USF Layer Guidelines

LAYERING

All drawings shall incorporate the standard AIA long format layers as specified in the National CAD Standard Version 3.1. Blank drawings containing these layers are available on the FPC web site. In accordance with the AIA layering standard, all layering names and information within shall adhere to the following guidelines.

- Only applicable layers are to be used.
- Blank layers shall be purged from the CAD drawing before creating the final deliverable CAD files.
- Graphic representations of related items shall be located on a single layer even when indicated on different drawings. For example, full height walls could be properly drawn on the layer A-WALL or A-WALL-FULL, but not both.
- Graphic symbols connected to text and notes, (leader lines, arrowheads, etc.) shall be located on the same layer as the corresponding text.

Layer names will be limited to 13 characters subdivided into 4 sections including: Discipline, Major group, Minor group, and Modifier as shown below. Layer names of 5 or 9 characters may be used when appropriate and consistent with layer naming guidelines.

13-CHARACTER LAYER NAME =	X-XXXX -XXXX -XXXX	
Discipline Maj	e or group Minor group Modifier	
	Modifie	

Discipline headings shall define the layer's discipline as follows:

A = Architectural

(Refer to Appendix

- B = Geotechnical
- C = Civil
- D = Process
- E = Electrical
- F = Fire Protection
- G = General
- H = Hazardous Materials
- I = Interiors
- L = Landscape
- M = Mechanical
- 0 = Operations

- P = Plumbing
- Q = Equipment
- R = Resource
- S = Structural
- T = Telecommunications
- U = University
- V = Survey / Mapping
- W = Civil Works
- X = Other Disciplines
- Z = Contractor / Shop Drawings

Major group headings shall define assemblies, construction systems or major categories such as walls, doors, ceilings, lights, power, sewer, water, storm drains, etc. (Refer to Appendix

Minor group headings shall further define the major group headings such as full height wall, partial height wall, emergency lighting or general lighting. (Refer to Appendix

The optional Modifier heading shall further define the minor group heading such as full height wall existing and full height wall demolished. Modifiers and user defined characters are options provided for extended clarification. (Refer to Appendix

ARCHITECTURAL LAYER GUIDELINES

Drawing Information Layers

Occupancy Plan & Area Designations Information
Ceiling Plan Information
Demolition Plan Information
Equipment Plan Information
Floor Plan Information
Large Scale Floor Plan Information
Roof Plan Information
Detail Drawings Information
Elevation Drawings
Section Drawings
Dimensions
Repetitive Annotation (Room Numbers; Equipment Numbers)
Key Notes
Notes and Call-outs
Patterns, Cross Hatching, & Poche
Symbols, Bubbles, and Targets
Schedules and Tables of Text
General Notes and Specifications

A-WALL	Walls
A-WALL-CNTR	Wall Center Lines
A-WALL-FULL	Full Height Walls
A-WALL-PRHT	Partial Height Walls
A-WALL-WHED	Window Headers
A-WALL-DHED	Door Headers
A-WALL-JAMB	Door & Window Jambs
A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill
A-CLNG-OVHD	Ceiling Elements, Soffits, and Bulkheads
A-CLNG-GRID	Ceiling Grid (T-Bar Ceiling)
A-DOOR	Doors
A-DOOR-IDEN	Door Number, Hardware Group, etc.
A-GLAZ	Windows, Window Walls, Curtain Walls, Glazed Partitions
A-GLAZ-SILL	Window Sills
A-GLAZ-IDEN	Window Numbers
A-FLOR	Floor Information
A-FLOR-LEVL	Level Changes, Ramps, Pits, & Depressions
A-FLOR-STRS	Stairs, Escalators, and Ladders
A-FLOR-HRAL	Stair and Balcony Handrails and Guardrails
A-FLOR-TPTN	Toilet Portions
A-FLOR-SPCL	Architectural Specialties
A-EQPM	Equipment
A-EQPM-FIXD	Fixed Equipment (CSU Type 1)
A-EQPM-IDEN	Equipment Identification Numbers
A-EQPM-MOVE	Moveable Equipment (CSU Type 2)

Building Information Layers (continued)

A-FURN	Furniture
A-FURN-IDEN	Furniture Identification Numbers
A-ROOF	Roof Information
A-ROOF-LEVL	Level Changes
A-ROOF-OTLN	Roof Perimeter/Edge, Roof Geometry
A-ROOF-STRS	Stair Treads and Ladders

STRUCTURAL LAYER GUIDELINES

Drawing Information Layers

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S-PCOL-***	Column Plan Information
S-PFND-****	Foundation Plan Information
S-PSFR-***	Structural Framing Plan Information
S-DETL-***	Detail Drawings Information
S-ELEV-***	Elevation Drawings Information
S-SECT-***	Section Drawings Information
S-***-DIMS	Dimensions
S-***-KEYN	Key Notes
S-***-NOTE	Notes, Call-outs, & Key Notes
S-***-SYMB	Symbols, Bubbles, & Targets
S-****-SCHD	Schedules and Tables of Text
S-***-TEXT	General Notes & Specifications

S-ABLT	Anchor Bolts & Hold-Downs		
S-COLS	Structural Columns		
S-COLS-RBAR	Reinforcing B	Bars	
S-COLS-WELD-SYMB	Welding Sym	bols	
S-FNDN-FTNG	Footings		
S-FNDN-GRBM	Grade Beams	6	
S-FNDN-PIER	Piers		
S-FNDN-RBAR	Reinforcing B	Bars	
S-FNDN-WELD-SYMB	Welding Sym	bols	
S-FRAM	Framing	(The drawing may be further	
S-FRAM-BEAM	Beams	segregated with sub-layers if needed)	
S-FRAM-BEAM-PRIM	Primary Bear	ns	
S-FRAM-BEAM-SCND	Secondary Be	eams	
S-FRAM-DECK	Structural De	ecking	
S-FRAM-JOIS	Joists		
S-FRAM-RBAR	Reinforcing B	Bars	
S-FRAM-WELD-SYMB	Welding Sym	bols	
S-GRID	Column Grid		
S-GRID-IDEN	Column Grid	Tags	
S-JNTS-CNST	Construction	Joints	
S-JNTS-CTRL	Control Joints	S	
S-SLAB	Concrete Slal	bs	
S-SLAB-OTLN	Slab Outline		
S-SLAB-RBAR	Concrete Slal	b Reinforcing	
S-WALL	Structural Be	aring & Sheer Walls	

MECHANICAL LAYER GUIDELINES

Drawing Information Layers

M-DETL-***	Detail Drawings Information
M-ELEV-***	Elevation Drawings Information
M-PCON-***	Mechanical Controls Plan Information
M-PHVA-***	HVAC Plan Information
M-PLGS-***	Large Scale HVAC Plan Information
M-PPIP-***	Piping Plan Information
M-PROF-***	Mechanical Roof Plan Information
M-PSTM-***	Steam Piping Plan Information
M-PWCH-***	Chilled Water Piping Plan Information
M-PWHT-***	Hot Water Piping Plan Information
M-SECT-***	Section Drawings Information
M-***-DIMS	Dimensions
M-***-KEYN	Key Notes
M-***-NOTE	Notes, Call-outs, & Key Notes
M-***-SCHD	Schedules and Tables of Text
M-***-SYMB	Symbols, Bubbles, & Targets
M-***-TEXT	General Notes and Specifications

Bunding million mation		
M-CDFF-RETN	Ceiling Return Diffusers	
M-CDFF-SUPP	Ceiling Supply Diffusers	
M-CONT	Controls & Instrumentation	
M-CONT-THER	Thermostats	
M-CONT-WIRE	Low Voltage Wiring	
M-CWRT-FIXT	Chilled Water Above Ground	d Elements (Manholes, etc.)
M-CWRT-NOTE	Chilled Water Notes	
M-CWTR	Chilled Water System	
M-CWTR-EQPM	Chilled Water Equipment	
M-CWTR-PIPE	Chilled Water Pipe	(When layers are used to
M-CWTR-RTRN	Chilled Water Return Lines	segregate supply & return
M-CWTR-SUPL	Chilled Water Supply Lines	minor group PIPE may NOT be used.)
M-DUAL-EQPM	Dual Temperature System E	Equipment
M-DUAL-PIPE	Dual Temperature System F	Pipe
M-DUCT-EXHT	HVAC System Exhaust Duct	work
M-DUCT-OTHR	HVAC System Other Ductwo	ork
M-DUCT-RETN	HVAC System Return Ductw	vork
M-DUCT-SUPP	HVAC System Supply Ductw	vork
M-ENER-SYST	Energy Management System	ns
M-EXHS-DUCT	Exhaust System Ductwork	
M-EXHS-EQPM	Exhaust System Equipment	
M-HOTW	Hot Water (Space Heating)	System
M-HOTW-EQPM	Hot Water Equipment	
M-HOTW-FIXT	Hot Water Above Ground El	ements (Manholes, etc.)
M-HOTW-PIPE	Hot Water Pipe	(When layers are used to
M-HOTW-RTRN	Hot Water Return Lines	segregate supply & return
M-HOTW-SUPL	Hot Water Supply Lines	minor group PIPE may NOT be used.)
M-HVAC-EQPM	HVAC Equipment	
M-ODFF	Other Diffusers	
M-REFG-EQPM	Refrigeration System Equip	ment

Building Information Layers (continued)

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M-REFG-PIPE	Refrigeration System Piping
M-SPCL-***	Special Systems
M-STEM-EQPM	Steam System Equipment
M-STEM-HPIP	High Pressure Steam Piping
M-STEM-LPIP	Low Pressure Steam Piping
M-STEM-MPIP	Medium Pressure Steam Piping
M-VENT-DUCT	Industrial or Laboratory Venting
M-VENT-EQPM	Industrial or Laboratory Venting Equipment

PLUMBING LAYER GUIDELINES

Drawing Information Layers

0	5
P-DETL-***	Detail Drawings Information
P-ELEV-***	Elevation Drawings Information
P-PPLM -****	Plumbing Plan Information
P-RISR -****	Plumbing Riser Diagram Information
P-SECT-***	Section Drawings Information
P-***-DIMS	Dimensions
P-****-KEYN	Key Notes
P-***-NOTE	Notes, Call outs, and Key Notes
P-***-SCHD	Schedules and Tables of Text
P-***-SYMB	Symbols, Bubbles, and Targets
P-***-TEXT	General Notes and Specifications

Building Information Layers

P-ACID P-ACID-EQPM P-ACID-PIPE P-DOMW P-DOMW-EQPM P-DOMW-PIPE-*** P-LABS-EQPM P-LABS-PIPE P-NGAS P-NGAS-EQPM P-NGAS-PIPE-**** P-SSWR P-SSWR-EQPM P-SSWR-FTXT P-SSWR-PIPE-*** **P-SSWR-TEXT P-SSWR-VENT** P-STRM P-STRM-FIXT P-STRM-PIPE-*** P-STRM-RFDR **P-STRM-TEXT**

Acid, Alkaline, and Oil Waste System Acid, Alkaline, and Oil Waste System Equipment Acid, Alkaline, and Oil Waste System Piping Domestic Hot & Cold Water System
Domestic Hot and Cold Water Equipment
Domestic Hot and Cold Water Piping
Laboratory Gas System Equipment
Laboratory Gas Piping
Natural Gas System
Natural Gas System Equipment
Natural Gas System Piping
Sanitary Sewer System
Sanitary Sewer Equipment (Manholes, Clean-outs, etc.)
Sanitary Sewer Fixtures
Sanitary Sewer Piping
Sanitary Sewer Text
Sanitary Sewer Vent Piping
Storm Drainage System
Storm Drainage Surface Features (Catch Basins, Manholes)
Storm Drain Piping
Storm Roof Drains
Storm Drain Text

FIRE PROTECTION SYSTEMS LAYER GUIDELINES

Drawing Information Layers

F-DETL-***	Detail Drawings Information
F-PFPE-***	Fire Protection Equipment Plan
F-PSPR-***	Sprinkler Plan
F-RISR-***	Sprinkler Riser Program
F-SECT-***	Section Drawings Information
F-***-DIMS	Dimensions
F-***-NOTE	Notes, Call outs, and Key Notes
F-***-SCHD	Schedules and Tables of Text
F-***-SYMB	Symbols, Bubbles, and Targets
F-***-TEXT	General Notes and Specifications

Building Information Layers

F-CO2S	CO2 (Carbon Dioxide) System
F-CO2S-EQPM	CO2 (Carbon Dioxide) System Equipment
F-CO2S-PIPE	CO2 (Carbon Dioxide) System Piping
F-HALN-EQPM	Halon Equipment
F-HALN-PIPE	Halon System Piping
F-HALN-SPHD	Halon Spray Heads
F-PROT-ALRM	Fire Protection Alarm System
F-PROT-EQPM	Fire System Equipment (Fire Hose Cabinet, Extinguishers)
F-PROT-SMOK	Smoke Detectors or Heat Sensors
F-SPRN-PIPE	Fire Protection Sprinkler Piping
F-SPRN-SPHD	Fire Protection Sprinkler Heads
F-STAN-EQIP	Fire Protection Standpipe Equipment
F-STAN-PIPE	Fire Protection Standpipe Piping
F-ANNO-DIMS	Annotation-Dimensions
F-ANNO-LEGN	Annotation Legn
F-ANNO-SYMB	Annotation Symbols
F-ANNO-TEXT	Annotation Text
F-HALN	Halon
F-IGAS	Inert Gas
F-IGAS-EQPM	Inert Gas Equipment
F-IGAS-PIPE	Inert Gas Piping
F-PROT	Fire protection system
F-PROT-STAN	Fire protection system standpipe
F-SPRN	Sprinkler system
F-SPRN-CLHD	Sprinkler system ceiling heads
F-SPRN-OTHD	Sprinkler system other heads
F-SPRN-STAN	Sprinkler system standpipe

ELECTRICAL LAYER GUIDELINES

Drawing Information Layers

E-DETL-****	Detail Drawings Information
E-PAUX-***	Auxiliary Systems Plan Information
E-PCOM-***	Auxiliary Systems Plan Information
E-PLIT-***	Lighting Plan Information
E-PPOW-***	Power Plan Information

Drawing Information Layers (continued)

E-RISR-***	Electrical Riser Diagrams
E-SECT-***	Section Drawings Information
E-***-DIMS	Dimensions
E-***-NOTE	Notes, Call outs, and Key Notes
E-***-SCHD	Schedules and Tables of Text
E-***-SYMB	Symbols, Bubbles, and Targets
E-***-TEXT	General Notes and Specifications

Building million mation	
E-CTRL Electrical	Control Systems
E-CTRL-EQPM	Control System Equipment & Devices
E-CTRL-WIRE	Control System Wiring
E-GRND	Electrical Ground System
E-LITE	Lighting System
E-LITE-CLNG	Ceiling Mounted Lighting
E-LITE-EMER	Emergency Lighting
E-LITE-EXIT	Exit Lighting
E-LITE-FLOR	Floor Lighting
E-LITE-IDEN	Luminaire Identification and Text
E-LITE-NUMB	Lighting Circuit Numbers
E-LITE-ROOF	Roof Mounted Lighting
E-LITE-SITE	Site Lighting Fixtures
E-LITE-SWCH	Lighting Switches
E-LITE-WIRE	Wiring and Conduit
E-POWR	Electrical Power System
E-POWR-CABL	Cable Trays
E-POWR-CLNG	Ceiling Receptacles and Devices
E-POWR-EQPM	Power Equipment
E-POWR-FLOR	Floor Mounted Outlets
E-POWR-NUMB	Power Circuit Numbers
E-POWR-WALL	Wall Outlets & Receptacles
E-POWR-WIRE	Power Wiring and Conduit
E-PROT-WIRE	Fire Protection System Wiring
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)
E-1LIN	Any major group: one-line diagrams
E-ALRM	Alarm system
E-AUXL	Auxiliary systems
E-BELL	Bell system
E-CCTV	Closed-circuit TV
E-CLOK	Clock system
E-COMM	Telephone, communication outlets
E-CTRL	Control systems
E-CTRL-DEVC	Control systems devices
E-DATA	Data outlets
E-DICT	Central dictation system
E-FIRE	Fire alarm, fire extinguishers
E-GRND-CIRC	Ground system circuits
E-GRND-DIAG	Ground system diagram
E-GRND-EQUI	Ground system equipotential
E-GRND-REFR	Ground system reference
E-INTC	Intercom system

Building Information Layers (continued)

building mornation	Layers (continued)
E-LEGN	Legend of symbols
E-LITE-CIRC	Lighting circuits
E-LITE-CIRC-NUMB	Lighting circuits numbers
E-LITE-EXTR	Lighting exterior and site
E-LITE-JBOX	Lighting junction box
E-LITE-OTLN	Lighting outline for background
E-LITE-SPCL	Lighting special
E-LITE-WALL	Lighting wall-mounted
E-LTNG	Lightning protection system
E-NURS	Nurse call system
E-PGNG	Paging system
E-POWR-BUSW	Power busways
E-POWR-CIRC	Power circuits
E-POWR-CIRC-NUMB	Power circuits numbers
E-POWR-DEVC	Power devices
E-POWR-FEED	Power feeders
E-POWR-JBOX	Power junction box
E-POWR-PANL	Power panels
E-POWR-ROOF	Power roof
E-POWR-SWBD	Power switchboards
E-POWR-UCPT	Power under-carpet wiring
E-POWR-URAC	Power under floor raceways
E-SERT	Security
E-SITE	Site
E-SITE-OVHD	Site overhead lines
E-SITE-POLE	Site electric poles
E-SITE-UNDR	Site underground lines
E-SOUN	Sound/PA system
E-TVAN	TV antenna system
Q-COMM	Communication System Information
Q-COMM-CATV	Cable Television System
Q-COMM-EQPM	Communication Equipment
Q-COMM-MHOL	Communications Manhole
Q-COMM-NOTE	Communication System Notes
Q-COMM-WIRE	Wiring Cables, Duct Banks & Conduits

CIVIL LAYER GUIDELINES

Drawing Information Layers

5	5
C-PGRD-****	Grading Plan Information
C-PPAV-***	Paving Plan Information
C-DETL-***	Detail Drawings Information
C-SECT-***	Section Drawings Information
C-***-NOTE	Notes, Call outs, and Key Notes
C-****-TEXT	General Notes and Specifications
C-***-SYMB	Symbols, Bubbles, and Targets
C-***-DIMS	Dimensions
C-***-SCHD	Schedules and Tables of Text

Building/Site Information Layers

C-BLDG-EXST	Footprint of Existing Buildings Use appropriate utility layers for
C-BLDG-DEMO	Footprint of Existing Building to be Demolished
C-BLDG-PROP	Footprint of Proposed Buildings
C-BLDG-EXST-HTCH	Existing Building Hatch
C-BLDG-PROP-HTCH	Proposed Building Hatch
C-PKNG	Parking Lots
C-PKNG-STRP	Parking Lot Striping
C-PKNG-CARS	Graphic Illustration of Cars
C-PKNG-CURB	Curbs
C-ROAD	Roads
C-ROAD-CNTR	Road Center Lines
C-ROAD-CURB	Curbs and Wheel Stops
C-ROAD-BRDG	Roadway Bridges
C-ROAD-IDEN	Road and Street Names
C-ROAD-PROP	Proposed Road
C-ROAD-DEMO	Existing Road to be Demolished
C-STRM-CULV	Culverts, Headwalls, Drainage Inlets
C-STRM-DTCH	Drainage Ditches

BOUNDARY SURVEY LAYER GUIDELINES

Drawing Information Layers

C-PBND-****	Boundary Plan Information
C-****-NOTE	Notes, Call outs, and Key Notes
C-***-TEXT	General Notes and Specifications
C-***-SYMB	Symbols, Bubbles, and Targets
C-***-DIMS	Dimensions

Project Information Layers

C-GRID	Grid Lines (FI State plane Coordinates)
C-GRID-NOTE	Grid Coordinates and Notes
C-PROP	Property Line (Campus Boundary)
C-PROP-NOTE	Property Line Notes
C-PROP-BNCH	Property Survey Benchmarks
C-PROP-ESMT	Easements
C-PROP-DIMS	Boundary and Distance Notations
C-PROP-ESMT	Easements, Right of Ways, Setback Lines
C-PROP-BRNG	Bearings and Distance Labels

TOPOGRAPHIC LAYER GUIDELINES

Drawing Information Layers

Topographic Plan Information
Detail Drawings Information
Section Drawings Information
Notes, Call outs, and Key Notes
General Notes and Specifications
Symbols, Bubbles, and Targets
Dimensions
Schedules and Tables of Text

Project Information Layers

C-BLDG **Building Outline** C-BLDG-ELEV **Building Elevations** Grid Lines (FI State plane Coordinates) C-GRID C-GRID-NOTE Grid Coordinates and Notes C-PKNG Parking Lots **C-PKNG-NOTE** Park`ing Lot Notes C-PKNG-TEXT Parking Lot Text C-PROP Property Line (Campus Boundary) C-PROP-ESMT Easements **C-PROP-NOTE Property Line Notes** C-ROAD Roads and Streets C-ROAD-BRDG Roadway Bridges **Curb Lines** C-ROAD-CURB Road and Street Names C-ROAD-NOTE Existing Contour Lines to be Changed C-TOPO-DEMO C-TOPO-MACL Major Depressed Contour Lines (Wet lands) Major Contour Lines C-TOPO-MAJR C-TOPO-MAJR-TEXT Major Contour Lines Text (Elevation) C-TOPO-MICL Minor Depressed Contour Lines (Wet lands) **Minor Contour Lines** C-TOPO-MINR Minor Contour Lines Text (Elevation) C-TOPO-MINR-TEXT C-TOPO-SPOT Spot Elevations (Tick Marks & Text) Site Water Features, Rivers, Streams, Ponds, and Coastlines L-SITE-WATR L-SITE-WATR-NOTE Names and Notes L-WALK Pedestrian Walks L-WALK-BRDG **Pedestrian Bridges** C-AFLD Airfields C-AFLD-ASPH Airfields asphalt surface Airfields centerline C-AFLD-CNTR C-AFLD-CONC Airfields concrete surface C-AFLD-FLNE Airfields fire lane Airfields fire lane pavement markings C-AFLD-FLNE-MRKG Airfields fire lane signage C-AFLD-FLNE-SIGN Airfields gravel surface C-AFLD-GRVL C-AFLD-MRKG Airfields pavement markings C-AFLD-SIGN Airfields signs C-AFLD-STAN Airfields stationing C-AFLD-WHIT Airfields white paint C-AFLD-WHIT-TICK Airfields white paint tick marks Airfields yellow paint C-AFLD-YELO C-AFLD-YELO-TICK Airfields yellow paint tick marks Buildings and primary structures outdoor decks (attached, no roof) C-BLDG-DECK C-BLDG-OTLN Buildings and primary structures outline Buildings and primary structures overhead (overhang) C-BLDG-OVHD Buildings and primary structures porch (attached, roof overhead) C-BLDG-PRCH C-BLIN Baseline **C-BLIN-STAN** Baseline stationing C-BORE Test borings C-BRDG Bridge Bridge construction joint C-BRDG-CNTJ C-BRDG-CNTR Bridge centerline

Bridge deck C-BRDG-DECK Bridge expansion joint C-BRDG-EXPJ Bridge deck fault / break line C-BRDG-FALT Bridge objects or lines hidden from view C-BRDG-HIDD C-BRDG-OBJT Bridge objects C-BRDG-OBJT-PRIM Bridge objects primary Bridge objects secondary C-BRDG-OBJT-SECD C-BRDG-RBAR Bridge reinforcing bar C-CATV Cable TV C-CATV-OVHD Cable TV overhead lines C-CATV-POLE Cable TV box / pole Cable TV underground lines C-CATV-UNDR C-CEME Cemetery C-CHAN Navigable channels Navigable channels breakwater **C-CHAN-BWTR** Navigable channels channel centerline and survey report lines C-CHAN-CNTR Navigable channels de-authorized channel limits, anchorages, etc. C-CHAN-DACL **C-CHAN-DOCK** Navigable channels decks, docks, floats, piers C-CHAN-NAID Navigable channels navigation aids C-COMM Communications C-COMM-OVHD Communications overhead lines C-COMM-POLE Communications box / pole Communications underground lines C-COMM-UNDR C-CTRL Control points C-CTRL-BMRK Control points benchmarks C-CTRL-FLYS Control points fly station C-CTRL-GRID Control points grid lines C-CTRL-HCPT Control points horizontal C-CTRL-HVPT Control points horizontal / vertical C-CTRL-PNPT Control points panel points C-CTRL-TRAV Control points traverse C-CTRL-VCPT Control points vertical Drain fields C-DFLD C-DFLD-OTLN Drain fields outline C-DFLD-PROF Drain fields profile C-DRIV Driveways C-DRIV-ASPH Driveways asphalt surface C-DRIV-CNTR Driveways centerline C-DRIV-CONC Driveways concrete surface Driveways curb C-DRIV-CURB C-DRIV-CURB-BACK Driveways curb back C-DRIV-CURB-FACE Driveways curb face **C-DRIV-FLNE** Driveways fire lane Driveways fire lane pavement markings C-DRIV-FLNE-MRKG Driveways fire lane signs C-DRIV-FLNE-SIGN Driveways gravel surface C-DRIV-GRVL Driveways pavement markings C-DRIV-MRKG C-DRIV-SIGN Driveways signs Driveways unpaved surface C-DRIV-UPVD Driveways white paint C-DRIV-WHIT C-DRIV-WHIT-TICK Driveways white paint tick marks

Project mormation	
C-DRIV-YELO	Driveways yellow paint
C-DRIV-YELO-TICK	Driveways yellow paint tick marks
C-DTCH	Ditches or washes
C-DTCH-BOTD	Ditches or washes bottom
C-DTCH-CNTR	Ditches or washes centerline
C-DTCH-EWAT	Ditches or washes edge of water
C-DTCH-TOPD	Ditches or washes top
C-EROS	Erosion and sediment control
C-EROS-CIPR	Erosion and sediment control culvert inlet protection
C-EROS-CNTE	Erosion and sediment control construction entrance
C-EROS-DDIV	Erosion and sediment control drainage divides
C-EROS-DVDK	Erosion and sediment control diversion dike
C-EROS-INPR	Erosion and sediment control inlet protection
C-EROS-SILT	Erosion and sediment control silt fence
C-EROS-SSLT	Erosion and sediment control super silt fence
C-ESMT	Easements
C-ESMT-ACCS	Easements access (pedestrian only; private access)
C-ESMT-CATV	Easements utility - cable television
C-ESMT-CONS	Easements conservation
C-ESMT-CSTG	Easements construction / grading
C-ESMT-ELEC	Easements utility - electrical
C-ESMT-FDPL	Easements flood plain
C-ESMT-INEG	Easements ingress / egress (vehicles; private access)
C-ESMT-LSCP	Easements landscape
C-ESMT-NGAS	Easements natural gas line
C-ESMT-PHON	Easements telephone line
C-ESMT-ROAD	Easements roadway
C-ESMT-ROAD-PERM	Easements roadway permanent
C-ESMT-ROAD-TEMP	Easements roadway temporary
C-ESMT-RWAY	Easements right-of-way (public access)
C-ESMT-SGHT	Easements sight distance
C-ESMT-SSWR	Easements sanitary sewer
C-ESMT-STRM	Easements storm sewer
C-ESMT-SWMT	Easements storm water management
C-ESMT-TRAL	Easements trail or path (public access)
C-ESMT-UTIL	Easements utilities
C-ESMT-WATR	Easements water supply
C-FENC	Fences
C-FENC-GRAL	Fences guard rail
C-FENC-POST	Fences posts
C-FENC-STEL	Fences steel (barbed wire and/or chain link)
C-FENC-WOOD	Fences wood
C-FIRE	Fire protection system
C-FIRE-HYDR	Fire protection system hydrants and connections
C-FIRE-PIPE	Fire protection system piping
C-FIRE-UNDR	Fire protection system underground piping
C-FLHA	Flood hazard area
C-FLHA-025Y	Flood hazard area 25 year mark
C-FLHA-050Y	Flood hazard area 50 year mark
C-FLHA-100Y	Flood hazard area 100 year mark
C-FLHA-200Y	Flood hazard area 200 year mark

FIOJECT IIIOI III ation	•
C-FUEL	Fuel gas
C-FUEL-EQPM	Fuel gas equipment (pumps, motors)
C-FUEL-INST	Fuel gas instrumentation (meters, valves, etc.)
C-FUEL-MHOL	Fuel gas manhole
C-FUEL-PIPE	Fuel gas piping
C-FUEL-TANK	Fuel gas storage tanks
C-FUEL-UNDR	Fuel gas underground piping
C-LOCN	Limits of construction
C-NGAS	Natural gas
C-NGAS-EQPM	Natural gas equipment (pumps, motors)
C-NGAS-INST	Natural gas instrumentation (meters, valves, etc.)
C-NGAS-MHOL	Natural gas manhole
C-NGAS-PIPE	Natural gas piping
C-NGAS-TANK	Natural gas storage tanks
C-NGAS-UNDR	Natural gas underground piping
C-PERC	Perc testing
C-PERC-HOLE	Perc testing test holes
C-POND	Ponds
C-POND-EDGE	Ponds edge
C-POND-SWAY	Ponds spillway
C-POND-TOPB	Ponds top of bank
C-POWR	Power
C-POWR-FENC	Power enclosure fence
C-POWR-INST	Power instrumentation (meters, transformers)
C-POWR-MHOL	Power manhole
C-POWR-OVHD	Power overhead lines
C-POWR-POLE	Power box / pole
C-POWR-STRC	Power structures
C-POWR-UNDR	Power underground lines
C-PRKG	Parking lots
C-PRKG-ASPH	Parking lots asphalt surface
C-PRKG-CARS	Parking lots cars and other vehicles
C-PRKG-CONC	Parking lots concrete surface
C-PRKG-CURB	Parking lots curb
C-PRKG-CURB-BACK	Parking lots curb back
C-PRKG-CURB-FACE	Parking lots curb face
C-PRKG-DRAN	Parking lots drainage slope indications
C-PRKG-FIXT	Parking lots fixtures (wheel stops, parking meters, etc.)
C-PRKG-FLNE	Parking lots fire lane
C-PRKG-FLNE-MRKG	Parking lots fire lane pavement markings
C-PRKG-FLNE-SIGN	Parking lots fire lane signage
C-PRKG-GRVL	Parking lots gravel surface
C-PRKG-MRKG	Parking lots pavement markings
C-PRKG-SIGN	Parking lots signs
C-PRKG-STRP	Parking lots striping
C-PRKG-UPVD	Parking lots surping Parking lots unpaved surface
C-PRKG-WHIT	Parking lots white paint
C-PRKG-WHIT-TICK	Parking lots white paint tick marks
C-PRKG-YELO	
	Parking lots yellow paint
C-PRKG-YELO-TICK C-PROP-LINE	Parking lots yellow paint tick marks
C-I ROF-LINE	Property property lines, survey benchmarks, property corners

C-PROP-SBCK Property setback lines C-PVMT Pavement C-PVMT-ASPH Pavement asphalt surface C-PVMT-CONC Pavement concrete surface C-PVMT-GRVL Pavement gravel surface C-RAIL Railroad C-RAIL-CNTR Railroad centerline C-RAIL-EQPM Railroad equipment (gates, signals, etc.) C-RAIL-TRAK Railroad track C-RIVR River C-RIVR-BOTM River bottom C-RIVR-CNTR **River centerline** C-RIVR-EDGE River edge C-RIVR-TOPB River top of bank C-ROAD-ASPH Roadways asphalt surface C-ROAD-CONC Roadways concrete surface C-ROAD-CURB-BACK Roadways curb back C-ROAD-CURB-FACE Roadways curb face **C-ROAD-FLNE** Roadways fire lane Roadways fire lane pavement markings C-ROAD-FLNE-MRKG C-ROAD-FLNE-SIGN Roadways fire lane signs C-ROAD-GRVL Roadways gravel surface Roadways pavement markings C-ROAD-MRKG C-ROAD-PROF Roadways profile Roadways signs C-ROAD-SIGN **C-ROAD-STAN** Roadways stationing C-ROAD-UPVD Roadways unpaved surface Roadways white paint C-ROAD-WHIT C-ROAD-WHIT-TICK Roadways white paint tick marks C-ROAD-YELO Roadways yellow paint Roadways yellow paint tick marks C-ROAD-YELO-TICK C-RRAP Riprap Sight distance C-SGHT C-SGHT-PROF Sight distance profile C-SOIL Soils C-SSWR Sanitary sewer Sanitary sewer plan diagram C-SSWR-DIAG C-SSWR-FORC Sanitary sewer force main Sanitary sewer lateral line C-SSWR-LATL **C-SSWR-MHOL** Sanitary sewer manhole C-SSWR-PIPE Sanitary sewer piping C-SSWR-PIPE-RCON Sanitary sewer piping reinforced concrete Sanitary sewer piping steel C-SSWR-PIPE-STEL C-SSWR-PROF Sanitary sewer profile **C-SSWR-STAN** Sanitary sewer stationing C-SSWR-STRC Sanitary sewer structures Sanitary sewer underground piping C-SSWR-UNDR C-STEM Steam system C-STEM-INST Steam system instrumentation (meters, valves, etc.) C-STEM-MHOL Steam system manhole Steam system piping C-STEM-PIPE

Project million Layers (continued)		
C-STEM-STRC	Steam system structures	
C-STEM-UNDR	Steam system underground piping	
C-STRM	Storm sewer	
C-STRM-CNTR	Storm sewer centerline	
C-STRM-DIAG	Storm sewer plan diagram	
C-STRM-HWAL	Storm sewer headwall	
C-STRM-MHOL	Storm sewer manhole	
C-STRM-PIPE	Storm sewer piping	
C-STRM-PIPE-CMTL	Storm sewer piping corrugated metal	
C-STRM-PIPE-RCON	Storm sewer piping reinforced concrete	
C-STRM-PROF	Storm sewer profile	
C-STRM-STAN	Storm sewer stationing	
C-STRM-STRC	Storm sewer structures	
C-STRM-UNDR	Storm sewer underground piping	
	Sidewalks	
C-SWLK		
C-SWLK-ASPH	Sidewalks asphalt	
C-SWLK-CONC	Sidewalks concrete	
C-TINN	Triangulated irregular network	
C-TINN-BNDY	Triangulated irregular network boundary	
C-TINN-FALT	Triangulated irregular network fault / break lines	
C-TINN-VIEW	Triangulated irregular network triangulation	
C-TINN-VOID	Triangulated irregular network void regions	
C-TOPO	Topography	
C-TOPO-BORE	Topography test borings	
C-TOPO-DEPR	Topography depression contours	
C-TOPO-TPIT	Topography test pits	
C-TRAL	Trails or paths	
C-TRAL-ASPH	Trails or paths asphalt surface	
C-TRAL-CONC	Trails or paths concrete surface	
C-TRAL-GRVL	Trails or paths gravel surface	
C-TRAL-MRKG	Trails or paths pavement markings	
C-TRAL-SIGN	Trails or paths signs	
C-TRAL-UPVD	Trails or paths unpaved surface	
C-WALL	Walls	
C-WALL-CTLJ	Walls control joints	
C-WALL-NSBR	Walls noise barrier	
C-WALL-RTWL	Walls retaining	
C-WALL-SHEA	Walls structural bearing or shear walls	
C-WATR	Water supply systems	
C-WATR-DIAG	Water supply systems plan diagram	
C-WATR-INST		
	Water supply systems instrumentation (meters, valves, etc.)	
C-WATR-PIPE	Water supply systems piping	
C-WATR-PROF	Water supply systems profile	
C-WATR-STAN	Water supply systems stationing	
C-WATR-STRC	Water supply systems structures	
C-WATR-UNDR	Water supply systems underground piping	
C-WATR-WELL	Water supply systems well	
C-WETL	Wetlands	

LANDSCAPE LAYER GUIDELINES

Drawing Information Layers

L-DETL-***	Detail Drawings Information
L-PIRR-***	Landscape Irrigation Plan Information
L-PPLA-***	Landscape Planting Plan Information
L-PSTR-***	Structural Plan Information
L-SECT-***	Section Drawings Information
L-****-DIMS	Dimensions
L-****-NOTE	Notes, Call outs, and Key Notes
L-****-SCHD	Schedules and Tables of Text
L-****-SYMB	Symbols, Bubbles, and Targets
L-***-TEXT	General Notes and Specifications

Project Information Layers

-	5
L-IRRG-COVR	Irrigation Coverage
L-IRRG-CTRL	Irrigation Controller
L-IRRG-EQPM	Irrigation Equipment
L-IRRG-HEAD	Irrigation Heads
L-IRRG-LTRL	Irrigation Lateral Line Piping
L-IRRG-MAIN	Pressurized Main Irrigation Lines
L-IRRG-VALV	Irrigation Valves
L-IRRIG-BKFL	Irrigation Backflow Devices
L-IRRIG-PUMP	Irrigation Booster Pumps
L-PLNT-BEDS	Landscape Planting Beds
L-PLNT-DEMO	Existing Plants to be Demolished
L-PLNT-EXST	Existing Plants to Remain
L-PLNT-GRCV	Ground Covers and Vines
L-PLNT-SHRB	Shrubs

L-PLNT-TREE	Trees
L-PLNT-TURF	Turf Areas
L-SITE-BRDG	Pedestrian Bridges
L-SITE-DECK	Decks
L-SITE-FENC	Fencing
L-SITE-POOL	Pools and Spas
L-SITE-WALL	Walls
L-WALK	Walks, Steps, and Sidewalks
L-WALK-PATT	Patterns and Cross Hatching