

**SSMP  
ELEMENT 4 – O & M Program  
APPENDIX 4.1**

**AutoCAD Standards**

# The City of San Mateo Public Works Engineering Division CAD STANDARDS

The enclosed CD contains a Autocad R2004 drawing file named “legend.dwg” along with a plot style table files named “City of SM CadStandards-full size.ctb & half size.ctb)”. This drawing contains all the layer attributes (Figure 1), typical title blocks for submitting project plans (Figure 2a) & profiles (Figure 2b), typical legend (Figure 3) and typical map (Figure 4).

The contents of this CD can be found on the City’s Q drive: Q/PW/PWENG/CADSTANDARDS. The files can be accessed by City staff and emailed (see Disclaimer) to consultants as necessary. Autocad 2004 (or later) and Adobe Acrobat programs will be needed to view all the files.

In order to implement the Standards you’ll need to first save the *Legend.dwg* Autocad drawing file to your computer and either open it and start your drawing or insert it into one of your existing drawings. The Standards will then be loaded and ready to use. Along with the Autocad drawing file is this Adobe Acrobat text explanative.

## Colors

There are 256 colors available in Autocad. Colors are used to differentiate between the various lines and features in the drawing. Each color is assigned a weight and kept in a .ctb file within Autocad. Plots requiring color and /or different line weights will use specific .ctb files. Colors have been chosen for specific reasons, one of which is visibility in Autocad while using a black background, one other is for clarity when printing on white paper. Use “City of SM CadStandards-full size.ctb” for ARCH D-24x36 inch drawings. Use “City of SM CadStandards-half size.ctb” for ARCH B-12x18 inch drawings.

Whenever color plots aren’t applicable then grayscale colors shall be substituted for actual color but line weights and types shall remain the same.

Modification of a .ctb file may be necessary to plot readable plan sheets depending on the scale of print and/or need. The City of San Mateo’s Cad Standards .ctb files should be used whenever possible.

**Disclaimer**

The “disclaimer” stamp (Figure 4) shall be used on “ALL” electronic or hard copy drawings from the Engineering Division going to outside sources.

**File Name/location/owner**

All drawings generated from the Engineering Division must utilize the timestamp.lsp routine as well as having the .dwg stored on the Q drive for others to access. Use of this Autocad autolisp routine is for indicating necessary information for locating the .dwg file. The “timestamp” shall be located at the bottom right corner outside of the title block where it says “ELECTRONIC FILE NAME” on the title block drawing.

**Layers/Linetypes/Lineweights**

(see Exhibit A or open “*legend.dwg*”)

**Scales**

The Title Block (Figure 2a & 2b) plot scale for printing on Arch D (24 x 36 inch) sized paper is 1:20. All reductions or .pdf’s of full sized drawings shall note the following: “Reduced Scale-Not For Bidding Purposes” or “Drawing Reduced to Half Size-Adjust Scale Accordingly”.

**Electronic drawing Submittals**

All electronic drawing files submitted to or created by the Public Works Department shall be Autocad Release 2004 or prior (more current releases of Autocad can save as release 2004). This will allow the City’s Engineering staff to have full access to the drawing files. Files submitted from outside sources should be on a CD or .ftp website for viewing. See “Public Works Standard Conditions”.

**Text**

All text style fonts shall be “romans.shx” unless otherwise noted (see Exhibit “A”):

## Exhibit “A”

Text	Font	Size	Width	Color	Lineweight	Plot Color
<i>TITLE SHEET</i>						
Title	sansserifbold	18	1.10	7 (white)	object	black
Headings	sansserifbold	9.60	1.28	7 (white)	object	black
Heading text	romans	2.75	1.00	232	.500mm	black
Map titles	romans	5.00	1.00	232	.500mm	black
<i>TITLE BLOCK for all sheets</i>						
Title	romans	5.00	1.00	94	1mm	black
Dates	romans	2.50	1.00	130	.400mm	black
Names	romans	2.50	1.00	130	.400mm	black
Project No.	romans	2.50	1.00	130	.400mm	black
Drawing No.	romans	5.00	1.00	94	1mm	black
Page No.	romans	5.00	1.00	232	.500mm	black
Scale	romans	2.50	1.00	130	.400mm	black
file name	romans	1.25	1.00	7 (white)	object	black
timestamp	romans	2.25	1.00	7 (white)	object	black
<i>SIGNATURE BLOCK for all sheets</i>						
Staff titles	romans	1.50	1.00	2 (yellow)	.005mm	black
Approval	romans	2.50	1.00	254 (gray)	.025mm	253
<i>REVISION BLOCK for all sheets</i>						
Text		2.00	1.00	7 (white)	object	black
<i>PLAN &amp; PROFILE sheets</i>						
Stations	romans	4.00	1.00	232	.500mm	black
Scales	romans	4.00	1.00	232	.500mm	black

# Exhibit "B"

LAYER NAME	DESCRIPTION	COLOR/LINETYPE/SCALE			LINEWEIGHT
CITY-BOUNDARY	city limit line	6	phantomx2	.5	use object
CREEKS	creeks	7	continuous	1	use object
EASEMENT	easements	45	continuous	1	use object
GRID	profile grid line	7	dot2	.16	use object
GRID-TILES	map page index	7	continuous	1	use object
GRID1	profile grid line	7	dot	.16	use object
LOTDIM	lot dimensions	14	continuous	1	use object
PARCELS	parcel lines	7	continuous	1	use object
RIGHT-OF-WAY	right of way, property line	8	continuous	1	use object
SD-ABANDONED	abandoned storm drain misc	9	hidden	1	use object
SD-ABANDONED-CATCHBASIN	abandoned catch basin	9	continuous	1	use object
SD-ABANDONED-LINE	abandoned storm drain line	9	continuous	1	use object
SD-CATCHBASIN	stormdrain catch basin	4	continuous	1	use object
SD-CHANNELS	stormdrain channel	5	dashed	1	use object
SD-CULVERTS	stormdrain culvert	5	dashed	1	use object
SD-INTAKE	stormdrain intake	4	continuous	1	use object
SD-MANHOLE	stormdrain manhole	4	continuous	1	use object
SD-MANHOLE-NO	stormdrain no manhole	7	continuous	1	use object
SD-PLUG	stormdrain plug	7	continuous	1	use object
SD-PRIVATE	stormdrain private	9	dashed	1	use object
SD-PUMPSTATION	stormdrain pumpstation	7	continuous	1	use object
SD-PUMPSTATION-BLDG	stormdrain pumpstation bldg	7	continuous	1	use object
SD-TRENCHDRAIN	stormdrain trenchdrain	11	continuous	1	use object
SIGNATUREBLOCK Approval	Approval text in signature block	254	continuous	1	use object
SIGNATUREBLOCK Stafftitles	Staff titles in signature block	2	continuous	1	use object
SD-04-GRAVITY	4" gravity stormdrain line	5	dashed	1	use object
SD-06-GRAVITY	6" gravity stormdrain line	5	dashed	1	use object
SD-08-GRAVITY	8" gravity stormdrain line	5	dashed	1	use object
SD-10-GRAVITY	10" gravity stormdrain line	5	dashed	1	use object
SD-12-GRAVITY	12" gravity stormdrain line	5	dashed	1	use object
SD-14-GRAVITY	14" gravity stormdrain line	5	dashed	1	use object
SD-15-GRAVITY	15" gravity stormdrain line	5	dashed	1	use object
SD-16-GRAVITY	16" gravity stormdrain line	5	dashed	1	use object
SD-17-GRAVITY	17" gravity stormdrain line	5	dashed	1	use object
SD-18-GRAVITY	18" gravity stormdrain line	5	dashed	1	use object
SD-19-GRAVITY	19" gravity stormdrain line	5	dashed	1	use object
SD-20-GRAVITY	20" gravity stormdrain line	5	dashed	1	use object
SD-21-GRAVITY	21" gravity stormdrain line	5	dashed	1	use object
SD-24-GRAVITY	24" gravity stormdrain line	5	dashed	1	use object
SD-27-GRAVITY	27" gravity stormdrain line	5	dashed	1	use object
SD-30-GRAVITY	30" gravity stormdrain line	5	dashed	1	use object
SD-33-GRAVITY	33" gravity stormdrain line	5	dashed	1	use object
SD-36-GRAVITY	36" gravity stormdrain line	5	dashed	1	use object
SD-38-GRAVITY-ELL	38" gravity stormdrain line	5	dashed	1	use object
SD-39-GRAVITY	39" gravity stormdrain line	5	dashed	1	use object
SD-42-GRAVITY	42" gravity stormdrain line	5	dashed	1	use object
SD-45-GRAVITY	45" gravity stormdrain line	5	dashed	1	use object
SD-48-GRAVITY	48" gravity stormdrain line	5	dashed	1	use object
SD-51-GRAVITY	51" gravity stormdrain line	5	dashed	1	use object
SD-54-GRAVITY	54" gravity stormdrain line	5	dashed	1	use object

# Exhibit "B" continued

LAYER NAME	DESCRIPTION	COLOR/LINETYPE/SCALE	LINEWEIGHT
	54" gravity stormdrain line		use object
SD-60-GRAVITY	60" gravity stormdrain line	5 dashed 1	use object
SD-66-GRAVITY	66" gravity stormdrain line	5 dashed 1	use object
SD-72-GRAVITY	72" gravity stormdrain line	5 dashed 1	use object
SIGNATUREBLOCK Approval	approval text in signature block	254 continuous 1	use object
SIGNATUREBLOCK Stafftitles	staff titles in signature block	2 continuous 1	use object
SS-CLEANOUT-PVT	private sanitary sewer cleanout	7 continuous 1	use object
SS-CLEANOUT-PVT-NODE	private sanitary sewer CO node	7 continuous 1	use object
SS-FORCE-OUTFALL	sanitary sewer force outfall line	73 dashed 1	use object
SS-FORCE-PVT	private sanitary sewer force main line	7 dashed 1	use object
SS-GRAVITY-PVT	private sanitary sewer gravity line	7 continuous 1	use object
SS-LATERAL	sanitary sewer lateral	73 continuous 1	use object
SS-MH	sanitary sewer manhole	96 continuous 1	use object
SS-MH-ABANDONED	abandoned sanitary sewer manhole	9 continuous 1	use object
SS-MH-CLEANOUT	sanitary sewer manhole cleanout	1 continuous 1	use object
SS-MH-CLEANOUT-NODE	sanitary sewer manhole CO node	1 continuous 1	use object
SS-MH-CLEANOUT-PVT	private sanitary sewer cleanout	7 continuous 1	use object
SS-MH-CLEANOUT-PVT-NODE	private sanitary sewer CO node	7 continuous 1	use object
SS-MH-FUTURE	future sanitary sewer manhole	70 continuous 1	use object
SS-MH-FUTURE-NODE	future sanitary sewer MH node	70 continuous 1	use object
SS-MH-NO	no sanitary sewer manhole	4 continuous 1	use object
SS-MH-NO-NODE	no sanitary sewer manhole node	4 continuous 1	use object
SS-MH-NODE	sanitary sewer manhole node	7 continuous 1	use object
SS-MH-NODE-PVT	private sanitary sewer manhole node	7 continuous 1	use object
SS-MH-PVT	private sanitary sewer manhole	7 continuous 1	use object
SS-PLUG	sanitary sewer plug	7 continuous 1	use object
SS-PUMPSTATION	sanitary sewer pumpstation	7 continuous 1	use object
SS-PUMPSTATION-BLDG	sanitary sewer pumpstation bldg	7 continuous 1	use object
SS-PUMPSTATION-PVT	private sanitary sewer pumpstation	7 continuous 1	use object
SS-STEEL-PIPE	steel sanitary sewer pipe	3 continuous 1	use object
SS-VALVE	sanitary sewer valve	84 continuous 1	use object
SS-WETWELL	sanitary sewer wetwell	7 continuous 1	use object
SS-WWTP	Waste Water Treatment Plant	3 continuous 1	use object
SS-00-ABANDONED	abandoned sanitary sewer line	9 continuous 1	use object
SS-00-FORCE	sanitary sewer force main line	3 dashed 1	use object
SS-04-ABANDONED	4" abandoned sanitary sewer line	9 continuous 1	use object
SS-04-FORCE	4" sanitary sewer force main line	3 dashed 1	use object
SS-04-FORCE-ABANDONED	4" abandoned SS force main line	9 continuous 1	use object
SS-04-GRAVITY	4" sanitary sewer gravity line	3 continuous 1	use object
SS-06-ABANDONED	6" abandoned sanitary sewer line	9 continuous 1	use object
SS-06-FORCE	6" sanitary sewer force main line	3 dashed 1	use object
SS-06-GRAVITY	6" sanitary sewer gravity line	3 continuous 1	use object
SS-06-OVERFLOW	6" sanitary sewer overflow line	3 border 1	use object
SS-08-ABANDONED	8" abandoned sanitary sewer line	9 continuous 1	use object
SS-08-FORCE	8" sanitary sewer force main line	3 dashed 1	use object
SS-08-FORCE-ABANDONED	8" abandoned sanitary sewer FM line	9 continuous 1	use object
SS-08-GRAVITY	8" sanitary sewer gravity line	3 continuous 1	use object
SS-08-OVERFLOW	8" sanitary sewer overflow line	3 border 1	use object
SS-10-FORCE	10" sanitary sewer force main line	3 dashed 1	use object
SS-10-GRAVITY	10" sanitary sewer gravity line	50 continuous 1	use object
SS-10-OVERFLOW	10" sanitary sewer overflow line	3 border 1	use object
SS-12-ABANDONED	12" abandoned sanitary sewer line	9 continuous 1	use object
SS-12-FORCE	12" sanitary sewer force main line	3 dashed 1	use object
SS-12-GRAVITY	12" sanitary sewer gravity line	3 continuous 1	use object
SS-14-FORCE	14" sanitary sewer force main line	3 dashed 1	use object
SS-14-GRAVITY	14" sanitary sewer gravity line	3 continuous 1	use object

# Exhibit "B" continued

LAYER NAME	DESCRIPTION	COLOR/LINETYPE/SCALE	LINEWEIGHT
SS-15-ABANDONED	15" abandoned sanitary sewer line	9 continuous 1	use object
SS-15-GRAVITY	15" sanitary sewer gravity line	3 continuous 1	use object
SS-16-GRAVITY	16" sanitary sewer gravity line	3 continuous 1	use object
SS-18-ABANDONED	18" abandoned sanitary sewer line	9 continuous 1	use object
SS-18-FORCE	18" sanitary sewer force main line	3 dashed 1	use object
SS-18-GRAVITY	18" sanitary sewer gravity line	3 continuous 1	use object
SS-21-FORCE	21" sanitary sewer force main line	3 dashed 1	use object
SS-21-GRAVITY	21" sanitary sewer gravity line	3 continuous 1	use object
SS-24-GRAVITY	24" sanitary sewer gravity line	3 continuous 1	use object
SS-27-GRAVITY	27" sanitary sewer gravity line	3 continuous 1	use object
SS-30-ABANDONED	30" abandoned sanitary sewer line	9 continuous 1	use object
SS-30-FORCE	30" sanitary sewer force main line	3 continuous 1	use object
SS-30-GRAVITY	30" sanitary sewer gravity line	3 continuous 1	use object
SS-33-FORCE	33" sanitary sewer force main line	3 dashed 1	use object
SS-33-GRAVITY	33" sanitary sewer gravity line	3 continuous 1	use object
SS-36-FORCE	36" sanitary sewer force main line	3 dashed 1	use object
SS-36-GRAVITY	36" sanitary sewer gravity line	3 continuous 1	use object
SS-39-GRAVITY	39" sanitary sewer gravity line	3 continuous 1	use object
SS-48-GRAVITY	48" sanitary sewer gravity line	3 continuous 1	use object
STREET-CENTERLINES	street centerlines	7 centerx2 .5	use object
STREET-LABELS	street names	4 continuous 1	use object
STREETS-OBOW	back of walk	60 continuous 1	use object
STREETS-OEOP	edge of pavement	8 continuous 1	use object
STREETS-OFOC	face of curb	9 continuous 1	use object
TITLEBLOCK DatesNamesProjectScale	Dates,names,project,scale in titleblock	130 continuous 1	use object
TITLEBLOCK Filename	File name/location for .dwg	7 continuous 1	use object
TITLEBLOCK Lines	line in titleblock	7 continuous 1	use object
TITLEBLOCK PagenumberSheetname	page number & sheet name in titleblock	232 continuous 1	use object
TITLEBLOCK TitleDrawingnumber	title & drawing number in titleblock	94 continuous 1	use object
TITLESHEET Heading	headings on title sheet	7 continuous 1	use object
TITLESHEET TextMaptitle	text & map title	232 continuous 1	use object
TXT-ADDRESS	parcel address	253 continuous 1	use object
TXT-BLOCKNUMBERS	subdivision block number	32 continuous 1	use object
TXT-EASEMENT	easement text	8 continuous 1	use object
TXT-LOTNUMBERS	lot number text	32 continuous 1	use object
TXT-MISCELABELS	miscellaneous text labels	7 continuous 1	use object
TXT-ROWDIMENSION	right of way dimensions	230 continuous 1	use object
TXT-SD	storm drain text	140 continuous 1	use object
TXT-SD-MH	storm drain manhole text	151 continuous 1	use object
TXT-SD-MH-LEADER	storm drain manhole leader line	7 continuous 1	use object
TXT-SD-PUMPSTATION	storm drain pumpstation text	7 continuous 1	use object
TXT-SS	sanitary sewer text	84 continuous 1	use object
TXT-SS-ABANDONED	abandoned sanitary sewer text	9 continuous 1	use object
TXT-SS-FORCE-OUTFALL	sanitary sewer force main outfall text	84 continuous 1	use object
TXT-SS-LATERALDIM	sanitary sewer lateral dimension text	34 continuous 1	use object
TXT-SS-MH	sanitary sewer manhole text	96 continuous 1	use object
TXT-SS-MH-CLEANOUT	sanitary sewer mahhole cleanout text	1 continuous 1	use object
TXT-SS-MH-FUTURE	sanitary sewer future manhole text	7 continuous 1	use object
TXT-SS-MH-LEADER	sanitary sewer mahole leader line	7 continuous 1	use object
TXT-SS-MH-NO	no manhole text	4 continuous 1	use object
TXT-SS-MH-PVT	private manhole text	7 continuous 7	use object
TXT-SS-PUMPSTATION	sanitary sewer pumpstation text	7 continuous 7	use object
TXT-SS-PVT	sanitary sewer private text	7 continuous 7	use object
TXT-SS-PVT-CLEANOUT	sanitary sewer private cleanout text	7 continuous 7	use object
TXT-TILENUMBERS	tile number text	7 continuous 7	use object
TXT-TRACTNAME	tractname text	6 continuous 1	use object

# FIGURE "1"

## LAYERS IN AUTOCAD

LAYER NAME	DESCRIPTION	COLOR/LINETYPE/SCALE/SYMBOL	SAMPLE
CITY-BOUNDARY	city limit line	6 phantomx2 .5	
CREEKS	creeks	7 continuous 1	
EASEMENT	easements	45 continuous 1	
GRID	profile grid line	7 dot2 .16	
GRID-TILES	map page index	7 continuous 1	
GRID1	profile grid line	7 dot .16	
LOTDIM	lot dimensions	14 continuous 1	
PARCELS	parcel lines	7 continuous 1	
RIGHT-OF-WAY	right of way, property line	8 continuous 1	
SD-ABANDONED	abandoned storm drain misc	9 hidden 1	
SD-ABANDONED-CATCHBASIN	abandoned catch basin	9 continuous 1	
SD-ABANDONED-LINE	abandoned storm drain line	9 continuous 1	
SD-CATCHBASIN	stormdrain catch basin	4 continuous 1	
SD-CHANNELS	stormdrain channel	5 dashed 1	
SD-CULVERTS	stormdrain culvert	5 dashed 1	
SD-INTAKE	stormdrain intake	4 continuous 1	
SD-MANHOLE	stormdrain manhole	4 continuous 1	
SD-MANHOLE-NO	stormdrain no manhole	7 continuous 1	
SD-PLUG	stormdrain plug	7 continuous 1	
SD-PRIVATE	stormdrain private	9 dashed 1	
SD-PUMPSTATION	stormdrain pumpstation	7 continuous 1	
SD-PUMPSTATION-BLDG	stormdrain pumpstation bldg	7 continuous 1	
SD-TRENCHDRAIN	stormdrain trenchdrain	11 continuous 1	
SIGNATUREBLOCK Approval	Approval text in signature block	254 continuous 1	
SIGNATUREBLOCK Stafftitles	Staff titles in signature block	2 continuous 1	
SD-04-GRAVITY	4" gravity stormdrain line	5 dashed 1	
SD-06-GRAVITY	6" gravity stormdrain line	5 dashed 1	
SD-08-GRAVITY	8" gravity stormdrain line	5 dashed 1	
SD-10-GRAVITY	10" gravity stormdrain line	5 dashed 1	
SD-12-GRAVITY	12" gravity stormdrain line	5 dashed 1	
SD-14-GRAVITY	14" gravity stormdrain line	5 dashed 1	
SD-15-GRAVITY	15" gravity stormdrain line	5 dashed 1	
SD-16-GRAVITY	16" gravity stormdrain line	5 dashed 1	
SD-17-GRAVITY	17" gravity stormdrain line	5 dashed 1	
SD-18-GRAVITY	18" gravity stormdrain line	5 dashed 1	
SD-19-GRAVITY	19" gravity stormdrain line	5 dashed 1	
SD-20-GRAVITY	20" gravity stormdrain line	5 dashed 1	
SD-21-GRAVITY	21" gravity stormdrain line	5 dashed 1	
SD-24-GRAVITY	24" gravity stormdrain line	5 dashed 1	
SD-27-GRAVITY	27" gravity stormdrain line	5 dashed 1	
SD-30-GRAVITY	30" gravity stormdrain line	5 dashed 1	
SD-33-GRAVITY	33" gravity stormdrain line	5 dashed 1	
SD-36-GRAVITY	36" gravity stormdrain line	5 dashed 1	
SD-38-GRAVITY-ELL	38" gravity stormdrain line	5 dashed 1	
SD-39-GRAVITY	39" gravity stormdrain line	5 dashed 1	
SD-42-GRAVITY	42" gravity stormdrain line	5 dashed 1	



# FIGURE "2a"

## TITLE TITLE


PROJECT NO.:

### GENERAL NOTES

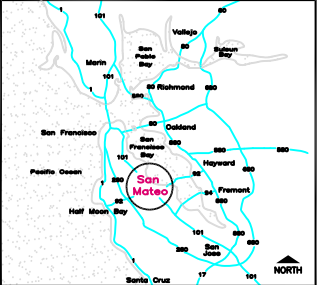
#. TEXT

### TABLE OF CONTENTS

SHT. 1 TITLE SHEET  
SHT. 2 SHEET DESCRIPTION



LOCATION MAP



VICINITY MAP

### BENCHMARKS

TEXT


### LEGEND

EXISTING      DESCRIPTION      PROPOSED


NO.	DESCRIPTION	BY	DATE

THIS SIGNATURE BLOCK IS FOR THE TITLE SHEET ONLY

ENGINEER'S STAMP



BUSINESS LOGO



## TITLE SHEET

REVISIONS BY: INITIAL	DATE	DATE: DD/MR
CASE #	DRAWN BY: INITIAL	DATE: DD/MR
#	CHECKED BY: INITIAL	DATE: DD/MR
#	SCALE: F = 1"	PROJECT NO.:
#	SET	

SHEET 1 OF #

ELECTRONIC FILE NAME

TITLEBLOCK FOR OUTSIDE AGENCY USE ONLY

ALTERNATE SIGNATURE LINE

# FIGURE "2b"

PLAN VIEW—SCALE

SECTION—SCALE

TITLEBLOCK FOR OUTSIDE AGENCY USE ONLY

THIS SIGNATURE BLOCK IS FOR SHEETS 2 AND ABOVE

DATE	BY	DATE	BY	DATE	BY
DESCRIPTION					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					
APPROVED					

STAMP

BUSINESS LOGO

TITLE

TITLE

TITLE SHEET

DRAWN BY	DATE	CHECKED BY	DATE	SCALE	PROJECT NO.
CASE NO.		CHECKED BY		SCALE	PROJECT NO.




















AREA FOR COMPANY INFORMATION.

SHEET 2 OF #

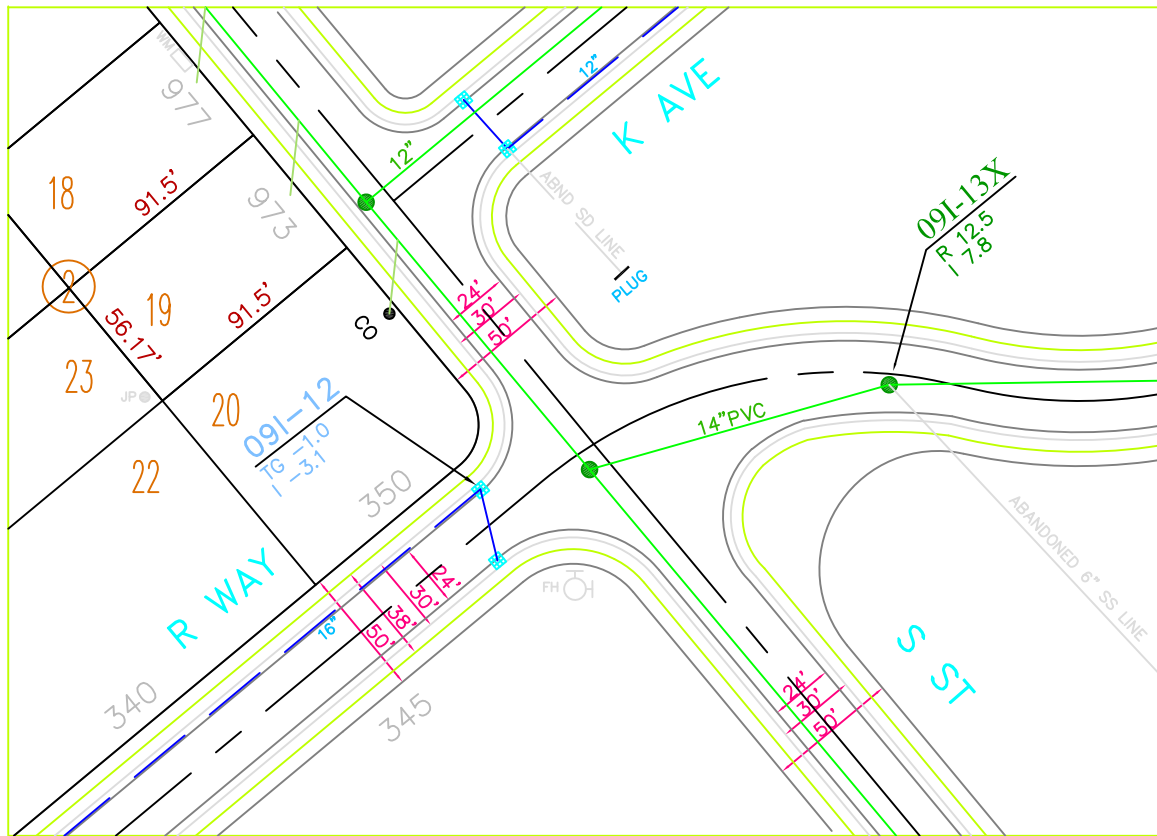
ELECTRONIC FILE NAME

# FIGURE "3"

## MISC SYMBOLS & ABBREVIATIONS

	FIBER OPTIC CABLE	AB	AGGREGATE BASE	MH	MANHOLE
	GAS LINE	AC	ASPHALT CONCRETE	OG	ORIGINAL GRADE
	GAS VALVE	AD	AREA DRAIN	PVC	POLYVINYL CHLORIDE
	WATER LINE	CB	CATCH BASIN	PVMT	PAVEMENT
	WATER VALVE	CL	CENTERLINE	RCP	REINFORCED CONC. PIPE
	WATER METER BOX	DI	DROP INLET	R/W	RIGHT OF WAY
	FIRE HYDRANT	D/W	DRIVEWAY	RCBC	REINFORCED CONCRETE BOX CULVERT
	JOINT POLE	ELECT	ELECTRICAL	S=	SLOPE
	TREE	EP	EDGE OF PAVEMENT	SCO	SEWER CLEANOUT
	DRIP LINE	EUC	EUCALYPTUS TREE	SD	STORM DRAIN
	WALL	EX	EXISTING	SDE	STORM DRAIN EASEMENT
	FENCE	FG	FINISH GRADE	SS	SANITARY SEWER
	STREET LIGHT	FF	FINISH FLOOR	SSE	SANITARY SEWER EASEMENT
	STREET LIGHT BOX	FH	FIRE HYDRANT	TB	TOP OF BANK
	SIGN	FL	FLOWLINE	TC	TOP OF CURB
	RR SIGNAL	G	GAS	TS	TOE OF SLOPE
	TRAFFIC SIGNAL	GV	GAS VALVE	TW	TOP OF WALL
	TRAFFIC SIGNAL BOX	GR	GROUND	VG	VALLEY GUTTER
	BRIDGE PIERS	HPT	HIGH POINT	W	WATER
		INV	INVERT ELEVATION	WV	WATER VALVE
		JP	JOINT UTILITY POLE		
		LF	LINEAR FEET		
		MIN	MINIMUM		

# FIGURE "4"



## TYPICAL MAP LAYERS

## FIGURE "5"

All items depicted shall be considered approximate and do not necessarily constitute precise or current locations of any substructure, parcel, lot, or building site.

CITY OF SAN MATEO  
DEPARTMENT OF PUBLIC WORKS



## **CAD STANDARDS**

The Engineering Technician performing edits to the master AutoCAD underground utility map files (e.g. the Sewer.dwg file located in the Q:\PW\PWENG\MASTER CAD folder) follow editing rules that are maintained along with the CAD standards.

### **CAD Standard Editing Rules**

**ALTER** – When a feature is spatially altered in CAD, e.g. a pipeline is spatially re-located, the CAD operator should edit the existing feature element, adjusting it while keeping its original CAD Handle.

**ADD** – When a new feature is added to a CAD sewer file, the feature is given a new unique CAD Handle. It is useful to provide maps of new sewer features to the GIS operator displaying the annotation text information that will need to be entered into the GIS attribute fields.

**DELETE** – Prior to deleting features from a CAD sewer file, it is useful to provide maps of the features to the GIS operator displaying the CAD handle with a notation as to why the feature is being removed.

**STANDARD RULES** – All sewer pipes need to be individual line segments and have two end points snapped at each end of the line segment. Pipes can not extend through any one manhole. If a pipe is stubbed, the end of the line segment shall have a point snapped to it with a layer name of “SS-MH-NO.” If a pipe segment extends far enough that it may warrant a manhole to be installed at the end of the pipe, it shall have a point snapped to the end with a layer name of “SS-MH-FUTURE.”