block Plan Drawing File(s)

- Begin the block plan drawing with prototype drawing Block-001.dwg. It has Title Block (Title) and Title Attributes (Attrib.) inserted in Paper Space at 0,0.
- Save as Block Plan file name *Profile No-002.dwg* (003,004 etc.)
- Insert the Xref Profile No.-X01 at 0,0 in Model Space.
- Make multiple Viewports in Paper Space as necessary to display all the blocks in the school

6.5.1 Paper Space, Title Block Attributes

Fill in the following:

- Name of School
- School Profile Number
- Title

First Line	Block Plan
Second Line	Sheet 1
	(or 2 etc. as appropriate)

- Scale 1:250
- Drawn and Date
- Checked and Date
- Drawing Number: **Profile No.-002, 3, 4 etc.** (e.g. 4725-002) as per File Name.
- Revision No.
- Revision No., Description, By, Checked and Date. (In revision box).

6.5.2 Layers

DRAWN OBJECT	LAYER	COLOUR	LINETYPE
	0	7 (B/W)	Continuous
Paper Space Viewport	Defpoints	7 (B/W)	Continuous
	Revisions	7 (B/W)	Continuous
Title Block	Titleblock	7 (B/W)	Continuous
Title Block Attributes			
Xref Drawing Profile No.-X01	Xref	7 (B/W)	Continuous

6.5.3 Frozen Layers

Freeze the following Xref layers in the Block Plan

LAYER	COLOUR	LINETYPE
<i>Profile No-X01</i> bldg-block-text-site	7 (B/W)	Continuous
<i>Profile No-X01</i> carparking	7 (B/W)	Continuous
<i>Profile No-X01</i> playingarea-outline	4 (Cyan)	Continuous
<i>Profile No-X01</i> playingarea-text	1 (Red) *	Continuous
<i>Profile No-X01</i> pool	3 (Green)	Continuous
<i>Profile No-X01</i> pool-text	1 (Red) *	Continuous
<i>Profile No-X01</i> site-features	4 (Cyan)	

* - Layer colour has changed since 1999 School Survey. Refer Section 2.

7 Revision of Existing Drawings

If a school has been altered, existing drawings of the school must be updated to reflect these changes.

- Drawing structure must conform to Sections 1 to 6 of this manual.
- Modify Xref drawing to reflect alterations to the school. Use layers, blocks and text styles as described in Section 6 of this manual.
- In Paper Space of **all** Site and Block Plans, draw a “Revision Cloud” around **all** changes.
- Place a “Revision Triangle” block (REVTRI.dwg) next to the revision cloud. The revision number shall match the new revision in the title block.

DRAWN OBJECT	LAYER	COLOUR	LINETYPE
Revision Cloud	Revisions	7 (B/W)	Continuous
Revision Triangle “REVTRI”			

- Update the Title Block in all plans
 - Update the main title block revision (eg. from “A” to “B”)
 - Insert a new line in the Revision Box with:
 - New Revision number. (eg. “B”)
 - Description of Revision (eg. “New Block F added”)
 - Add your initials in the space provided
 - Type the current date.
- Some layer colour assignments may have changed since the 1999 School Survey. Refer Section 2.

NB: If revision clouds and/or triangles are already present in the drawing, remove them before updating.

8 Customised AutoCAD Tools

- Customised CAD tools are available for creation and amendment of CAD files. The tools are available on the floppy disk attached (Refer Appendix C), and are accessible via the menu file ACAD.MNS.
- Some of the tools are for use only with scanned images, and should not be necessary for operations described in this manual.
- The tools are only available for use in AutoCAD Release 14. For other software you must use the methods described in Section 6 of this manual.

8.1 Menu and Lisp Files


- Copy the customisation files from A:\Custom (Refer Appendix C) to an AutoCAD support file directory, or the working directory.
 - Copy the Menu file ACAD.MNS from the disk provided to an AutoCAD support file directory, or the working directory.
 - Copy the prototype drawing MOE-LAY.DWG from the disk provided to the working directory.
 - Copy the file SITE-SCL.TXT from A:\Custom to the working directory.
- Start AutoCAD and load the menu ACAD.MNS.
- This will give access to all the Customised AutoCAD tools you may use to construct the schools drawings. Use of these tools should ensure that the new drawings conform to this manual.

8.2 Step 1: Create the External Reference (Xref)


Start a new school drawing, Profile N^o-X01.DWG, use MOE-PROT.dwg as prototype








8.2.1 Step 1a: Draw the Block Plan Features

1. Pick the “SC” button from the “MOE - SETUP TOOLS” toolbar, and type in scale 250. This sets up the scale 1:250 for items such as text. It does not scale the drawing up or down.

	Sets the scale factor for text etc.	1:250 for Block Plans
---	-------------------------------------	-----------------------

2. Draw the building outlines, internal walls, boundaries etc. using the tools shown in the diagram. These tools will automatically draw items on their correct layer, to conform to this manual.

MENU	ITEM	NOTES
MOE Block	 Draws building outline.	Show door openings.

MOE Block		Draws internal walls.	Show door openings.
MENU			ITEM
MOE Block		Draws lines for covered ways, flyout lines etc.	Flyout lines relate first/second floors to ground floors in the block plan.
MOE Block		Toilet symbol.	
MOE Block		Urinal symbol.	
MOE Text		Block labels.	If alphabetical block name use upper case.
MOE Text		Room numbers.	Always use a number.
MOE Text		Building general text.	COVERED WALKWAY, FIRST FLOOR PLAN, BASEMENT etc.









- Circulation spaces such as hallways, foyers, etc. shall not be numbered.
- DO NOT draw non full height partitions, e.g. toilet cubicle partitions, cupboards
- Load the “BP” (LISP file) command and use this to make door openings.

8.2.2 Step 1b: Draw the Site Plan Features

Select a site plan scale factor, to fit the entire drawing into the drawing sheet space. (785 wide x 509 high)

- Change the scale by picking the “SC” button from the “MOE - SETUP TOOLS” toolbar, and type in scale you wish to use for the SITE features.

Draw site features and text using the tools shown in the diagram.

MENU		ITEM	NOTES
MOE Text		Block labels.	Text to be identical to “B-b” above.
MOE Block		Swimming pool outline.	
MOE Text		Swimming pool text.	POOL
MOE Block		Play area outline.	Outline of designated marked hardcourts, and playing fields only.
MOE Text		Playing area text.	PAVED PLAYING or GRASS PLAYING
MOE Block		Insert a car as a block.	
MOE Text		Car parking text.	(No.?) CARPARKS. Place adjacent to car symbol. (e.g. “27 CARPARKS”).
MOE Block		Site boundary line.	


MOE Text		Road names.	Upper case. Use the full name e.g. STREET, not ST.
-------------	---	-------------	--

Remember:

- When drawing SITE features and text, ensure that you have picked the correct block scale using the “SC” button from the “MOE - SETUP TOOLS” toolbar.
- When drawing BLOCK features and text, ensure that you have picked the correct block scale using the “SC” button from the “MOE - SETUP TOOLS” toolbar.

8.3 Step 2: Create the Site Plan Drawing

When the Xref drawing operation is complete, pick the “SITE” button from the “MOE-SETUP TOOLS” toolbar. This creates a new drawing *Profile No.-001.dwg* with a title block attached, and attaches the previous drawing as an Xref.

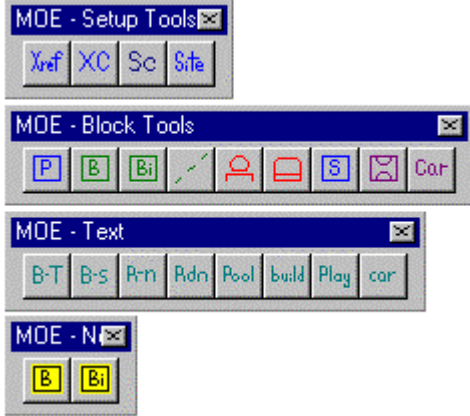
	Creates a drawing with a title block and the Xref referenced in.	Use in CAD directory only.
---	--	----------------------------

- Load the “MOE-LAY” command with the “APPLOAD” command.
- Use the “MOE-LAY” command to select the correct layers in model space.

8.4 Step 3: Create the Block Plan Drawing

- To create a Block Plan drawing for the school use the SAVEAS feature of AutoCAD to save as the next drawing number. *Profile No-002.dwg*
- Remember to alter the title, scale and drawing number using the “DDATTE” command.
- Load the “MOE-LAY” command with the “APPLOAD” command.
- Use the “MOE-LAY” command to select the correct layers in model space.

8.5 Key to Toolbar Buttons



MOE SETUP

MENU	ITEM	NOTES
Xref	Scales up Vectorised or scanned image	Only for use on scanned files as part of the 1999 School Survey.
XC	Creates an Xref file form scanned image.	Only for use on scanned files as part of the 1999 School Survey.
Sc	Sets the scale factor for text etc.	Set suitably for Model Space in Site Plan. Set to 1:250 for Model Space in Block Plans Set to 1:1 when in Paper Space
Site	Makes Site Plan	Inserts Xref and Title Block.




MOE BLOCK

MENU	ITEM
P	Swimming pool outline.
B	Draws building outline.
Bi	Draws internal walls.
(Dashed line icon)	Draws lines for covered ways, flyout lines etc.
(Toilet icon)	Toilet symbol.
(Urinal icon)	Urinal symbol.
S	Site boundary line.
(Play area icon)	Play area outline.
Car	Insert a car as a block.



MOE TEXT

MENU	ITEM
B-b	Block labels. (Block Plan)
B-s	Block labels. (Site Plan)
R-n	Room numbers.
R-dn	Road names.
Pool	Swimming pool text.
build	Building general text.

GENERAL

MENU	ITEM	NOTES
	Change SNAPANGLE	To assist drawing of blocks. Aligns cursor cross-hairs with drawn line.
	Reset SNAPANGLE to zero	
	Insert Prototype Drawing	Inserts MOE-PROT.dwg and associated layers.

MOE NEW

MENU	ITEM	NOTES
	Draws building outline.	Creates a new building outline layer. To separate building alterations from existing.
	Draws internal walls.	Creates a new internal wall layer. To separate building alterations from existing.

9 File Protection

When Drawing is complete:

- Lock all layers in each drawing file
- Set file to “Read Only”

10 Information Transfer

When all drawing is complete, forward the following by mail to the appropriate Ministry of Education District Office:

Format:	AutoCAD Files (*.DWG)
Media:	90mm (3 ½ ") Floppy Disk

Format:	1:2 Reduced Paper Copies
Media:	A3 Plain White Paper

10.1 Ministry of Education District Office Address

DISTRICT OFFICE	PHONE/ FAX NO	POSTAL ADDRESS	COURIER ADDRESS
Northland	(09) 438 2730 (09) 438 0873	Private Bag 9015, WHANGAREI	Walton Plaza, Walton Street, Whangarei
Auckland	(09) 377 7655 (09) 302 3019	Private Bag 47911, Ponsonby, AUCKLAND	39-45 College Hill, Ponsonby, Auckland
Bay of Plenty	(07) 348 1322 (07) 348 1342	PO Box 1749 ROTORUA	69 Pukuatua St, 2nd floor, Dept of Social Welfare Building, Rotorua
Waikato	(07) 838 3708 (07) 838 2085	Private Bag 3011 HAMILTON	Cnr Grey & Bridge St. Hamilton
Central West	(06) 345 0198 (06) 345 0199	Private Bag Wanganui	116 Victoria Avenue, Wanganui
Central East	(06) 835 9671 (06) 835 2489	PO Box 147 NAPIER	1st flr, Ernst & Young House, Cnr Marine Parade & Vautier, Napier
Central South	(04) 566 1219 (04) 566 1503	65 Waterloo Road, LOWER HUTT	2nd flr, 65 Waterloo Road, Lower Hutt
Nelson/ Marlborough	(03) 546 8474 (03) 546 8024	PO Box 843 NELSON	Level 2, Sealord House, cnr Trafalgar and Bridge, Nelson
Canterbury	(03) 365 7386 (03) 364 1667	PO Box 25 22 CHRISTCHURCH	123 Victoria Street Christchurch
Otago	(03) 474 0152 (03) 479 0250	PO Box 1225 DUNEDIN	John Wickliffe House, Princes Street, Dunedin
Southland	(03) 218 2466 (03) 218 2420	Private Bag INVERGARGILL	78 Doon Street, Invercargill

Appendix A
Sample Title Blocks

Appendix A:

Sample Title Blocks

These drawings have been reduced to A4 size for ease of use.
In practice, please provide Hard copy A3 drawings

SITE PLAN

Title:

Revision
No. Drawing Number: **?????-001**

By: | Date:

Checked: | Date:

Scale: | Date:

Author: | Date:

Checked: | Date:



Profile No. ????

ASSET PLAN REGISTER

MINISTRY OF EDUCATION PROPERTY MANAGEMENT

SAMPLE SCHOOL

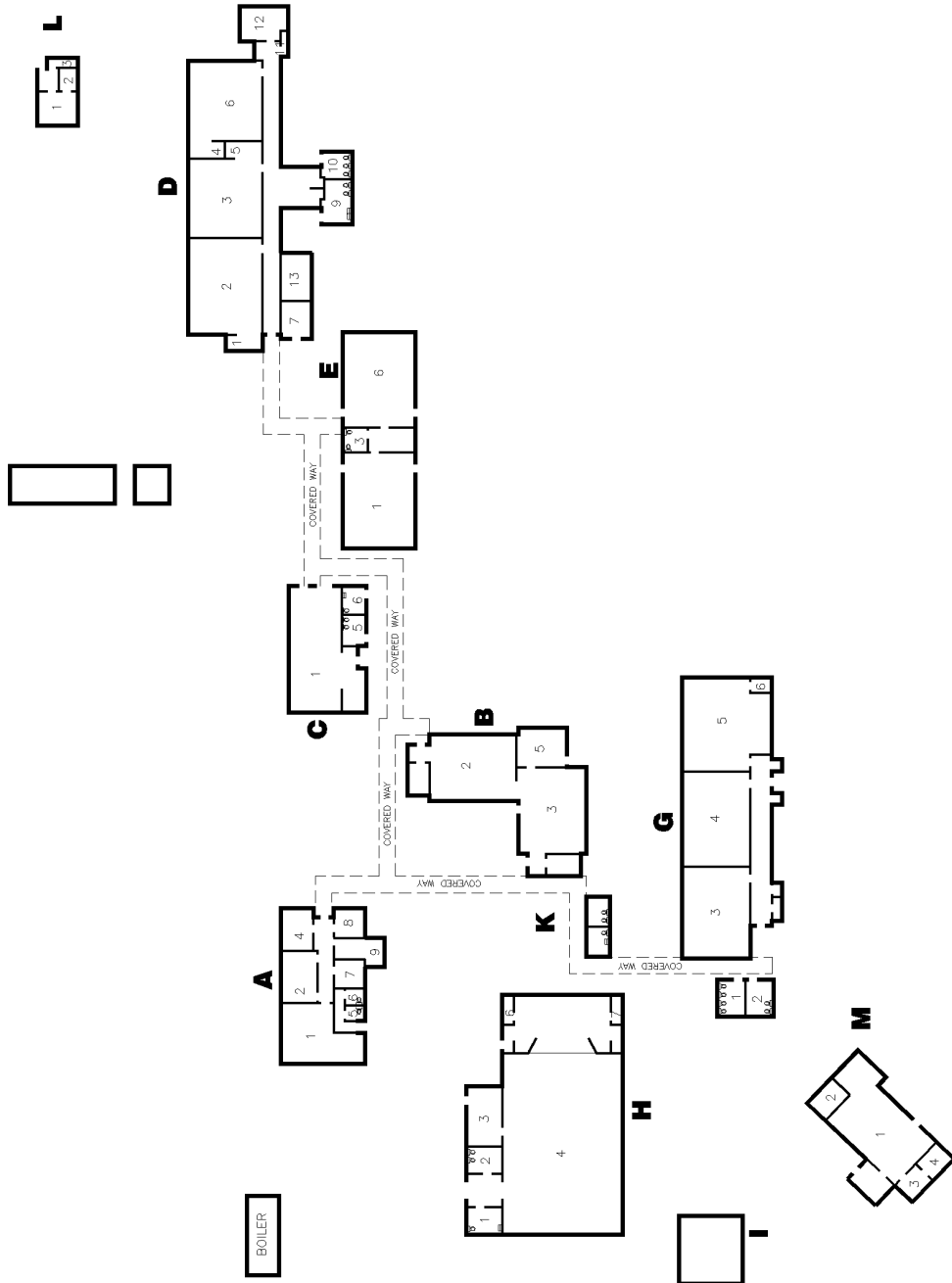


DO NOT SCALE

Appendix B
Sample Drawings

Appendix B:
Sample Drawings

These drawings have been reduced to A4 size for ease of use.
In practice, please provide Hard copy A3 drawings



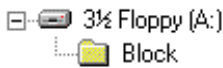
MARTINBOROUGH SCHOOL Te Tāhuhu o te Matauranga PROPERTY MANAGEMENT CENTRAL SOUTH	Profile No. 2906 ASSET PLAN REGISTER		BLOCK PLAN	
			Title:	Drawing Number: 2906-002
Original Scale: 1:250		Approved:	Checked:	Date:
Date:		Drawn:	LD	20.11.98
Date:		By:	DN, AP, GK	Date:
Date:		Checked:	B	Date:
Date:		Issued to:	MCE	Date:
Date:		Issued to:	REGION	Date:
Date:		Issued to:	BMT	Date:
Date:		Issued to:	BMT	Date:

Appendix C
Computer Floppy Disk (3½")

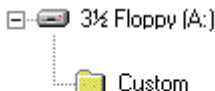
Appendix C:

Computer Floppy Disk (3 ½")


Standard Blocks

DIRECTORY	Item	Notes
	URINAL.DWG	Urinal Symbol Block
	TOILET.DWG	Toilet Symbol Block
	CARP1.DWG	Car Symbol Block
	REVTRI .DWG	Revision Triangle Block
	NTHP.DWG	North Point Symbol Block


Customisation Files

DIRECTORY	ITEM	NOTES
	ACAD.MNS	Menu file
	ACAD.LSP	Standard AutoCAD lisp file
	MOE-LAY.LSP	Lisp routine to set layers on/off
	BLOCK-EX.LSP	Lisp for external walls
	BLOCK-IN.LSP	Lisp for internal walls
	BLOCK-TX.LSP	Lisp for block labelling text
	BP.LSP	Lisp for doorway opening
	MOE.LSP	Lisp for set site or block layers
	MOE-LAY.LSP	Lisp for site/block layers
	NBLK-EX.LSP	Lisp for new block outlines
	NBLK-IN.LSP	Lisp for new block internal walls
	PL-UPD.LSP	Lisp to update title block date
	PLAY-L.LSP	Lisp for playing area outline
	POOL.LSP	Lisp for pool outline
	RE-SCALE.LSP	Lisp for changing scale
	SCALE.LSP	Lisp for setting scale
	SITE.LSP	Lisp for setting up Site Plan <ul style="list-style-type: none"> • For use on School Survey 1999.
	SITE-L.LSP	Lisp for drawing site outline
	TEXT.LSP	Lisp for drawing all text
	XREF-SC.LSP	Lisp for making Xref into Site Plan <ul style="list-style-type: none"> • For use on School Survey 1999.
SITE-SCL.TXT	Text file for storing scale factor.	
ICON (No.).BMP	Toolbar icon files <ul style="list-style-type: none"> • One file for each toolbar item. 	

Prototype Files

DIRECTORY	ITEM	NOTES
	MOE-PROT.DWG	Block prototype drawing
	SITE-001.DWG	Site Plan prototype drawing
	BLOC-002.DWG	Block Plan prototype drawing

Title Block Files

DIRECTORY	ITEM	NOTES
	TITLE.DWG	Title Block drawing
	ATTRIB.DWG	Title Block Attributes