

The California State University

Office of the Chancellor

Computer Aided Design (CAD) - Standards

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OVERVIEW

This computer aided design (CAD) guideline is for use on all of the California State University (CSU) Campuses'. These standards have been developed to serve as a template for the development of contractually required electronic data submittals to the California State University. Any deviations from these standards are to be approved in writing in advance by the University.

This CAD Submittal standard is not intended to preclude the A/E from using their software of choice in creating the documents. The A/E remains solely responsible however, for meeting these specific submittal requirements, including the AutoCAD.DWG file formatted as described below.

1.0 GENERAL REQUIREMENTS

All information described in section 3.0 is to be included in the electronic data deliverables. Any additional files are to be excluded from the deliverable package unless otherwise directed by the University.

All deliverables are to be provided on Windows Formatted CD-ROM.

All files are to be copied directly to the CD-ROM. No compression or archive utilities are allowed.

All drawings files will be saved in AutoCAD version 14.0. No other formats or versions will be acceptable without prior written authorization by the University.

The submitter is responsible for archiving the electronic data until final written acceptance from the University has been issued. Electronic data deliverables are required with all major submittals .

2.0 REQUIRED DOCUMENTATION

The electronic data deliverable package will include 5” CD-ROM with labels and 8 1/2”x 11” hard copy print out of the file descriptions.

2.1 CD-ROM LABELING

All CDs are to be labeled as follows:

CAMPUS:	Campus for which the project is intended for. Specify satellite location if applicable.
DATE:	The date when the submittal was delivered to the campus for final acceptance.
PROJECT:	Title of the project.
SUBMITTAL:	Project submittal phase (ie 50% schematic etc.)
BLDG NUMBERS:	Two digit building number identified by the campus specific to the project.
AUTOCAD VERSION:	Auto CAD version.
WINDOWS VERSION:	Windows version.
COMPANY:	Name of consultant to the campus.
PHONE NUMBER:	Phone number of consultant.
CD-ROM:	CR-ROM Number. Label as CD-ROM x of y. When only a single CD is used for the submittal, label as CD-ROM 1 of 1
FILES:	List of drawing included on CD-ROM.

Individual specification sections are not to be listed on the CD-ROM label. Limit file listing on text files to either “SPECIFICATIONS” of “FILE DESCRIPTIONS”. See Examples below.

2.2 FILE DESCRIPTION

Each CD is to be accompanied by a list of all included files, and a file description for each file on an 8 1/2"x11" hard copy print out and a text file in Microsoft Word format. Master files using reference files are to itemize all applicable reference files and layers. Each list is to include the following information:

See example below.

(Project Information)

Date

Campus, Project, Building Number

Consulting Company

Address & Phone Number

Project Manager

(Listing of files included in submittal)

A230EF02.DWG (no reference files)

A230FF03.DWG (no reference files)

A230SF04.DWG (no reference files)

A23AF01.DWG reference file structure below

Reference File	A230EF02.DWG	A230FF03.DWG	A230SF04.DWG
Layers used from reference file	E-FLOR E-LITE E-PCON	F-FIRE F-HALN	S-FLOR S-PCOL S-PSFR

3.0 REQUIRED DATA

Include ALL drawings included in the hard copy submittal, including any standard sheets (i.e., abbreviation sheets, standard symbol sheets, etc.) necessary for a complete document set.

Include all files, both graphic and non-graphic, required for accessing and using the project submittal drawings (e.g., color tables, pen tables, plot files ((i.e. PC2 or PCP format)), etc.).

3.1 FILE TYPES

Both text and graphic type files will be included in the electronic data deliverables.

3.1.1 TEXT FILES

File Descriptions are to be saved in an Microsoft Word text format.

Specifications shall be delivered in Microsoft Word format. Contact the University to determine the latest acceptable version of the file format, e.g Word 6.0, Word 97, etc.

3.1.2 DRAWING FILES

There are two distinct types of CAD files addressed in these standards: sheet files and model files.

A sheet file is synonymous to a plotted CAD drawing file. A sheet file is the selected view of the model file(s) within a border sheet. Sheet files are plotted at full scale (1=1), since the model file

files are referenced into the sheet at a particular scale ratio. In other words a sheet file is a ready-to-plot CAD file.

A model file contains the physical components of a project. Model files are drawn at full scale and typically represent plans, elevations, sections, etc.

Note: A sheet file shall be created with AutoCAD Paper Space.

Sheet border, title block, consultant's stamp, logos and all other components of the master drawing sheet shall be located in paper space.

All graphic representations of the project or facility and all related notes, dimensions symbols, etc. shall be constructed in model space, they may be referenced from another model file.

See also 4.0 Drawing Formats & Graphics

3.2 FILE INFORMATION

All information included in hard copy submittals shall be included in electronic data deliverables.

If blocks and cells are used in the documents, then they are to be consistent throughout without deviation. For example, if fixture "A" is used in a block form, then all locations where fixture "A" is shown shall be of the same block.

Drawings relying on reference files are to include a list of dependent reference files on the title block. Any reference files or block files pertinent to the content of the master file is required data and is to be included on the File Description.

3.3 FILE FORMAT

All submittals shall incorporate good drafting practices and organize information clearly and systematically.

Graphic elements representing a physical component of the project (i.e., lines indicating a wall, or a block indicating a light fixture) shall be shown only one time in the submittals. If additional references to the object are needed in additional drawing files they shall be shown via an external reference of the original file.

Examples of acceptable organization of drawing information are shown in section S Submittal Prototypes.

3.4 FILE SIZE AND ORGANIZATION

It is the responsibility of the consultant to organize drawing information coherently and maintain reasonable file sizes

3.5 COPY AND COMPRESSION FORMAT

File shall be copied directly to the CD-ROM. No other commands will be acceptable (i.e. BACKUP RESTORE). No compression or archive utilities are allowed.

3.6 REFERENCE FILES

Drawings using reference files are to list referenced files on the title block layer. This list will give an account of dependent files for the complete document. This information will also be added to the file description for master files, refer to section 2.2. In all submittals reference files shall be located in the same directory as the dependent files.

Reference files shall NOT include path names.

3.7 DOCUMENT FILE FORMAT

One drawing file corresponding to each hard copy submittal sheet is to be saved in a plot-ready format. Document files shall be formatted utilizing paper space. Plotting shall be set to plot a view named “plot” with a plot scale of 1”=1”formatted to match the hard copy submittals.

3.8 FILE NAMING

All files included in the electronic data deliverable package will conform to a logical file naming convention. When requested by the university, the consultant shall use university’s existing file naming protocols. In the absence of a university standard, the consultant shall submit a proposed file-naming scheme for the approval of the university.

4.0 DRAWING FORMATS & GRAPHICS

Sheet border, title block, consultant’s stamp, logos and all other components of the master drawing sheet shall be located in paper space.

All graphic representations of the project or facility and all related notes, dimensions, symbols, etc., shall be constructed in model space.

4.1 STANDARD COORDINATE SYSTEM

The world coordinate system shall correspond to the California Coordinate System NAD 83 for all civil, map and campus plan (including Campus Master Plans files. Where necessary for compositing drawings on a sheet a user coordinate system named "PLAN VIEW" shall be established."

4.2 PROTOTYPE DRAWING FILES

Prototype drawing files and symbols shall be utilized when provided by the University. These may include but not be limited to; typical title sheets, formatted drawing files, drawing symbology and other blocks. When blocks contain attributes all relevant attribute fields are to be filled out.

4.3 STANDARD SHEET SIZES AND FORMATS

All sheet sizes are to be limited to five standard formats. Required sheet size is specific to each project and is under the discretion of the University. They are as follows:

A Sized Plot	8 1/2” x 11”
B Sized Plot	11” x 17”
C Sized Plot	24” x 36” (preferred format)
D Sized Plot	30” x 42”

4.4 GRAPHICS

All graphic entities shall be comprised of representational and geometrically accurate entities, e.g. a circle shall be represented by circle entity and NOT a visually equivalent collection of line segments.

All graphics representing the actual physical components of the project, e.g. walls or doors, shall be drawn at full scale.

Continuous linear elements such as contour lines, or curb lines, shall be constructed with polylines

Items shown in a dashed linetype shall be created with the LINETYPE feature and NOT by individual line elements.

4.4.1 TEXT

All text is to be created only with the standard AutoCAD's font files:
eg. romans, romand, romant, italic, italicc
Custom, or third party fonts, shall not be used.

4.4.2 SPECIAL ENTITY REQUIREMENTS (BLOCKS)

Common symbols, doors, W.C.s, windows, equipment, etc., shall be blocks. Consultants shall use predefined symbols and blocks when such are provided by the university.

Entities to be shown as blocks

- All Plumbing & Bath Fixtures e.g., water closets, urinals, lavatories, tubs, grab bars, accessories, mirrors
- All Electrical Devices & Hardware e.g., lighting fixtures, switches, outlets, panels
- Mechanical Equipment e.g., supply diffusers, return grilles, thermostats, air handlers chillers, pumps boilers, heat exchangers
- Doors (insert with scale set to door size)
- Windows (insert with scale to window size)
- Equipment, type I and II
- Furniture
- Drawing Symbols
- Door and window marks, room # indicators, scale indicators, north arrows

4.4.3 RASTER GRAPHICS

Raster files shall not be used to represent the project geometry, e.g. building plans or other drawings shall not be scanned and inserted as raster files.

Raster files may be used for the incorporation of existing condition photos or similar applications

Any raster file included in a drawing shall be placed on its own layer.

4.5 DIMENSIONING

All dimensions shown in the project submittals shall be fully associative. Dimension definition points should be located with an appropriate Object Snap (End Point, Mid Point, etc.) or otherwise located precisely on the project geometry. Manual input of dimension text or otherwise overriding the actual dimensions is NOT acceptable in submittals to the university.

4.6 FILL AND HATCH PATTERNS

Limit excessive use of hatch patterns to avoid unnecessarily large files. All consultants are responsible for keeping files sizes within reasonable limits.

A solid hatch shall be created by only using AutoCAD “SOLID” hatch pattern, or with the SOLID command. Using dense hatch patterns to create solid fill shall not be permitted in the drawing set.

4.7 LINE WEIGHTS AND PEN ASSIGNMENTS

Recommendations:

These pen assignments are provided to support CSU personnel in producing consistent hard copy output from the electronic submittals. Consultants are solely responsible for the production and appearance of their hard copy submittals.

Note: While color #s 14, 54, 94, 134, 174, & 214 have no AutoCAD color name they are a greyed out red, yellow, green, cyan, blue, & magenta respectively on a standard 256 color AutoCAD display

Typical Drawing Layers *	AutoCAD Color #	Output Device Description	Raster: Inkjet/Laser/Electrostatic (Monochrome)		Pen Plotter, 6 Pens			Pen Plotter, 4 Pens		
			Line Width	% Fill	Pen	Size	Color	Pen	Size	Color
Patterns	1, Red	Extra Fine	0.15	100%	Pen 1	0.15	Black	Pen 1	0.25	Black
Dimensions	2, Yellow	Fine	0.25	100%	Pen 2	0.25	Black	Pen 1	0.25	Black
Notes, Text, Schedules,	3, Green	Light	0.35	100%	Pen 3	0.35	Black	Pen 2	0.35	Black
Titles, Project Info	4, Cyan	Medium	0.50	100%	Pen 4	0.50	Black	Pen 3	0.50	Black
Titles, Project Info	5, Blue	Heavy	0.70	100%	Pen 5	0.70	Black	Pen 4	0.70	Black
Borders, Project Info	6, Magenta	Extra Heavy	0.90	100%	Pen 6	0.90	Black	Pen 4	0.90	Black
Background Layers		Halftones (Backgrounds)								
	14	Extra Fine	0.15	50%	Pen 7	0.15	Green	Pen 5	0.25	Green
	54	Fine	0.25	50%	Pen 8	0.25	Green	Pen 5	0.25	Green
	94	Light	0.35	50%	Pen 9	0.35	Green	Pen 6	0.35	Green
	134	Medium	0.50	50%	Pen 10	0.50	Green	Pen 7	0.50	Green
	174	Heavy	0.70	50%	Pen 11	0.70	Green	Pen 8	0.70	Green
214	Extra Heavy	0.90	50%	Pen 12	0.90	Green	Pen 8	0.70	Green	

*All Submittals to the CSU shall have colors set by layer, colors shall not be set by entity.

5.0 LAYERING

All layering names and information within shall coincide with the following guidelines. Only applicable layers are to be used. Blank layers are not to be included in the electronic data deliverables. If reference files are used, refer to section 3.6 for additional direction.

Graphic representations of related items shall be located on a single layer even when indicated on different drawings. E.g., Full height walls could be properly shown as A-WALL or A-WALL-FULL but not both.

Graphic indicators for text and notes, e.g., header line and arrowheads for a note, shall be located on the same layer as the corresponding text.

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

PROPOSED 13-CHARACTER LAYER NAME = X-XXXX - XXXX - XXXX



Major group headings shall define the layer's discipline as follows:

- A = Architectural
- C = Civil
- E = Electrical
- F = Fire Protection
- L = Landscape
- M = Mechanical
- P = Plumbing
- Q = Communications
- S = Structural

Minor group headings shall define assemblies or construction systems such as walls, doors, ceilings or electrical power. Refer to section 5.1.

Modifier headings shall further define the minor group headings such as full height wall, partial height wall, emergency lighting or general lighting. Refer to section 5.2.

User Defined heading shall further define the modifier group heading such as full height wall existing and full height wall demolished. Refer to section 5.2.

Modifiers and user definer characters are options provided for extended clarification. Most layers on small projects will only require five (5) character major/minor format.

5.1 LAYER GUIDELINES BY DISCIPLINE

The CSU CAD Layer guidelines are of necessity both specific and open ended. The modular nature of guidelines allows for tremendous flexibility in delineating the myriad components of CSU's infrastructure.

The following discipline specific guidelines delineate the acceptable format of layer names for common project types. It should be noted that the naming structure is consistent across all disciplines and common elements would be named identically in all disciplines. The organization of layer names by discipline is merely a convenience to aid in finding the appropriate layer. The layer names comprise a single comprehensive system.

For example: A-DOOR is the only acceptable layer for indicating a door in all disciplines Electrical Plans, Plumbing Plans etc. By the same logic E-LITE-EXIT is the only acceptable layer for indicating an exit light in an architectural drawing.

These disciplines specific guidelines shall be used whenever possible. Alternative layer names or organization are not acceptable.

Where the nature of project or drawing requires it, consultants may propose expansions of the layering guidelines. The proposed expansion shall be submitted in writing to the Office of the Chancellor and are subject to revision or rejection at the discretion of the university. Acceptable expansions shall utilize the Major Group Headings (see 5.0), Minor Group Abbreviations (see 5.2), and modifiers and User Definitions (see 5.3) as provided, as well as the format shown below (see 5.1.x).

Accepted Expansions of the layer name guidelines may be included in future revisions of the CSU Competitor Aided Design Guidelines at the discretion of the university.

The color and linetype assignments for the layers are provided to support CSU personnel in producing consistent hard copy output from the electronic submittals. Consultants are solely responsible for the production and appearance of their hard copy submittals.

5.1.1 ARCHITECTURAL LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
A-PARE-****	Occupancy Plan & Area Designations Information		
A-PCLG-****	Demolition Plan Information		
A-PDEM-****	Ceiling Plan Information		
A-PEQP-****	Equipment Plan Information		
A-PFLR-****	Floor Plan Information		
A-PLGS-****	Large Scale Floor Plan Information		
A-PROF-****	Roof Plan Information		
A-DETL-****	Detail Drawings Information		
A-ELEV-****	Elevation Drawings		
A-SECT-****	Section Drawings		
A-****-DIMS	Dimensions	2, Yellow	Continuous
A-****-IDEN	Repetitive Annotation, i.e. Rm No's/Equip No's	3, Green	Continuous
A-****-KEYN	ConDoc Key Notes	3, Green	Continuous
A-****-NOTE	Notes and Call-outs	3, Green	Continuous
A-****-PATT	Patterns, Cross Hatching, & Poche	1, Red	Continuous
A-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
A-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
A-****-TEXT	General Notes and Specifications	3, Green	Continuous
Building Information Layers			
A-WALL	Walls	5, Blue	Continuous
A-WALL-CNTR	Wall Center Lines	2, Yellow	Center
A-WALL-FULL	Full Height Walls	6, Magenta	Continuous
A-WALL-PRHT	Partial Height Walls	4, Cyan	Continuous
A-WALL-WHED	Window Headers	3, Green	Continuous
A-WALL-DHED	Door Headers	3, Green	Continuous
A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous
A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill	1, Red	Continuous
A-CLNG-OVHD	Ceiling Elements, soffits, and Bulkheads	4, Cyan	Hidden
A-CLNG-GRID	Ceiling Grid (T-Bar Ceiling)	1, Red	Continuous
A-DOOR	Doors	4, Cyan	Continuous
A-DOOR-IDEN	Door Number, Hardware Group, etc.	3, Green	Continuous
A-GLAZ	Window, Window Walls, Curtain Walls, Glazed Partitions	3, Green	Continuous
A-GLAZ-SILL	Window Sills	3, Green	Continuous
A-GLAZ-IDEN	Window Number	3, Green	Continuous

5.1.1 Continued

Layer	Description	Color	Linetype
A-FLOR	Floor Information	3, Green	Continuous
A-FLOR-LEVL	Level Changes, Ramps, Pits, & Depression	5, Blue	Continuous
A-FLOR-STRS	Stairs, Escalators, and Ladders	4, Cyan	Continuous
A-FLOR-HRAL	Stair and Balcony Handrails and Guardrails	4, Cyan	Continuous
A-FLOR-TPTN	Toilet Portions	4, Cyan	Continuous
A-FLOR-SPCL	Architectural Specialties	4, Cyan	Continuous
A-EQPM	Equipment	4, Cyan	Continuous
A-EQPM-FIXD	Fixed Equipment (CSU Type 1)	4, Cyan	Continuous
A-EQDM-MOVE	Moveable Equipment (CSU Type 2)	3, Green	Dashed
A-EQPM-IDEN	Equipment Identification Numbers	3, Green	Continuous
A-FURN	Furniture	3, Green	Continuous
A-FURN-IDEN	Furniture Identification Numbers	3, Green	Continuous
A-ROOF	Roof Information	4, Cyan	Continuous
A-ROOF-LEVL	Level Changes	4, Cyan	Continuous
A-ROOF-OTLN	Roof Perimeter/Edge, Roof Geometry	6, Magenta	Continuous
A-ROOF-STRS	Stair Treads and Ladders	4, Cyan	Continuous

5.1.2 STRUCTURAL LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
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	2, yellow	Continuous
S-****-KEYN	ConDoc Key Notes	3, Green	Continuous
S-****-NOTE	Notes, Call-outs, & Key Notes	3, Green	Continuous
S-****-SYMB	Symbols, Bubbles, & Targets	4, Cyan	Continuous
S-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
S-****-TEXT	General Notes & Specifications	3, Green	Continuous
Building Information Layers			
S-ABLT	Anchor Bolts & Hold-Downs	4, Cyan	Continuous
S-COLS	Structural Columns	6, Magenta	Continuous
S-COLS-RBAR	Reinforcing Bars	5, Blue	Continuous
S-COLS-WELD-SYMB	Welding Symbols	3, Green	Continuous
S-FNDN-FTNG	Footings	6, Magenta	Continuous
S-FNDN-GRBM	Grade Beams	6, Magenta	Continuous
S-FNDN-PIER	Piers	6, Magenta	Continuous
S-FNDN-RBAR	Reinforcing Bars	5, Blue	Continuous
S-FNDN-WELD-SYMB	Welding Symbols	3, Green	Continuous
S-FRAM	Framing	4, Cyan	Continuous
S-FRAM-BEAM	Beams	5, Blue	Continuous
The drawing may be further segregated with sublayers if needed, e.g.:			
S-FRAM-BEAM-PRIM	Primary Beams	6, Magenta	Continuous
S-FRAM-BEAM-SCND	Secondary Beams	4, Cyan	Continuous
S-FRAM-DECK	Structural Decking	4, Cyan	Continuous
S-FRAM-JOIS	Joists	6, Magenta	Continuous
S-FRAM-RBAR	Reinforcing Bars	5, Blue	Continuous
S-FRAM-WELD-SYMB	Welding Symbols	3, Green	Continuous

5.1.2 Continued

Layer	Description	Color	Linetype
S-GRID	Column Grid	2, Yellow	Center
S-GRID-IDEN	Column Grid Tags	4, Cyan	Continuous
S-JNTS-CNST	Construction Joints	4, Cyan	Continuous
S-JNTS-CTRL	Control Joints	4, Cyan	Continuous
S-SLAB	Concrete Slabs	4, Cyan	Continuous
S-SLAB-OTLN	Slab Outline	6, Magenta	Continuous
S-SLAB-RBAR	Concrete Slab Reinforcing	5, Blue	Continuous
S-WALL	Structural Bearing & Sheer Walls	4, Cyan	Continuous

5.1.3 MECHANICAL LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
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-DETL-****	Detail Drawings Information		
M-ELEV-****	Elevation Drawings Information		
M-SECT-****	Section Drawings Information		
M-****-DIMS	Dimensions	2,yellow	Continuous
M-****-KEYN	ConDoc Key Notes	3, Green	Continuous
M-****-NOTE	Notes, Call-outs, & Key Notes	3, Green	Continuous
M-****-SYMB	Symbols, Bubbles, & Targets	4, Cyan	Continuous
M-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
M-****-TEXT	General Notes & Specifications	3, Green	Continuous
Building Information Layers			
M-DUCT-SUPP	HVAC System Supply Ductwork	4,Cyan	Continuous
M-DUCT-RETN	HVAC System Return Ductwork	4,Cyan	Continuous
M-DUCT-EXHT	HVAC System Exhaust Ductwork	4,Cyan	Continuous
M-DUCT-OTHR	HVAC System Other Ductwork	4,Cyan	Continuous
M-HVAC-EQPM	HVAC Equipment	5, Blue	Continuous
M-CDFE-SUPP	Ceiling Supply Diffusers	5, Blue	Continuous
M-CDFE-RETN	Ceiling Return Diffusers	5, Blue	Continuous
M-ODFF	Other Diffusers	5, Blue	Continuous
M-CONT	Controls & Instrumentation	4, Cyan	Continuous
M-CONT-THER	Thermostats	4, Cyan	Continuous
M-CONT-WIRE	Low Voltage Wiring	4, Cyan	Continuous
M-ENER-SYST	Energy Management Systems	4,Cyan	Continuous
M-EXHS-DUCT	Exhaust System Ductwork	4,Cyan	Continuous
M-EXHS-EQPM	Exhaust System Equipment	5, Blue	Continuous

5.1.3 CONTINUED

Layer	Description	Color	Linetype
Chilled Water System			
M-CWTR-EQPM	Chilled Water Equipment	5, Blue	Continuous
M-CWRT-FIXT	C.W. Above Ground Elements, e.g. Manholes	5, Blue	Continuous
M-CWRT-NOTE	Chilled Water Notes	3, Green	Continuous
M-CWTR-PIPE	Chilled Water Pipe	4,Cyan	Continuous
	When Layers below are used to segregate supply & return subgroup PIPE may NOT be used.		
M-CWTR-RTRN	Chilled Water Return Lines	4, Cyan	Continuous
M-CWTR-SUPL	Chilled Water Supply Lines	4, Cyan	Continuous
M-DUAL-PIPE	Dual Temperature System Pipe	4,Cyan	Continuous
M-DUAL-EQPM	Dual Temperature System Equipment	5, Blue	Continuous
Hot Water (Space Heating) System			
M-HOTW-EQPM	Hot Water Equipment	5, Blue	Continuous
M-HOTW-FIXT	H.W. Above Ground Elements, e.g. Manholes	5, Blue	Continuous
M-HOTW-PIPE	Hot Water Pipe	4,Cyan	Continuous
	When Layers below are used to segregate supply & return subgroup PIPE may NOT be used.		
M-HOTW-RTRN	Hot Water Return Lines	4, Cyan	Continuous
M-HOTW-SUPL	Hot Water Supply Lines	4, Cyan	Continuous
M-REFG-EQPM	Refrigeration System Equipment	5, Blue	Continuous
M-REFG-PIPE	Refrigeration System Piping	4,Cyan	Continuous
M-STEM-LPIP	Low Pressure Steam Piping	4,Cyan	Continuous
M-STEM-MPIP	Medium Pressure Steam Piping	4,Cyan	Continuous
M-STEM-HPIP	High Pressure Steam Piping	4,Cyan	Continuous
M-STEM-EQPM	Refrigeration System Equipment	5, Blue	Continuous
M-SPCL-****	Special Systems		
M-VENT-DUCT	Industrial or Laboratory Venting	4,Cyan	Continuous
M-VENT-EQPM	Industrial or Laboratory Venting Equipment	4,Cyan	Continuous

5.1.4 PLUMBING LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
P-PPLM -****	Plumbing Plan Information		
P-DETL-****	Detail Drawings Information		
P-ELEV-****	Elevation Drawings Information		
P-SECT-****	Section Drawings Information		
P-RISR -****	Plumbing Riser Diagram Information		
P-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
P-****-TEXT	General Notes and Specifications	3, Green	Continuous
P-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
P-****-DIMS	Dimensions	2, Yellow	Continuous
P-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
Building Information Layers			
Acid, Alkaline, and Oil Waste System			
P-ACID-PIPE	Acid, Alkaline, and Oil Waste System Piping	4, Cyan	Continuous
P-ACID-EQPM	Acid, Alkaline, and Oil Waste System Equipment	5, Blue	Continuous
Domestic Hot & Cold Water System			
P-DOMW-PIPE	Domestic Hot and Cold Water Piping	4, Cyan	Continuous
P-DOMW-EQPM	Domestic Hot and Cold Water Equipment	5, Blue	Continuous
Sanitary Drainage			
P-SANR-PIPE	Sanitary Piping	4, Cyan	Continuous
P-SANR-VENT	Sanitary Vent Piping	4, Cyan	Continuous
P-SANR-EQPM	Sanitary Equipment	5, Blue	Continuous
P-SANR-FTXT	Sanitary Fixture	5, Blue	Continuous
Storm Drainage System			
P-STRM-PIPE	Storm Drain Piping	4, Cyan	Continuous
P-STRM-RFDR	Roof Drains	5, Blue	Continuous
Natural Gas System			
P-NGAS-PIPE	Natural Gas System Piping	4, Cyan	Continuous
P-NGAS-EQPM	Natural Gas System Equipment	5, Blue	Continuous
Laboratory Gas System			
P-LABS-PIPE	Laboratory Gas Piping	4, Cyan	Continuous
P-LABS-EQPM	Laboratory Equipment	5, Blue	Continuous

5.1.5 FIRE PROTECTION SYSTEMS LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
F-PSPR-****	Sprinkler Plan		
F-PFPE-****	Fire Protection Equipment Plan		
F-RISR-****	Sprinkler Riser Program		
F-DETL-****	Detail Drawings Information		
F-SECT-****	Section Drawings Information		
F-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
F-****-TEXT	General Notes and Specifications	3, Green	Continuous
F-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
F-****-DIMS	Dimensions	2, Yellow	Continuous
F-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
Building Information Layers			
F-CO2S-PIPE	CO ² (Carbon Dioxide) System Piping	4, Cyan	Continuous
F-CO2S-EQPM	CO ² (Carbon Dioxide) System Equipment	5, Blue	Continuous
F-HALN-PIPE	Halon System Piping	4, Cyan	Continuous
F-HALN-EQPM	Halon Equipment	5, Blue	Continuous
F-HALN-SPHD	Halon Spray Heads	5, Blue	Continuous
F-SPRN-SPHD	Fire Protection Sprinkler Heads	5, Blue	Continuous
F-SPRN-PIPE	Fire Protection Sprinkler Piping	4, Cyan	Continuous
F-STAN-EQIP	Fire Protection Standpipe Equipment	5, Blue	Continuous
F-STAN-PIPE	Fire Protection Standpipe Piping	4, Cyan	Continuous
F-PROT-EQPM	Fire System Equipment (Fire Hose Cabinet, Extinguishers)	5, Blue	Continuous
F-PROT-ALRM	Fire Alarm	5, Blue	Continuous
F-PROT-SMOK	Smoke Detectors or Heat Sensors	5, Blue	Continuous

5.1.6 ELECTRICAL LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
E-PAUX-****	Auxiliary Systems Plan Information		
E-PCOM-****	Communications Plan Information		
E-PLIT-****	Lighting Plan Information		
E-PPOW-****	Power Plan Information		
E-RISR-****	Electrical Riser Diagrams		
E-DETL-****	Detail Drawings Information		
E-SECT-****	Section Drawings Information		
E-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
E-****-TEXT	General Notes and Specifications	3, Green	Continuous
E-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
E-****-DIMS	Dimensions	2, Yellow	Continuous
E-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
Building Information Layers			
Lighting			
E-LITE-CLNG	Ceiling Mounted Lighting	5, Blue	Continuous
E-LITE-EXIT	Exit Lighting	5, Blue	Continuous
E-LITE-EMER	Emergency Lighting	5, Blue	Continuous
E-LITE-FLOR	Floor Lighting	5, Blue	Continuous
E-LITE-ROOF	Roof Mounted Lighting	5, Blue	Continuous
E-LITE-SITE	Site Lighting Fixtures	5, Blue	Continuous
E-LITE-SWCH	Lighting Switches	5, Blue	Continuous
E-LITE-WIRE	Wiring and Conduit	5, Blue	Dashed
E-LITE-NUMB	Lighting Circuit Numbers	4, Cyan	Continuous
E-LITE-IDEN	Luminaire Identification and Text	4, Cyan	Continuous
Power			
E-POWR-WALL	Wall Outlets & Receptacles	5, Blue	Continuous
E-POWR-CLNG	Ceiling Receptacles and Devices	5, Blue	Continuous
E-POWR-FLOR	Floor Mounted Outlets	5, Blue	Continuous
E-POWR-EQPM	Power Equipment	5, Blue	Continuous
E-POWR-CABL	Cable Trays	4, Cyan	Continuous
E-POWR-NUMB	Power Circuit Numbers	4, Cyan	Continuous
E-POWR-WIRE	Power Wiring and Conduit	4, Cyan	Dashed
Electrical Control Systems			
E-CTRL-EQPM	Control System Equipment & Devices	5, Blue	Continuous
E-CTRL-WIRE	Control System Wiring	4, Cyan	Dashed
E-GRND	Electrical Ground System	3, Green	Continuous
E-PROT-WIRE	Fire Protection System Wiring	3, Green	Dashed
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)	2, Yellow	Dashed

5.1.7 CIVIL LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
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	3, Green	Continuous
C-****-TEXT	General Notes and Specifications	3, Green	Continuous
C-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
C-****-DIMS	Dimensions	2, Yellow	Continuous
C-****-SCHD	Schedules and Tables of Text	4, Cyan	Continuous

Project Information Layers

Property Lines & Survey Benchmarks
See Section 5.1.8 for Topographic Contour Layers

Contour Lines & Elevations
See Section 5.1.9 for Topographic Contour Layers

C-BLDG-EXST	Footprint of Existing Building	3, Green	Continuous
C-BLDG-DEMO	Footprint of Existing Bldg. to be Demolished	3, Green	Continuous
C-PKNG	Parking Lots	3, Green	Continuous
C-PKNG-STRP	Parking Lot Striping, and Pavement	3, Green	Continuous
C-PKNG-CARS	Graphic Illustration of Cars	1, Red	Continuous
C-PKNG-CURB	Curbs and Wheel Stops	3, Green	Continuous
C-ROAD	Roads	3, Green	Continuous
C-ROAD-CNTR	Road Center Lines	3, Green	Continuous
C-ROAD-CURB	Curbs	3, Green	Continuous
C-ROAD-BRDG	Roadway Bridges	4, Cyan	Continuous
C-ROAD-PROP	Proposed Road	4, Cyan	Continuous
C-ROAD-DEMO	Existing Road to be Demolished	3, Green	Continuous
C-STRM-CULV	Culverts, Headwalls, Drainage Inlets	6, Magenta	Continuous
C-STRM-IDEN	Storm Sewer System Annotation	4, Cyan	Continuous
C-STRM-DTCH	Drainage Ditches	3, Green	Dashed
P-STRM-FIXT	Storm Drainage Surface Features (Catch Basins, Manholes)	5, Blue	Continuous
P-STRM-PIPE	Storm Drain Pipes	5, Blue	Dashed
Site utilities use the same layering protocols as building utilities, e.g. Site Lighting would be:			
E-LITE-SITE	Site Lighting Fixtures	5, Blue	Continuous
E-LITE-WIRE	Wiring and Conduit	5, Blue	Dashed
E-LITE-NUMB	Lighting Circuit Numbers	4, Cyan	Continuous

See the appropriate discipline specific guidelines e.g. 5.1.6 for site utilities layering.

5.1.8 BOUNDARY SURVEY LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
C-PBND-****	Boundary Plan Information		
C-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
C-****-TEXT	General Notes and Specifications	3, Green	Continuous
C-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
C-****-DIMS	Dimensions	2, Yellow	Continuous
Project Information Layers			
C-GRID	Grid Lines (California Coordinates)	1, Red	Continuous
C-GRID-NOTE	Grid Coordinates and Notes	3, Green	Continuous
C-PROP	Property Line (Campus Boundary)	4, Cyan	Phantom
C-PROP-NOTE	Property Line Notes	5, Blue	Continuous
C-PROP-ESMT	Easements	6, Magenta	Continuous
C-PROP-DIMS	Boundary and Distance Notations	2, Yellow	Continuous
C-PROP-ESMT	Easements, Right of Ways, Setback Lines	6, Magenta	Continuous
C-PROP-BRNG	Bearings and Distance Labels	4, Cyan	Continuous
C-ROAD	Roads and Streets	5, Blue	Continuous
C-ROAD-IDEN	Road and Street Names	4, Cyan	Continuous

5.1.9 TOPOGRAPHIC PLANS LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
C-PTOP-****	Topographic Plan Information		
C-DETL-****	Detail Drawings Information		
C-SECT-****	Section Drawings Information		
C-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
C-****-TEXT	General Notes and Specifications	3, Green	Continuous
C-****-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
C-****-DIMS	Dimensions	6, Magenta	Continuous
C-****-SCHD	Schedules and Tables of Text	6, Magenta	Continuous
Building Information Layers			
C-GRID	Grid Lines (California Coordinates)	3, Green	Continuous
C-GRID-NOTE	Grid Coordinates and Notes	3, Green	Continuous
C-BLDG	Building Outline	2, Yellow	Continuous
C-BLDG-ELEV	Building Elevations	2, Yellow	Continuous
Topographic Information			
C-TOPO-SPOT	Spot Elevations (Tick Marks & Text)	3, Green	Continuous
C-TOPO-MAJR	Major Contour Lines	6, Magenta	Dash Dot
C-TOPO-MAJR-TEXT	Major Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-MINR	Minor Contour Lines	4, Cyan	Dash Dot
C-TOPO-MINR-TEXT	Minor Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-DEMO	Existing Contour Lines to be Changed	2, Yellow	2 Dashed
C-TOPO-MACL	Major Depressed Contour Lines (Wet lands)	4, Cyan	Continuous
C-TOPO-MICL	Minor Depressed Contour Lines (Wet lands)	6, Magenta	Continuous
C-PROP	Property Line (Campus Boundary)	4, Cyan	Phantom
C-PROP-NOTE	Property Line Notes	5, Blue	Continuous
C-PROP-ESMT	Easements	6, Magenta	Continuous
C-ROAD	Roads and Streets	6, Magenta	Continuous
C-ROAD-CURB	Curb Lines	3, Green	Continuous
C-ROAD-NOTE	Road and Street Names	3, Green	Continuous
C-ROAD-BRDG	Roadway Bridges	4, Cyan	Continuous
L-WALK	Pedestrian Walks	3, Green	Continuous
L-WALK-BRDG	Pedestrian Bridges	4, Cyan	Continuous
C-PKNG	Parking Lot	3, Green	Continuous
C-PKNG-NOTE	Parking Lot Notes	3, Green	Continuous
C-PKNG-TEXT	Parking Lot Text	3, Green	Continuous
L-SITE-WATR	Site Water Features, Rivers, Streams, Ponds, and Coastlines	1, Red	Continuous
L-SITE-WATR-NOTE	Names and Notes	3, Green	Continuous

5.1.10 LANDSCAPE LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
L-PIRR-****	Landscape Irrigation Plan Information		
L-PPLA-****	Landscape Planting Plan Information		
L-DETL-****	Detail Drawings Information		
L-SECT-****	Section Drawings Information		
L-PSTR-****	Structural Plan Information		
L-****-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
L-****-TEXT	General Notes and Specifications	3, Green	Continuous
L-****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
L-****-DIMS	Dimensions	2, Yellow	Continuous
L-****-SCHD	Schedules and Tables of Text	3, Green	Continuous
Project Information Layers			
Landscape Planting			
L-PLNT-TREE	Tree	3, Green	Continuous
L-PLNT-EXST	Existing Plants to Remain	3, Green	Continuous
L-PLNT-DEMO	Existing Plants to be Demolished	3, Green	Continuous
L-PLNT-GRND	Ground Cover and Vines	3, Green	Continuous
L-PLNT-SHRB	Shrubs & Bushes	5, Blue	Continuous
L-PLNT-TURF	Lawn Areas	3, Green	Continuous
L-PLNT-BEDS	Landscape Planting Beds	3, Green	Continuous
Landscape Irrigation System			
L-IRRG-MAJR	Main Irrigation Lines (larger than 2")	3, Green	Continuous
L-IRRG-SPHD	Sprinkler Head	6, Magenta	Continuous
L-IRRG-PIPE	Sprinkler Piping	3, Green	Continuous
L-IRRG-EQPM	Irrigation Equipment	6, Magenta	Continuous
L-IRRG-COVR	Irrigation Coverage	3, Green	Continuous
L-WALK	Walks, Steps, and	3, Green	Continuous
L-WALK-PATT	Patterns and Cross Hatching	3, Green	Continuous
Site Improvements			
L-SITE-FENC	Fencing	5, Blue	Continuous
L-SITE-WALL	Walls	6, Magenta	Continuous
L-SITE-DECK	Decks	4, Cyan	Continuous
L-SITE-BRDG	Pedestrian Bridges	4, Cyan	Continuous
L-SITE-POOL	Pools and Spas	6, Magenta	Continuous

5.1.11 CAMPUS MASTER PLAN LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
C-PMST-SYMB	Symbols, Arrows, Graphic Scales, etc.	4, Cyan	Continuous
C-PMST-LEGN	Legend of Building Names & Numbers	3, Green	Continuous
C-PMST-NOTE	Notes	3, Green	Continuous
C-PMST-****	Other Campus Master Plan Information		
C-SHDB-LGND	Building Legend (in Paper Space)	4, Cyan	Continuous
C-SHDB-NOTE	Master Plan Notes (in Paper Space)	3, Green	Continuous
Campus Information Layers			
C-BLDG-EXST	Existing Building Outline	6, Magenta	Continuous
C-BLDG-EXST-NOTE	Existing Building Number	4, Cyan	Continuous
C-BLDG-EXST-PATT	Existing Building Hatch Pattern	3, Green	Continuous
C-BLDG-TEMP	Existing Temporary Building Outline	3, Green	Continuous
C-BLDG-TEMP-NOTE	Existing Temporary Building Number	3, Green	Continuous
C-BLDG-PROP	Proposed Building Outline	5, Blue	Continuous
C-BLDG-PROP-NOTE	Proposed Building Number	4, Cyan	Continuous
C-BLDG-PROP-PATT	Proposed Building Pattern	1, Red	Continuous
C-ROAD	Roads and Streets	6, Magenta	Continuous
C-ROAD-CURB	Curb Lines	3, Green	Continuous
C-ROAD-NOTE	Road and Street Names	4, Cyan	Continuous
C-ROAD-BRDG	Roadway Bridges	6, Magenta	Continuous
C-ROAD-GUTR	Roadway Gutters	2, Yellow	Continuous
L-WALK	Pedestrian Walks	4, Cyan	Continuous
L-WALK-BRDG	Pedestrian Bridges	5, Blue	Continuous
C-PKNG-EXST	Parking Lot	3, Green	Continuous
C-PKNG-EXST-NOTE	Parking Lot	3, Green	Continuous
C-PKNG-EXST-TEXT	Parking Lot Notes (Number of Spaces)	3, Green	Continuous
C-PKNG-PROP	Proposed Parking Lot	3, Green	Continuous
C-PKNG-PROP-NOTE	Proposed Parking Lot Number	3, Green	Continuous
C-BLDG-EXST	Existing Building Outline	3, Green	Continuous
C-BLDG-EXST-NOTE	Existing Building Number	3, Green	Continuous
C-BLDG-EXST-PATT	Existing Building Hatch Pattern	1, Red	Continuous
C-BLDG-TEMP	Existing Temporary Building Outline	3, Green	Continuous
C-BLDG-TEMP-NOTE	Existing Temporary Building Number	3, Green	Continuous
C-BLDG-TEMP-PATT	Existing Temporary Building Hatch Pattern	1, Red	Continuous
C-BLDG-PROP	Proposed Building Outline	3, Green	Continuous
C-BLDG-PROP-NOTE	Proposed Building Number	3, Green	Continuous
C-BLDG-PROP-PATT	Proposed Building Pattern	1, Red	Continuous
L-SITE-WATR	Site Water Features, Rivers, Streams, Ponds, and Coastlines	5, Blue	Continuous
L-SITE-WATR-NOTE	Names and Notes	4, Cyan	Continuous

5.1.12 UTILITY INFRASTRUCTURE LAYER GUIDELINES

Layer	Description	Color	Linetype
Drawing Information Layers			
C-PUTL-****	Site Utility Plan Information		
C-DETL-****	Detail Drawings Information		
C-ELEV-****	Elevation Drawings Information		
C-SECT-****	Section Drawings Information		
C-****-NOTE	Notes, Call-outs, and Key Notes	3, Green	Continuous
C-****-TEXT	General Notes and Specifications	3, Green	Continuous
C-****-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
C-****-DIMS	Dimensions	6, Magenta	Continuous
C-****-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Topographic Plan Information

All topographic plan data is to be contained in a separate drawing file and incorporated into utility plans via references files.

Utility Information Layers

P-SSWR	Sanitary Sewer System	3, green	Continuous
P-SSWR-MHOL	Sanitary Sewer Manholes	4, Cyan	Continuous
P-SSWR-ELEV	Sanitary Sewer Elevations	4, Cyan	Continuous
P-SSWR-PIPE	Sanitary Sewer Pipe	3, Green	Continuous
P-SSWR-NOTE	Sanitary Sewer Notes	3, Green	Continuous
P-SSWR-EQPM	Sanitary Sewer Equipment	6, Magenta	Continuous
P-STRM	Storm Drain System		
P-STRM-MHOL	Sanitary Sewer Manholes	4, Cyan	Continuous
P-STRM-ELEV	Sanitary Sewer Elevations	4, Cyan	Continuous
P-STRM-PIPE	Sanitary Sewer Pipe	3, Green	Continuous
P-STRM-NOTE	Sanitary Sewer Notes	3, Green	Continuous
P-STRM-EQPM	Sanitary Sewer Equipment	6, Magenta	Continuous
P-GSWR	Grey Water System	3, Green	Continuous
P-GSWR-MHOL	Grey Water Manholes	4, Cyan	Continuous
P-GSWR-ELEV	Grey Water Elevations	4, Cyan	Continuous
P-GSWR-PIPE	Grey Water Pipe	3, Green	Continuous
P-GSWR-NOTE	Grey Water Notes	3, Green	Continuous
P-GSWR-EQPM	Grey Water Equipment	6, Magenta	Continuous
P-DOMW	Domestic Water System	3, Green	Continuous
P-DOMW-MHOL	Domestic Water Manholes	4, Cyan	Continuous
P-DOMW-ELEV	Domestic Water Elevations	4, Cyan	Continuous
P-DOMW-PIPE	Domestic Water Pipe	3, Green	Continuous
P-DOMW-NOTE	Domestic Water Notes	3, Green	Continuous

5.1.12 CONTINUED

Layer	Description	Color	Linetype
Hot Water (Space Heating) System			
M-HOTW-FIXT	Chilled Water Surface Features e.g. Manholes	4, Cyan	Continuous
M-HOTW-EQPM	Hot Water Equipment	5, Blue	Continuous
M-HOTW-NOTE	Hot Water Notes	3, Green	Continuous
M-HOTW-PIPE	Hot Water Piping	4, Cyan	Continuous
	Use when supply & return are shown together, may NOT be used when layers below are used		
M-HOTW-RTRN	Hot Water Return Lines	4, Cyan	Continuous
M-HOTW-SUPL	Hot Water Supply Lines	4, Cyan	Continuous
Chilled Water (Space Cooling) System			
M-CWRT-FIXT	Chilled Water Surface Features e.g. Manholes	4, Cyan	Continuous
M-CWRT-EQPM	Chilled Water Equipment	5, Blue	Continuous
M-CWRT-NOTE	Chilled Water Notes	3, Green	Continuous
M-CWRT-PIPE	Chilled Water Piping	4, Cyan	Continuous
	Use when supply & return are shown together, may NOT be used when layers below are used		
M-CWRT-RTRN	Chilled Water Return Lines	4, Cyan	Continuous
M-CWRT-SUPL	Chilled Water Supply Lines	4, Cyan	Continuous
Natural Gas System			
M-NGAS-EQPM	Natural Gas Equipment	5, Blue	Continuous
M-NGAS-PIPE	Natural Gas Pipe	3, Green	Continuous
M-NGAS-NOTE	Natural Gas Notes	3, Green	Continuous
M-NGAS-MHOL	Natural Gas Manholes	3, Green	Continuous
Communication System			
Q-COMM-EQPM	Communication Equipment	3, Green	Continuous
Q-COMM-WIRE	Wiring Cables, Duct Banks & Conduits	3, Green	Continuous
Q-COMM-NOTE	Communication System Notes	3, Green	Continuous

5.2 MINOR GROUP ABBREVIATIONS

All minor group headings shall comply with the following abbreviation outline:

Layer	Description
ABLT	Anchor Bolts
ACID	Acid, Alkaline, And Oil Waste Systems
ALRM	Alarm System
AREA	Area Calculations & Occupancy Info
AUXL	Auxiliary Systems
BELL	Bell System
BLDG	Building Foot Print
BRIN	Brine System
CCTV	Closed Circuit Television
CHIM	Prefabricated Chimneys
CLNG	Ceiling Information
CLOK	Clock System
COMM	Telephone & Communication System
CMPA	Compressed Air System
COLS	Columns
CO2S	Co2 System
CTRL	Control & Instrumentation System
CWTR	Chilled Water System
DATA	Data System
DETL	Details
DICT	Central Dictation System
DOMW	Domestic Hot & Cold Water System
DOOR	Doors
DUST	Dust & Fume Collection System
DIMS	Dimensions
ELEV	Interior & Exterior Elevations
ENER	Energy Management System
EQPM	Equipment
EXHS	Exhaust System
FIRE	Fire Protection Or Alarm System
FIXT	Fixtures
FLOR	Floor Information
FNDN	Foundation
FRAM	Framing Plan (Beams & Joists)
FUEL	Fuel System Piping
FURN	Furniture
GLAZ	Windows & Curtain Walls
GRID	Column Grid
GRND	Ground (Elec.)And/Or (Planting)
GSWR	Grey Water System
HALN	Halon System
HOTW	Hot Water Heating System
HVAC	Hvac System

5.2 MINOR GROUP ABBREVIATIONS (Continued)

Layer	Description
INTC	Intercom System
IRRG	Irrigation System
LEGN	Legend Of Symbols
LLIN	Single Line Diagram
LITE	
LTNG	Lighting Protection System
MACH	Machine Shop Equipment
MDGS	Medical System
METL	Miscellaneous Metal
NGAS	Natural Gas & Storage Tanks
NURS	Nurse Call System
NOTE	Notes, Call Outs, & Keynotes
PGNG	Paging System
PKGN	Parking
PLNT	Planting
POWR	Power
PROC	Processing System
PROP	Property Line
PROT	Fire Protection System

Plan Information Minor Groups

PARE	Area Calculation Plan Information
PBND	Boundary Plan Information
PCLG	Ceiling Plan Information
PCOL	Column Plan Information
PCOM	Communications Plan Information
PCON	Controls Plan Information
PDEM	Demolition Plan Information
PEQM	Equipment Plan Information
PFLR	Floor Plan Information
PFND	Foundation Plan Information
PHVA	HVAC Plan Information
PIRR	Irrigation Plan Information
PLGS	Large Scale Plan Information
PLIT	Lighting Plan Information
PMCH	Mechanical Plan Information
PPIP	Piping Plan Information
PPLA	Planting Plan Information
PPLM	Plumbing Plan Information
PROF	Roof Plan Information
PSFR	Structural Framing Plan Information
PSPR	Sprinkler Plan Information
PSTR	Structural Plan Information
PSYS	System Plan Information
PUTL	Site Utility Plan Information

5.2 MINOR GROUP ABBREVIATIONS (Continued)

Layer	Description
REFG	Refrigeration System
RISR	Riser Diagram Or Plan
ROAD	Roads
ROOF	Roof
SANR	Sanitary Drainage
SCHD	Scheduled & Title Block Sheets
SECT	Sections
SERT	Security System
SHBD	Sheet Boarder & Title Block Line Work
SITE	Site Improvements
SLAB	Slab
STEM	Steam Systems
STRM	Storm Drain System
SPCL	Special System
SPRN	Fire Protection Sprinkler System
SSWR	Sanitary Sewer (Manhole, Pumping Station)
STAN	Fire Protection Standpipe System
SOUN	Sound Or Pa System
SYMB	Symbols, Bubbles, And Targets
TEST	Test Equipment
TOPO	Proposed Contour Lines & Elevations
TVAN	Television Antenna System
TREE	Tree
TEXT	General Notes & Specifications
WALK	Walks And Steps
WALL	Walls
WATR	Domestic Water

5.3 MODIFIERS AND USER DEFINITIONS

Layer	Description
ACCS	Access
ALRM	Alarm
APPL	Appliances
BEAM	Beams
BEDS	Landscaping Beds
BORE	Test Borings
BRDG	Bridges
BRNG	Bearings & Distance Labels
BUSW	Busways
CABL	Cable Trays
CARS	Graphic Illustration Of Cars
CASE	Casework
CDFE	Hvac Ceiling Diffusers
CEQP	Compressed Air Equipment
CHAR	Chairs & Other Seating
CIRC	Circuits
CNTR	Centerlines
CONP	Steam Systems Condensate Piping
CONS	Construction Controls
COVR	Coverage
CPIP	Compressed Air Piping
CURB	Curbs
CLNG	Ceiling
CTRL	Controls
DECK	Decking Or Decks
DEMO	Existing To Be Removed
DEVC	Devices
DIAG	Diagram
DIMS	Dimensions
DRAN	Drainage System Or Indication
DUCT	Duct Work
DHED	Door Header
EDGE	Edge Of Perimeter
ELEV	Elevation Or Elevated Surface (3d Element)
EMER	Emergency
EQPM	Equipment
EQUI	Equipotential System
ESMT	Easements, Right-Of-Way & Set Backs
EVTR	Elevator Equipment
EXIT	Exiting
EXST	Existing To Remain

5.3 MODIFIERS AND USER DEFINITIONS (Continued)

Layer	Description
FEED	Feeders
FENC	Fencing
FILE	File Cabinets
FIXD	Fixed
FIXT	Fixtures
FLDR	Floor Drains
FNSH	Finishes
FREE	Free Standing Or Self Supporting
FULL	Full Height
FURN	Furniture
FLOR	Floor Located
GGEP	Fuel Gas General Piping
GPRP	Fuel Gas Process Piping
GRID	Grid
GRND	Ground Cover And Vines
GUTR	Gutters
HPIP	High Pressure Piping
HRAL	Stair & Balcony Hand/Guardrails
HAZW	Hazardous Waste Materials
IDEN	Identification Tag
INTR	Elements On The Interior Of Bldg.
ISLD	Islands
JAMB	Door And Window Jambs
JOIN	Joint
JOIS	Joists
LEVL	Elevation Changes
LOGO	Office Or Project Logo
LPIP	Low Pressure Piping
MAJR	Major (I.E. Contours)
MINR	Minor (I.E. Contours)
MACL	Major Depressed Contour Lines
MBND	Material Beyond Section Cut
MCUT	Material Cut By Section
MICL	Minor Depressed Contour Lines
MOVE	Movable Elements
MHOL	Manholes
NEWW	New Of Proposed Work
NICN	Not In Contract
NOTE	Notes, Call-Outs & Keynotes*
NPLT	Nonplot Information & Const. Lines
NUMB	Numbering. For Systems; Circuits & Branches

5.3 MODIFIERS AND USER DEFINITIONS (Continued)

Layer	Description
OCCP	Occupant Or Employee Name
ODFF	Hvac Diffusers
OGEP	Fuel Oil General Piping
OPEN	Open
OPRP	Fuel Oil Process Piping
OTLN	Outline
OVHD	Overhead
PATT	Cross-Hatching And Poche
PACL	Proposed Major Contour Lines
PANL	Panel Or Equipment Boards
PEQP	Process Air Equipment
PICL	Proposed Minor Contour Lines
PILE	Piles Or Drilled Piers
PILE	Piping
PLAY	Playground
PLNT	Planting
PLOT	Plotting Targets & Windows
PNLS	Panel System
POLE	Pole
POOL	Pools And Spas
POWR	System Power Designation
PIIP	Process Air Piping
PRHT	Partial Height
PROP	Proposed
ROOF	Roof Located
RAIS	Raised Floors Or Platform
RBAR	Reinforcing Bars
RDME	Non Plotting Read Me Information
REFR	Reference System
RISR	Riser Diagram Or Plan
RFDR	Roof Drains
RFEQ	Roof Top Exhaust Equipment
RTWL	Retaining Wall
RTRN	Return Lines
SCHD	Schedules And Title Block Sheets
SIGN	Signage
SILL	Window Sills
SITE	Site Located
SMOK	Smoke Detectors Or Heat Sensors
SPCL	Specialties And Accessories
SPHD	Sprinkler Head
SPOT	Spot Elevations
SPRT	Sport Area Or Equipment
STOR	Storage Equipment Or Containers
STRP	Striping

5.3 MODIFIERS AND USER DEFINITIONS (Continued)

Layer	Description
STRS	Stairs, Escalators And Ladders
SUSP	Suspended Elements Or Equipment
SWBD	Switch Boards
SWCH	Switches
SYMB	Symbols, Bubbles And Targets*
SHRB	Shrubs And Bushes
SUPL	Supply Lines
TEES	Main Tees
TEXT	General Notes & Specifications
THER	Thermostats
TPTN	Toilet Partitions
TREE	Trees
TTLB	Title Block Sheet Name And Number
TURF	Lawn Area
UCPT	Under Carpet Wiring
UNDR	Underground
URAC	Underground Raceways
WALL	Wall Located
WDWK	Woodwork And Cabinets
WIRE	Wiring
WKSN	Work Stations
WHED	Window Header
WATR	Water Features
WALK	Walks (Pedestrian)

S.0 PROTOTYPE SUBMITTALS

Drawing File BORDER.DWG

Layer	Description	Color	Linetype
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This drawing is the master drawing border that is referenced (NOT Inserted as a BLOCK) in paper space by all the project document files. The drawing specific title block text(e.g. Drawing Number, Drawing Name, File Name, etc.) for the document files are located in paper space in the document file itself.

Items Drawn in Paper Space

No items shall be drawn in paper space in the Border Sheet

Items Drawn in Model Space

G-SHBD	Sheet Border and Title block Line Work Includes campus name and logo, and text uniform to all drawings in document set.		
G-SHBD-LW25	Sheet Border & Title Block, light lines	2, Yellow	Continuous
G-SHBD-LW35	Sheet Border & Title Block, fine lines	3, Green	Continuous
G-SHBD-LW50	Sheet Border & Title Block, medium lines	4, Cyan	Continuous
G-SHBD-LW70	Sheet Border & Title Block, heavy lines	5, Blue	Continuous

NOTE:

All drawing specific text, sheet number, sheet title, revisions etc. shall be included on the individual drawing sheets.

G-SHBD-LOGO	Consultants Logo, & Addl. Graphics Items		
G-SHBD-LOGO-LW35	Consultants Logo, etc.: light lines	2, Yellow	Continuous
G-SHBD-LOGO-LW35	Consultants Logo, etc.: fine lines	3, Green	Continuous
G-SHBD-LOGO-LW35	Consultants Logo, etc.: medium lines	4, Cyan	Continuous
G-SHBD-LOGO-LW70	Consultants Logo, etc.: heavy lines	5, Blue	Continuous

Note:

It is not the intention to require all line weights and their corresponding layers be used in CSU documents. Only the layers needed to generate the appropriate line types for the title sheet and graphics should be included.

S.0.1 Typical Drawing File Set Up

Drawing File "TYPICAL".DWG

Layer	Description	Color	Linetype
Items Drawn in Paper Space			
G-SHBD-TTLB	Title Block Text		
G-SHBD-TTLB-LW25	Title Block Text, light lines	2, Yellow	Continuous
G-SHBD-TTLB-LW35	Title Block Text, fine lines	3, Green	Continuous
G-SHBD-TTLB-LW35	Title Block Text, medium lines	4, Cyan	Continuous
G-SHBD-TTLB-LW70	Title Block Text, heavy lines	5, Blue	Continuous
G-SHBD-SEAL	Consultants Professional Stamp & Signature		
G-SHBD-SEAL-LW25	Consultants Stamp, light lines	2, Yellow	Continuous
G-SHBD-SEAL-LW35	Consultants Stamp, fine lines	3, Green	Continuous
G-SHBD-SEAL-LW50	Consultants Stamp, medium lines	4, Cyan	Continuous
G-SHBD-SEAL-LW70	Consultants Stamp, heavy lines	5, Blue	Continuous
*_****-TEXT	General Notes and Specifications	3, Green	Continuous
*_****-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

X-Ref master sheet border: BORDER.DWG

Items Drawn in Model Space

Drawing Information Layers

*_****-NOTE	Notes, Call-outs, and Key Notes	3, Green	Continuous
*_****-SYMB	Symbols, Bubbles, and Targets	4, Cyan	Continuous
*_****-DIMS	Dimensions	2, Yellow	Continuous
*-DETL-****	Detail Drawings Information		
*-ELEV-****	Elevation Drawings Information		
*-SECT-****	Section Drawings Information		

Building Information Layers

All layers representing the physical components of the project

Note:

Only the layers needed to generate the appropriate graphics should be included.

S.1 SMALL BUILDING RENOVATION PROJECT PROTOTYPE SUBMITTAL

This submittal prototype would be appropriate for a smaller project with a single designer or a small design team. The complete plan model of the project exists in a single file making possible the simultaneous manipulation of all the major elements of the building. The other dependent files contain the projects notation and a display of the appropriate layers from the model attached as an external reference file.

Where a single model would be untenable for a larger design team the large project prototype S.3 would be a more appropriate prototype.

Hard copy Submittals

Drawings

A2.1	Floor Plan with Door Schedule
A2.2	Equipment and Case Work Plan and Schedule
A3.1	Interior Elevations and Sections
A5.1	Architectural Ceiling Plan
A9.1	Construction Details
E2.1	Electrical Plan (with half toned floor plan) and Fixture Schedule

Electronic Submittals

The drawing file names have been shown in a more self explanatory form to aid in following the logic of this prototype. The actual submittal should follow the file naming convention as shown in section 3.8.

Drawings

BORDER.DWG See S.0.1	Master Sheet Border Drawing Model space contains drawing border and title block information.
A20.DWG See S.1.1	Master Drawing: External Reference File; None Floor Plan Model with Ceiling Plan and Fixtures
A21.DWG See S.1.2	Document File: External Reference File; A20.DWG. Floor Plan Document File Model space contains external reference with drawing symbols and notation. Paper space contains door Schedule and drawing border and title block information.
A22.DWG See S.1.3	Document File: External Reference File; A20.DWG. Equipment & Casework Plan Model space contains external reference with drawing symbols and notation. Paper space contains Equipment Schedule and drawing border and title block information.
A31.DWG See S.1.4	Document File: External Reference File; None Elevations & Sections Model space contains interior elevations with drawing symbols and notation. Paper space contains drawing border and title block information.
A51.DWG See S.1.5	Document File: External Reference File; A20.DWG Reflected Ceiling Plan Model space contains external reference with drawing symbols and notation.

pageS.1 (Continued)

A91.DWG See S.1.6	Document File: External Reference File; None. Architectural Details Model space contains details, symbols and notation. Paper space contains drawing border and title block information.
E21.DWG See S.1.7	Document File: External Reference File; A20.DWG. Electrical Lighting & Power Plan Model space contains external reference with drawing symbols and notation. Paper space contains fixture schedule, drawing border, and title block information.
SPC.TXT	ASCII Text File Complete text of project manual and specifications. Division O not required.
A20.LOG	ASCII Text File, Drawing File Description of A20.DWG (see section 2.2)
A21.LOG	ASCII Text File, Drawing File Description of A21.DWG (see section 2.2)
A22.LOG	ASCII Text File, Drawing File Description of A22.DWG (see section 2.2)
A31.LOG	ASCII Text File, Drawing File Description of A31.DWG (see section 2.2)
A51.LOG	ASCII Text File, Drawing File Description of A51.DWG (see section 2.2)
A91.LOG	ASCII Text File, Drawing File Description of A91.DWG (see section 2.2)
E21.LOG	ASCII Text File, Drawing File Description of E21.DWG (see section 2.2)

S.1.1 SMALL BUILDING SUBMITTAL

MASTER DRAWING

Drawing File A20.DWG

Layer	Description	Color	Linetype
All elements located in Model Space			
A-WALL	Walls	6, Magenta	Continuous
A-WALL-CNTR	Wall Center Lines	2, Yellow	Center
A-WALL-WHED	Window Headers	3, Green	Continuous
A-WALL-DHED	Door Headers	3, Green	Continuous
A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous
A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill	1, Red	Continuous
A-WALL-EXST	Existing Wall to Remain	4, Cyan	Continuous
A-WALL-DEMO	Existing Wall to be Removed	4, Cyan	Dashed
A-DOOR	Doors	4, Cyan	Continuous
A-GLAZ	Window, Curtain Walls, Glazed Partitions	3, Green	Continuous
A-FLOR-DEMO	Floor Areas to be Demolished	4, Cyan	Dashed
A-EQPM-FIXD	Fixed Equipment (CSU Type 1)	4, Cyan	Continuous
A-EQDM-MOVE	Moveable Equipment (CSU Type 2)	3, Green	Dashed
A-CLNG-OVHD	Ceiling Elements, soffits, and Bulkheads	4, Cyan	Hidden
A-CLNG-GRID	Ceiling Grid (T-Bar Ceiling)	1, Red	Continuous
S-COLS	Structural Columns	6, Magenta	Continuous
S-GRID	Column Grid	2, Yellow	Center
S-GRID-IDEN	Column Grid Tags	4, Cyan	Continuous
E-LITE-CLNG	Ceiling Mounted Lighting	5, Blue	Continuous
E-LITE-EMER	Emergency Lighting	5, Blue	Continuous
F-SPRN-SPHD	Sprinkler Heads	5, Blue	Continuous
F-PROT-SMOK	Smoke Detectors or Heat Sensors	5, Blue	Continuous
M-CDFD	Ceiling Diffusers	2, Yellow	Continuous

S.1.2 SMALL BUILDING SUBMITTAL

FLOOR PLAN

Drawing File A21.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PFLR-TEXT	Floor Plan General Notes and Specifications	3, Green	Continuous
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Items Drawn in Model Space

Drawing Information Layers

A-PFLR-NOTE	Floor Plan Notes, Call-Outs, and Key Notes	3, Green	Continuous
A-PFLR-SYMB	Floor Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
A-PFLR-DIMS	Floor Plan Dimensions	2, Yellow	Continuous

Building Information Layers

A20:A-WALL	Walls	6, Magenta	Continuous
A20:A-WALL-CNTR	Wall Center Lines	2, Yellow	Center
A20:A-WALL-WHED	Window Headers	3, Green	Continuous
A20:A-WALL-DHED	Door Headers	3, Green	Continuous
A20:A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous
A20:A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill	1, Red	Continuous
A20:A-WALL-EXST	Existing Wall to Remain	4, Cyan	Continuous
A20:A-WALL-DEMO	Existing Wall to be Removed	4, Cyan	Dashed

A20:A-DOOR	Doors	4, Cyan	Continuous
A-DOOR-IDEN	Door Number Symbol	4, Cyan	Continuous

A20:A-GLAZ	Window, Curtain Walls, Glazed Partitions	3, Green	Continuous
A-GLAZ-IDEN	Window Number Symbols	4, Cyan	Continuous

A20:A-FLOR-DEMO	Floor Areas to be Demolished		
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A20:S-COLS	Structural Columns	6, Magenta	Continuous
A20:S-GRID	Column Grid	2, Yellow	Center
A20:S-GRID-IDEN	Column Grid Tags	4, Cyan	Continuous

A20:LAYR	Indicates Layer from External Reference File (A20: indicates file A20.DWG is being referenced)		
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S.1.3 SMALL BUILDING SUBMITTAL

EQUIPMENT & CASEWORK PLAN

Drawing File A22.DWG

Layer	Description	Color	Linetype
Items Contained in Paper Space			
See Section S.0.1 for typical general layer information			
A-PEQM-SCHD	Equipment and Casework Schedules	3, Green	Continuous
A-PEQM-TEXT	Equipment General Notes and Specifications	3, Green	Continuous
Items Contained in Model Space			
A-PEQM-NOTE	Equipment Notes, Call-Outs, and Key Notes	3, Green	Continuous
A-PEQM-SYMB	Equipment Symbols, Bubbles and Targets	4, Cyan	Continuous
A-PEQM-DIMS	Equipment Dimensions	2, Yellow	Continuous
A20:A-WALL	<i>Walls</i>	<i>6, Magenta</i>	<i>Continuous</i>
A20:A-WALL-WHED	<i>Window Headers</i>	<i>3, Green</i>	<i>Continuous</i>
A20:A-WALL-DHED	<i>Door Headers</i>	<i>3, Green</i>	<i>Continuous</i>
A20:A-WALL-JAMB	<i>Door & Window Jambs</i>	<i>6, Magenta</i>	<i>Continuous</i>
A20:A-WALL-EXST	<i>Existing Wall to Remain</i>	<i>4, Cyan</i>	<i>Continuous</i>
A20:A-DOOR	<i>Doors</i>	<i>4, Cyan</i>	<i>Continuous</i>
A20:A-GLAZ	<i>Window, Curtain Walls, Glazed Partitions</i>	<i>3, Green</i>	<i>Continuous</i>
A20:S-COLS	<i>Structural Columns</i>	<i>6, Magenta</i>	<i>Continuous</i>
A20:S-GRID	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Center</i>
A20:S-GRID-IDEN	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>
A20:A-EQPM-FIXD	<i>Fixed Equipment (CSU Type 1)</i>	<i>4, Cyan</i>	<i>Continuous</i>
A20:A-EQPM-MOVE	<i>Moveable Equipment (CSU Type 2)</i>	<i>3, Green</i>	<i>Dashed</i>
A-EQPM-IDEN	Equipment Identifiers		
A20:LAYR	Indicates Layer from External Reference File (A20: indicates file A20.DWG is being referenced)		

S.1.4 SMALL BUILDING SUBMITTAL

SECTIONS & ELEVATIONS

Drawing File A31.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-ELEV-TEXT	General Notes and Specifications	3, Green	Continuous
A-ELEV-SCHD	Schedules and Tables of Text	6, Magenta	Continuous
A-SECT-TEXT	General Notes and Specifications	3, Green	Continuous
A-SECT-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-ELEV-NOTE	Elevation Notes, Call-Outs,	3, Green	Continuous
A-ELEV-KEYN	ConDoc Keynotes	3, Green	Continuous
A-ELEV-SYMB	Elevation Symbols, Bubbles and Targets	6, Magenta	Continuous
A-ELEV-DIMS	Elevation Dimensions	2, Yellow	Continuous
A-SECT-NOTE	Section Notes, Call-Outs,	3, Green	Continuous
A-SECT-KEYN	ConDoc Keynotes	3, Green	Continuous
A-SECT-SYMB	Section Symbols, Bubbles and Targets	6, Magenta	Continuous
A-SECT-DIMS	Section Dimensions	2, Yellow	Continuous

Project Information Layers

A-ELEV-OTLN	Building (or space) Outline	6, Magenta	Continuous
A-ELEV-FNSH	Extents of Finishes, Woodwork and Trim	4, Cyan	Continuous
A-ELEV-PATT	Elevation Cross-Hatching And Poche	1, Red	Continuous
A-SECT-MCUT	Materials Cut by Section	6, Magenta	Continuous
A-SECT-MBNT	Materials Beyond Section Cut	4, Cyan	Continuous
A-SECT-OTLN	Building (or space) Outline	5, Blue	Continuous
A-SECT-FNSH	Extents of Finishes, Woodwork and Trim	4, Cyan	Continuous
A-SECT-PATT	Elevation Cross-Hatching And Poche	1, Red	Continuous

S.1.5 SMALL BUILDING SUBMITTAL

REFLECTED CEILING PLAN

Drawing File A51.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PCLG-TEXT	General Notes and Specifications	3, Green	Continuous
A-PCLG-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

A-PCLG-NOTE	Ceiling Plan Notes, Call-Outs,	3, Green	Continuous
A-PCLG-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PCLG-SYMB	Ceiling Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
A-PCLG-DIMS	Ceiling Plan Dimensions	2, Yellow	Continuous

A20:A-WALL--FULL	Full Height Walls	6, Magenta	Continuous
A20:A-WALL--WHED	Window Headers	3, Green	Continuous
A20:A-WALL--DHED	Door Headers	3, Green	Continuous

A20:A-CLNG	Ceiling Elements, soffits, and Bulkheads	3, Green	Continuous
A20:A-CLNG-GRID	Ceiling Grid (T-Bar Ceiling)	1, Red	Continuous

A20:S-COLS	Structural Columns	6, Magenta	Continuous
A20:S-GRID	Column Grid	3, Green	Continuous
A20:S-GRID-IDEN	Column Grid Tags	4, Cyan	Continuous

A20:M-CDFF	Ceiling Diffusers	2, Yellow	Continuous
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A20:E-LITE-CLNG	Ceiling Mounted Lighting	3, Green	Continuous
A20:E-LITE-EMER	Emergency Lighting	5, Blue	Continuous

A20:F-SPRN-SPHD	Fire Sprinkler Heads	5, Blue	Continuous
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A20::F-PROT-SMOK	Smoke Detectors or Heat Sensors	5, Blue	Continuous
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A20:LAYR	Indicates Layer from External Reference File (A20: indicates file A20.DWG is being referenced)		
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S.1.6 SMALL BUILDING SUBMITTAL

ARCHITECTURAL DETAILS

Drawing File A91.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-DETL-TEXT	General Notes and Specifications	3, Green	Continuous
A-DETL-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-DETL-NOTE	Detail Notes, Call-Outs,	3, Green	Continuous
A-DETL-KEYN	ConDoc Keynotes	3, Green	Continuous
A-DETL-SYMB	Detail Symbols, Bubbles and Targets	6, Magenta	Continuous
A-DETL-DIMS	Detail Dimensions	2, Yellow	Continuous
A-DETL-MCVT	Materials Cut by Section	4, Cyan	Continuous
A-DETL-MBNT	Materials Beyond Section Cut	4, Cyan	Continuous
A-DETL-PATT	Detail Cross-Hatching And Poche	1, Red	Continuous

Graphic layers may be further segregated by appropriate layer modifiers if necessary, i.e.:

A-DETL-WALL	Walls Shown in Elevation View	2, Yellow	Continuous
A-DETL-DOOR	Doors Shown in Elevation View	2, Yellow	Continuous

S.1.7 SMALL BUILDING SUBMITTAL

ELECTRICAL LIGHTING & POWER PLAN

Drawing File E21.DWG Electrical Plan

Layer	Description	Color	Linetype
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Item Drawn in Paper Space

See Section S.0.1 for typical general layer information

E-PLIT-TEXT	General Notes and Specifications	3, Green	Continuous
E-PLIT-SCHD	Schedules and Tables of Text	3, Green	Continuous

Note: This project example shows all electrical description information on layers E-PLIT-**** since all electrical elements are on a single drawing. More complex projects could also utilize layers E-PPOW, E-PCOM, E-PAUX to illustrate lighting plans, power plans, communications plans, and auxiliary plans independently.

Items Drawn in Model Space

E-PLIT-NOTE	Lighting Plan Notes, Call-Outs,	3, Green	Continuous
E-PLIT-KEYN	ConDoc Keynotes	3, Green	Continuous
E-PLIT-SYMB	Lighting Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
E-PLIT-DIMS	Lighting Plan Dimensions	2, Yellow	Continuous
<i>A20:A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A20:A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A20:A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A20:A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A20:A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>
<i>A20:S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A20:S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>A20:S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A20:M-CDFD</i>	<i>Ceiling Diffusers</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A20:E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A20:E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>5, Blue</i>	<i>Continuous</i>

S.1.7 SMALL BUILDING SUBMITTAL (Continued)

E-LITE-SWCH	Lighting Switches	5, Blue	Continuous
E-LITE-WIRE	Wiring and Conduit	4, Cyan	Continuous
E-LITE-NUMB	Lighting Circuit Numbers	4, Cyan	Continuous
E-LITE-IDEN	Luminaire Identification and Text	3, Green	Continuous
E-POWR	Power Outlets	5, Blue	Continuous
E-POWR-NUMB	Power Circuit Numbers	4, Cyan	Continuous
E-POWR-WIRE	Power Wiring and Conduit	4, Cyan	Continuous
<i>A20:FF-SPRN-SPHD</i>	<i>Sprinkler Heads</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A20:F-PROT-SMOK</i>	<i>Smoke Detectors and Heat Sensors</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A20:F-PROT-WIRE</i>	<i>Fire Protection Wiring</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A20:A-EQPM-FIXD</i>	<i>Fixed Equipment (CSU Type 1) W/ Elec. Connection</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A20:A-EQPM-MOVE</i>	<i>Moveable Equipment (CSU Type 2)W/ Elec. Con.</i>	<i>3, Green</i>	<i>Continuous</i>

S.2 CAMPUS UTILITY MAP PROTOTYPE SUBMITTAL

This prototype is intended for a campus wide infrastructure map.

All disciplines and infrastructure elements are contained in drawing files that cover the full extent of the campus. Individual map pages or drawing sheets that represent a smaller portion of the campus are created via drawing files, e.g. MAPX, that contain a title sheet (BORDER.DWG and sheet specific text) and viewport set to display the appropriate portions of external reference files, e.g. UTILS. DWG, CAMPMAP.DWG, etc.

Maintaining a seamless geographically contiguous database across the full extent of a campus while avoiding unworkably large drawing files are issues that are addressed by this prototype in addition to the always important issue of a coherent structure for drawing data. A similar approach should be utilized for all large area maps, or drawing files are to large to reasonably be dealt with in a single file.

Hard copy Submittals

Drawing

INDEX	Campus wide Mapping indicating Map Pages
MAP"X"	Individual Map Pages Covering a Segment of Campus in Detail, Typically 1"-20' scale

Electronic Submittals

The drawing file names have been shown in a more self explanatory form to aid in following the logic of this prototype. The actual submittal should follow the file naming convention as shown in section 3.8.

BORDER.DWG See S.0.1	Master Sheet Border Drawing Model Space contains drawing border & title block.
UTILS.DWG: See S.2.1	Master File, External Reference Files: None No Paper Space Component Model Space Contains all Campus Utility Information in a single contiguous file
CAMPMAP.DWG: See S.2.2	Master File, External Reference Files, Name No Paper Space Component Model Space contains plan view of major campus infrastructure, Building Outlines, Roads and Streets Hardscape <i>When the scope and detail of a mapping project generate files beyond 3-5 megabytes an additional file(s) shall be created to contain the finer detail with major plan information as shown above remaining in CAMPMAP.DWG.</i>
CONTOUR.DWG: See S.2.3	Master File, External Reference Files, None No Paper Space Component Model Space Contains contour lines, Elevation Indicators, and Notation of Entire Campus
PLANT.DWG: See S.2.4	Master File, External Reference Files, None No Paper Space Component Model Space Contains Campus wide Map of Major Vegetation

S.2 CAMPUS UTILITY MAP (Continued)

MAPX.DWG: See S.2.5	Document File, External References; UTILS.DWG, CAMPMAP.DWG, CAMPDETL.DWG, CONTOUR.DWG, PLANT.DWG, BORDER.DWG Paper Space contains BORDER.DWG, title block information, and view port for reference files. Model space contains X refs Drawing view set to MAPX, displaying appropriate area of master drawings.
INDEX.DWG: See S.2.6	Document File, External References: CAMPMAP.DWG Paper Space Contains drawing border, title block, legends and map keys Model space contains x refs and grid lines indicating map pages.
KEYMAP.DWG: See S.2.7 generate additional custom maps	Utility File, External References, None This drawing file is preformatted for use with Auto CAD's Advanced Data Extension (ADE) to No paper Space Component Model Space Contains a simple drawing of major campus infrastructure (campus boundary, Major Buildings and Roads) Present Views (named "MAPX") for each Map Page
UTILS.LOG:	ASC11 Text File: Drawing file description of UTILS.DWG (see 2.2)
CAMPMAP.LOG:	ASC11 Text File: Drawing file description of CAMPMAP.DWG (see 2.2)
COUNTOUR.LOG:	ASC11 Text File: Drawing file description of COUNTOUR.DWG (see 2.2)
PLANT.LOG:	ASC11 Text File: Drawing file description of PLANT.DWG (see 2.2)
MAPX.LOG:	ASC11 Text File: Drawing file description of MAPX.DWG (see 2.2)
KEYMAP.LOG:	ASC11 Text File: Drawing file description of KEYMAP.DWG (see 2.2)
INDEX.LOG:	ASC11 Text File: Drawing file description of INDEX.DWG (see 2.2)

S.2.1 CAMPUS UTILITY MAP

Drawing File UTILS.DWG

All items drawn in model space

Layer	Description	Color	Linetype
Drawing Information Layers			
See Section S.0.1 for typical general layer information			
U-PUTL-****	Site Utility Plan Information		
U-DETL-****	Detail Drawings Information		
U-ELEV-****	Elevation Drawings Information		
U-SECT-****	Section Drawings Information		
*-****-NOTE	Notes, Call-outs, and Key Notes	3, Green	Continuous
*-****-TEXT	General Notes and Specifications	3, Green	Continuous
*-****-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
*-****-DIMS	Dimensions	6, Magenta	Continuous
*-****-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Utility Information Layers

Sanitary Sewer System

P-SSWR-FIXT	S.S. Above Ground Elements, e.g. Manholes	4, Cyan	Continuous
P-SSWR-PIPE	Sanitary Sewer Pipe	3, Green	Continuous
P-SSWR-NOTE	Sanitary Sewer Notes	3, Green	Continuous
P-SSWR-EQPM	Sanitary Sewer Equipment	6, Magenta	Continuous

Storm Drain System

P-STRM-FIXT	S.W. Above Ground Elements, e.g. Manholes	4, Cyan	Continuous
P-STRM-PIPE	Storm Drain Pipe	3, Green	Continuous
P-STRM-NOTE	Storm Drain Notes	3, Green	Continuous
P-STRM-EQPM	Storm Drain Equipment	6, Magenta	Continuous

Grey Water System

P-GSWR-FIXT	G.W. Above Ground Elements, e.g. Manholes	4, Cyan	Continuous
P-GSWR-PIPE	Grey Water Pipe	3, Green	Continuous
P-GSWR-NOTE	Grey Water Notes	3, Green	Continuous
P-GSWR-EQPM	Grey Water Equipment	6, Magenta	Continuous

Domestic Water System

P-DOMW	Domestic Water System	3, Green	Continuous
P-DOMW-FIXT	D.W. Above Ground Elements, e.g. Manholes	4, Cyan	Continuous
P-DOMW-PIPE	Domestic Water Pipe	3, Green	Continuous
P-DOMW-NOTE	Domestic Water Notes	3, Green	Continuous

S.2.1 CAMPUS UTILITY MAP (Continued)

Layer	Description	Color	Linetype
Hot Water (Space Heating) System			
M-HOTW-EQPM	Hot Water Equipment	5, Blue	Continuous
M-HOTW-FIXT	H.W. Above Ground Elements, e.g. Manholes	5, Blue	Continuous
M-HOTW-RTRN	Hot Water Return Lines	4, Cyan	Continuous
M-HOTW-SUPL	Hot Water Supply Lines	4, Cyan	Continuous
Chilled Water System			
M-CWTR-EQPM	Chilled Water Equipment	5, Blue	Continuous
M-CWRT-FIXT	C.W. Above Ground Elements, e.g. Manholes	5, Blue	Continuous
M-CWRT-NOTE	Chilled Water Notes	3, Green	Continuous
M-CWTR-RTRN	Chilled Water Return Lines	4, Cyan	Continuous
M-CWTR-SUPL	Chilled Water Supply Lines	4, Cyan	Continuous
M-NGAS	Natural Gas System	3, Green	Continuous
M-NGAS-ELEV	Natural Gas Elevations	3, Green	Continuous
M-NGAS-PIPE	Natural Gas Pipe	3, Green	Continuous
M-NGAS-NOTE	Natural Gas Notes	3, Green	Continuous
M-NGAS-MHOL	Natural Gas Manholes	3, Green	Continuous
Q-COMM	Communication System	3, Green	Continuous
Q-COMM-EQPM	Communication Equipment	3, Green	Continuous
Q-COMM-WIRE	Wiring Cables, Duct Banks & Conduits	3, Green	Continuous
Q-COMM-NOTE	Communication System Notes		

S.2.2 CAMPUS UTILITY MAP

Drawing CAMPMAP.DWG:

All elements are drawn in Model Space

Layer	Description	Color	Linetype
C-BLDG	Building Outline (A single closed polyline per building)	6, Magenta	Continuous
C-BLDG-IDEN	Building Identification Numbers	4, Cyan	Continuous
C-BLDG-TEMP	Temporary Building Outline	4, Cyan	Dashed
C-ROAD	Roads and Streets	5, Blue	Continuous
C-ROAD-CURB	Curb Lines	5, Blue	Continuous
C-ROAD-GUTR	Roadway Gutters	3, Green	Continuous
C-ROAD-IDEN	Road and Street Names	4, Cyan	Continuous
C-ROAD-BRDG	Roadway Bridges	6, Magenta	Continuous
C-ROAD-STRP	Roadway Striping	3, Green	Hidden
C-PKNG	Parking Lots	3, Green	Continuous
C-PKNG-TEMP	Temporary Parking Lots	3, Green	Dashed
C-PKNG-IDEN	Parking Lot Identification Numbers	4, Cyan	Continuous
C-PKNG-STRP	Parking Lot Striping	3, Green	Hidden
C-PKNG-NOTE	Parking Lot Notes and Collects	3, Green	Continuous
L-SITE-IDEN	Site Features Identification	4, Cyan	Continuous
L-SITE-FENC	Fencing	5, Blue	Continuous
L-SITE-BRDG	Pedestrian Bridges	6, Magenta	Continuous
L-SITE-WALK	Pedestrian Walkways	5, Blue	Continuous
L-SITE-FENC	Fencing	5, Blue	Continuous
L-SITE-POOL	Pools and Spas	6, Magenta	Continuous
L-SITE-SPRT	Sports Fields	5, Blue	Continuous
L-SITE-WATR	Water Features (Rivers, Streams, & Lakes)	6, Magenta	Continuous

S.2.3 CAMPUS UTILITY MAP

Drawing CONTOUR.DWG:

All elements shown in model space

C-TOPO-SPOT	Spot Elevations (Tick Marks & Text)	3, Green	Continuous
C-TOPO-MAJR	Major Contour Lines	5, Blue	Dash Dot
C-TOPO-MAJR-TEXT	Major Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-MINR	Minor Contour Lines	4, Cyan	Dash Dot
C-TOPO-MINR-TEXT	Minor Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-DEMO	Existing Contour Lines to be Changed	2, Yellow	2 Dashed
C-TOPO-NOTE	Topographic Survey Notes	3, Green	Continuous
C-TOPO-MACL	Major Depressed Counter Lines (wetlands)	5, Blue	2XDash Dot
C-TOPO-MACL-TEXT	Major Depressed Counter Lines Text	3, Green	Continuous
C-TOPO-MICL	Minor Depressed Contour Lines (wetlands)	4, Cyan	2XDash Dot
C-TOPO-MICL-TEXT	Minor Depressed Counter Lines Text	3, Green	Continuous
C-TOPO-RTWL	Retaining Wall	6, Magenta	Continuous

S.2.4 CAMPUS UTILITY MAP

Layer	Description	Color	Linetype
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Drawing PLANT.DWG

All items drawn in model space

L-PLNT-TREE	Tree	5, Blue	Continuous
L-PLNT-GRND	Ground Cover and Vines	3, Green	Continuous
L-PLNT-SHRB	Shrubs & Bushes	5, Blue	Continuous
L-PLNT-TURF	Lawn Areas	3, Green	Continuous
L-PLNT-BEDS	Landscape Planting Beds	3, Green	Continuous

S.2.5 CAMPUS UTILITY MAP

Layer	Description	Color	Linetype
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Drawing File MAPX.DWG

Individual Map Pages

Each map page file shall be zoomed to show the appropriate portion (MAPX) of the master files. Zoomed view shall be saved as a named view, "MAPX"

Items drawn in Paper Space

See Section S.0.1 for typical general layer information

Items drawn in Model Space

All layers from external references files

UTILS.DWG
CAMPMAP.DWG
CONTOUR.DWG
PLANT.DWG

S.2.6 CAMPUS UTILITY MAP

Layer	Description	Color	Linetype
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Drawing File INDEX.DWG

Items drawn in Paper Space

See Section S.0.1 for typical general layer information

Items drawn in Model Space

Simplified version of campus map, typically showing campus boundary, major roads and buildings. Indicate map page coverage

INDX-BLDG	Building Outlines
INDX-ROAD	Roads and Streets
INDX-PROP	Property Line/Campus Boundary
INDX-GRID	Map Page Grid Lines
INDX-****	Additional Layers as Needed

S.2.7 CAMPUS UTILITY MAP

Layer	Description	Color	Linetype
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Drawing File KEYMAP.DWG

This drawing file is preformatted for use with Auto CAD's Advanced Data Extension (ADE) to generate additional custom maps

No Paper Space Component

Items Drawn in Model Space

KEYM-PROP	Property Line/Campus Boundary	5, Blue	2 Dash
KEYM-BLDG	Building Outlines, Show only Major Buildings Necessary to indicate campus layout	6, Magenta	Continuous
KEYM-ROAD	Roads and Streets, Show only major roads & streets necessary to indicate campus layout	5, Blue	Continuous
KEYM-****	Additional layers as needed to indicate general campus layout		

S.3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

This submittal prototype differs from S.1 in that rather than maintain a common database via a master model (See Drawing A2.0 in S.1) the complete database (or model) is contained in a series of discipline specific files that refer on each other to show the disciplines in relationship to each other. The ultimate database is equally complete and free of redundancies but more amenable to a diverse and widespread design group that would need to work on many disciplines and files simultaneously.

Hard copy Submittals

Drawings

Hard Copy Submittals are equivalent to the electronic .DWG submittals below with the exception of BORDER.DWG (the master title sheet) which has no hard copy equivalent.

Electronic Submittals

The drawing file names have been shown in a more self explanatory form to aid in following the logic of this prototype. The actual submittal should follow the file naming convention as shown in section 3.8.

Drawing Files

Drawing Name	Drawing Description	CAD Standards Section #
BORDER.DWG	Sheet Border Drawing	S.0.1
CGRAD1.DWG	Civil: Grading Plan	S.3.C1
CSITE1.DWG	Civil: Site Plan	S.3.C2
CUTIL1.DWG	Civil: Site Utilities	S.3.C3
LSITE1.DWG	Landscape: Landscape Plan	S.3.L1
LIRIG1.DWG	Landscape: Irrigation Plan	S.3.L2
AFLOR1.DWG	Architectural: Floor Plan	S.3.A1
ACLG1.DWG	Architectural: Reflected Ceiling Plan	S.3.A2
AROOF1.DWG	Architectural: Roof Plan	S.3.A3
LGFLR1.DWG	Architectural: Enlarged Floor Plan e.g. Stair Plan, Toilet Plans, etc.	S.3.A4
AEQUIP1.DWG	Architectural: Equipment Plan	S.3.A5
AELEV1.DWG	Architectural: Elevations (Interior & Exterior)	S.3.A6
ASECT1.DWG	Architectural: Sections	S.3.A7

S.3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET (Continued)

Drawing Name	Drawing Description	CAD Standards Section #
ADETL1.DWG	Architectural: Details	S.3.A8
ADEMO1.DWG	Architectural: Demolition Plan	S.3.A9
AREA1.DWG	Architectural: Occupancy Plan	S.3.A10
FNDN1.DWG	Structural: Foundation Plans	S.3.S1
SFRAM1.DWG	Structural: Framing Plans	S.3.S2
COLGRID.DWG	Structural: Column Plans	S.3.S3
SELEV1.DWG	Structural: Elevations	S.3.S4
SDETL1.DWG	Structural: Details	S.3.S5
MHVAC1.DWG	Mechanical: HVAC Plan	S.3.M1
MPIPE1.DWG	Mechanical: Piping Plan	S.3.M2
MROOF1.DWG	Mechanical: Roof Plan	S.3.M3
MCNTRL1.DWG	Mechanical: Controls Plan	S.3.M4
LGMCH1.DWG	Mechanical: Enlarged Plan	S.3.M5
PLUMB1.DWG	Plumbing: Plumbing Plan	S.3.P1
PRISR1.DWG	Plumbing: Riser Diagrams	S.3.P2
FSUPR1.DWG	Fire Suppression: Fire Suppression Plan	S.3.F1
FRISR1.DWG	Fire Suppression: Riser Diagrams	S.3.F2
ELITE1.DWG	Electrical: Lighting Plan	S.3.E1
EPOWR1.DWG	Electrical: Power Distribution Plan	S.3.E2
ERISR1.DWG	Electrical: Riser Diagram	S.3.E3
QCOMM1.DWG	TeleCom: Communication Systems Plan	S.3.Q1

S.3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET (Continued)

Text Files

SPC.TXT	ASCII Text File Complete text of project manual and specifications. Division O not required.
BORDER.LOG	ASCII Text File, Drawing File Description (see section 2.2)
CGRAD1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
CSITE1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
CUTIL1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
LSITE1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
LIRIG1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
AFLOR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ACLG1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
AROOF1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
LGFLR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
AEQUIP1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
AELEV1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ASECT1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ADETL1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ADEMO1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
AREA1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
FNDN1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
SFRAM1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
COLGRID.LOG	ASCII Text File, Drawing File Description (see section 2.2)
SELEV1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
SDETL1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
MHVAC1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
MPIPE1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
MROOF1.LOG	ASCII Text File, Drawing File Description (see section 2.2)

S.3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET (Continued)

MCNTRL1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
LGMCH1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
PLUMB1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
PRISR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
FSUPR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
FRISR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ELITE1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
EPOWR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
ERISR1.LOG	ASCII Text File, Drawing File Description (see section 2.2)
QCOMM1.LOG	ASCII Text File, Drawing File Description (see section 2.2)

S.3.C1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Civil: Grading Plan

Drawing File: CGRAD1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

C-PGRD-TEXT	General Notes and Specifications	3, Green	Continuous
C-PGRD-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

C-PGRD-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
C-PGRD-TEXT	General Notes and Specifications	3, Green	Continuous
C-PGRD-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
C-PGRD-DIMS	Dimensions	6, Magenta	Continuous

Project Information Layers

C-GRID	Grid Lines (California Coordinates)	1, Red	Continuous
C-GRID-NOTE	Grid Coordinates and Notes	3, Green	Continuous
C-BLDG-ELEV	Building Elevations	2, Yellow	Continuous
C-BLDG-IDEN	Building Annotations	2, Yellow	Continuous
C-PROP	Property Line (Campus Boundary)	4, Cyan	Phantom
C-PROP-NOTE	Property Line Notes	5, Blue	Continuous
C-PROP-ESMT	Easements	6, Magenta	Continuous
C-TOPO-SPOT	Spot Elevations (Tick Marks & Text)	3, Green	Continuous
C-TOPO-MAJR	Major Contour Lines	6, Magenta	Dash Dot
C-TOPO-MAJR-TEXT	Major Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-MINR	Minor Contour Lines	4, Cyan	Dash Dot
C-TOPO-MINR-TEXT	Minor Contour Lines Text (Elevation)	3, Green	Continuous
C-TOPO-DEMO	Existing Contour Lines to be Changed	2, Yellow	2 Dashed

S.3.C1 Continued

Layer	Description	Color	Linetype
C-STRM-CULV	Culverts, Headwalls, Drainage Inlets	6, Magenta	Continuous
C-STRM-IDEN	Storm Sewer System Annotation	4, Cyan	Continuous
C-STRM-DTCH	Drainage Ditches	3, Green	Dashed
P-STRM-FIXT	Storm Drainage Surface Features (Catch Basins, Manholes)	5, Blue	Continuous
P-STRM-PIPE	Storm Drain Pipes	5, Blue	Dashed
C-SITE-WATR	Site Water Features	2, Yellow	Continuous

External Reference Files

Drawing File: AFLOR1.DWG

<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>4, Cyan</i>	<i>Continuous</i>
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S.3.C2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Civil: Site Plan

Drawing File: CSITE1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

C-PSIT-TEXT	General Notes and Specifications	3, Green	Continuous
C-PSIT-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

C-PSIT-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
C-PSIT-TEXT	General Notes and Specifications	3, Green	Continuous
C-PSIT-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
C-PSIT-DIMS	Dimensions	6, Magenta	Continuous

Project Information Layers

C-ROAD	Roads and Streets	5, Blue	Continuous
C-ROAD-CURB	Curb Lines	5, Blue	Continuous
C-ROAD-GUTR	Roadway Gutters	3, Green	Continuous
C-ROAD-IDEN	Road and Street Names	4, Cyan	Continuous
C-ROAD-BRDG	Roadway Bridges	6, Magenta	Continuous
C-ROAD-STRP	Roadway Striping	3, Green	Hidden
L-WALK	Pedestrian Walks	4, Cyan	Continuous
L-WALK-BRDG	Pedestrian Bridges	5, Blue	Continuous
C-PKNG	Parking Lot	4, Cyan	Continuous
C-PKNG-STRP	Parking Lot Striping	2, Yellow	Continuous
L-SITE-WATR	Site Water Features,	1, Red	Continuous
L-SITE-FENC	Fencing	3, Green	Continuous
L-SITE-WALL	Walls	3, Green	Continuous
L-SITE-DECK	Decks	6, Magenta	Continuous
L-SITE-BRDG	Pedestrian Bridges	4, Cyan	Continuous
L-SITE-POOL	Pools and Spas	6, Magenta	Continuous

S.3.C2 continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: AFLOR1.DWG			
<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>4, Cyan</i>	<i>Continuous</i>
Drawing File: CGRAD1.DWG			
<i>C-TOPO-ELEV</i>	<i>Elevations</i>	<i>2, Yellow</i>	<i>Continuous</i>
<i>C-TOPO-MAJR</i>	<i>Major Contour Lines</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>C-TOPO-MINR</i>	<i>Minor Contour Lines</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>C-GRID</i>	<i>Grid Lines (California Coordinates)</i>	<i>3, Green</i>	<i>Continuous</i>
<i>C-GRID-NOTE</i>	<i>Grid Coordinates and Notes</i>	<i>3, Green</i>	<i>Continuous</i>
<i>C-BLDG-ELEV</i>	<i>Building Elevations</i>	<i>2, Yellow</i>	<i>Continuous</i>
<i>C-BLDG-IDEN</i>	<i>Building Annotations</i>	<i>2, Yellow</i>	<i>Continuous</i>
<i>C-PROP</i>	<i>Property Line (Campus Boundary)</i>	<i>4, Cyan</i>	<i>Phantom</i>
<i>C-PROP-NOTE</i>	<i>Property Line Notes</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>C-PROP-ESMT</i>	<i>Easements</i>	<i>6, Magenta</i>	<i>Continuous</i>

S.3.C3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Civil: Site Utilities

Drawing File: CUTIL1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

C-PUTL-TEXT	General Notes and Specifications	3, Green	Continuous
C-PUTL-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

C-PUTL-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
C-PUTL-TEXT	General Notes and Specifications	3, Green	Continuous
C-PUTL-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
C-PUTL-DIMS	Dimensions	6, Magenta	Continuous

Project Information Layers

P-SSWR-MHOL	Sanitary Sewer Manholes	4, Cyan	Continuous
P-SSWR-ELEV	Sanitary Sewer Elevations	4, Cyan	Continuous
P-SSWR-PIPE	Sanitary Sewer Pipe	3, Green	Continuous
P-SSWR-IDEN	Sanitary Sewer Annotation	3, Green	Continuous
P-SSWR-EQPM	Sanitary Sewer Equipment	6, Magenta	Continuous
P-STRM-MHOL	Sanitary Sewer Manholes	4, Cyan	Continuous
P-STRM-ELEV	Sanitary Sewer Elevations	4, Cyan	Continuous
P-STRM-PIPE	Sanitary Sewer Pipe	3, Green	Continuous
P-STRM-IDEN	Sanitary Sewer Annotation	3, Green	Continuous
P-STRM-EQPM	Sanitary Sewer Equipment	6, Magenta	Continuous
P-GSWR-MHOL	Grey Water Manholes	4, Cyan	Continuous
P-GSWR-ELEV	Grey Water Elevations	4, Cyan	Continuous
P-GSWR-PIPE	Grey Water Pipe	3, Green	Continuous
P-GSWR-IDEN	Grey Water Annotation	3, Green	Continuous
P-GSWR-EQPM	Grey Water Equipment	6, Magenta	Continuous
P-DOMW	Domestic Water System	3, Green	Continuous
P-DOMW-MHOL	Domestic Water Manholes	4, Cyan	Continuous
P-DOMW-ELEV	Domestic Water Elevations	4, Cyan	Continuous
P-DOMW-PIPE	Domestic Water Pipe	3, Green	Continuous
P-DOMW-IDEN	Domestic Water Annotation	3, Green	Continuous
M-HOTW-MHOL	Hot Water Manholes	4, Cyan	Continuous
M-HOTW-ELEV	Hot Water Elevations	4, Cyan	Continuous
M-HOTW-RTRN	Hot Water Return Lines		

S.3.C3 continued

Layer	Description	Color	Linetype
M-CWRT-MHOL	Chilled Water Manholes	4, Cyan	Continuous
M-CWRT-ELEV	Chilled Water Elevations	4, Cyan	Continuous
M-CWRT-IDEN	Chilled Water Annotation	3, Green	Continuous
M-NGAS-ELEV	Natural Gas Elevations	3, Green	Continuous
M-NGAS-PIPE	Natural Gas Pipe	3, Green	Continuous
M-NGAS-IDEN	Natural Gas Annotation	3, Green	Continuous
M-NGAS-MHOL	Natural Gas Manholes	3, Green	Continuous
Q-COMM-EQPM	Communication Equipment	3, Green	Continuous
Q-COMM-WIRE	Wiring Cables, Duct Banks & Conduits	3, Green	Continuous
Q-COMM-IDEN	Communication System Annotation		

External Reference Files

Drawing File: LSITE1.DWG

<i>L-PLNT-TREE</i>	<i>Tree</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-PLNT-EXST</i>	<i>Existing Plants to Remain</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>

Drawing File: AFLOR1.DWG

<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>4, Cyan</i>	<i>Continuous</i>
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Drawing File: CGRAD1.DWG

<i>C-TOPO-MAJR</i>	<i>Major Contour Lines</i>	<i>94, Grey Green</i>	<i>2 Dash (half tone)</i>
<i>C-TOPO-MINR</i>	<i>Minor Contour Lines</i>	<i>174, Grey Yellow</i>	<i>2 Dash (half tone)</i>
<i>C-GRID</i>	<i>Grid Lines (California Coordinates)</i>	<i>174, Grey Yellow</i>	<i>Dashed (half tone)</i>
<i>C-GRID-NOTE</i>	<i>Grid Coordinates and Notes</i>	<i>174, Grey Yellow</i>	<i>Continuous (half tone)</i>
<i>C-BLDG-IDEN</i>	<i>Building Annotations</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>C-PROP</i>	<i>Property Line (Campus Boundary)</i>	<i>134, Grey Cyan</i>	<i>Phantom (half tone)</i>
<i>C-PROP-ESMT</i>	<i>Easements</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>

S.3.C3 continued

Layer	Description	Color	Linetype
Drawing File: CSITE1.DWG			
<i>C-ROAD</i>	<i>Roads and Streets</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-CURB</i>	<i>Curb Lines</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-IDEN</i>	<i>Road and Street Names</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-BRDG</i>	<i>Roadway Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-WALK</i>	<i>Pedestrian Walks</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-WALK-BRDG</i>	<i>Pedestrian Bridges</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-PKNG</i>	<i>Parking Lot</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-SITE-FENC</i>	<i>Fencing</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WALL</i>	<i>Walls</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-DECK</i>	<i>Decks</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-BRDG</i>	<i>Pedestrian Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-SITE-POOL</i>	<i>Pools and Spas</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WATR</i>	<i>Site Water Features,</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>

S.3.L1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Landscape: Landscape Plan

Drawing File: LSITE1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

L-PPLA-TEXT	Planting Plan General Notes and Specifications	3, Green	Continuous
L-PPLA-SCHD	Planting Plan Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

L-PPLA-NOTE	Planting Plan Notes, Call outs, and Key Notes	3, Green	Continuous
L-PPLA-TEXT	Planting Plan General Notes and Specifications	3, Green	Continuous
L-PPLA-SYMB	Planting Plan Symbols, Bubbles, and Targets	6, Magenta	Continuous
L-PPLA-DIMS	Planting Plan Dimensions	6, Magenta	Continuous

Project Information Layers

L-PLNT-TREE	Trees	3, Green	Continuous
L-PLNT-EXST	Existing Plants to Remain	3, Green	Continuous
L-PLNT-DEMO	Existing Plants to be Demolished	3, Green	Continuous
L-PLNT-GRND	Ground Cover and Vines	3, Green	Continuous
L-PLNT-TURF	Lawn Areas	3, Green	Continuous
L-PLNT-BEDS	Landscape Planting Beds	3, Green	Continuous

External Reference Files

Drawing File: AFLOR1.DWG

<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
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S.3.L1 continued

Layer	Description	Color	Linetype
Drawing File: CGRAD1.DWG			
<i>C-TOPO-MAJR</i>	<i>Major Contour Lines</i>	<i>94, Grey Green</i>	<i>2 Dash (half tone)</i>
<i>C-TOPO-MINR</i>	<i>Minor Contour Lines</i>	<i>174, Grey Yellow</i>	<i>2 Dash (half tone)</i>
<i>C-GRID</i>	<i>Grid Lines (California Coordinates)</i>	<i>174, Grey Yellow</i>	<i>Dashed (half tone)</i>
<i>C-GRID-NOTE</i>	<i>Grid Coordinates and Notes</i>	<i>174, Grey Yellow</i>	<i>Continuous (half tone)</i>
<i>C-BLDG-IDEN</i>	<i>Building Annotations</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>C-PROP</i>	<i>Property Line (Campus Boundary)</i>	<i>134, Grey Cyan</i>	<i>Phantom (half tone)</i>
<i>C-PROP-ESMT</i>	<i>Easements</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: CSITE1.DWG			
<i>C-ROAD</i>	<i>Roads and Streets</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-CURB</i>	<i>Curb Lines</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-IDEN</i>	<i>Road and Street Names</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-BRDG</i>	<i>Roadway Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-WALK</i>	<i>Pedestrian Walks</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-WALK-BRDG</i>	<i>Pedestrian Bridges</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-PKNG</i>	<i>Parking Lot</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-FENC</i>	<i>Fencing</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WALL</i>	<i>Walls</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-DECK</i>	<i>Decks</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-BRDG</i>	<i>Pedestrian Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-SITE-POOL</i>	<i>Pools and Spas</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WATR</i>	<i>Site Water Features,</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>

S.3.L2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Landscape: Irrigation Plan

Drawing File: LIRIG1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

L-PIRR-TEXT	General Notes and Specifications	3, Green	Continuous
L-PIRR-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

L-PIRR-NOTE	Notes, Call outs, and Key Notes	3, Green	Continuous
L-PIRR-TEXT	General Notes and Specifications	3, Green	Continuous
L-PIRR-SYMB	Symbols, Bubbles, and Targets	6, Magenta	Continuous
L-PIRR-DIMS	Dimensions	6, Magenta	Continuous

Project Information Layers

L-IRRG-MAJR	Main Irrigation Lines (larger than 2")	3, Green	Continuous
L-IRRG-SPHD	Sprinkler Head	6, Magenta	Continuous
L-IRRG-PIPE	Sprinkler Piping	3, Green	Continuous
L-IRRG-EQPM	Irrigation Equipment	6, Magenta	Continuous
L-IRRG-COVR	Irrigation Coverage	3, Green	Continuous

External Reference Files

Drawing File: LSITE1.DWG

<i>L-PLNT-TREE</i>	<i>Tree</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-PLNT-EXST</i>	<i>Existing Plants to Remain</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-PLNT-GRND</i>	<i>Ground Cover and Vines</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-PLNT-TURF</i>	<i>Lawn Areas</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-PLNT-BEDS</i>	<i>Landscape Planting Beds</i>	<i>3, Green</i>	<i>Continuous</i>

Drawing File: AFLOR1.DWG

<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>4, Cyan</i>	<i>Continuous</i>
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S.3.L2 continued

Layer	Description	Color	Linetype
Drawing File: CGRAD1.DWG			
<i>C-TOPO-MAJR</i>	<i>Major Contour Lines</i>	<i>94, Grey Green</i>	<i>2 Dash (half tone)</i>
<i>C-TOPO-MINR</i>	<i>Minor Contour Lines</i>	<i>174, Grey Yellow</i>	<i>2 Dash (half tone)</i>
<i>C-GRID</i>	<i>Grid Lines (California Coordinates)</i>	<i>174, Grey Yellow</i>	<i>Dashed (half tone)</i>
<i>C-GRID-NOTE</i>	<i>Grid Coordinates and Notes</i>	<i>174, Grey Yellow</i>	<i>Continuous (half tone)</i>
<i>C-BLDG-IDEN</i>	<i>Building Annotations</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>C-PROP</i>	<i>Property Line (Campus Boundary)</i>	<i>134, Grey Cyan</i>	<i>Phantom (half tone)</i>
<i>C-PROP-ESMT</i>	<i>Easements</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: CSITE1.DWG			
<i>C-ROAD</i>	<i>Roads and Streets</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-CURB</i>	<i>Curb Lines</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-IDEN</i>	<i>Road and Street Names</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>C-ROAD-BRDG</i>	<i>Roadway Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-WALK</i>	<i>Pedestrian Walks</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-WALK-BRDG</i>	<i>Pedestrian Bridges</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>C-PKNG</i>	<i>Parking Lot</i>	<i>3, Green</i>	<i>Continuous</i>
<i>L-SITE-FENC</i>	<i>Fencing</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WALL</i>	<i>Walls</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>L-SITE-DECK</i>	<i>Decks</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-BRDG</i>	<i>Pedestrian Bridges</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>L-SITE-POOL</i>	<i>Pools and Spas</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>L-SITE-WATR</i>	<i>Site Water Features,</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>

S.3.A1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Floor Plan

Drawing File: AFLOR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PFLR-TEXT	General Notes and Specifications	3, Green	Continuous
A-PFLR-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PFLR-DIMS	Floor Plan Dimensions	2, Yellow	Continuous
A-PFLR-NOTE	Floor Plan Notes, Call-Outs,	3, Green	Continuous
A-PFLR-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PFLR-SYMB	Floor Plan Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

A-WALL	Walls	5, Blue	Continuous
A-WALL-CNTR	Wall Center Lines	2, Yellow	Center
A-WALL-FULL	Full Height Walls	6, Magenta	Continuous
A-WALL-PRHT	Partial Height Walls	4, Cyan	Continuous
A-WALL-WHED	Window Headers	3, Green	Continuous
A-WALL-DHED	Door Headers	3, Green	Continuous
A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous
A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill	1, Red	Continuous
A-CLNG-OVHD	Major Ceiling Elements Shown on Floor Plan	4, Cyan	Hidden
A-DOOR	Doors	3, Green	Continuous
A-DOOR-IDEN	Door Number, Hardware Group, etc.	3, Green	Continuous
A-GLAZ	Window, Window Walls, Curtain Walls Curtain Walls, Glazed Partitions	5, Blue	Continuous
A-GLAZ-SILL	Window Sills	3, Green	Continuous
A-GLAZ-IDEN	Window Number	3, Green	Continuous
A-FLOR	Floor Information	3, Green	Continuous
A-FLOR-CASE	Architectural Casework	4, Cyan	Continuous
A-FLOR-LEVL	Level Changes, Ramps, Pits, & Depression	5, Blue	Continuous
A-FLOR-STRS	Stairs, Escalators, and Ladders	4, Cyan	Continuous
A-FLOR-HRAL	Stair and Balcony Handrails and Guardrails	4, Cyan	Continuous
A-FLOR-TPTN	Toilet Portions	4, Cyan	Continuous
A-FLOR-SPCL	Architectural Specialties	4, Cyan	Continuous
F-PROT-EQPM	Fire System Equipment (Fire Hose Cabinet, Extinguishers)	5, Blue	Continuous

S.3.A1 continued

Layer	Description	Color	Linetype
P-SANR-FTXT	Toilets & Other Sanitary Fixture	3, Green	Continuous
P-DOMW-FIXT	Domestic Water Fixtures, Sinks, etc.	3, Green	Continuous
C-BLDG-PROP	Footprint of Proposed Building	0, White	Off, No Display

External Reference Files

Drawing File: COLGRID.DWG

<i>S-COLS</i>	<i>Structural Columns</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Center</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.A2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Reflected Ceiling Plan

Drawing File: ACLG1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PCLG-TEXT	General Notes and Specifications	3, Green	Continuous
A-PCLG-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PCLG-NOTE	Ceiling Plan Notes, Call-Outs,	3, Green	Continuous
A-PCLG-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PCLG-SYMB	Ceiling Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
A-PCLG-DIMS	Ceiling Plan Dimensions	2, Yellow	Continuous

Project Information Layers

Note:

This layering model locates ceiling fixtures of multiple disciplines in the architectural reflected ceiling plan with the understanding that the architect will be locating visible features with the engineering disciplines providing the utilities support for them. It would also be acceptable to locate fixtures in the discipline specific drawings with the obvious condition that the location be consistent (E-LITE-CLNG should appear in ACLG1.DWG or ELITE.1DWG but not both) and the other disciplines drawings then reference the appropriate file to create their backgrounds.

A-CLNG	Ceiling Elements, soffits, and Bulkheads	3, Green	Continuous
A-CLNG-GRID	Ceiling Grid (T-Bar Ceiling)	1, Red	Continuous
A-CLNG-ACCS	Access Panels & Ceiling Penetrations	3, Green	Continuous
A-CLNG-SPCL	Ceiling Mounted Specialties (clocks, fans, etc.)	3, Green	Continuous
M-CDFD-SUPP	Ceiling Supply Diffusers	2, Yellow	Continuous
M-CDFD-RETN	Ceiling Return Diffusers	2, Yellow	Continuous
E-LITE-CLNG	Ceiling Mounted Lighting	3, Green	Continuous
E-LITE-EXIT	Exit Lighting	3, Green	Continuous
E-LITE-EMER	Emergency Lighting	3, Green	Continuous
F-SPRN-SPHD	Sprinkler Heads	5, Blue	Continuous
F-AFFF-SPHD	Aqueous Film Spray Heads	5, Blue	Continuous
F-HALN-SPHD	Halon Spray Heads	5, Blue	Continuous

S.3.A2 Continued

Layer	Description	Color	Linetype
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External Reference Files

Drawing File: AFLOR1.DWG

<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>4, Cyan</i>	<i>Continuous</i>

Drawing File: COLGRID.DWG

<i>S-COLS</i>	<i>Structural Columns</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>3, Green</i>	<i>Continuous</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.A3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Roof Plan

Drawing File: AROOF1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PROF-TEXT	General Notes and Specifications	3, Green	Continuous
A-PROF-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PROF-NOTE	Roof Plan Notes, Call-Outs,	3, Green	Continuous
A-PROF-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PROF-SYMB	Roof Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
A-PROF-DIMS	Roof Plan Dimensions	2, Yellow	Continuous

Project Information Layers

A-ROOF-LEVL	Level Changes	4, Cyan	Continuous
A-ROOF-OTLN	Roof Perimeter/Edge Roof Geometry	6, Magenta	Continuous
A-ROOF-STRS	Stair Treads and Ladders	4, Cyan	Continuous
A-ROOF-PATT	Roof Cross Hatching & Patterns	1, Red	Continuous

External Reference Files

Drawing File: AFLOR1.DWG

<i>C-BLDG-PROP</i>	<i>Footprint of Proposed Building</i>	<i>1, Red</i>	<i>Hidden</i>
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Drawing File: COLGRID.DWG

<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Center</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.A4 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Enlarged Floor Plan e.g. Stair Plan, Toilet Plans, etc.

The need for larger scale plan drawings is understood and accommodated by these submittal standards. It is essential however that the integrity of the project model or database not be compromised by redundancies or absences in the comprehensive project model.

These dual issues are accommodated via importing appropriate segments of the full model as a reference file and using the enlarged plan drawing only as a source of larger scale symbology and notation and not actual project geometry, i.e. walls, ducts, diffusers, etc.)

Drawing File: LGFLR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PLGS-TEXT	General Notes and Specifications	3, Green	Continuous
A-PLGS-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PLGS-NOTE	Large Scale Floor Plan Notes, Call-Outs,	3, Green	Continuous
A-PLGS-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PLGS-SYMB	Large Scale Floor Plan Symbols, ...	4, Cyan	Continuous
A-PLGS-DIMS	Large Scale Floor Plan Dimensions	2, Yellow	Continuous

Project Information Layers

External Reference Files

Drawing File: AFLOR1.DWG

A-WALL	Walls	5, Blue	Continuous
A-WALL-CNTR	Wall Center Lines	2, Yellow	Continuous
A-WALL-FULL	Full Height Walls	6, Magenta	Continuous
A-WALL-PRHT	Partial Height Walls	4, Cyan	Continuous
A-WALL-WHED	Window Headers	3, Green	Continuous
A-WALL-DHED	Door Headers	3, Green	Continuous
A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous
A-WALL-PATT	Wall Insulation, Hatch Patterns & Fill	1, Red	Continuous
A-CLNG-OVHD	Major Ceiling Elements Shown on Floor Plan	4, Cyan	Hidden
A-DOOR	Doors	4, Cyan	Continuous

S.3.A4 continued

Layer	Description	Color	Linetype
<i>A-GLAZ</i>	<i>Window, Window Walls, Curtain Walls Curtain Walls, Glazed Partitions</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>A-GLAZ-SILL</i>	<i>Window Sills</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-FLOR</i>	<i>Floor Information</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-FLOR-CASE</i>	<i>Architectural Casework</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-LEVL</i>	<i>Level Changes, Ramps, Pits, & Depression</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-FLOR-STRS</i>	<i>Stairs, Escalators, and Ladders</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-HRAL</i>	<i>Stair and Balcony Handrails and Guardrails</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-TPTN</i>	<i>Toilet Portions</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-SPCL</i>	<i>Architectural Specialties</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>P-SANR-FTXT</i>	<i>Toilets & Other Sanitary Fixture</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>P-DOMW-FIXT</i>	<i>Domestic Water Fixtures, Sinks, etc.</i>	<i>4, Cyan</i>	<i>Continuous</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>6, Magenta</i>	<i>Continuous</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Center</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.A5 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Equipment Plan

Drawing File: AEQUIP1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PEQP-TEXT	General Notes and Specifications	3, Green	Continuous
A-PEQP-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PEQP-NOTE	Equipment Plan Notes, Call-Outs,	3, Green	Continuous
A-PEQP-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PEQP-SYMB	Equipment Plan Symbols, Bubbles and Targets	6, Magenta	Continuous
A-PEQP-DIMS	Equipment Plan Dimensions	2, Yellow	Continuous

Project Information Layers

Equipment			
A-EQPM-FIXD	Fixed Equipment (CSU Type 1)	3, Green	Continuous
A-EQDM-MOVE	Moveable Equipment (CSU Type 2)	3, Green	Dashed
A-EQPM-IDEN	Equipment Identification Numbers	3, Green	Continuous

External Reference Files

Drawing File: AFLOR1.DWG

Walls

A-WALL-FULL	Full Height Walls	6, Magenta	Continuous
A-WALL-PRHT	Partial Height Walls	4, Cyan	Continuous
A-WALL-WHED	Window Headers	3, Green	Continuous
A-WALL-DHED	Door Headers	3, Green	Continuous
A-WALL-JAMB	Door & Window Jambs	6, Magenta	Continuous

A-CLNG-OVHD	Major Ceiling Elements Shown on Floor Plan	4, Cyan	Hidden
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A-DOOR	Doors	3, Green	Continuous
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A-GLAZ	Window, Window Walls, Curtain Walls Curtain Walls, Glazed Partitions	5, Blue	Continuous
A-GLAZ-SILL	Window Sills	3, Green	Continuous

Floor Information

A-FLOR-CASE	Architectural Casework	4, Cyan	Continuous
A-FLOR-LEVL	Level Changes, Ramps, Pits, & Depression	5, Blue	Continuous
A-FLOR-STRS	Stairs, Escalators, and Ladders	4, Cyan	Continuous
A-FLOR-TPTN	Toilet Portions	4, Cyan	Continuous

S.3.A5 Continued

Layer	Description	Color	Linetype
<i>Floor Information</i>			
<i>A-FLOR-CASE</i>	<i>Architectural Casework</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-LEVL</i>	<i>Level Changes, Ramps, Pits, & Depression</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-FLOR-STRS</i>	<i>Stairs, Escalators, and Ladders</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-HRAL</i>	<i>Stair and Balcony Handrails and Guardrails</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>A-FLOR-TPTN</i>	<i>Toilet Portions</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-FLOR-SPCL</i>	<i>Architectural Specialties</i>	<i>4, Cyan</i>	<i>Continuous</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Continuous</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>3, Green</i>	<i>Continuous</i>

S.3.A6 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Elevations (Interior & Exterior)

Drawing File: AELEV1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-ELEV-TEXT	General Notes and Specifications	3, Green	Continuous
A-ELEV-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-ELEV-NOTE	Elevation Notes, Call-Outs,	3, Green	Continuous
A-ELEV-KEYN	ConDoc Keynotes	3, Green	Continuous
A-ELEV-SYMB	Elevation Symbols, Bubbles and Targets	6, Magenta	Continuous
A-ELEV-DIMS	Elevation Dimensions	2, Yellow	Continuous

Project Information Layers

A-ELEV-OTLN	Building (or space) Outline	6, Magenta	Continuous
A-ELEV-FNSH	Extents of Finishes, Woodwork and Trim	4, Cyan	Continuous
A-ELEV-PATT	Elevation Cross-Hatching And Poche	1, Red	Continuous

Graphic layers may be further segregated by appropriate layer modifiers if necessary, i.e.:

A-ELEV-WALL	Walls Shown in Elevation View	2, Yellow	Continuous
A-ELEV-COLL	Columns Shown in Elevation View	2, Yellow	Continuous

Linework may also be segregated into appropriate layer subgroups if necessary, i.e.:

A-ELEV-OTLN-LW50	Medium Linework	4, Cyan	Continuous
A-ELEV-OTLN-LW75	Heavy Linework	4, Cyan	Continuous
A-ELEV-FNSH-LW25	Light Linework	6, Magenta	Continuous
A-ELEV-FNSH-LW35	Fine Linework	6, Magenta	Continuous

S.3.A7 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Sections

Drawing File: ASECT1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-SECT-TEXT	General Notes and Specifications	3, Green	Continuous
A-SECT-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-SECT-NOTE	Section Notes, Call-Outs,	3, Green	Continuous
A-SECT-KEYN	ConDoc Keynotes	3, Green	Continuous
A-SECT-SYMB	Section Symbols, Bubbles and Targets	6, Magenta	Continuous
A-SECT-DIMS	Section Dimensions	2, Yellow	Continuous

Project Information Layers

A-SECT-MCUT	Materials Cut by Section	6, Magenta	Continuous
A-SECT-MBNT	Materials Beyond Section Cut	4, Cyan	Continuous
A-SECT-OTLN	Building (or space) Outline	5, Blue	Continuous
A-SECT-FNSH	Extents of Finishes, Woodwork and Trim	4, Cyan	Continuous
A-SECT-PATT	Elevation Cross-Hatching And Poche	1, Red	Continuous

Graphic layers may be further segregated by appropriate layer modifiers if necessary, i.e.:

A-SECT-WALL	Walls Shown in Elevation View	2, Yellow	Continuous
A-SECT-COLL	Columns Shown in Elevation View	2, Yellow	Continuous

Linework may also be segregated into appropriate layer subgroups if necessary, i.e.:

A-SECT-MCUT-LW50	Medium Linework	4, Cyan	Continuous
A-SECT-MCUT-LW75	Heavy Linework	4, Cyan	Continuous
A-SECT-MBNT-LW25	Light Linework	6, Magenta	Continuous
A-SECT-MBNT-LW35	Fine Linework	6, Magenta	Continuous

S.3.A8 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Details

Drawing File: ADETL1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-DETL-TEXT	General Notes and Specifications	3, Green	Continuous
A-DETL-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-DETL-NOTE	Detail Notes, Call-Outs,	3, Green	Continuous
A-DETL-KEYN	ConDoc Keynotes	3, Green	Continuous
A-DETL-SYMB	Detail Symbols, Bubbles and Targets	6, Magenta	Continuous
A-DETL-DIMS	Detail Dimensions	2, Yellow	Continuous

Project Information Layers

A-DETL-MCVT	Materials Cut by Section	4, Cyan	Continuous
A-DETL-MBNT	Materials Beyond Section Cut	4, Cyan	Continuous
A-DETL-PATT	Detail Cross-Hatching And Poche	1, Red	Continuous

Graphic layers may be further segregated by appropriate layer modifiers if necessary, i.e.:

A-DETL-WALL	Walls Shown in Elevation View	2, Yellow	Continuous
A-DETL-DOOR	Doors Shown in Elevation View	2, Yellow	Continuous

Linework may also be segregated into appropriate layer subgroups if necessary, i.e.:

A-DETL-MCVT-LW50	Medium Linework	4, Cyan	Continuous
A-DETL-MCVT-LW75	Heavy Linework	4, Cyan	Continuous
A-DETL-MBNT-LW25	Light Linework	6, Magenta	Continuous
A-DETL-MBNT-LW35	Fine Linework	6, Magenta	Continuous

S.3.A9 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Demolition Plan

Drawing File: ADEMO1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PDEM-TEXT	General Notes and Specifications	3, Green	Continuous
A-PDEM-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PDEM-NOTE	Demolition Notes, Call-Outs,	3, Green	Continuous
A-PDEM-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PDEM-SYMB	Demolition Symbols, Bubbles and Targets	6, Magenta	Continuous
A-PDEM-DIMS	Demolition Dimensions	2, Yellow	Continuous

Project Information Layers

A-WALL-EXST	Existing Wall to Remain	3, Green	Continuous
A-WALL-DEMO	Existing Wall to be Removed	3, Green	Dashed
A-WALL-DEMO-HAZW	Wall to be Removed Contains Hazardous Mtl.s	1, Red	Continuous

Other features as required to document scope of existing work to be retained and demolished. Work shown in layers not noted as existing (EXST) or demolished (DEMO) is assumed to be new construction.

S.3.A10 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Architectural: Occupancy Plan

Drawing File: AREA1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

A-PARE-TEXT	General Notes and Specifications	3, Green	Continuous
A-PARE-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

A-PARE-NOTE	Area Plan Notes, Call-Outs,	3, Green	Continuous
A-PARE-KEYN	ConDoc Keynotes	3, Green	Continuous
A-PARE-SYMB	Area Plan Symbols, Bubbles and Targets	6, Magenta	Continuous
A-PARE-DIMS	Area Plan Dimensions	2, Yellow	Continuous

Project Information Layers

A-AREA-ROOM	Room/Space Boundary	6, Magenta	Dashed
A-AREA-OCCP	Occupancy Zone Boundary Lines	4, Cyan	Continuous
A-AREA-PATT	Cross-Hatching And Poche	1, Red	Continuous
A-AREA-IDEN	Room Numbers & Space ID tags	2, Yellow	Continuous

If area plans are shown against a half tone floor plan the appropriate reference files would be attached as below.,

External Reference Files

Drawing File: AFLOR1.DWG

Walls

<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-PRHT</i>	<i>Partial Height Walls</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL-JAMB</i>	<i>Door & Window Jambs</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>174, Grey Yellow</i>	<i>Hidden(half tone)</i>
<i>A-DOOR</i>	<i>Doors</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ</i>	<i>Window, Window Walls, Curtain Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ-SILL</i>	<i>Window Sills</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>

S.3.A10 Continued

Layer	Description	Color	Linetype
<i>Floor Information</i>			
<i>A-FLOR-LEVL</i>	<i>Level Changes, Ramps, Pits, & Depression</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-STRS</i>	<i>Stairs, Escalators, and Ladders</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-TPTN</i>	<i>Toilet Portions</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.S1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Structural: Foundation Plans

Drawing File: FNDN1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

S-PFND-TEXT	General Notes and Specifications	3, Green	Continuous
S-PFND-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

S-PFND-DIMS	Foundation Plan Dimensions	2, Yellow	Continuous
S-PFND-KEYN	ConDoc Keynotes	3, Green	Continuous
S-PFND-NOTE	Foundation Plan Notes, Call-Outs,	3, Green	Continuous
S-PFND-SYMB	Foundation Plan Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

S-ABLT	Anchor Bolts & Hold-Downs	4, Cyan	Continuous
S-FNDN-FTNG	Footings	6, Magenta	Continuous
S-FNDN-GRBM	Grade Beams	6, Magenta	Continuous
S-FNDN-PIER	Piers	6, Magenta	Continuous
S-FNDN-RBAR	Reinforcing Bars	5, Blue	Continuous
S-FNDN-WELD-SYMD	Welding Symbols	3, Green	Continuous
S-JNTS-CNST	Construction Joints	4, Cyan	Continuous
S-JNTS-CTRL	Control Joints	4, Cyan	Continuous
S-SLAB-OTLN	Slab Outline	6, Magenta	Continuous
S-SLAB-RBAR	Concrete Slab Reinforcing	5, Blue	Continuous

External Reference Files

Drawing File: COLGRID.DWG

<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Center</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.S2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Structural: Framing Plans

Drawing File: SFRAM1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

S-PSFR-TEXT	General Notes and Specifications	3, Green	Continuous
S-PSFR-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

S-PSFR-DIMS	Foundation Plan Dimensions	2, Yellow	Continuous
S-PSFR-NOTE	Foundation Plan Notes, Call-Outs,	3, Green	Continuous
S-PSFR-KEYN	ConDoc Keynotes	3, Green	Continuous
S-PSFR-SYMB	Foundation Plan Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

S-FRAM-BEAM	Beams	5, Blue	Continuous
The drawing may be further segregated with sublayers if needed, e.g.:			
S-FRAM-BEAM-PRIM	Primary Beams	6, Magenta	Continuous
S-FRAM-BEAM-SCND	Secondary Beams	4, Cyan	Continuous
S-FRAM-DECK	Structural Decking	4, Cyan	Continuous
S-FRAM-JOIS	Joists	6, Magenta	Continuous
S-FRAM-RBAR	Reinforcing Bars	5, Blue	Continuous
S-FRAM-WELD-SYMD	Welding Symbols	3, Green	Continuous

External Reference Files

Drawing File: COLGRID.DWG

<i>S-GRID</i>	<i>Column Grid</i>	<i>2, Yellow</i>	<i>Continuous</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>3, Green</i>	<i>Continuous</i>
<i>S-COLS</i>	<i>Structural Columns</i>	<i>4, Cyan</i>	<i>Continuous</i>

S.3.S3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Structural: Column Plans

Drawing File: COLGRID.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

S-PCOL-TEXT	General Notes and Specifications	3, Green	Continuous
S-PCOL-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

S-PCOL-DIMS	Foundation Plan Dimensions	2, Yellow	Continuous
S-PCOL-KEYN	ConDoc Keynotes	3, Green	Continuous
S-PCOL-NOTE	Foundation Plan Notes, Call-Outs,	3, Green	Continuous
S-PCOL-SYMB	Foundation Plan Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

S-GRID	Column Grid	2, Yellow	Center
S-GRID-IDEN	Column Grid Tags	4, Cyan	Continuous
S-COLS	Structural Columns	6, Magenta	Continuous
S-COLS-RBAR	Reinforcing Bars	5, Blue	Continuous
S-COLS-WELD-SYMD	Welding Symbols	3, Green	Continuous

S.3.S4 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Structural: Elevations

Drawing File: SELEV1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

S-ELEV-TEXT	General Notes and Specifications	3, Green	Continuous
S-ELEV-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

S-ELEV-DIMS	Elevation Dimensions	2, Yellow	Continuous
S-ELEV-NOTE	Elevation Notes, Call-Outs,	3, Green	Continuous
S-ELEV-KEYN	ConDoc Keynotes	3, Green	Continuous
S-ELEV-SYMB	Elevation Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

S-GRID	Vertical Column Grid Lines	2, Yellow	Center
S-GRID-TAGS	Column Tags	4, Cyan	Continuous
S-ELEV-BEAM	Beams Shown in Elevation View	4, Cyan	Continuous
S-ELEV-FTNG	Footings Shown in Elevation View	3, Green	Continuous
S-ELEV-WALL	Structural Walls Shown in Elevation View	3, Green	Continuous
S-ELEV-COLL	Structural Columns Shown in Elevation View	4, Cyan	Continuous
S-ELEV-RBAR	Reinforcing Bars	5, Blue	Continuous
S-ELEV-WELD-SYMB	Welding Symbols	3, Green	Continuous
S-ELEV-PATT	Elevation Cross-Hatching And Poche	1, Red	Continuous

Linework may also be segregated into appropriate layer subgroups if necessary, i.e.:

S-ELEV-BEAM-LW50	Medium Linework	4, Cyan	Continuous
S-ELEV-BEAM-LW75	Heavy Linework	4, Cyan	Continuous

S.3.S5 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Structural: Details

Drawing File: SDETL1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

S-DETL-TEXT	General Notes and Specifications	3, Green	Continuous
S-DETL-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

S-DETL-NOTE	Detail Notes, Call-Outs,	3, Green	Continuous
S-DETL-KEYN	ConDoc Keynotes	3, Green	Continuous
S-DETL-SYMB	Detail Symbols, Bubbles and Targets	6, Magenta	Continuous
S-DETL-DIMS	Detail Dimensions	2, Yellow	Continuous

Project Information Layers

S-DETL-MCUT	Materials Cut by Section	4, Cyan	Continuous
S-DETL-MBNT	Materials Beyond Section Cut	4, Cyan	Continuous
S-DETL-PATT	Detail Cross-Hatching And Poche	1, Red	Continuous
S-GRID	Column Grid Lines	2, Yellow	Continuous
S-GRID-TAGS	Column Tags	3, Green	Continuous

Graphic layers may be further segregated by appropriate layer modifiers if necessary, i.e.:

S-DETL-BEAM	Beams Shown in Detail View	4, Cyan	Continuous
S-DETL-COLL	Columns Shown in Detail View	4, Cyan	Continuous
S-DETL-RBAR	Concrete Reinforcing Bars	5, Blue	Continuous

Linework may also be segregated into appropriate layer subgroups if necessary, i.e.:

S-DETL-MCVT-LW50	Medium Linework	4, Cyan	Continuous
S-DETL-MCVT-LW70	Heavy Linework	5, Blue	Continuous
S-DETL-MBNT-LW25	Light Linework	1, Red	Continuous
S-DETL-MBNT-LW35	Fine Linework	2, Yellow	Continuous

S.3.M1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Mechanical: HVAC Plan

Drawing File: MHVAC1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

M-PHVA-TEXT	General Notes and Specifications	3, Green	Continuous
M-PHVA-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

M-PHVA-DIMS	HVAV Plan Dimensions	2, Yellow	Continuous
M-PHVA-NOTE	HVAV Plan Notes, Call-Outs,	3, Green	Continuous
M-PHVA-KEYN	ConDoc Keynotes	3, Green	Continuous
M-PHVA-SYMB	HVAV Plan Symbols, Bubbles and Targets	4, Cyan	Continuous

Project Information Layers

M-DUCT-SUPP	Supply Ductwork	4, Cyan	Continuous
M-DUCT-RETN	Return Ductwork	4, Cyan	Continuous
M-DUCT-EXHT	Exhaust Ductwork	4, Cyan	Continuous
M-DUCT-OTHR	Other Ductwork	4, Cyan	Continuous
M-HVAC-EQUP	HVAC Equipment	5, Blue	Continuous
M-VENT-DUCT	Industrial or Laboratory Venting	4, Cyan	Continuous
M-VENT-EQPM	Industrial or Laboratory Venting Equipment	4, Cyan	Continuous

External Reference Files

Drawing File: ACLG1.DWG

<i>M-CDFF-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-CDFF-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>

S.3.M1 Continued

Layer	Description	Color	Linetype
Drawing File: AFLOR1.DWG			
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.M2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Mechanical: Piping Plan

Drawing File: MPIPE1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

M-PPIP-TEXT	General Notes and Specifications	3, Green	Continuous
M-PPIP-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

M-PPIP-NOTE	Piping Plan Notes, Call-Outs,	3, Green	Continuous
M-PPIP-KEYN	ConDoc Keynotes	3, Green	Continuous
M-PPIP-SYMB	Piping Plan Symbols, Bubbles and Targets	6, Magenta	Continuous
M-PPIP-DIMS	Piping Plan Dimensions	2, Yellow	Continuous

Project Information Layers

M-CWTR-PIPE	Chilled Water Pipe	4,Cyan	Continuous
M-CWTR-EQPM	Chilled Water Equipment	5, Blue	Continuous
M-HOTW-PIPE	Hot Water Heating Pipe	4,Cyan	Continuous
M-HOTW-EQPM	Hot Water Heating Equipment	5, Blue	Continuous
M-DUAL-PIPE	Dual Temperature System Pipe	4,Cyan	Continuous
M-DUAL-EQPM	Dual Temperature System Equipment	5, Blue	Continuous
M-REFG-EQPM	Refrigeration System Equipment	5, Blue	Continuous
M-REFG-PIPE	Refrigeration System Piping	4,Cyan	Continuous
M-STEM-LPIP	Low Pressure Steam Piping	4,Cyan	Continuous
M-STEM-MPIP	Medium Pressure Steam Piping	4,Cyan	Continuous
M-STEM-HPIP	High Pressure Steam Piping	4,Cyan	Continuous
M-STEM-EQPM	Refrigeration System Equipment	5, Blue	Continuous

S.3.M2 Continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: MHVAC1.DWG			
<i>M-HVAC-EQUP</i>	<i>HVAC Equipment</i>	<i>3, Green</i>	<i>Continuous</i>
Drawing File: AFLOR1.DWG			
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: ACLG1.DWG			
<i>M-CDFE-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-CDFE-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.M3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Mechanical: Roof Plan

Drawing File: MROOF1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

M-PROF-TEXT	General Notes and Specifications	3, Green	Continuous
M-PROF-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

M-PROF-DIMS	Mechanical Roof Plan Dimensions	2, Yellow	Continuous
M-PROF-NOTE	Mechanical Roof Plan Notes, Call-Outs,	3, Green	Continuous
M-PROF-KEYN	ConDoc Keynotes	3, Green	Continuous
M-PROF-SYMB	Mechanical Roof Plan Symbols	4, Cyan	Continuous

Project Information Layers

M-CWTR-PIPE	Chilled Water Pipe	4, Cyan	Continuous
M-CWTR-EQPM	Chilled Water Equipment	5, Blue	Continuous
M-HOTW-PIPE	Hot Water Heating Pipe	4, Cyan	Continuous
M-HOTW-EQPM	Hot Water Heating Equipment	5, Blue	Continuous
M-REFG-PIPE	Refrigeration System Piping	4, Cyan	Continuous
M-REFG-EQPM	Refrigeration System Equipment	5, Blue	Continuous
M-DUCT-SUPP	Supply Ductwork	4, Cyan	Continuous
M-DUCT-RETN	Return Ductwork	4, Cyan	Continuous
M-DUCT-EXHT	Exhaust Ductwork	4, Cyan	Continuous
M-DUCT-OTHR	Other Ductwork	4, Cyan	Continuous
M-HVAC-EQUP	HVAC Equipment	3, Green	Continuous
M-VENT-DUCT	Industrial or Laboratory Venting	4, Cyan	Continuous
M-VENT-EQPM	Industrial or Laboratory Venting Equipment	5, Blue	Continuous

S.3.M3 Continued

Layer	Description	Color	Linetype
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External Reference Files

Drawing File: AROOF1.DWG

<i>A-ROOF-LEVL</i>	<i>Level Changes</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-ROOF-OTLN</i>	<i>Roof Perimeter/Edge Roof Geometry</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-ROOF-STRS</i>	<i>Stair Treads and Ladders</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

Drawing File: COLGRID.DWG

<i>S-GRID</i>	<i>Column Grid</i>	<i>54, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.M4 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Mechanical: Controls Plan

Drawing File: MCNTRL1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

M-PCON-TEXT	General Notes and Specifications	3, Green	Continuous
M-PCON-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

M-PCON-NOTE	Mechanical Controls Plan Notes, Call-Outs,	3, Green	Continuous
M-PCON-KEYN	ConDoc Keynotes	3, Green	Continuous
M-PCON-SYMB	Mechanical Controls Plan Symbols,	6, Magenta	Continuous
M-PCON-DIMS	Mechanical Controls Plan Dimensions	2, Yellow	Continuous

Project Information Layers

M-CONT-WIRE	Mechanical Controls Wiring	4, Cyan	Continuous
M-CONT-INST	Mechanical Controls Instrumentation	5, Blue	Continuous
M-ENER-SYST	Energy Management Systems	4, Cyan	Continuous

External Reference Files

External Reference Files

Drawing File: MHVAC1.DWG

<i>M-HVAC-EQUP</i>	<i>HVAC Equipment</i>	<i>3, Green</i>	<i>Continuous</i>
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Drawing File: AFLOR1.DWG

<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>

S.3.M4 Continued

Layer	Description	Color	Linetype
Drawing File: ACLG1.DWG			
<i>M-CDFD-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-CDFD-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.M5 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Mechanical: Enlarged Plan

The need for larger scale plan drawings is understood and accommodated by these submittal standards. It is essential however that the integrity of the project model or database not be compromised by redundancies or absences in the comprehensive project model.

These dual issues are accommodated via importing appropriate segments of the full model as a reference file and using the enlarged plan drawing only as a source of larger scale symbology and notation and not actual project geometry, i.e. walls, ducts, diffusers, etc.)

Drawing File: LGMCH1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

M-PLGS--TEXT	General Notes and Specifications	3, Green	Continuous
M-PLGS--SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

M-PLGS-NOTE	Large Scale HVAC Plan Notes, Call-Outs,	3, Green	Continuous
M-PLGS--KEYN	ConDoc Keynotes	3, Green	Continuous
M-PLGS--SYMB	Large Scale HVAC Plan Symbols, ...	6, Magenta	Continuous
M-PLGS--DIMS	Large Scale HVAC Plan Dimensions	2, Yellow	Continuous

Project Information Layers

External Reference Files

Drawing File: MPIPE1.DWG

<i>M-CWTR-PIPE</i>	<i>Chilled Water Pipe</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-CWTR-EQPM</i>	<i>Chilled Water Equipment</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-HOTW-PIPE</i>	<i>Hot Water Heating Pipe</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-HOTW-EQPM</i>	<i>Hot Water Heating Equipment</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-DUAL-PIPE</i>	<i>Dual Temperature System Pipe</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-DUAL-EQPM</i>	<i>Dual Temperature System Equipment</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-REFG-EQPM</i>	<i>Refrigeration System Equipment</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-REFG-PIPE</i>	<i>Refrigeration System Piping</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-STEM-LPIP</i>	<i>Low Pressure Steam Piping</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-STEM-MPIP</i>	<i>Medium Pressure Steam Piping</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-STEM-HPIP</i>	<i>High Pressure Steam Piping</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-STEM-EQPM</i>	<i>Refrigeration System Equipment</i>	<i>5, Blue</i>	<i>Continuous</i>

S.3.M5 Continued

Layer	Description	Color	Linetype
Drawing File: MHVAC1.DWG			
<i>M-DUCT-SUPP</i>	<i>Supply Ductwork</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-DUCT-RETN</i>	<i>Return Ductwork</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-DUCT-EXHT</i>	<i>Exhaust Ductwork</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-DUCT-OTHR</i>	<i>Other Ductwork</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-HVAC-EQUP</i>	<i>HVAC Equipment</i>	<i>3, Green</i>	<i>Continuous</i>
<i>M-VENT-DUCT</i>	<i>Industrial or Laboratory Venting</i>	<i>4, Cyan</i>	<i>Continuous</i>
<i>M-VENT-EQPM</i>	<i>Industrial or Laboratory Venting Equipment</i>	<i>4, Cyan</i>	<i>Continuous</i>
Drawing File: AFLOR1.DWG			
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: ACLG1.DWG			
<i>M-CDFP-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-CDFP-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.P1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Plumbing: Plumbing Plan

Drawing File:PLUMB1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

P-PPLM-TEXT	General Notes and Specifications	3, Green	Continuous
P-PPLM-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

P-PPLM-NOTE	Plumbing Plan Notes, Call-Outs,	3, Green	Continuous
P-PPLM-KEYN	ConDoc Keynotes	3, Green	Continuous
P-PPLM-SYMB	Plumbing Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
P-PPLM-DIMS	Plumbing Plan Dimensions	2, Yellow	Continuous

Project Information Layers

P-ACID-PIPE	Acid, Alkaline, and Oil Waste System Piping	4, Cyan	Continuous
P-ACID-EQPM	Acid, Alkaline, and Oil Waste System Equipment	5, Blue	Continuous
P-DOMW-EQPM	Domestic Hot and Cold Water Equipment	5, Blue	Continuous
P-DOMW-PIPE	Domestic Hot and Cold Water Piping	4, Cyan	Continuous
P-SANR-PIPE	Sanitary Piping	4, Cyan	Continuous
P-SANR-VENT	Sanitary Vent Piping	4, Cyan	Continuous
P-SANR-EQPM	Sanitary Equipment	5, Blue	Continuous
P-STRM-PIPE	Storm Drain Piping	4, Cyan	Continuous
P-STRM-RFDR	Roof Drains	5, Blue	Continuous
P-NGAS-PIPE	Natural Gas System Piping	4, Cyan	Continuous
P-NGAS-EQPM	Natural Gas System Equipment	5, Blue	Continuous
P-LABS-PIPE	Laboratory Gas Piping	4, Cyan	Continuous
P-LABS-EQPM	Laboratory Equipment	5, Blue	Continuous

S.3.P1 Continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: AFLOR1.DWG			
<i>P-SANR-FTXT</i>	<i>Sanitary Fixture, Toilets Etc.</i>	<i>3, Green</i>	<i>Continuous</i>
<i>P-DOMW-FIXT</i>	<i>Domestic Water Fixtures, Sinks, etc.</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-PRTL</i>	<i>Partial Height Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-JAMB</i>	<i>Door & Window Jambs</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-DOOR</i>	<i>Doors</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ</i>	<i>Window, Window Walls, Curtain Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ-SILL</i>	<i>Window Sills</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-LEVL</i>	<i>Level Changes, Ramps, Pits, & Depression</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-STRS</i>	<i>Stairs, Escalators, and Ladders</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-TPTN</i>	<i>Toilet Portions</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>54, Grey Yellow</i>	<i>Continuous (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>

S.3.P2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Plumbing: Riser Diagrams

Drawing File: PRISR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

P-RISR-TEXT	General Notes and Specifications	3, Green	Continuous
P-RISR-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

P-RISR-NOTE	Plumbing Riser Diagrams Notes, Call-Outs,	3, Green	Continuous
P-RISR-KEYN	ConDoc Keynotes	3, Green	Continuous
P-RISR-SYMB	Plumbing Riser Diagrams Symbols	6, Magenta	Continuous
P-RISR-DIMS	Plumbing Riser Diagrams Dimensions	2, Yellow	Continuous

Project Information Layers

P-ACID-PIPE	Acid, Alkaline, and Oil Waste System	3, Green	Continuous
P-DOMW-PIPE	Domestic Hot and Cold Water Piping	4, Cyan	Continuous
P-DOMW-EQPM	Domestic Hot and Cold Water Equipment	5, Blue	Continuous
P-SANR-PIPE	Sanitary Piping	4, Cyan	Continuous
P-SANR-VENT	Sanitary Vent Piping	4, Cyan	Continuous
P-SANR-EQPM	Sanitary Equipment	5, Blue	Continuous
P-STRM-PIPE	Storm Drain Piping	4, Cyan	Continuous
P-STRM-RFDR	Roof Drains	5, Blue	Continuous
P-NGAS-PIPE	Natural Gas System Piping	4, Cyan	Continuous
P-NGAS-EQPM	Natural Gas System Equipment	5, Blue	Continuous
P-LABS-PIPE	Laboratory Gas Piping	4, Cyan	Continuous
P-LABS-EQPM	Laboratory Equipment	5, Blue	Continuous

S.3.F1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Fire Suppression: Fire Suppression Plan

Drawing File: FSUPR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

F-PSPR-TEXT	General Notes and Specifications	3, Green	Continuous
F-PSPR-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

F-PSPR-NOTE	Ceiling Plan Notes, Call-Outs,	3, Green	Continuous
F-PSPR-KEYN	ConDoc Keynotes	3, Green	Continuous
F-PSPR-SYMB	Ceiling Plan Symbols, Bubbles and Targets	6, Magenta	Continuous
F-PSPR-DIMS	Ceiling Plan Dimensions	2, Yellow	Continuous

Project Information Layers

Aqueous Film System

F-AFFF-PIPE	Aqueous Film System Piping	4, Cyan	Continuous
F-AFFF-EQPM	Aqueous Film Equipment	5, Blue	Continuous

Halon System

F-HALN-PIPE	Halon System Piping	4, Cyan	Continuous
F-HALN-EQPM	Halon Equipment	5, Blue	Continuous

Fire Protection Sprinkler System

F-SPRN-PIPE	Sprinkler Piping	4, Cyan	Continuous
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Fire Protection Standpipe System

F-STAN-EQIP	Fire Protection Standpipe Equipment	5, Blue	Continuous
F-STAN-PIPE	Fire Protection Standpipe Piping	4, Cyan	Continuous

Fire Protection Systems

F-PROT-ALRM	Fire Alarm	5, Blue	Continuous
F-PROT-SMOK	Smoke Detectors or Heat Sensors	5, Blue	Continuous

CO² (Carbon Dioxide) System

F-CO2S-PIPE	CO ² (Carbon Dioxide) System Piping	4, Cyan	Continuous
F-CO2S-EQPM	CO ² (Carbon Dioxide) System Equipment	5, Blue	Continuous

S.3.F1 Fire Suppression Plan Continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: ACLG1.DWG			
<i>M-CDFD-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>M-CDFD-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>F-HALN-SPHD</i>	<i>Halon Spray Heads</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>F-SPRN-SPHD</i>	<i>Sprinkler Heads</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>F-AFFF-SPHD</i>	<i>Aqueous Film Spray Heads</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
Drawing File: AFLOR1.DWG			
<i>F-PROT-EQPM</i>	<i>Fire System Equipment (Fire Hose Cabinet, Extinguishers)</i>	<i>5, Blue</i>	<i>Continuous</i>
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.F2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Fire Suppression: Riser Diagrams

Drawing File: FRISR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

F-RISR-TEXT	General Notes and Specifications	3, Green	Continuous
F-RISR-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

F-RISR-NOTE	Plumbing Riser Diagrams Notes, Call-Outs,	3, Green	Continuous
F-RISR-KEYN	ConDoc Keynotes	3, Green	Continuous
F-RISR-SYMB	Plumbing Riser Diagrams Symbols	4, Cyan	Continuous
F-RISR-DIMS	Plumbing Riser Diagrams Dimensions	2, Yellow	Continuous

Project Information Layers

F-HALN-PIPE	Aqueous Film System Piping	4, Cyan	Continuous
F-HALN-EQPM	Aqueous Film Equipment	5, Blue	Continuous
F-HALN-PIPE	Halon System Piping	4, Cyan	Continuous
F-HALN-EQPM	Halon Equipment	5, Blue	Continuous
F-SPRN-PIPE	Sprinkler Piping	4, Cyan	Continuous
F-STAN-PIPE	Fire Protection Standpipe Piping	3, Green	Continuous
F-STAN-EQIP	Fire Protection Standpipe Equipment	5, Blue	Continuous
F-CO2S-PIPE	CO ² (Carbon Dioxide) System Piping	4, Cyan	Continuous
F-CO2S-EQPM	CO ² (Carbon Dioxide) System Equipment	6, Magenta	Continuous

S.3.E1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Electrical: Lighting Plan

Drawing File: ELITE1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

E-PLIT-TEXT	General Notes and Specifications	3, Green	Continuous
E-PLIT-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

E-PLIT-NOTE	Lighting Plan Notes, Call-Outs,	3, Green	Continuous
E-PLIT-KEYN	ConDoc Keynotes	3, Green	Continuous
E-PLIT-SYMB	Lighting Plan Symbols, Bubbles and Targets	4, Cyan	Continuous
E-PLIT-DIMS	Lighting Plan Dimensions	2, Yellow	Continuous

Project Information Layers

Note:

This layering model locates ceiling fixtures of multiple disciplines in the architectural reflected ceiling plan with the understanding that the architect will be locating visible features with the engineering disciplines providing the utilities support for them. It would also be acceptable to locate fixtures in the discipline specific drawings with the obvious condition that the location be consistent (E-LITE-CLNG should appear in ACLG1.DWG or ELITE.1DWG but not both) and the other disciplines drawings then reference the appropriate file to create their backgrounds.

E-LITE-FLOR	Floor Lighting	5, Blue	Continuous
E-LITE-ROOF	Roof Mounted Lighting	5, Blue	Continuous
E-LITE-SITE	Site Lighting	5, Blue	Continuous
E-LITE-NUMB	Lighting Circuit Numbers	4, Cyan	Continuous
E-LITE-IDEN	Luminaire Identification and Text	3, Green	Continuous
E-LITE-SWCH	Lighting Switches	5, Blue	Continuous
E-LITE-WIRE	Wiring and Conduit	4, Cyan	Continuous
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)	2, Yellow	Dashed

S.3.E1 Continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: ACLG1.DWG			
<i>E-LITE-CLNG</i>	<i>Ceiling Mounted Lighting</i>	<i>3, Green</i>	<i>Continuous</i>
<i>E-LITE-EXIT</i>	<i>Exit Lighting</i>	<i>3, Green</i>	<i>Continuous</i>
<i>E-LITE-EMER</i>	<i>Emergency Lighting</i>	<i>3, Green</i>	<i>Continuous</i>
<i>A-CLNG</i>	<i>Ceiling Elements, soffits, and Bulkheads</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-GRID</i>	<i>Ceiling Grid (T-Bar Ceiling)</i>	<i>14, Grey Red</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-ACCS</i>	<i>Access Panels & Ceiling Penetrations</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-CLNG-SPCL</i>	<i>Ceiling Mounted Specialties (clocks, fans, etc.)</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>M-CDFD-SUPP</i>	<i>Ceiling Supply Diffusers</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>M-CDFD-RETN</i>	<i>Ceiling Return Diffusers</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>F-SPRN-SPHD</i>	<i>Sprinkler Heads</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: AFLOR1.DWG			
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL</i>	<i>Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.E2 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Electrical: Power Distribution Plan

Drawing File: EPOWR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

E-PPOW-TEXT	General Notes and Specifications	3, Green	Continuous
E-PPOW-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

E-PPOW-NOTE	Electrical Power Plan Notes, Call-Outs,	3, Green	Continuous
E-PPOW-KEYN	ConDoc Keynotes	3, Green	Continuous
E-PPOW-SYMB	Electrical Power Plan Symbols, Bubbles & Targets	6, Magenta	Continuous
E-PPOW-DIMS	Electrical Power Plan Dimensions	2, Yellow	Continuous

Project Information Layers

E-POWR-WALL	Wall Outlets & Receptacles	5, Blue	Continuous
E-POWR-CLNG	Ceiling Receptacles and Devices	5, Blue	Continuous
E-POWR-FLOR	Floor Mounted Outlets	3, Green	Continuous
E-POWR-EQPM	Power Equipment	5, Blue	Continuous
E-POWR-CABL	Cable Trays	4, Cyan	Continuous
E-POWR-NUMB	Power Circuit Numbers	4, Cyan	Continuous
E-POWR-WIRE	Power Wiring and Conduit	4, Cyan	Continuous
E-CTRL-EQPM	Control System Equipment & Devices	5, Blue	Continuous
E-CTRL-WIRE	Control System Wiring	4, Cyan	Continuous
E-GRND	Electrical Ground System	3, Green	Continuous
E-PROT-WIRE	Fire Protection System Wiring	3, Green	Continuous
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)	2, Yellow	Continuous

External Reference Files

Drawing File: AFLOR1.DWG

Walls

<i>A-WALL-FULL</i>	<i>Full Height Walls</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-WHED</i>	<i>Window Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-DHED</i>	<i>Door Headers</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>A-WALL-PRHT</i>	<i>Partial Height Walls</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-WALL-JAMB</i>	<i>Door & Window Jambs</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>

S.3.E2 Continued

Layer	Description	Color	Linetype
<i>A-CLNG-OVHD</i>	<i>Major Ceiling Elements Shown on Floor Plan</i>	<i>174, Grey Yellow</i>	<i>Hidden(half tone)</i>
<i>A-DOOR</i>	<i>Doors</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ</i>	<i>Window, Window Walls, Curtain Walls</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-GLAZ-SILL</i>	<i>Window Sills</i>	<i>94, Grey Green</i>	<i>Continuous (half tone)</i>
<i>Floor Information</i>			
<i>A-FLOR-LEVL</i>	<i>Level Changes, Ramps, Pits, & Depression</i>	<i>174, Grey Blue</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-STRS</i>	<i>Stairs, Escalators, and Ladders</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
<i>A-FLOR-TPTN</i>	<i>Toilet Portions</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>
Drawing File: COLGRID.DWG			
<i>S-COLS</i>	<i>Structural Columns</i>	<i>214, Grey Magenta</i>	<i>Continuous (half tone)</i>
<i>S-GRID</i>	<i>Column Grid</i>	<i>174, Grey Yellow</i>	<i>Center (half tone)</i>
<i>S-GRID-IDEN</i>	<i>Column Grid Tags</i>	<i>134, Grey Cyan</i>	<i>Continuous (half tone)</i>

S.3.E3 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

Electrical: Riser Diagram

Drawing File: ERISR1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

E-RISR-TEXT	General Notes and Specifications	3, Green	Continuous
E-RISR-SCHD	Schedules and Tables of Text	3, Green	Continuous

Items Drawn in Model Space

Drawing Information Layers

E-RISR-NOTE	Electrical Riser Diagram Notes, Call-Outs,	3, Green	Continuous
E-RISR-KEYN	ConDoc Keynotes	3, Green	Continuous
E-RISR-SYMB	Electrical Riser Diagram Symbols...	4, Cyan	Continuous
E-RISR-DIMS	Electrical Riser Diagram Dimensions	2, Yellow	Continuous

Project Information Layers

E-POWR-EQPM	Power Equipment	5, Blue	Continuous
E-POWR-NUMB	Power Circuit Numbers	4, Cyan	Continuous
E-POWR-WIRE	Power Wiring and Conduit	4, Cyan	Continuous
E-LITE-NUMB	Lighting Circuit Numbers	4, Cyan	Continuous
E-LITE-IDEN	Luminaire Identification and Text	4, Cyan	Continuous
E-LITE-SWCH	Lighting Switches	5, Blue	Continuous
E-LITE-WIRE	Wiring and Conduit	4, Cyan	Continuous
E-CTRL-EQPM	Control System Equipment & Devices	5, Blue	Continuous
E-CTRL-WIRE	Control System Wiring	4, Cyan	Continuous
E-GRND	Electrical Ground System	3, Green	Continuous
E-PROT-WIRE	Fire Protection System Wiring	4, Cyan	Continuous
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)	2, Yellow	Continuous

S.3.Q1 MAJOR BUILDING PROJECT CONSTRUCTION DOCUMENT SET

TeleCom: Communication Systems Plan

Drawing File: QCOMM1.DWG

Layer	Description	Color	Linetype
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Items Drawn in Paper Space

See Section S.0.1 for typical general layer information

Q-PCOM-TEXT	General Notes and Specifications	3, Green	Continuous
Q-PCOM-SCHD	Schedules and Tables of Text	6, Magenta	Continuous

Items Drawn in Model Space

Drawing Information Layers

Q-PCOM-NOTE	Communications Plan Notes, Call-Outs,	3, Green	Continuous
Q-PCOM-KEYN	ConDoc Keynotes	3, Green	Continuous
Q-PCOM-SYMB	Communications Plan...	6, Magenta	Continuous
Q-PCOM-DIMS	Communications Plan Dimensions	2, Yellow	Continuous

Project Information Layers

E-CTRL-EQPM	Control System Equipment & Devices	6, Magenta	Continuous
E-CTRL-WIRE	Control System Wiring	6, Magenta	Continuous
E-GRND	Electrical Ground System	3, Green	Continuous
E-PROT-WIRE	Fire Protection System Wiring	3, Green	Continuous
E-WKLP-INFO	Clearances and work space req. (NEC Codes etc.)	2, Yellow	Continuous
Q-DATA-WALL	Data Wall Outlets & Receptacles	3, Green	Continuous
Q-DATA-FLOR	Data Floor Mounted Outlets	3, Green	Continuous
Q-DATA-EQPM	Data Systems Equipment	6, Magenta	Continuous
Q-DATA-CABL	Data Cable Trays	3, Green	Continuous
Q-DATA-NUMB	Data Circuit Numbers	3, Green	Continuous
Q-DATA-WIRE	Data Wiring and Conduit	3, Green	Continuous
Q-PHON-WALL	Data Wall Outlets & Receptacles	3, Green	Continuous
Q-PHON-FLOR	Data Floor Mounted Outlets	3, Green	Continuous
Q-PHON-EQPM	Data Systems Equipment	6, Magenta	Continuous
Q-PHON-CABL	Data Cable Trays	3, Green	Continuous
Q-PHON-NUMB	Data Circuit Numbers	3, Green	Continuous
Q-PHON-WIRE	Data Wiring and Conduit	3, Green	Continuous

Other Tele-communications services that may need to be accommodated (structured like the above examples) are:

Q-SOUN	Sound or PA systems
Q-CCTV	Closed Circuit Television Systems
Q-TVAN	Television Antenna Systems
Q-SERT	Security Systems
Q-NURS	Nursing Call Systems

S.3.Q1 Continued

Layer	Description	Color	Linetype
External Reference Files			
Drawing File: AFLOR1.DWG			
<i>Walls</i>			
A-WALL-FULL	Full Height Walls	214, Grey Magenta	Continuous (half tone)
A-WALL-WHED	Window Headers	214, Grey Magenta	Continuous (half tone)
A-WALL-DHED	Door Headers	214, Grey Magenta	Continuous (half tone)
A-WALL-PRHT	Partial Height Walls	134, Grey Cyan	Continuous (half tone)
A-WALL-JAMB	Door & Window Jambs	214, Grey Magenta	Continuous (half tone)
A-DOOR	Doors	94, Grey Green	Continuous (half tone)
A-GLAZ	Window, Window Walls, Curtain Walls	174, Grey Blue	Continuous (half tone)
A-GLAZ-SILL	Window Sills	94, Grey Green	Continuous (half tone)
<i>Floor Information</i>			
A-FLOR-LEVL	Level Changes, Ramps, Pits, & Depression	174, Grey Blue	Continuous (half tone)
A-FLOR-STRS	Stairs, Escalators, and Ladders	134, Grey Cyan	Continuous (half tone)
A-FLOR-TPTN	Toilet Portions	134, Grey Cyan	Continuous (half tone)
Drawing File: COLGRID.DWG			
S-COLS	Structural Columns	214, Grey Magenta	Continuous (half tone)
S-GRID	Column Grid	174, Grey Yellow	Center (half tone)
S-GRID-IDEN	Column Grid Tags	134, Grey Cyan	Continuous (half tone)