Lucas County Engineers Office

CAD STANDARDS & SPECIFICATIONS

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PREFACE

POLICY AND PROCEDURAL RESPONSIBILITIES

As part of the Lucas County Engineer's CAD Standard Procedures, the Lucas County Engineer's Office and consultants awarded projects for design and drafting, shall enter into an agreement; whereas the consultant selected shall be required to attend a pre-drafting and design CAD tech meeting with the Lucas County Engineers Office, for the sole purpose of the consultant attaining the CAD drafting guidelines and procedural standards, (given in a presentational format), that are inherent to all Lucas County Engineer CAD projects. The tech meeting shall be attended by the CAD techs and /or engineers from the consultant involved in said project. The tech meeting will approximately last no longer than two hours and shall be held in the Lucas County Engineers Office, officiated by the Computer/CADD Systems Manager and Lead CAD Technicians of the Lucas County Engineers Office. All consultants will be required to submit electronic CAD drawings in the format as prescribed by this document:

AutoDesk's AutoCAD 2010 or AutoDesk's Civil 3D 2010

X-REFERENCING

X-REFERENCING WILL ONLY BE PERMITTED IN THE WORKFLOW FORMAT AS SPECIFIED IN CHAPTER 1 OF THE LCEO PROCEDURAL MANUAL FOR CIVIL 3D.

LUCAS COUNTY ENGINEER'S EXPECTATION STATEMENTS

- **LUCAS COUNTY FONTS WILL BE USED.**
- **LUCAS COUNTY LINETYPES WILL BE USED.**
- **ALL LUCAS COUNTY SYMBOLS WILL BE USED FOR PRESENTATION OF EXISTING TOPOGRAPHY.**
- **ALL LINES & POLYLINES IN SUBMITTED DRAWINGS WILL HAVE A LINETYPE SCALE OF 1. THE LTSCALE COMMAND GOVERNS THE LINETYPE SCALE GLOBALLY THROUGHOUT ALL DRAWINGS.**
- **ALL BORDER, PLAN AND PROFILE AND CROSS SECTION SHEET BLOCKS WILL BE USED AND ARE IN THEIR OWN .DWT FILES (CIVIL 3D) OR AS .DWG BLOCKS. THESE FILES ARE TO BE USED AS BLOCKS, AND THEREFORE, SHALL NOT BE EXPLODED, AS THEY ARE ATTRIBUTE ENABLED.**
- **THE .DWT FILE IS THE AUTOCAD TEMPLATE FILE FROM WHICH AUTOCAD DRAWINGS ARE BASED. THE ACAD.DWT FILE THAT IS PROVIDED IN THE LCE STANDARDS CONTAINS ALL LCE STANDARDS.**
- **NAMING CONVENTIONS FOR ALL DRAWINGS WILL BE FOLLOWED.**
- **A LISTING OF DRAWINGS, THAT INCLUDES AND DESCRIBES EACH DRAWING CLASSIFICATION, (TITLE SHEET, PLAN AND PROFILE; ETC.), AND SHEET NUMBERS SHALL BE INCLUDED WITH SUBMITTAL.**
- **ALL SUBMITTED DRAWINGS SHALL NOT CONTAIN ANONYMOUS OR AMBIGUOUS BLOCKS GENERATED BY COPYING AND PASTING AUTOCAD OBJECTS FROM ONE DRAWING TO ANOTHER, AS THEY HAVE CORRUPTED LCEO DRAWINGS SUBMITTED BY CONSULTANTS IN THE PAST. A THOROUGH PURGE OF ALL DRAWINGS SHALL BE DONE PRIOR TO SUBMITTAL TO THE LUCAS COUNTY ENGINEER'S OFFICE.**
- **ANY DUPLICATION OF TOPOGRAPHY LINES, POLYLINES, TEXT, SYMBOLS OR BLOCKS WITHIN DRAWINGS WILL NOT BE ACCEPTED AND RETURNED TO THE CONSULTANT FOR CORRECTION.**
- **VIOLATION OF THESE POLICIES AND PROCEDURES ARE GROUNDS FOR REFUSING DRAWINGS SUBMITTED TO THE LUCAS COUNTY ENGINEER'S OFFICE AND SHALL BE RETURNED FOR CORRECTIONS.**

Introduction

The requirements presented in this manual ensure that CAD files can be used by the entire project team (surveyors, engineers, designers, technicians, contractors, etc.) throughout all phases of project development in the Lucas County Engineer's Office.

The Lucas County Engineer's Office uses AutoDesk's AutoCAD Civil 3D exclusively as its standard drafting and design software package. The standards referenced in this manual have been developed and tested using the software version 2010 of the stated software above. All projects submitted shall be in AutoCAD 2010 or Civil 3D 2010 format.

This manual is not a textbook and does not exempt the professional from performing responsible engineering and/or surveying practices. It is intended to provide uniform procedures and standards for organizations that perform CAD related services for The Lucas County Engineer's Office. The professional shall have final responsibility for the accuracy of all input and output of computer-based applications.

Distribution

This manual, in its entirety, may be freely copied and distributed for the purpose of providing a consistent guide to the CAD requirements of the Lucas County Engineer's Office. The manual, Standard CAD files and other support files can be downloaded from the Engineer's CAD Standards webpage at the following address:

http://oh-lucascounty.civicplus.com/index.asp?NID=1385

Revisions and Updates

The Lucas County Engineer's Office will continue to develop, and maintain procedures and standards for the Engineer's CAD related projects. Updates will be located at the web link above.

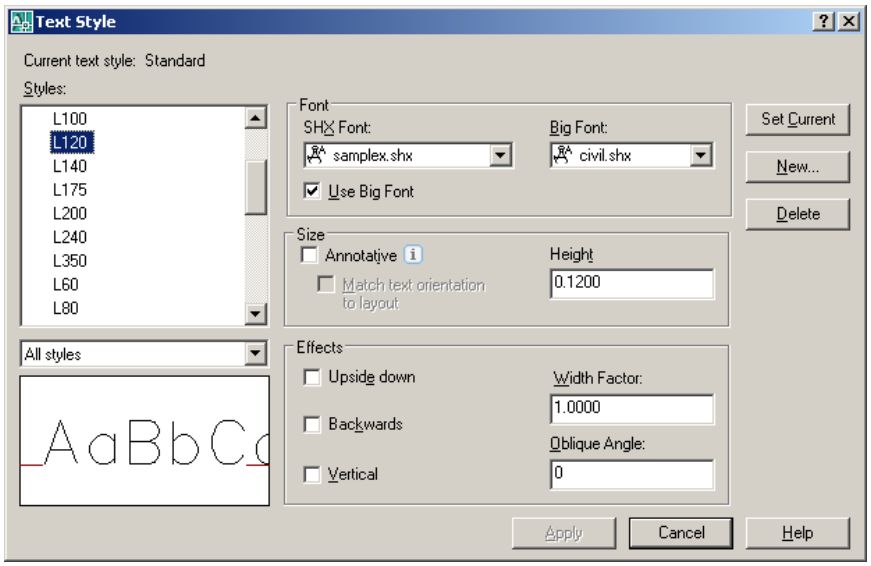
SECTION 1 - FONT SPECIFICATION

SIZE AND SCALE

SAMPLEX, w/CIVIL (BIG FONT)

TEXTSTYLE NAME	FONT NAME	BIG FONT NAME	TEXT HEIGHT (1:1)	x	SCALE	=	TEXT HEIGHT FOR .DWG
	SAMPLEX.SHX	CIVIL.SHX					
L60			0.06		20		1.2
L80			0.08		20		1.6
L120			0.12		20		2.4
L140			0.14		20		2.8
L175			0.175		20		3.5
L200			0.2		20		4
L240			0.24		20		4.8
L350			0.3		20		6
L500			0.5		20		10

NOTE: USE FORMULA FOR ANY SCALE TO GET CORRECT TEXT HEIGHT FOR YOUR DRAWING. (EXAMPLE - REPLACE THE 20 VALUE IN THE SCALE COLUMN WITH 40. USING THE FORMULA, L60 WOULD BE 0.06 x 40 = 2.4; ETC.)



FONTS – FOR GENERAL NOTES, SUMMARIES, DETAILS, PLANS, R/W PLANS, PLAN & PROFILES, & CROSS SECTIONS:

SAMPLEX.SHX
CIVIL.SHX

FONTS – FOR TITLE SHEET:
SAMPLEX.SHX
CIVIL.SHX
HELVFILL.SHX

NOTE: OTHER THAN THE L SERIES TEXTSTYLE NAMES (L60-L350), IGNORE ALL OTHER TEXT STYLES.

SECTION 2 - LINETYPE SPECIFICATION

Linetype	Appearance	Description
ByLayer		
ByBlock		
20DOT		. . . . .
30DOT		.....
3D Linetype		
40DOT		.....
ACAD_ISO02W100		ISO dash
ACAD_ISO03W100		ISO dash space
ACAD_ISO04W100		ISO long-dash dot
ACAD_ISO05W100		ISO long-dash double-dot
ACAD_ISO06W100		ISO long-dash triple-dot
ACAD_ISO07W100		ISO dot
ACAD_ISO08W100		ISO long-dash short-dash
ACAD_ISO09W100		ISO long-dash double-short-dash
ACAD_ISO10W100		ISO dash dot
ACAD_ISO11W100		ISO double-dash dot
ACAD_ISO12W100		ISO dash double-dot
ACAD_ISO13W100		ISO double-dash double-dot
ACAD_ISO14W100		ISO dash triple-dot
ACAD_ISO15W100		ISO double-dash triple-dot
BARBWIRE_1		Barbed Wire Fence with spaces
BATTING		Batting SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
BORDER		Border
BORDER2		Border (.5x)
BORDERX2		Border (2x)
CABLE_LINE		Cable line ----C----C----C----C----C----C--
CABLE_TV		Cable line ----CATV----CATV----CATV----CATV----
CENTER		Center
CENTER2		Center (.5x)
CENTERX2		Center (2x)
Continuous		Continuous
DASHDOT		Dash dot
DASHDOT2		Dash dot (.5x)
DASHDOTX2		Dash dot (2x)
DASHED		Dashed
DASHED2		Dashed (.5x)
DASHEDX2		Dashed (2x)
DIVIDE		Divide
DIVIDE2		Divide (.5x)
DIVIDEX2		Divide (2x)
DOT		Dot
DOT2		Dot (.5x)
DOTX2		Dot (2x)
DOTXs		Dot (2x)
DOTXs2		Dot
DOTXs2x		DotXs (.5x)

(CONT. ON PAGE 2)

ELEC_LINE	Electric line ----E----E----E----E----E----E--
FENCELINE1	Fenceline circle ----0-----0----0-----0----0-----0--
FENCELINE2	Fenceline square ----[]-----[]----[]-----[]----[]---
FENCELINE3	Fenceline X ----X-----X----X-----X----X---
GAS_LINE	Gas line ----G----G----G----G----G----G--
GAS2	-------- - - - -------- - - - --------
GUARDRAIL	Guardrail circle _____0______0_____0_____0_____
HIDDEN	Hidden __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
HIDDEN2	Hidden (.5x) _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
HIDDEN8	_ _ _ _ _ _ _ _ (1/2 of Hidden4)_ _ _ _ _ _ _ _
HIDDENX2	Hidden (2x) ____ ____ ____ ____ ____ ____ ____
HOT_WATER_SUPPLY	Hot water supply ---- HW ---- HW ---- HW ----
ODOT-C	
PHANTOM	Phantom ______ __ __ ______ __ __ ______
PHANTOM2	Phantom (.5x) ___ _ _ ___ _ _ ___ _ _ ___ _ _
PHANTOMX2	Phantom (2x) ____________ ____ ____ _
RW_LINE	Right-of-Way line ----/----/----/----/----/----/--
SAN_LINE	Sanitary line ----S----S----S----S----S----S--
STM_LINE	Stm Swr line (.25x)__ __ __ __ __ __ __ __ __ _
TELE_LINE	Telephone line ----T----T----T----T----T----T--
TRACKS	Tracks -|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-
Treeline100	courbes 100%
Treeline100-100	courbes 100%
Treeline125	courbes 125%
Treeline125-125	courbes 125%
Treeline25	courbes 25%
Treeline25-25	courbes 25%
Treeline50	courbes 50%
Treeline50-50	courbes 50%
Treeline75	courbes 75%
Treeline75-75	courbes 75%
USAN1	_______ _ ____ _ ________
WETLAND	Wetland Area____ . . . ____ . . . ____ . . . __
WTR_LINE	Water line ___ _ _ ___ _ _ ___ _ _ ___ _ _
ZIGZAG	Zig zag /\.

ALL LINETYPES HAVE A SCALE PROPERTY PRE-SET TO A 1:1. MOST PLANS, OR PLAN & PROFILE DRAWING VIEWPORTS SHALL BE SET AT 1:20, THEREFORE, LTSCALE SHOULD BE SET TO 1, THUS GLOBALLY CONTROLLING THE DISPLAY SIZE OF THE LINETYPE FOR EACH LINE. NO INDIVIDUAL LINE'S LINETYPE SCALE SHOULD BE SET INDEPENDENTLY THROUGH ITS PROPERTY SETTINGS. ANOTHER EXAMPLE OF GLOBALLY CONTROLLING LINETYPE SIZE IS FOR CROSS SECTION DRAWINGS, WHEREAS THE LTSCALE WOULD BE SET TO 1, THE VIEWPORT SCALE FOR X-SECTIONS ARE SET TO 1:5. AGAIN, NO INDIVIDUAL LINE SHOULD HAVE ITS OWN LINETYPE SCALE SET INDEPENDENTLY FROM THE OVERALL LINETYPE SCALE OF THE DRAWING.

NOTE:

FOR LAYER ASSIGNMENTS OF LINETYPES, SEE SECTION 3.1 – LAYER SPECIFICATIONS.

The LCE acad.lin file is included on the CD or through the CAD Standards files download.

SECTION 3 - LAYER SPECIFICATION

1 = ON 0=OFF

Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	VP Freeze	Description
0	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	AutoCAD
22X34	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Border Block Legacy Layer
3D_AREA1	1	0	0	blue	3D Linetype	By Line Weight	Color_5	1	0	Ex. Area Wetland, Water 3D Linework for TIN
3D_BERM1	1	0	0	magenta	3D Linetype	By Line Weight	Color_6	1	0	Ex. Berm 3D Linework for TIN
3D_BL_SURVEY1	1	0	0	red	3D Linetype	By Line Weight	Color_1	1	0	Baseline Survey, CL Right of Way 3D Linework
3D_BLDG1	1	0	0	blue	3D Linetype	By Line Weight	Color_5	1	0	Ex. Buildings, Houses, Sheds 3D Linework for TIN
3D_CL	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Ex. CL 3D Linework
3D_CL_DIT1	1	0	0	cyan	3D Linetype	By Line Weight	Color_4	1	0	Ex. CL Ditch 3D Linework
3D_CL_DRV1	1	0	0	cyan	3D Linetype	By Line Weight	Color_4	1	0	Ex. CL Driveways 3D Linework
3D_CLP1	1	0	0	cyan	3D Linetype	By Line Weight	Color_4	1	0	Ex. CL Pavement 3D Linework
3D_CURB1	1	0	0	yellow	3D Linetype	By Line Weight	Color_2	1	0	Ex. Curb 3D Linework
3D_DITCH1	1	0	0	cyan	3D Linetype	By Line Weight	Color_4	1	0	Ex. Top of Bank, Bottom of Ditch 3D Linework
3D_PAVT1	1	0	0	green	3D Linetype	By Line Weight	Color_3	1	0	Ex. Pavement 3D Linework
3D_RIDGE1	1	0	0	cyan	3D Linetype	By Line Weight	Color_4	1	0	Ex. For Mound 3D Linework
3D_STRUCT1	1	0	0	yellow	3D Linetype	By Line Weight	Color_2	1	0	Ex. Bridge Structures 3D Linework
3D_WALKS1	1	0	0	12	3D Linetype	By Line Weight	Color_12	1	0	Ex. Concrete or Asph. Walkways 3D Linework
3D_WALLS1	1	0	0	20	3D Linetype	By Line Weight	Color_20	1	0	Ex. Concrete Walls, Headwalls or Wingwalls 3D Linework
AREA1	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Area Wetland, Water Linework
AREA2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Area Wetland, Water Text
AS-BUILT	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	As-Built Entities
ASSESSOR NUMBERS	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Parcel Accessor No.
BERM1	1	0	0	magenta	HIDDEN	By Line Weight	Color_6	1	0	Ex. Berm Linework
BERM2	1	0	0	magenta	Continuous	By Line Weight	Color_6	1	0	Ex. Berm Text
BL_EP1	1	0	0	red	CENTER2	By Line Weight	Color_1	1	0	Baseline Survey, CL Right of Way Linework
BL_EP2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Baseline Survey, CL Right of Way Linework
BL_SURVEY1	1	0	0	red	CENTER2	By Line Weight	Color_1	1	0	Baseline Survey, CL Right of Way Linework
BL_SURVEY2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Baseline Survey, CL Right of Way Text
BLDG1	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Buildings, Houses, Sheds Linework
BLDG2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Buildings, Houses, Sheds Text
BORDER	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	Border Linework
BORDER TEXT	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Border Text
CATV1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Cablesystem, Etc., MHS Linework
CATV2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Cablesystem, Etc., MHS Text
CL	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Cross Sections Centerline
CL_CONSTR	1	0	0	yellow	CENTER2	By Line Weight	Color_2	1	0	Centerline Construction Linework
CL_DIT1	1	0	0	cyan	DIVIDE	By Line Weight	Color_4	1	0	Ex. CL Ditch Linework
CL_DIT2	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Ex. CL Ditch Text
CL_DRV1	1	0	0	magenta	CENTER2	By Line Weight	Color_6	1	0	Ex. CL Driveways Linework
CL_DRV2	1	0	0	magenta	Continuous	By Line Weight	Color_6	1	0	Ex. CL Driveways Text
CL_RR1	1	0	0	magenta	CENTERX2	By Line Weight	Color_6	1	0	Ex. CL Railroad Tracks Linework
CL_RR2	1	0	0	magenta	Continuous	By Line Weight	Color_6	1	0	Ex. CL Railroad Tracks Text
CLP1	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Ex. CL Pavement Linework
CLP2	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Ex. CL Pavement Text
COLINE1	1	0	0	11	CENTERX2	By Line Weight	Color_11	1	0	Countyline Linework
COLINE2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Countyline Text
CONSTLIMITS1	1	0	0	red	DASHED	By Line Weight	Color_1	1	0	Construction Limits Linework
CONSTLIMITS2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Construction Limits Text
CONTOURS2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Contour Text
CORPLINE1	1	0	0	11	PHANTOMX2	By Line Weight	Color_11	1	0	Corporation Lines
CORPLINE2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Corporation Lines Text
CURB1	1	0	0	yellow	HIDDEN2	By Line Weight	Color_2	1	0	Ex. Curb Linework
CURB2	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Ex. Curb Text
CUT_LINE	1	0	0	251	ACAD_ISO03W100	By Line Weight	Color_251	1	0	Edge of Paper
DAYSTAMP	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Daystamp
DCA_INFO	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	AutoCAD
Defpoints	1	0	0	white	Continuous	By Line Weight	Color_7	0	0	AutoCAD
DITCH1	1	0	0	cyan	DIVIDE	By Line Weight	Color_4	1	0	Ex. Top of Bank, Bottom of Ditch Linework
DITCH2	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Ex. Top of Bank, Bottom of Ditch Text
DRAIN1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Ex. Catch Basins, MH's, Inlets & Pipes Linework
DRAIN2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Ex. Catch Basins, MH's, Inlets & Pipes Text
EASEMENT1	1	0	0	white	DASHED2	By Line Weight	Color_7	1	0	Ex. Easement Linework
EASEMENT2	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Ex. Easement Text
ELEC1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Electric, MHS Linework
ELEC2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Electric, MHS Text

Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	VP Freeze	Description
END_AREAS	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	End Area Calculation Numbers
EPGC	1	0	0	green	DASHED	By Line Weight	Color_3	1	0	AutoCAD-Exist. Profile Grade
EPGCT	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	AutoCAD-Exist. Profile Grade Text
Ex-ConPL	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Ex. Concept Plan
Ex-ConPR	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Ex. Concept Profile
Ex-FinPL	1	0	0	green	DASHED	By Line Weight	Color_3	1	0	Ex. Finish Plan
Ex-FinPR	1	0	0	green	DASHED	By Line Weight	Color_3	1	0	Ex. Finish Profile
Ex-PLTxt	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Ex. Plan Text
Ex-PRTxt	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Ex. Profile Text
Ex-X_Pipe	1	0	0	20	DASHED	By Line Weight	Color_20	1	0	Ex. Cross Section Pipe
Ex-X_PipeTxt	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Ex. Cross Section Pipe Text
EXISTING	1	0	0	cyan	DASHED	By Line Weight	Color_4	1	0	
EXTOPO1	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Mailboxes, Objects that don't fit on other layers
EXTOPO2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Mailboxes, Objects that don't fit on other layers Text
EXUNKN1	1	0	0	cyan	HIDDEN2	By Line Weight	Color_4	1	0	Ex. Unknown Objects
EXUNKN2	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Ex. Unknown Objects Text
Fabric_Fence	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Filter Fabric Fence
FENCE1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Ex. Fences (Wood, Wiremesh, Chainlinks, Etc.) Line
FENCE2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Ex. Fences (Wood, Wiremesh, Chainlinks, Etc.) Text
FIELD CHECK	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	AutoCAD
FINAL	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	
Frame	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Invisible Frame (Text)
Frame2	1	0	0	red	Continuous	By Line Weight	Color_1	0	0	
GAS1	1	0	0	yellow	GAS2	By Line Weight	Color_2	1	0	Gas, Valves Linework
GAS2	1	0	0	yellow	GAS2	By Line Weight	Color_2	1	0	Gas, Valves Text
GRAIL1	1	0	0	blue	GUARDRAIL	By Line Weight	Color_5	1	0	Ex. Guardrail Linework
GRAIL2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Ex. Guardrail Text
GRID	1	0	0	251	DOTX2	By Line Weight	Color_251	1	0	Profile Grid
GRIDH	1	0	0	251	20DOT	By Line Weight	Color_251	1	0	Profile Grid
GRIDHV	1	0	0	251	20DOT	By Line Weight	Color_251	1	0	Profile Grid
GRIDHY	1	0	0	11	40DOT	By Line Weight	Color_11	1	0	Profile Grid
GRIDV	1	0	0	251	20DOT	By Line Weight	Color_251	1	0	Profile Grid
GRIDVY	1	0	0	11	40DOT	By Line Weight	Color_11	1	0	Profile Grid
Ground	1	0	0	green	WETLAND	By Line Weight	Color_3	1	0	Typical Section Ex. Ground Linework
HATCH	1	0	0	9	Continuous	By Line Weight	Color_9	1	0	Hatching Patterns
HGRD	1	0	0	252	DOTX2	By Line Weight	Color_252	1	0	Cross Sections Grid
HGRDH	1	0	0	252	20DOT	By Line Weight	Color_252	1	0	Cross Sections Grid
HGRDHY	1	0	0	11	40DOT	By Line Weight	Color_11	1	0	Cross Sections Grid
HGRDV	1	0	0	252	20DOT	By Line Weight	Color_252	1	0	Cross Sections Grid
HGRDVY	1	0	0	11	40DOT	By Line Weight	Color_11	1	0	Cross Sections Grid
HOLEPUNCH	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	
LCE Holepunch	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Border Sheet Punch Holes
LINECODE_TXT	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Carlson Generated Text of Linework
MAJ_CONTOURS	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Major Contour Linework
MARKER	1	0	0	magenta	Continuous	By Line Weight	Color_6	1	0	Carlson Point
Match Line	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	
MIN_CONTOURS	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Minor Contour Linework
MLine_LT	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	
MLine_RT	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	
ODOT Holepunch	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Border Sheet Punch Holes
P-ConPL	1	0	0	80	Continuous	By Line Weight	Color_80	1	0	Prop. Concept Plan
P-ConPR	1	0	0	80	Continuous	By Line Weight	Color_80	1	0	Prop. Concept Profile
P-FinPL	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Prop. Finish Plan
P-FinPR	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Prop. Finish Profile
P-PAVT	1	0	0	42	Continuous	By Line Weight	Color_42	1	0	
P-PLTxt	1	0	0	51	Continuous	By Line Weight	Color_51	1	0	Prop. Plan Text
P-PRTxt	1	0	0	51	Continuous	By Line Weight	Color_51	1	0	Prop. Profile Text
P-X_Pipe	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Cross Section Pipe
P-X_PipeTxt	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Cross Section Pipe Text
PARCELS	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Parcel Linework
PARCELS2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Parcel Text
PAVT1	1	0	0	green	DASHED	By Line Weight	Color_3	1	0	Ex. Pavement Linework
PAVT2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Ex. Pavement Text
PBASE	1	0	0	51	Continuous	By Line Weight	Color_51	1	0	AutoCAD- Profile Base
PEGC	1	0	0	green	DASHED	By Line Weight	Color_3	1	0	AutoCAD- Ex. Profile Grade
PEGCT	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	AutoCAD- Ex. Profile Grade Text
PGC	1	0	0	~~31~~	Continuous	By Line Weight	Color_31	1	0	AutoCAD- Prop. Profile Grade
PGCT	1	0	0	~~31~~	Continuous	By Line Weight	Color_31	1	0	AutoCAD- Prop. Profile Grade Text
PGRID	1	0	0	~~31~~	Continuous	By Line Weight	Color_31	1	0	AutoCAD- Profile Grid
PGRIDT	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	AutoCAD- Profile Grid Elevation
Pipetrench	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Drainage-Pavement Restoration
PL1	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Property Line Linework
PL2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Property Line Text
PLAY1	1	0	0	green	HIDDEN2	By Line Weight	Color_3	1	0	Ex. Playground Equip. Linework

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Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	VP Freeze	Description
PLAY2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Ex. Playground Equip. Text
PNTDESC	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Carlson Point Description
PNTELEV	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Carlson Point Elevation
PNTMARK	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Carlson Point Mark
PNTNO	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Carlson Point Number
PNTS	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Carlson Point
PO	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Property Owners
PRF_View	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Profile View
PROF_INFO	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	AutoCAD
PROP_BERM1	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Proposed Berm Linework
PROP_BERM2	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Proposed Berm Text
PROP_CL_CONSTR1	1	0	0	11	CENTER	By Line Weight	Color_11	1	0	Proposed CL Construction Linework
PROP_CL_CONSTR2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Proposed CL Construction Text
PROP_CURB1	1	0	0	52	Continuous	By Line Weight	Color_52	1	0	Proposed Curb Linework
PROP_CURB2	1	0	0	52	Continuous	By Line Weight	Color_52	1	0	Proposed Curb Text
PROP_DITCH1	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Ditch Linework
PROP_DITCH2	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Ditch Text
PROP_DRAIN1	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Catch Basins, MH's, Inlets & Pipes Linework
PROP_DRAIN2	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Catch Basins, MH's, Inlets & Pipes Text
PROP_Drive1	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Drive Linework
PROP_Drive2	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Drive Text
PROP_EASEMENT1	1	0	0	10	DASHED	By Line Weight	Color_10	1	0	Proposed Easements Linework
PROP_EASEMENT2	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	Proposed Easements Text
PROP_GRAIL1	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Guardrail Linework
PROP_GRAIL2	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Guardrail Text
PROP_PAVT1	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Pavement Linework
PROP_PAVT2	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Pavement Text
PROP_PVMT_REPAIR1	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Pavement Repair Linework
PROP_PVMT_REPAIR2	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Pavement Repair Text
PROP_PVMTMARKINGS1	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Pavement Marking Linework
PROP_PVMTMARKINGS2	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Pavement Marking Text
PROP_RW1	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	Proposed Right of Way Linework
PROP_RW2	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	Proposed Right of Way Text
PROP_SAN1	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Sanitary
PROP_SAN2	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	Proposed Sannitary Text
PROP_SIGNAL_CONDUIT1	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Signal Conduit Linework
PROP_SIGNAL_CONDUIT2	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Signal Conduit Text
PROP_SIGNAL1	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Pavement Marking Linework
PROP_SIGNAL2	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Pavement Marking Text
PROP_SIGNS1	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Signs
PROP_SIGNS2	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Signs Text
PROP_STRUCT1	1	0	0	51	Continuous	By Line Weight	Color_51	1	0	Proposed Bridge Structures Linework
PROP_STRUCT2	1	0	0	51	Continuous	By Line Weight	Color_51	1	0	Proposed Bridge Structures Text
PROP_TREEREMOVE1	1	0	0	72	Continuous	By Line Weight	Color_72	1	0	Tree Removal
PROP_TREEREMOVE2	1	0	0	72	Continuous	By Line Weight	Color_72	1	0	Tree Removal Text
PROP_WALKS1	1	0	0	13	Continuous	By Line Weight	Color_13	1	0	Proposed Concrete or Asph. Walkways Linework
PROP_WALKS2	1	0	0	13	Continuous	By Line Weight	Color_13	1	0	Proposed Concrete or Asph. Walkways Text
PROP_WALLS1	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Concrete Walls, Headwalls or Wingwalls Linework
PROP_WALLS2	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Concrete Walls, Headwalls or Wingwalls Text
PROP_WAT1	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Water & Valves, MH's Linework
PROP_WAT2	1	0	0	141	Continuous	By Line Weight	Color_141	1	0	Proposed Water & Valves, MH's Text
PSN-DRAIN1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Existing Stm. Pipe Network
PSN-DRAIN2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Existing Stm. Pipe Network
PSN-PROP_DRAIN1	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Stm. Pipe Network
PSN-PROP_DRAIN2	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Proposed Stm. Pipe Network
PSN-SAN1	1	0	0	40	USAN1	By Line Weight	Color_40	1	0	Existing San. Pipe Network
PSN-SAN2	1	0	0	40	USAN1	By Line Weight	Color_40	1	0	Existing San. Pipe Network
PSN-WAT1	1	0	0	blue	PHANTOM2	By Line Weight	Color_5	1	0	Existing Wtr. Pipe Network
PSN-WAT2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Existing Wtr. Pipe Network
PSProf_EGC	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Paper Space Profile Ex. Grade CL Elev
PSPROF_GRIDELEV	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Paper Space Profile Grid Elev
PSProf_Sta	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Paper Space Stationing
PVGRID	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	AutoCAD

Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	VP Freeze	Description
PVMTMARKINGS1	1	0	0	30	HIDDEN2	By Line Weight	Color_30	1	0	Existing Traffic Control Linework
PVMTMARKINGS2	1	0	0	30	Continuous	By Line Weight	Color_30	1	0	Existing Traffic Control Text
REFERENCE1	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Reference Boxes Linework
REFERENCE2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Reference Boxes Text
RIDGE1	1	0	0	cyan	DIVIDE	By Line Weight	Color_4	1	0	Existing For Mound Linework
RIDGE2	1	0	0	cyan	Continuous	By Line Weight	Color_4	1	0	Existing For Mound Text
Road Name_Sheet View	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Model Space Plan Sheet Layout
RR1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Existing Railroad Tracks Linework
RR2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Existing Railroad Tracks Text
RW1	1	0	0	white	RW_LINE	By Line Weight	Color_7	1	0	Existing Right of Way Linework
RW2	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Existing Right of Way Text
SAN1	1	0	0	40	USAN1	By Line Weight	Color_40	1	0	Sanitary Sewer, MH's Pump Stations Linework
SAN2	1	0	0	40	Continuous	By Line Weight	Color_40	1	0	Sanitary Sewer, MH's Pump Stations Text
SECLINE1	1	0	0	21	DASHED2	By Line Weight	Color_21	1	0	Section Lines
SECLINE2	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Section Lines Text
SIGN1	1	0	0	30	HIDDEN2	By Line Weight	Color_30	1	0	Existing Traffic Signs
SIGN2	1	0	0	30	Continuous	By Line Weight	Color_30	1	0	Existing Traffic Signs Text
SIGNAL_CONDUIT1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Existing Signal Conduit Linework
SIGNAL_CONDUIT2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Existing Signal Conduit Text
SIGNAL1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Existing Traffic Control Linework
SIGNAL2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Existing Traffic Control Text
SOLIDHATCH	1	0	0	80	Continuous	By Line Weight	Color_80	1	0	Shade for Proposed Drainage Pipes & Structures
SPOTEL1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Spot Elevation
SRF-CORR	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Surface Corridor
SRF-CORR-PROP	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	C3D - Surface Corridor
SRF-FLT	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Surface Breaklines
SRF-SL	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Surface Section Lines
SRF-VIEW	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Surface Triangles
STALBL	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Stationing
STAPTS	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	C3D - Stationing
STLINE1	1	0	0	10	PHANTOMX2	By Line Weight	Color_10	1	0	State Line Linework
STLINE2	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	State Line Text
STRUCT1	1	0	0	yellow	HIDDEN	By Line Weight	Color_2	1	0	Existing Bridge Structures Linework
STRUCT2	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Existing Bridge Structures Text
SURVEY1	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Nails, R.R. Spikes, Etc. on Planview, Bench Marks Linework
SURVEY2	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Nails, R.R. Spikes, Etc. on Planview, Bench Marks Text
Table	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Table Linework
Table_Headings	1	0	0	13	Continuous	By Line Weight	Color_13	1	0	Table Headings Text
Table_Text	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Table Text
TEL1	1	0	0	30	TELE_LINE	By Line Weight	Color_30	1	0	Tel., MH's Linework
TEL2	1	0	0	30	Continuous	By Line Weight	Color_30	1	0	Tel., MH's Text
Text	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	
TEXT-S	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	General Notes-Summaries Text
Title Block	1	0	0	white	Continuous	By Line Weight	Color_7	1	0	Border Block Layer
Titlename	1	0	0	10	Continuous	By Line Weight	Color_10	1	0	Border Block Layer
Titles	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Border Block Layer
TREE1	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Existing Trees, Bushes Linework
TREE2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Existing Trees, Bushes Text
TRIMLINE	1	0	0	71	Continuous	By Line Weight	Color_71	1	0	For Pavement Trimlines, Pavement Repair, Wearing Course Removal, Etc.
TWPLINE1	1	0	0	11	DASHEDX2	By Line Weight	Color_11	1	0	Township Line
TWPLINE2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Township Line Text
UTIL1	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Poles and Anchors Linework
UTIL2	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Poles and Anchors Text
VEGE1	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Existing Brushline and Wooded Area Linework
VEGE2	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Existing Brushline and Wooded Area Text
Viewport	1	0	0	red	Continuous	By Line Weight	Color_1	0	0	Paper Space Viewport
WALKS1	1	0	0	12	HIDDEN2	By Line Weight	Color_12	1	0	Existing Concrete or Asph. Walkways Linework
WALKS2	1	0	0	12	Continuous	By Line Weight	Color_12	1	0	Existing Concrete or Asph. Walkways Text
WALLS1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Existing Concrete Walls, Headwalls or Wingwalls Linework
WALLS2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Existing Concrete Walls, Headwalls or Wingwalls Text
WAT1	1	0	0	blue	PHANTOM2	By Line Weight	Color_5	1	0	Water and Valves, MH's Linework
WAT2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Water and Valves, MH's Text
X-CATV1	1	0	0	50	Continuous	By Line Weight	Color_50	1	0	Cross Section - Cablesystem, Etc., MHS Linework

Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	VP Freeze	Description
X-CATV2	1	0	0	50	Continuous	By Line Weight	Color_50	1	0	Cross Section - Cablesystem, Etc., MHS Text
X-DRAIN1	1	0	0	20	HIDDEN2	By Line Weight	Color_20	1	0	Cross Section - Existing Catch Basins, MH's, Inlets & Pipes Linework
X-DRAIN2	1	0	0	20	Continuous	By Line Weight	Color_20	1	0	Cross Section - Existing Catch Basins, MH's, Inlets & Pipes Text
X-ELEC1	1	0	0	40	Continuous	By Line Weight	Color_40	1	0	Cross Section - Electric, MHS Linework
X-ELEC2	1	0	0	40	Continuous	By Line Weight	Color_40	1	0	Cross Section - Electric, MHS Text
X-GAS1	1	0	0	40	GAS2	By Line Weight	Color_40	1	0	Cross Section - Gas, Valves Linework
X-GAS2	1	0	0	40	GAS2	By Line Weight	Color_40	1	0	Cross Section - Gas, Valves Text
X-P-ASSEMBLY	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Cross Section - Proposed Assemblies (Typ. Sec.)
X-P-BERM1	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Cross Section - Proposed Berm Linework
X-P-BERM2	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Cross Section - Proposed Berm Text
X-P-CURB1	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Cross Section - Proposed Curb Linework
X-P-CURB2	1	0	0	41	Continuous	By Line Weight	Color_41	1	0	Cross Section - Proposed Curb Text
X-P-DRAIN1	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Cross Section - Proposed Catch Basins, MH's, Inlets & Pipes Linework
X-P-DRAIN2	1	0	0	11	Continuous	By Line Weight	Color_11	1	0	Cross Section - Proposed Catch Basins, MH's, Inlets & Pipes Text
X-P-WTR1	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Cross Section - Proposed Water and Valves, MH's Linework
X-P-WTR2	1	0	0	21	Continuous	By Line Weight	Color_21	1	0	Cross Section - Proposed Water and Valves, MH's Text
X-SAN1	1	0	0	40	USAN1	By Line Weight	Color_40	1	0	Cross Section - Sanitary Sewer, MH's Pump Stations Linework
X-SAN2	1	0	0	40	Continuous	By Line Weight	Color_40	1	0	Cross Section - Sanitary Sewer, MH's Pump Stations Text
X-Section View	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	Cross Section View
X-SOLIDHATCH	1	0	0	80	Continuous	By Line Weight	Color_80	1	0	Cross Section - Shade for Proposed Drainage Pipes & Structures
X-STRUCT1	1	0	0	28	Continuous	By Line Weight	Color_28	1	0	Cross Section - Existing Bridge Structures Linework
X-STRUCT2	1	0	0	28	Continuous	By Line Weight	Color_28	1	0	Cross Section - Existing Bridge Structures Text
X-TEL1	1	0	0	50	Continuous	By Line Weight	Color_50	1	0	Cross Section - Tel., MH's Linework
X-TEL2	1	0	0	50	Continuous	By Line Weight	Color_50	1	0	Cross Section - Tel., MH's Text
X-WAT1	1	0	0	blue	PHANTOM2	By Line Weight	Color_5	1	0	Cross Section - Water and Valves, MH's Linework
X-WAT2	1	0	0	blue	Continuous	By Line Weight	Color_5	1	0	Cross Section - Water and Valves, MH's Text
XEG	1	0	0	green	DASHED2	By Line Weight	Color_3	1	0	Existing Cross Section Grade
XEGCT	1	0	0	green	Continuous	By Line Weight	Color_3	1	0	Existing Cross Section Grade Text
XGrid	1	0	0	8	Continuous	By Line Weight	Color_8	1	0	Grid for X-Sections
XGridT	1	0	0	yellow	Continuous	By Line Weight	Color_2	1	0	Text on X-Sections
XPG	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Cross Section Grade
XPGT	1	0	0	31	Continuous	By Line Weight	Color_31	1	0	Proposed Cross Section Grade Text
XS_INFO	1	0	0	red	Continuous	By Line Weight	Color_1	1	0	AutoCAD

The format of these layers, (naming, colors, linetypes, lineweights; ect.), SHALL NOT BE CHANGED IN ANY WAY.

SPECIAL NOTE – Lineweights and colors are to be strictly adhered to as all LCE projects that are printed/plotted, are color dependent. Changing the lineweight of a layer may affect the printing outcome if the lineweight used is higher (example: 0.8000 mm) than a specific layer's color that is used in the LCE standard .CTB file(example: 0.5000 mm).

The Description column in the table above shall be followed as to which CAD objects are to be placed on which layers.

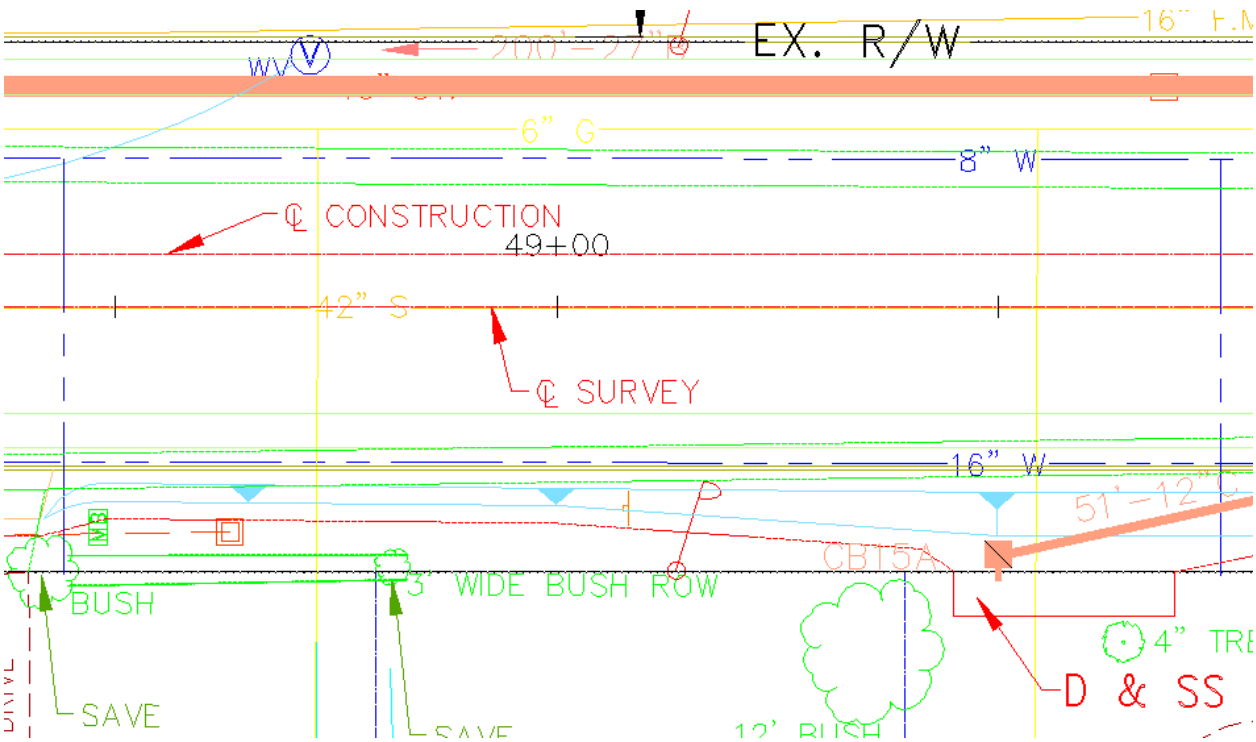
SECTION 4 - DIMENSION SPECIFICATION

The LCEO uses associative dimensioning throughout their projects, which is explained as follows:

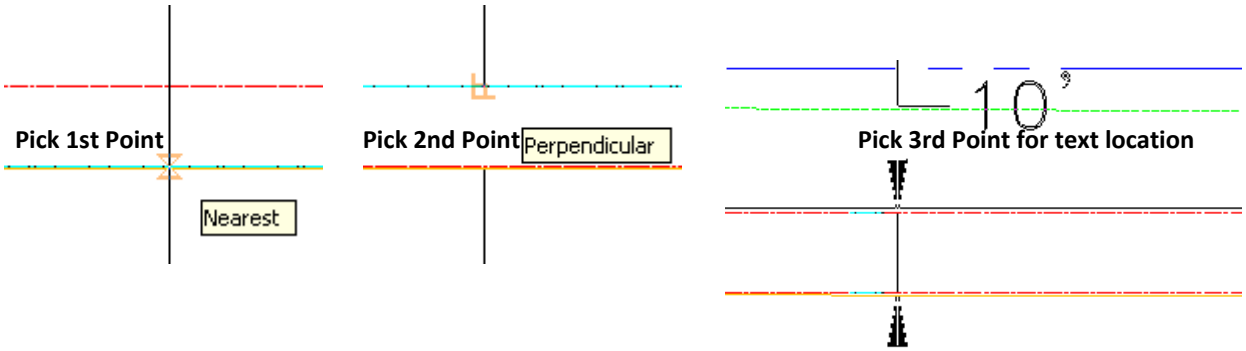
- *Associative dimensions.* Automatically adjust their locations, orientations, and measurement values when the geometric objects, (grip points, arrows or text), associated with them are modified. Dimensions in a layout may be associated to objects in model space. By default, Associative Dimensioning is turned on in the AutoCAD template file provided with the CAD Standards files.

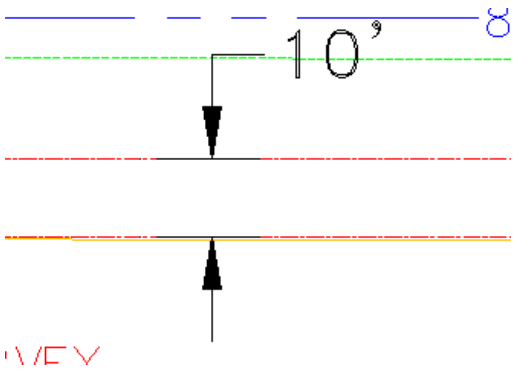
It has been determined that, for use in LCE projects, associative dimensioning is more flexible, and makes working with dimensions that much easier for manipulation and updating purposes. The following example reflects this ease of use.

Here is a typical LCE project plan view:



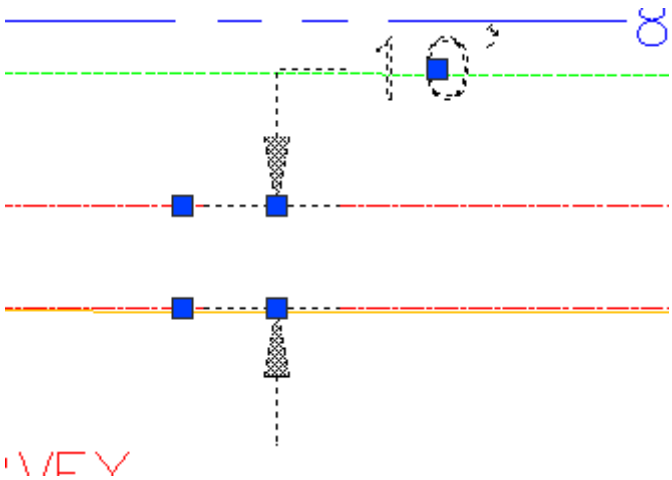
Just use a typical dimension, (linear dimension), between two points as an example:



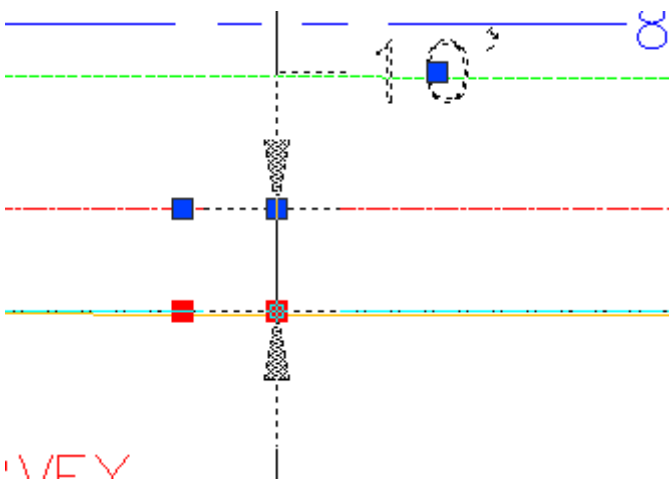


Now that you have a dimension that's in an associative state, you can do many things to manipulate how the dimension displays.

Pick the dimension once, and see the grips appear:

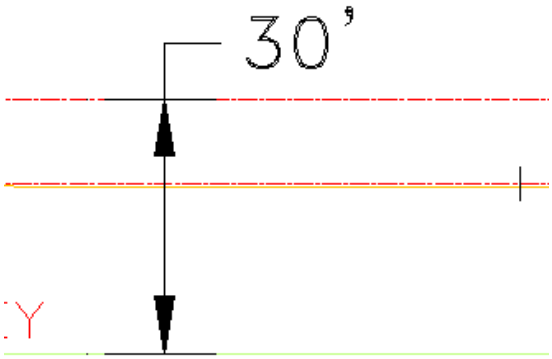


Hold down the shift key on the keyboard and select two of the grips from the same side of the dimension. Like so-(they should turn red):



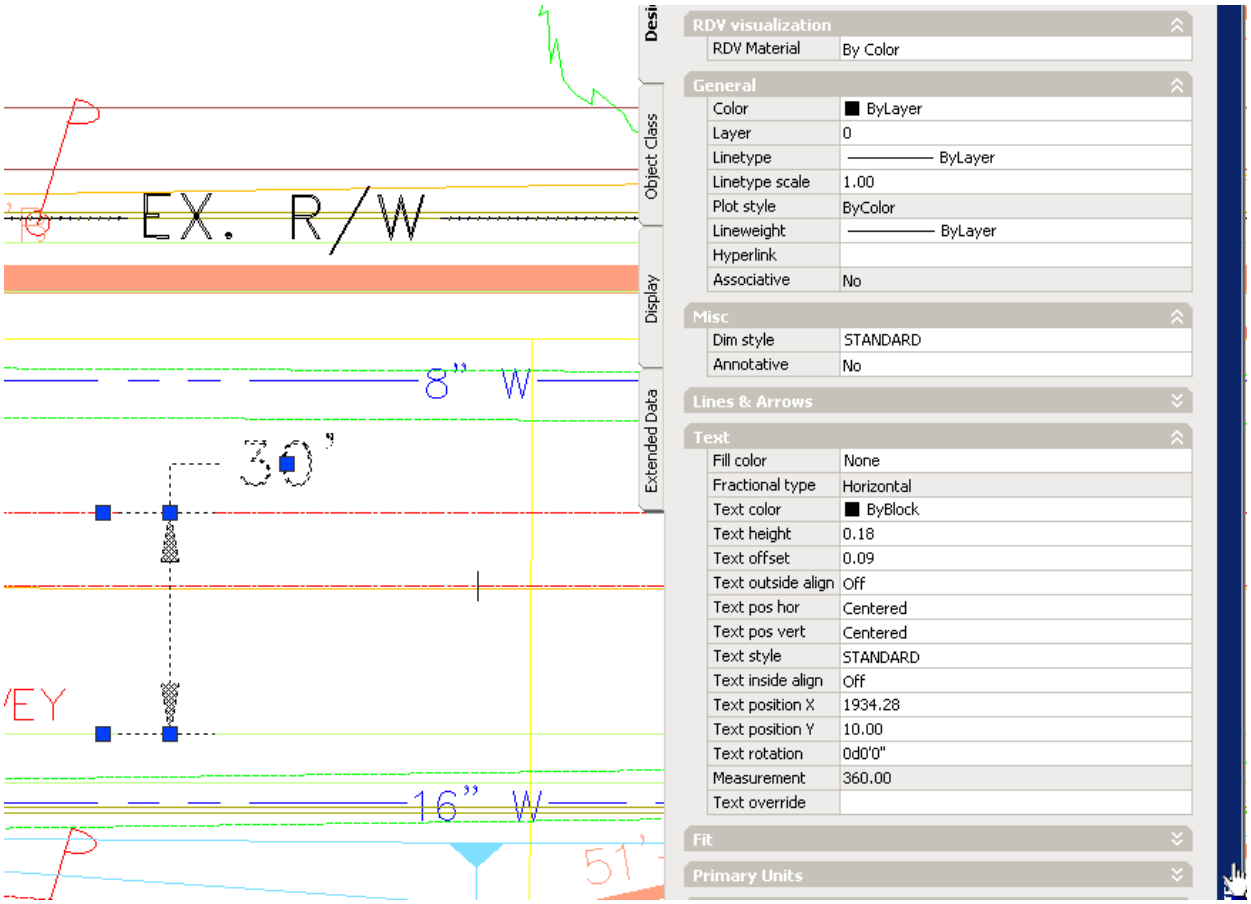
Now let go of the Shift key and pick one of the red grips and drag it anywhere, in this case, down.

You should see the numbers change as you drag it. You can then, using a snap mode, snap it to some other object to redefine the dimension. In this case, it will be dragged to the proposed pavement line parallel to the baseline (Be careful not to snap it to a 3 dimensional object, as this can cause problems):

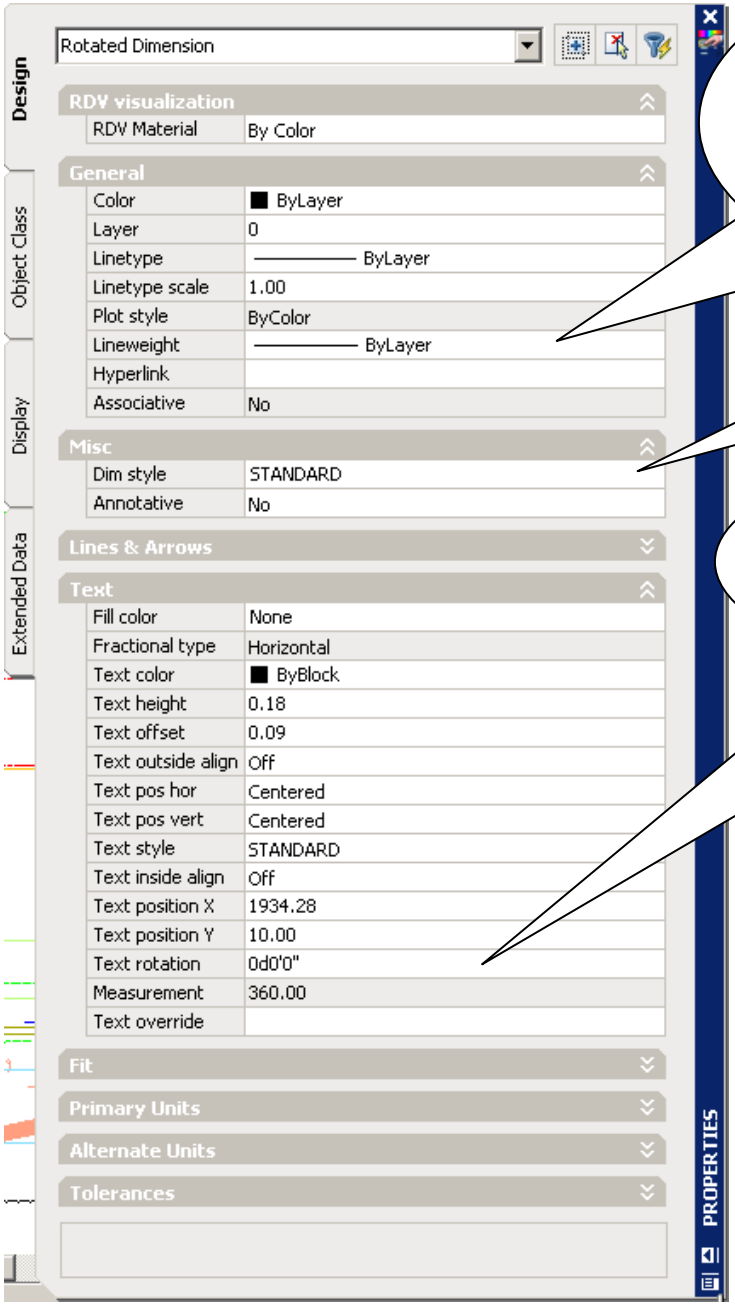


(NOTE-Pictures may not reflect the final versions of LCE Dimension Styles that are in the LCE acad.dwt file).

It automatically updated the text, without any intervention from you. <u>ALL DIMENSIONS</u> are treated this way when associative dimensioning is enabled. You can also manipulate the properties of an associative dimension. If you highlight (pick) the dimension again, and bring up the properties of the dimension, you'll see in the following examples of what can be done:



Let's take a closer look:



Color, linetype, lineweight, linetype scale are governed by the layer the dimension is on. DO NOT MANIPULATE THE DIMENSION IN THIS WAY. When properly layered, dimensions will display and plot correctly.

LCE Standard will be used for existing and proposed.

Text Rotation and Text Override are easy and quick manipulations of dimension text without a lot of fussing.

Many of the dimension variables can be changed or manipulated from this point, however; the LCE Standard dimension style will handle most if not all the needs of the dimensions you use.

<u>DIMSCALE</u> – This is the command for the overall scale for all dimensions. It should be set to 20 by default.

You can include prefixes, suffixes, and user-supplied text in dimensions.

At the text prompt, while creating the dimension, you enter the following format string:

<> H7/h6\XSee Note 26\P[ ]

The angle brackets represent the primary units, and the square brackets represent the alternate units. The \X separates text above the dimension line from text below the dimension line. The \P is a paragraph break.

The resulting text appears as follows:

Further explanations are found in the AutoCAD help. Just do a search on "Stacked Dimensions".

SECTION 5 – LEADER AND LABEL SPECIFICATION

Leaders and labels are a part of the LCE Standards in all LCE project plans, profiles and cross sections. Be sure to set the pre-defined LCE Standard dimension style or multi-leader style as current based on labeling for existing or proposed.

QUICK LEADER – Pre-Defined LCE Standard Dimension Styles

In Civil 3D, the template file from the LCE has pre-defined dimension styles, and quick leader is controlled under the dimension style. Here are the dimension style names to be used:

LCE Standard (Ex.) – Uses L120 text style

LCE Standard (Prop.) – Uses L140 text style

MULTI-LEADER – Pre-Defined LCE Standard Dimension Styles

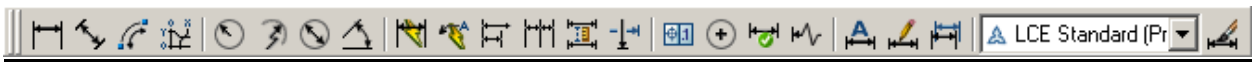
The Civil 3D's template file from the LCE has a pre-defined multi-leader style (note-the multi-leader style is separate from the dimension style). Here are the names:

LCE Standard (Ex.) – Uses L120 text style

LCE Standard (Prop.) – Uses L140 text style

DIMENSION AND MULTI-LEADER TOOLBARS

Dimension Toolbar:



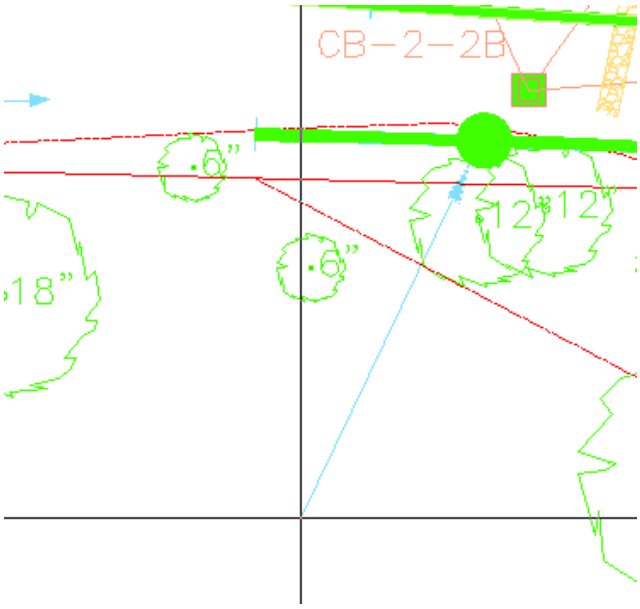
Multi-Leader Toolbar:

Each icon on the toolbar has a tool tip that comes up when you mouse over them:

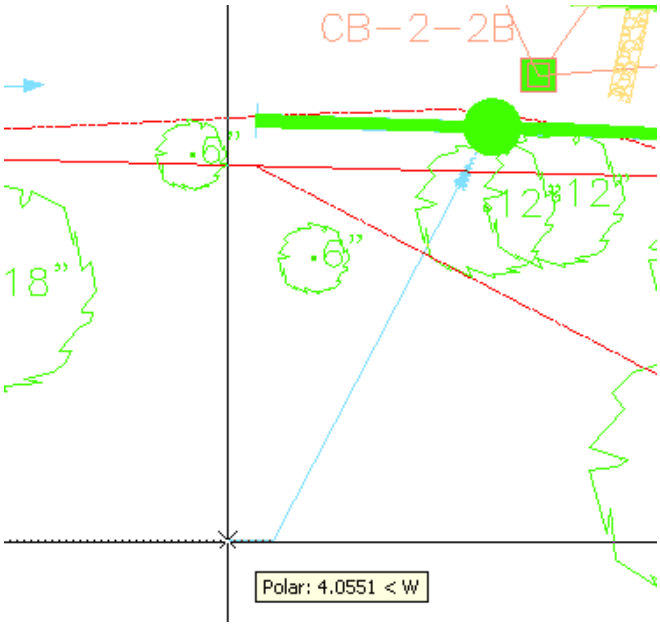
Each one is pretty self-explanatory.

QUICK LEADER

Using the quick leader command or icon, , begin by clicking the location where you want to begin your leader arrow:

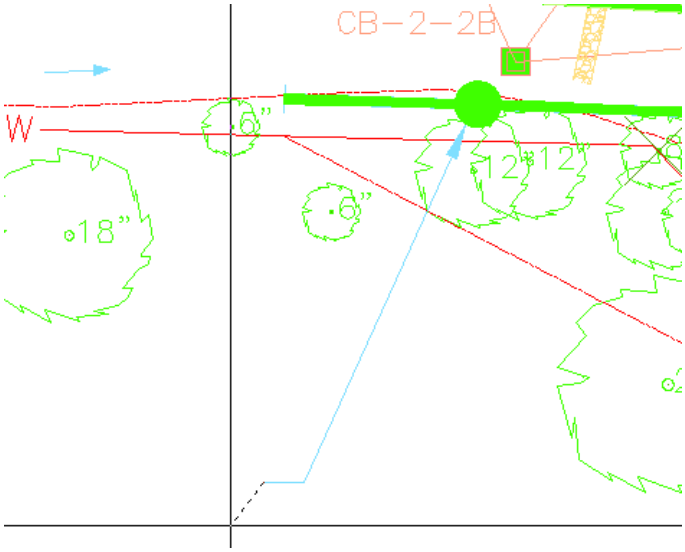


Next, pick the location of where you want the first leg of the leader line to end:



The second leg of the line will end the leader to connect to the text label.

Select the endpoint of the second line:

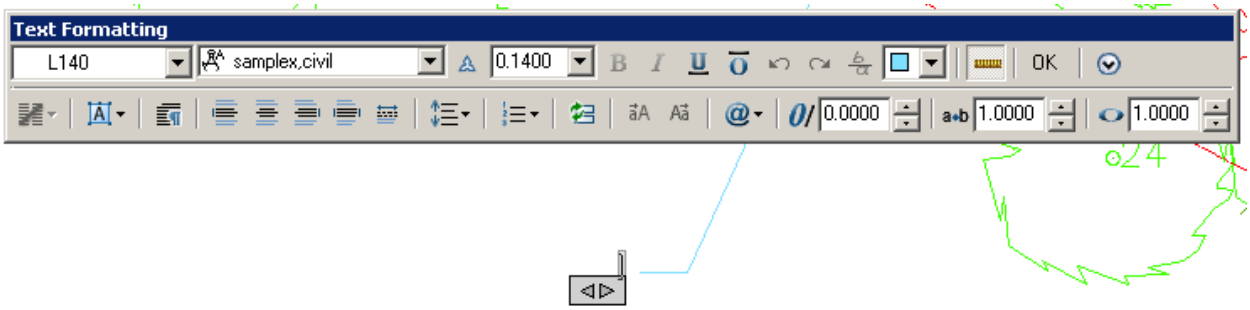


Hit enter and you are prompted for the text width.

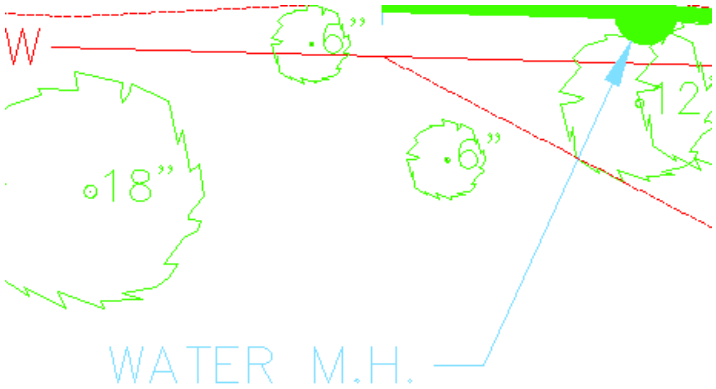
```
Specify next point:
Specify next point:
Specify next point:

Specify text width <0.0000>:
```

Just hit enter again and then, once more and you should see this:



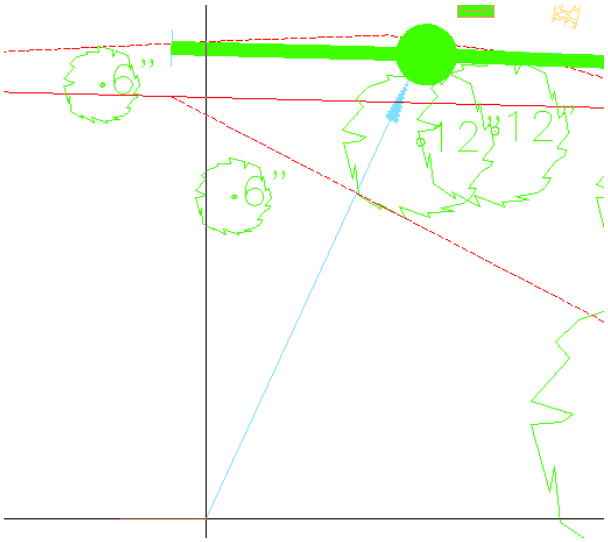
This is the multi-line text editor. Enter the text you wish to use as a label and click OK:



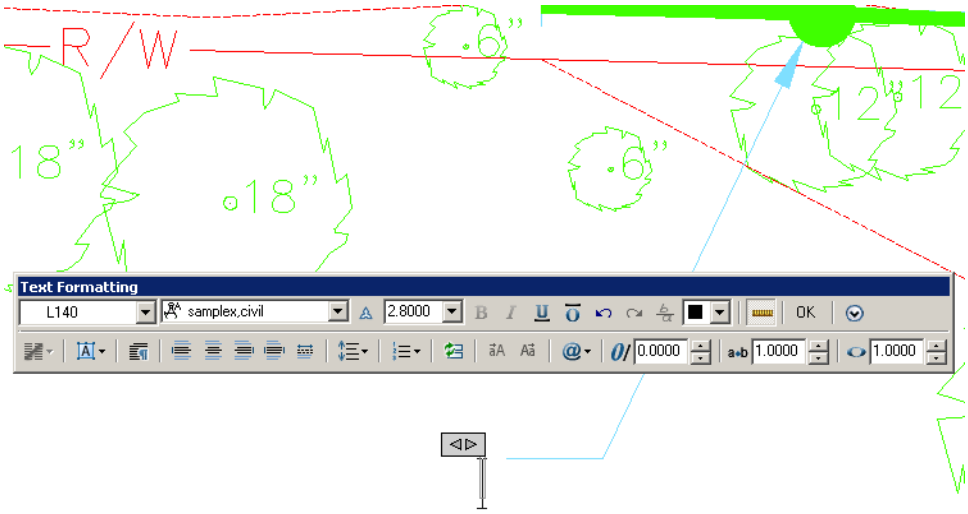
Here is your finished leader w/label. This label w/leader is now fully integrated for ease of manipulation, such as moving or revising.

MULTI-LEADER

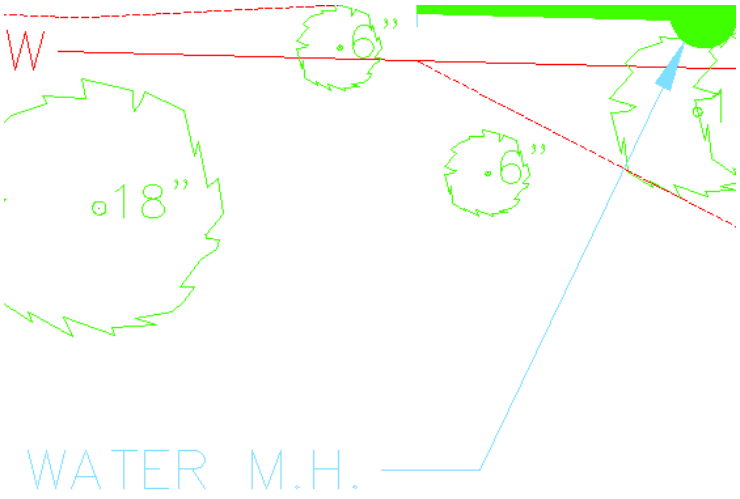
Using the multi-leader command or icon, , begin by clicking the location where you want to begin your leader arrow:



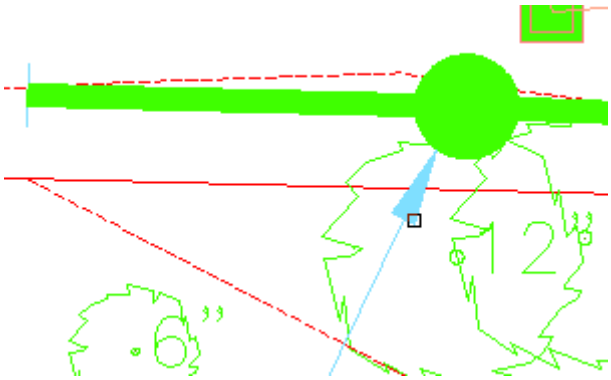
Next, pick the location of where you want the leader line to end and the mtext editor appears:



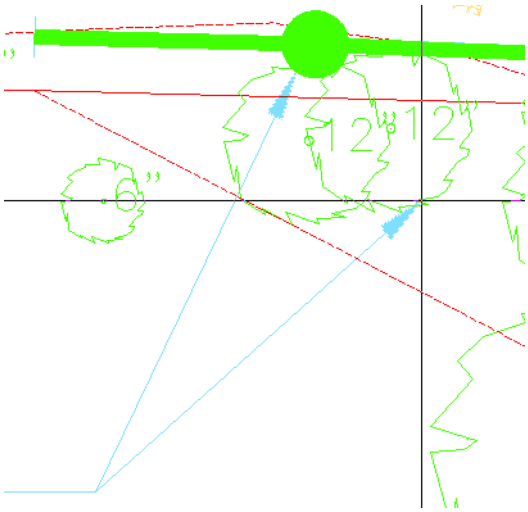
Type in the text for your label and click OK:



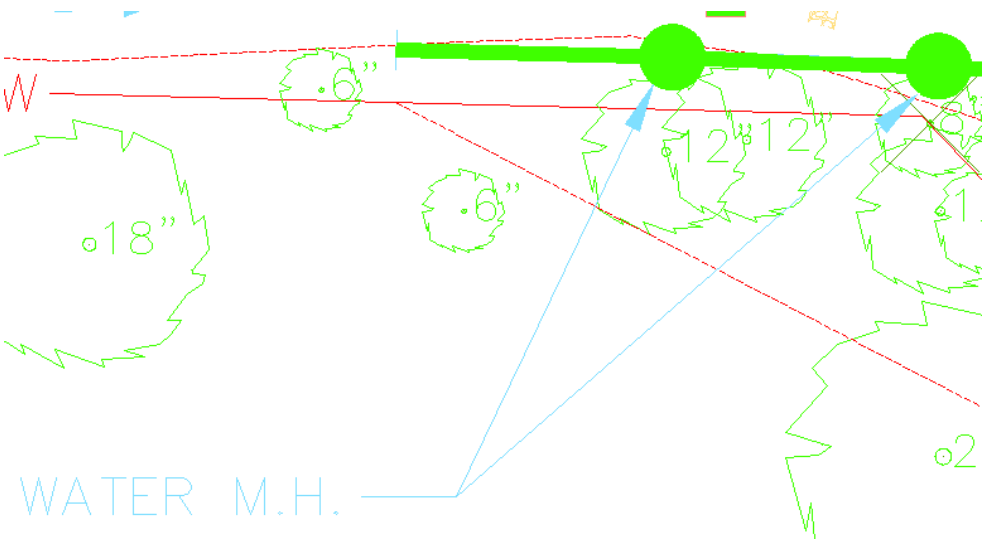
Now there are many things you can do here. If you want to add another leader to the one you just created, click this icon, , and select the leader line at the arrow:



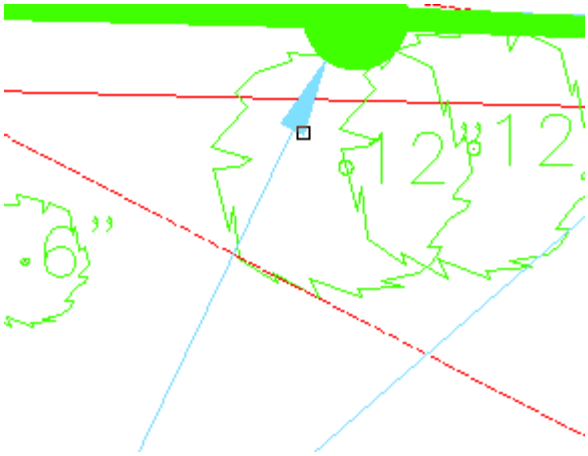
Drag the second leader to the desired location and hit enter, as when you pick the location for the second leader, the command continues until you hit enter:



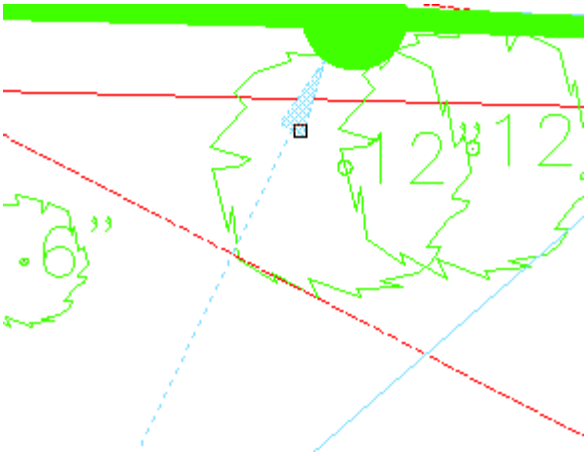
You now have a multi-leader label:



You can also delete a second leader like so. Pick this icon from the toolbar, , and select the leader line you wish to delete. It should show the leader as follows:

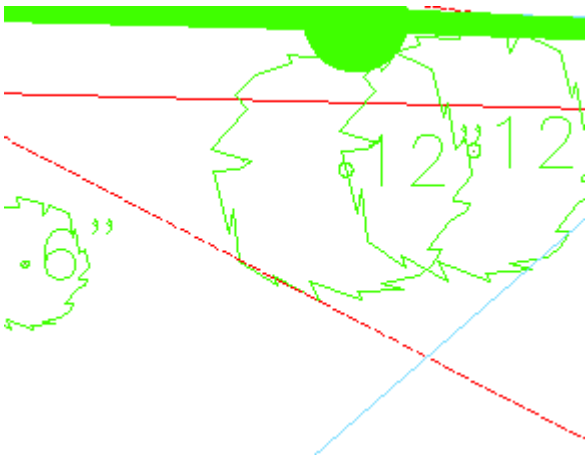


Before selection…

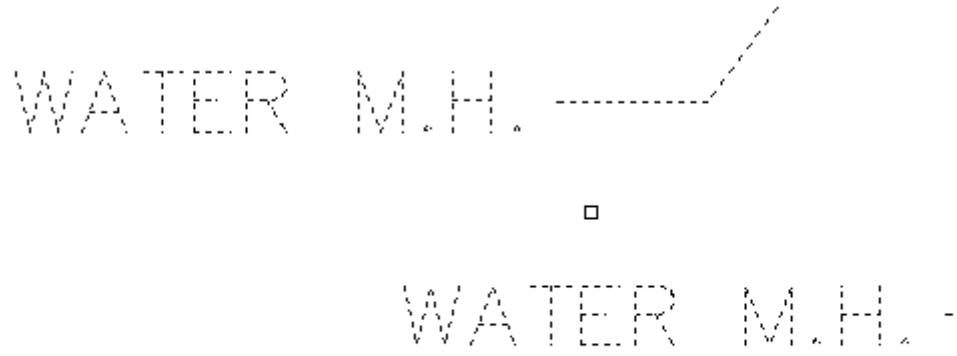


After Selection…

Hit Enter and the leader is gone:



You can align multi-leaders (in other words, line up one label with another). Select both leaders using this icon, :



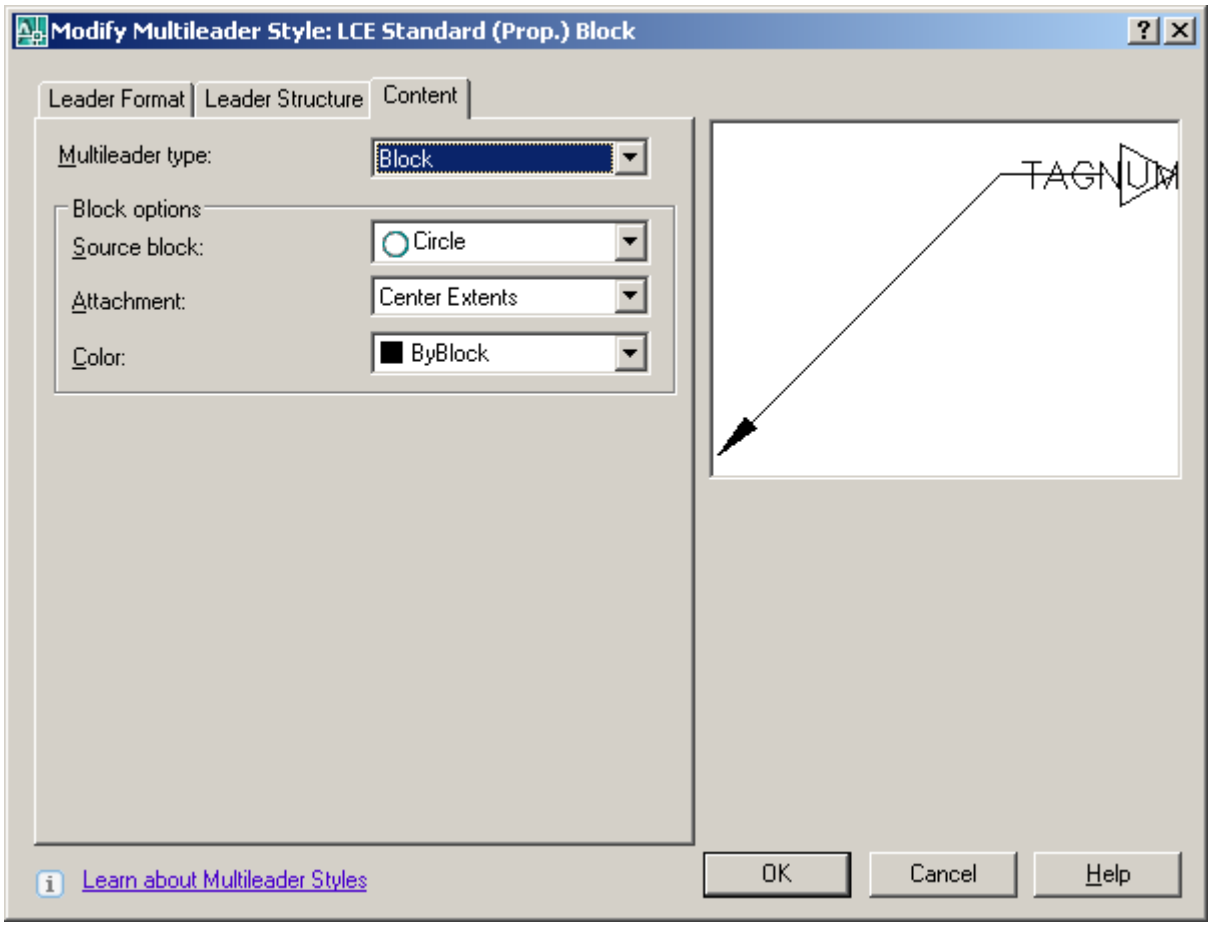
Hit Enter, then select the leader label you wish to align to:

Hit Enter and you're done. Your labels are aligned:

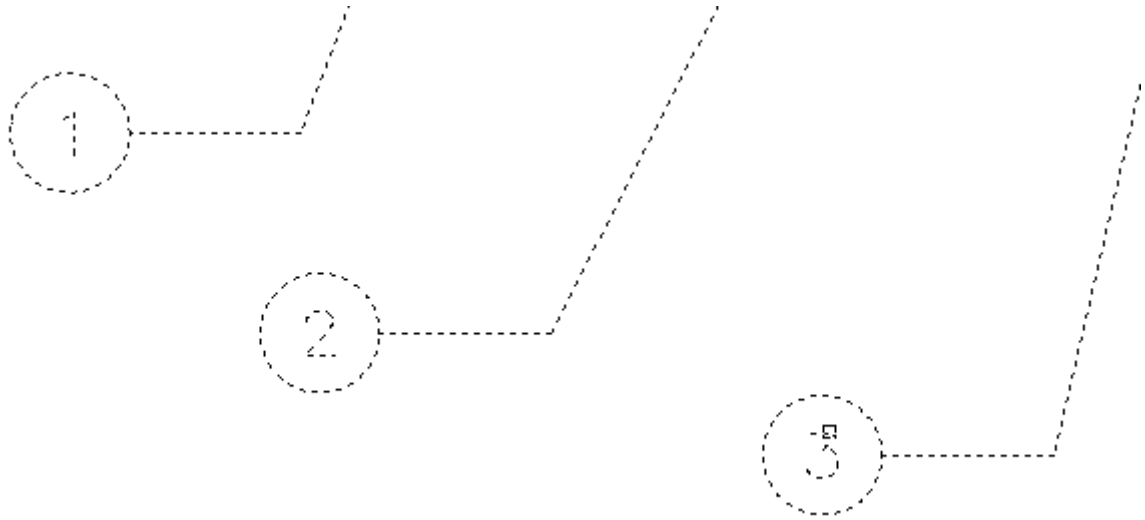
You can also collect your multi-leader labels.

Multi-leader objects with blocks as content can be collected and attached to one landing line. Using the MLEADERCOLLECT command, multi-leaders can be collected horizontally, vertically, or within a specified area depending on your drawing needs.

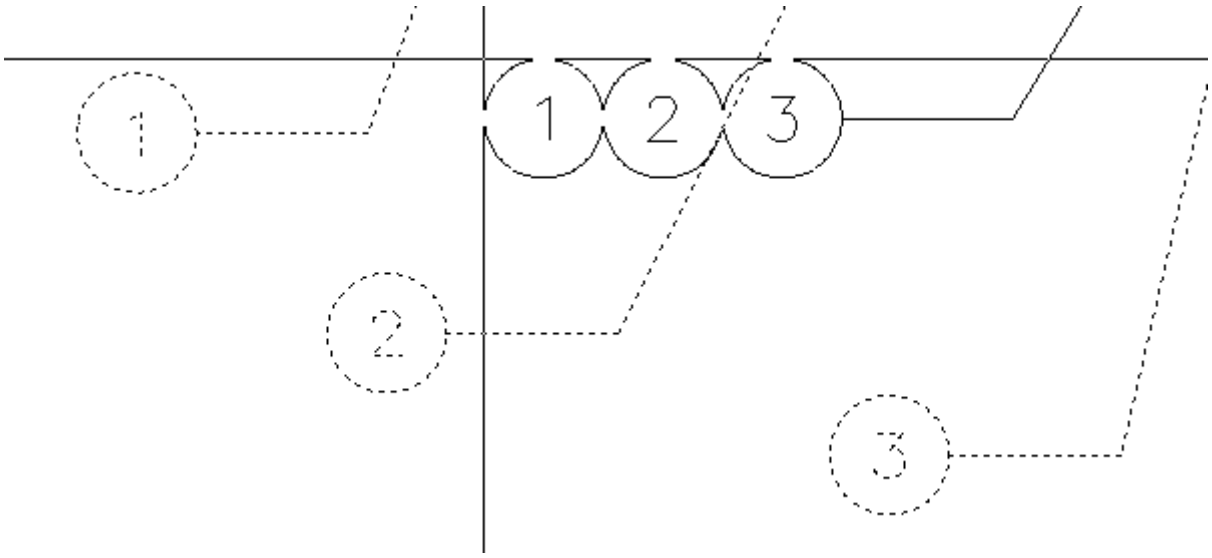
For example, if you have multi-leaders with the custom block content, (note-you can create your own multi-leader style with customized block content, as long as they are based on one of the LCE Standard Multi-leader styles), as shown:



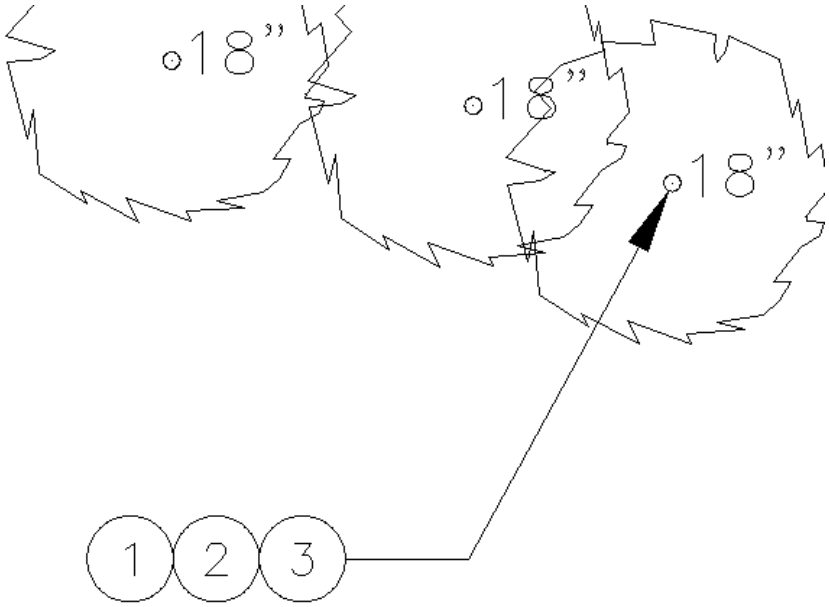
Click the Collect Multileaders icon, , then simply select the block content style multi-leaders that you wish to collect:



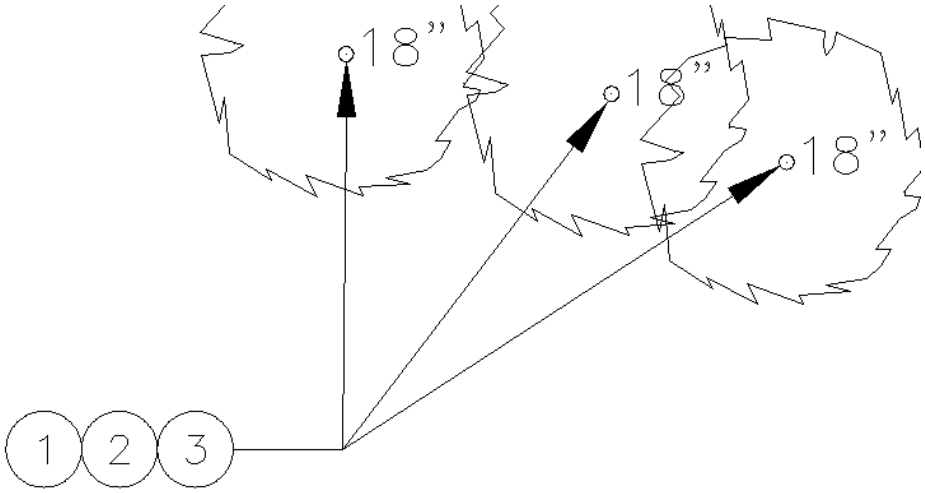
Hit Enter and select the location of your new leader:



And, now you have a new collected leader:



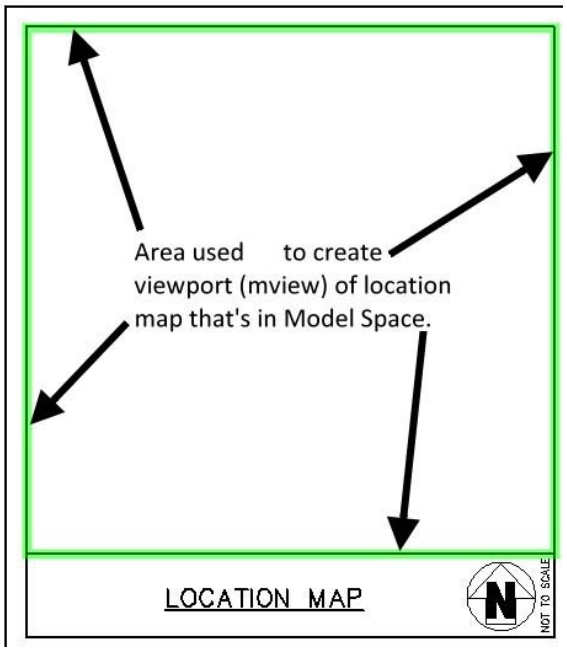
You can even add more leaders to this one:

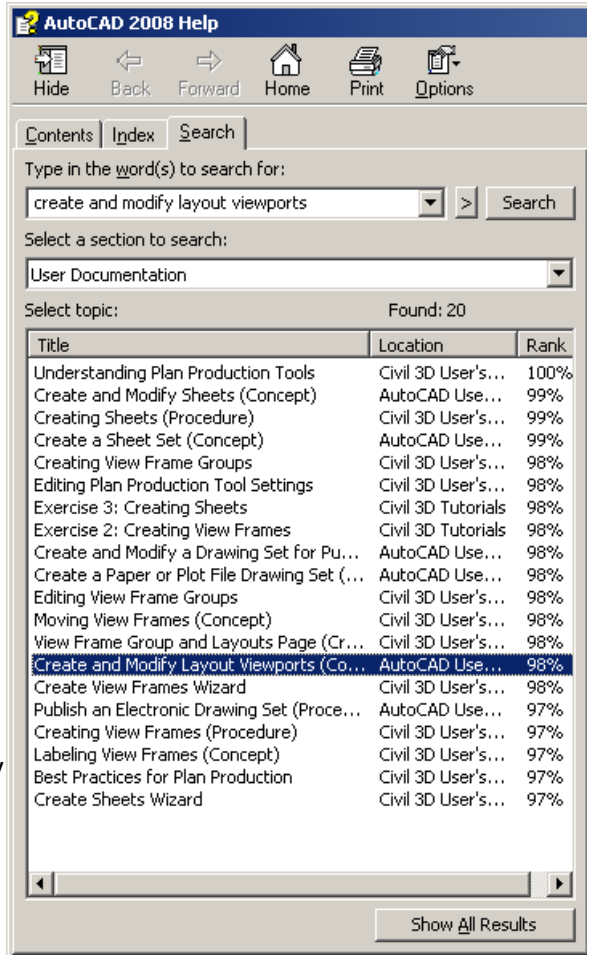


BLOCK SPECIFICATIONS

TITLE BLOCK

Location Map:



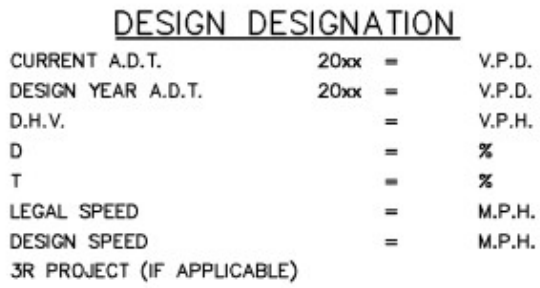


Use AutoCAD Help and type in “create and modify layout viewports” under search for more detailed help or consult the LCE’s CAD Procedural Manual for use of Map Book procedures.

Design Designation Table:

DESIGN DESIGNATION				
CURRENT A.D.T.	20xx	=		V.P.D.
DESIGN YEAR A.D.T.	20xx	=		V.P.D.
D.H.V.		=		V.P.H.
D		=		%
T		=		%
LEGAL SPEED		=		M.P.H.
DESIGN SPEED		=		M.P.H.
3R PROJECT (IF APPLICABLE)				

2008 AutoCAD Table (Editable Cells)



DESIGN DESIGNATION			
CURRENT A.D.T.	20xx	=	V.P.D.
DESIGN YEAR A.D.T.	20xx	=	V.P.D.
D.H.V.		=	V.P.H.
D		=	%
T		=	%
LEGAL SPEED		=	M.P.H.
DESIGN SPEED		=	M.P.H.
3R PROJECT (IF APPLICABLE)			

As it looks in Plot Preview

To edit table, simply double-click desired cell(s), and edit or add desired text. <u>DO NOT CHANGE THE PROPERTIES OF THIS TABLE (LAYER, LINETYPE, COLOR; ETC.), AS THE TABLE’S PROPERTIES ARE ALREADY PRE-SET.</u>

Sheet Index Table:

INDEX OF SHEETS	
TITLE SHEET	1
TYPICAL SECTIONS	X
GENERAL NOTES	X
GENERAL SUMMARY	X
SUB-SUMMARIES AND DETAILS	X
STORM WATER POLLUTION PREVENTION PLAN	X
PLAN AND PROFILE SHEETS	X
CROSS SECTION SHEETS	X
RIGHT OF WAY SUMMARY	X

2008 AutoCAD Table (Editable Cells)

INDEX OF SHEETS

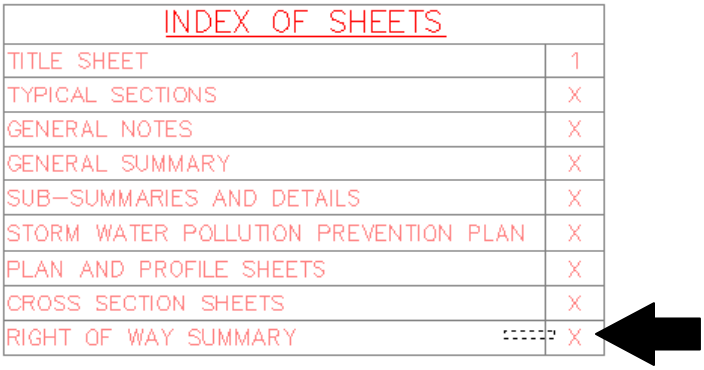
TITLE SHEET	1
TYPICAL SECTIONS	X
GENERAL NOTES	X
GENERAL SUMMARY	X
SUB-SUMMARIES AND DETAILS	X
STORM WATER POLLUTION PREVENTION PLAN	X
PLAN AND PROFILE SHEETS	X
CROSS SECTION SHEETS	X
RIGHT OF WAY SUMMARY	X

As it looks in Plot Preview

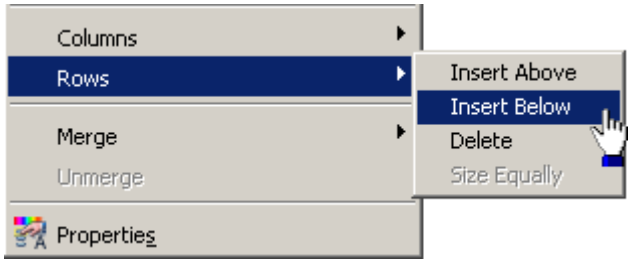
The Sheet Index Table will be a little more involved with editing, as sheets may be added to a project. Again, double-clicking each cell allows easy editing of text. More advanced editing is as follows:

Adding Rows

Adding rows to the table may be necessary at times. Select the desired row to add a row above or below it by using the cross window selection (click, drag and click) between the two cells of the row:



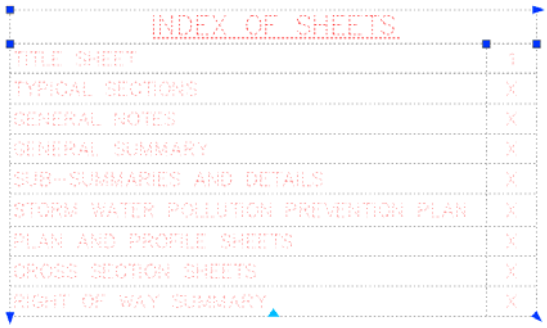
Row will be selected indicated by grips. Now, right-click, go to Rows, and make the appropriate selection:



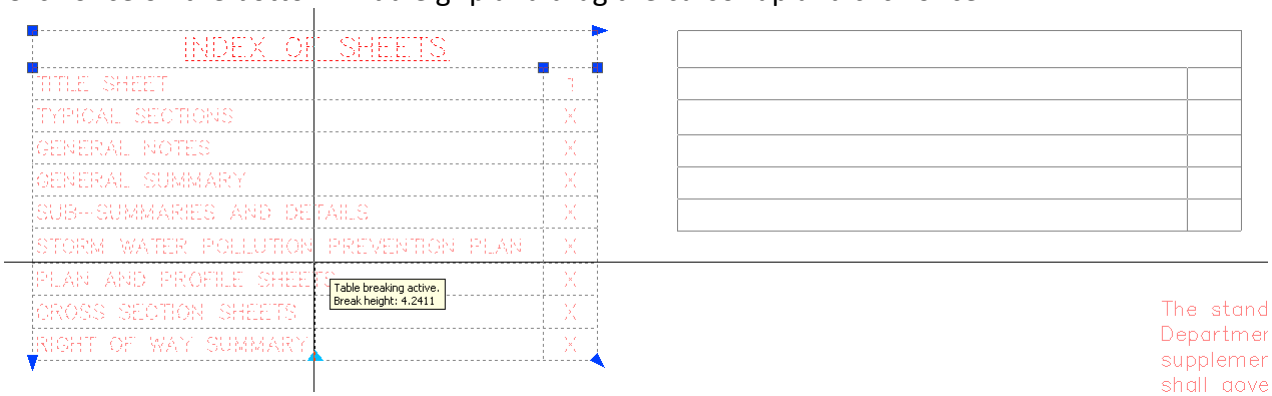
As you can see, you can insert a row above or below the row you've selected. You can also delete the row you've selected.

Adjusting Table to Accommodate Additional Sheets

Click once on the table, and grips will appear:



Click once on the bottom middle grip and drag the cursor up and click once:



This is helpful when sheets are added to the project and you need more room to expand the list. (NOTE – It will be necessary to move the table to the left, (closer to the location map), to accommodate the newly expanded list).

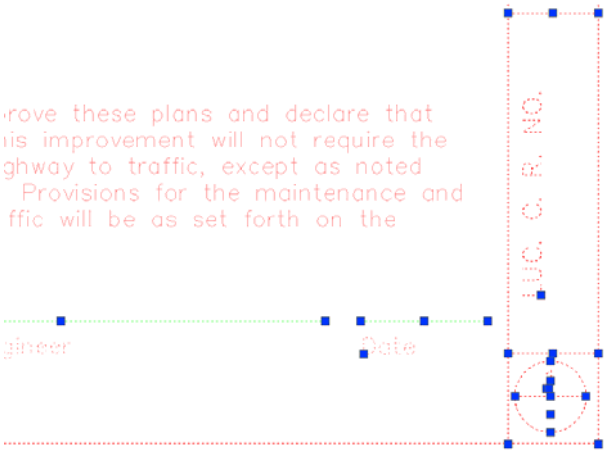
<u>DO NOT CHANGE THE PROPERTIES OF THIS TABLE (LAYER, LINETYPE, COLOR; ETC.), AS THE TABLE'S PROPERTIES ARE ALREADY PRE-SET.</u>

Editable Text Areas (MText)

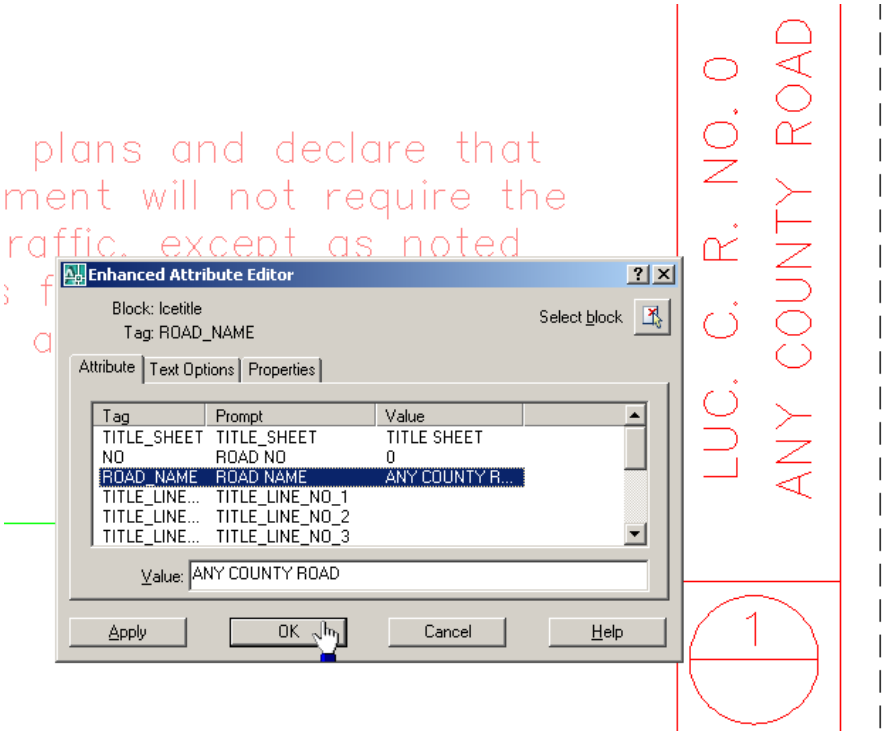
The areas highlighted below are editable MText areas. They are not embedded inside the block. DO NOT CHANGE THE PROPERTIES OF THIS MTEXT (LAYER, TEXTSTYLE; ETC.), OR EXPLODE THIS TEXT FOR ANY REASON.

Editing Attribute Labels

Double-click the border block to access the Enhanced Attribute Editor:

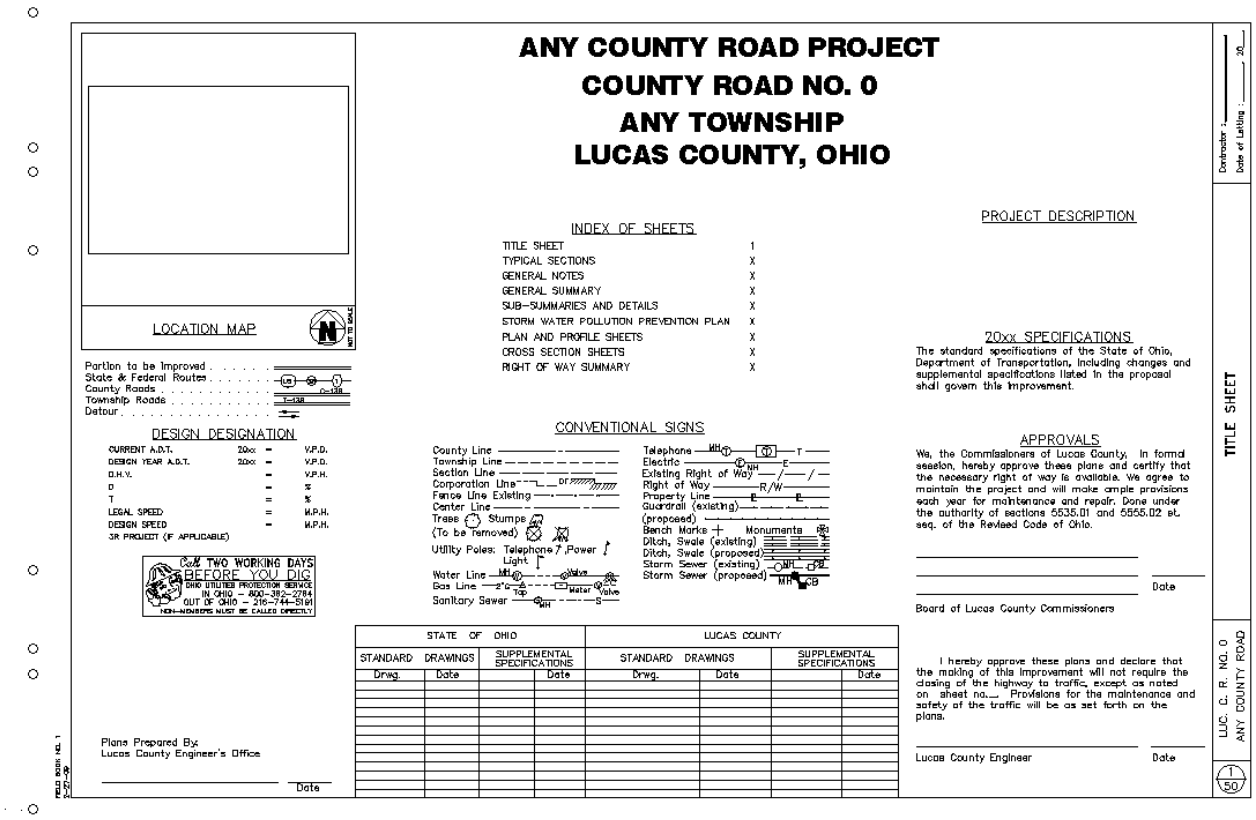


Click on each Attribute Tag row to add a new value in the Value field:



Continue adding values until all values are filled (some values may be added later – e.g.-Total Sheet Number)

This should be your finished result:



<u>DO NOT EXPLODE OR CHANGE THE PROPERTIES OF THIS TITLE BLOCK OR ANY OTHER BORDER BLOCK FOR ANY REASON. FOLLOWING THIS RULE WILL KEEP THE DRAWING INTACT AND; THEREFORE, WILL ALWAYS FOLLOW THE CAD STANDARDS SET FORTH FOR THE OBJECTS IN THIS BORDER BLOCK, AS WELL AS, ALL THE OTHER BORDER BLOCKS.</u>

All other border blocks work on this same labeling principal. Add the attributes values accordingly to each block. For an easy short-cut to edit attributes globally throughout a single drawing, see Chapter 6 of the LCE CAD Procedural Manual. For additional attribute editing instruction, go to the AutoCAD Help, click in the search field and type in Attribute Editing.

SECTION 7 - CAD SYMBOL SPECIFICATIONS
Lucas County Engineer's Symbol Library
Scale - 1" = 20' (As Shown)
March 3, 2009

	MON LAYER: SURVEY1 DESCRIPTION: MONUMENT BLOCK NAME: MON
B.M. OR L.C.B.M. LAYER: SURVEY1 DESCRIPTION: LUCAS COUNTY BENCH MARK BLOCK NAME: BM	M MONUMENT BOX LAYER: SURVEY1 DESCRIPTION: MONUMENT BOX BLOCK NAME: MONBOX
BR PLT LAYER: SURVEY1 DESCRIPTION: BRASS PLATE BLOCK NAME: BRPLATE	PK LAYER: SURVEY1 DESCRIPTION: P.K. NAIL BLOCK NAME: PKNAIL
CONC MONUMENT LAYER: SURVEY1 DESCRIPTION: CONCRETE MONUMENT BLOCK NAME: CMON	RR SPK LAYER: SURVEY1 DESCRIPTION: R.R. SPIKE BLOCK NAME: SPT38
CONC NAIL LAYER: SURVEY1 DESCRIPTION: CONCRETE NAIL BLOCK NAME: CNAIL	S.B.M. LAYER: SURVEY1 DESCRIPTION: SITE BENCH MARK BLOCK NAME: BM
HUB LAYER: SURVEY1 DESCRIPTION: WOOD STAKE BLOCK NAME: WOODSTK	SHP SPK LAYER: SURVEY1 DESCRIPTION: SHIP SPIKE BLOCK NAME: SHIPSPK
IBOLT LAYER: SURVEY1 DESCRIPTION: IRON BOLT BLOCK NAME: IBLT	STONE MONUMENT LAYER: SURVEY1 DESCRIPTION: STONE MONUMENT BLOCK NAME: SPT11
IP LAYER: SURVEY1 DESCRIPTION: IRON PIPE BLOCK NAME: IP	T IRON LAYER: SURVEY1 DESCRIPTION: T-SHAPED IRON BAR BLOCK NAME: T_IRON
IP_SET LAYER: SURVEY1 DESCRIPTION: IRON PIPE SET BLOCK NAME: IP	TRAV PNT LAYER: SURVEY1 DESCRIPTION: TRAVERSE POINT BLOCK NAME: TRVSPNT
I_ROD OR BAR LAYER: SURVEY1 DESCRIPTION: IRON ROD BLOCK NAME: IROD	X-CUT LAYER: SURVEY1 DESCRIPTION: AN X CUT INTO THE SURFACE OF AN OBJECT BLOCK NAME: XCUT
MAG NAIL LAYER: SURVEY1 DESCRIPTION: MAGNETIC NAIL BLOCK NAME: SPT4	X-CUT IN MON BOX LAYER: SURVEY1 DESCRIPTION: IRON BAR BLOCK NAME: XMON

HORZ. CTL. PT.
LAYER: SPOTEL1
DESCRIPTION: HORIZONTAL CONTROL POINT
BLOCK NAME: SPT11

HIGH POINT
LAYER: SPOTEL1
DESCRIPTION: SHOT TAKEN AT A HIGH ELEVATION POINT
BLOCK NAME: SPOTEL

LOW POINT
LAYER: SPOTEL1
DESCRIPTION: SHOT TAKEN AT A LOW ELEVATION POINT
BLOCK NAME: SPOTEL

VERT. CTL. PT.
LAYER: SPOTEL1
DESCRIPTION: VERTICAL CONTROL POINT
BLOCK NAME: SPT11

NOTE IN FIELD BK
LAYER: SPOTEL1
DESCRIPTION: A SPECIAL NOTE MADE IN THE FIELD BOOK
BLOCK NAME: SPT11

NORMAL WTR ELEV
LAYER: SPOTEL1
DESCRIPTION: SHOT TAKEN AT WATER SURFACE
BLOCK NAME: SPOTEL

WASH-OUT
LAYER: SPOTEL1
DESCRIPTION: SINKING OR ERODING GROUND ABOVE OR NEAR PIPE OR TILE
BLOCK NAME: SPT69

SPOT EL
LAYER: SPOTEL1
DESCRIPTION: SPOT ELEVATION
BLOCK NAME: SPOTEL

CHECK SHOT
LAYER: SPOTEL1
DESCRIPTION: SHOT TAKEN TO CHECK LOCATION AND ELEVATION
BLOCK NAME: SPOTEL

STA.
LAYER: SPOTEL1
DESCRIPTION: SHOT TAKEN FOR STATIONING CROSS SECTION PURPOSES
BLOCK NAME: GRIDEL

ANTENNA
LAYER: EXTOPO1
DESCRIPTION: ANTENNA
BLOCK NAME: ANT

BLDG COR
LAYER: BLDG1
DESCRIPTION: CORNER OF BUILDING OR HOUISE STRUCTURE
BLOCK NAME: BLDGCOR

BLDG. NO.
LAYER: BLDG1
DESCRIPTION: A BUILDING ADDRESS OR NUMBERS FOR A BUILDING OR BUILDINGS
BLOCK NAME: BNO

RND. C.B.
LAYER: DRAIN1
DESCRIPTION: ROUND CATCH BASIN
BLOCK NAME: RCB

SQ. C.B.
LAYER: DRAIN1
DESCRIPTION: SQUARE CATCH BASIN
BLOCK NAME: SCB

CATV/PWR/LT
LAYER: UTIL1
DESCRIPTION: CABLE TV, POWER, LIGHT POLE
BLOCK NAME: CTVPLP

CATV/TEL/PWR/LT
LAYER: UTIL1
DESCRIPTION: CABLE TV, TELEPHONE, POWER, LIGHT POLE
BLOCK NAME: CTVPPLP

CATV
LAYER: CATV1
DESCRIPTION: CABLE TV POLE
BLOCK NAME: CTVP

CATV/TELE/PWR
LAYER: UTIL1
DESCRIPTION: CABLE TV, TELEPHONE, POWER POLE
BLOCK NAME: CTVPPP

CATV/TELE
LAYER: UTIL1
DESCRIPTION: CABLE TV, TELEPHONE POLE
BLOCK NAME: CTVPP

DELIN. SIGN
LAYER: SIGN1
DESCRIPTION: DELINEATOR SIGN – A.K.A. OBJECT MARKER
BLOCK NAME: DEL

DH
DRILL HOLE
LAYER: EXTOPO1
DESCRIPTION: HOLE DRILLED IN SURFACE OR OBJECT
BLOCK NAME: DH

E
ELEC. METER
LAYER: ELEC1
DESCRIPTION: ELECTRIC METER
BLOCK NAME: ELMTR

FENCE COR
LAYER: FENCE1
DESCRIPTION: FENCE CORNER
BLOCK NAME: FENCOR

FILL PORT
LAYER: UTIL1
DESCRIPTION: FILL PORT
BLOCK NAME: FILLPT

FLAG POLE
LAYER: EXTOPO1
DESCRIPTION: FLAG POLE
BLOCK NAME: FP

GV
G VALVE
LAYER: WAT1
DESCRIPTION: GATE VALVE FOR WATER MAIN
BLOCK NAME: GTV

G
GAS METER
LAYER: GAS1
DESCRIPTION: GAS METER
BLOCK NAME: GASMTR

GUY POLE
LAYER: UTIL1
DESCRIPTION: GUY POLE
BLOCK NAME: GUYPOLE

GUY WIRE ANC
LAYER: UTIL1
DESCRIPTION: GUY WIRE ANCHOR
BLOCK NAME: GUYWIRE

GV
GAS VALVE
LAYER: GAS1
DESCRIPTION: GAS VALVE
BLOCK NAME: GV

HYD
HYD
LAYER: WAT1
DESCRIPTION: HYDRANT
BLOCK NAME: HYD

INLET
LAYER: DRAIN1
DESCRIPTION: INLET
BLOCK NAME: INLET

INLET ROUND
LAYER: DRAIN1
DESCRIPTION: ROUND INLET
BLOCK NAME: INRD

INLET SQUARE
LAYER: DRAIN1
DESCRIPTION: SQUARE INLET
BLOKCK NAME: INSQ

ORN. LIGHT
LAYER: ELEC1
DESCRIPTION: ORNAMENTAL LIGHT
BLOCK NAME: ORNLT

LIGHT POLE
LAYER: ELEC1
DESCRIPTION: LIGHT POLE
BLOCK NAME: LP

PWR/LIGHT POLE
LAYER: ELEC1
DESCRIPTION: POWER & LIGHT POLE
BLOCK NAME: PLP

PH/PWR/LIGHT
LAYER: UTIL1
DESCRIPTION: TELEPHONE, POWER & LIGHT POLE
BLOCK NAME: TPLP

PH&LT POLE
LAYER: UTIL1
DESCRIPTION: TELEPHONE & LIGHT POLE
BLOCK NAME: TLP

MB
MAILBOX
LAYER: EXTOPO1
DESCRIPTION: MAILBOX
BLOCK NAME: MB

MANHOLE
LAYER: DRAIN1
DESCRIPTION: MANHOLE
BLOCK NAME: MH

S
SAN. M.H.
LAYER: SAN1
DESCRIPTION: SANITARY MANHOLE
BLOCK NAME: SANMH

ST. M.H.
LAYER: DRAIN1
DESCRIPTION: STORM MANHOLE
BLOCK NAME: STMH

UTIL. M.H.
LAYER: EXUNKN1
DESCRIPTION: UITLITY MANHOLE
BLOCK NAME: UMH

WTR. M.H.
LAYER: WAT1
DESCRIPTION: WATER MANHOLE
BLOCK NAME: WMH

METER PIT
LAYER: WAT1
DESCRIPTION: METER PIT
BLOCK NAME: MPIT

MON. WELL
LAYER: UTIL1
DESCRIPTION: MONITORING WELL
BLOCK NAME: MONWELL

PIPE
LAYER: DRAIN1
DESCRIPTION: PIPE OR PIPE END
BLOCK NAME: SPT51

PROP. LINE
LAYER: EXTOPO1
DESCRIPTION: PROPERTY LINE
BLOCK NAME: PL

POST
LAYER: EXTOPO1
DESCRIPTION: POST
BLOCK NAME: POST

PWR. POLE
LAYER: ELEC1
DESCRIPTION: POWER POLE
BLOCK NAME: PP

75
PNT. ON FLAT SURFACE
LAYER: WALLS1
DESCRIPTION: SHOT TAKEN ON A FLAT SURFACE
BLOCK NAME: SPT9

PWR/TELE
LAYER: UTIL1
DESCRIPTION: POWER & TELEPHONE POLE
BLOCK NAME: PTP

ELEC. RISER
LAYER: ELEC1
DESCRIPTION: ELECTRIC RISER
BLOCK NAME: ERISER

GAS RISER
LAYER: GAS1
DESCRIPTION: GAS RISER
BLOCK NAME: GRISER

ROCK
LAYER: EXTOPO1
DESCRIPTION: ROCK
BLOCK NAME: ROCK

R.R. XING SIG.
LAYER: RR1
DESCRIPTION: RAILROAD CROSSING SIGNAL
BLOCK NAME: RRXSIG

TELE. RISER
LAYER: TEL1
DESCRIPTION: TELEPHONE RISER
BLOCK NAME: TRISER

CABLE TV RISER
LAYER: CATV1
DESCRIPTION: CABLE TV RISER
BLOCK NAME: CTVR

SIGN
LAYER: SIGN1
DESCRIPTION: SIGN
BLOCK NAME: SIGN

SIGN W/2 POST
LAYER: SIGN1
DESCRIPTION: SIGN W/2 POSTS
BLOCK NAME: SIGN2

SOIL BORING
LAYER: EXTOPO1
DESCRIPTION: SOIL BORING
BLOCK NAME: SB

SH
SPRK HEAD
LAYER: EXTOPO1
DESCRIPTION: SPRINKLER HEAD
BLOCK NAME: SHEAD

POST
LAYER: EXTOPO1
DESCRIPTION: SQUARE POST
BLOCK NAME: SPT7

TANK

LAYER: UTIL1
DESCRIPTION: TANK
BLOCK NAME: TANK

TELE.

LAYER: TEL1
DESCRIPTION: TELEPHONE POLE
BLOCK NAME: TP

TRAFFIC SIGNAL

LAYER: EXTOPO1
DESCRIPTION: TRAFFIC SIGNAL
BLOCK NAME: TSP

TRANS. LINE TWR.

LAYER: ELEC1
DESCRIPTION: TRANSMISSION LINE TOWER
BLOCK NAME: TLTWR

TRANS TWR

LAYER: EXTOPO1
DESCRIPTION: TRANSMISSION TOWER
BLOCK NAME: TTB

UNDGRD. MKR.

LAYER: EXTOPO1
DESCRIPTION: UNDERGROUND MARKER
BLOCK NAME: UNDGMKR

UTIL. POLE

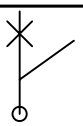
LAYER: UTIL1
DESCRIPTION: UTILITY POLE
BLOCK NAME: UP

WATER METER

LAYER: WAT1
DESCRIPTION: WATER METER
BLOCK NAME: WTRMTR

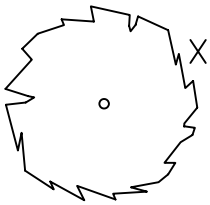
WTR VALVE

LAYER: WAT1
DESCRIPTION: WATER VALVE
BLOCK NAME: WV



XING GATE

LAYER: RR1
DESCRIPTION: CROSSING GATE
BLOCK NAME: XGATE

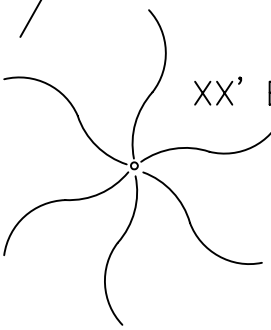


XX"

LAYER: TREE1
DESCRIPTION: DECIDUOUS TREE
BLOCK NAME: TREE

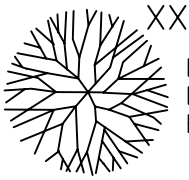
XX" PINE

LAYER: TREE1
DESCRIPTION: CONIFER (PINE) TREE
BLOCK NAME: PINETR



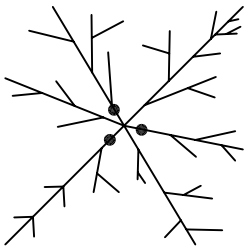
XX' BUSH

LAYER: TREE1
DESCRIPTION: CONIFER BUSH
BLOCK NAME: CBUSH



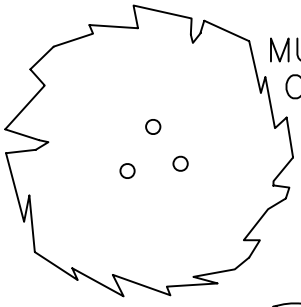
XX' BUSH

LAYER: TREE1
DESCRIPTION: DECIDUOUS BUSH
BLOCK NAME: SDBUSH OR DBUSH



MULTI-STEM CONIFER
OR MISCELLANEOUS CONIFER

LAYER: TREE1
DESCRIPTION: MULTI-STEM OR MISC. CONFIER TREE
BLOCK NAME: MCTREE



MULTI-STEM DECIDIUOUS
OR MISC. DECIDUOUS

LAYER: TREE1
DESCRIPTION: MULTI-STEM OR MISC. DECIDUOUS TREE
BLOCK NAME: MDTREE

STUMP

LAYER: TREE1
DESCRIPTION: TREE STUMP
BLOCK NAME: STUMP

The Symbol Library is included with the CAD Standards on the CD or when downloaded from our website.