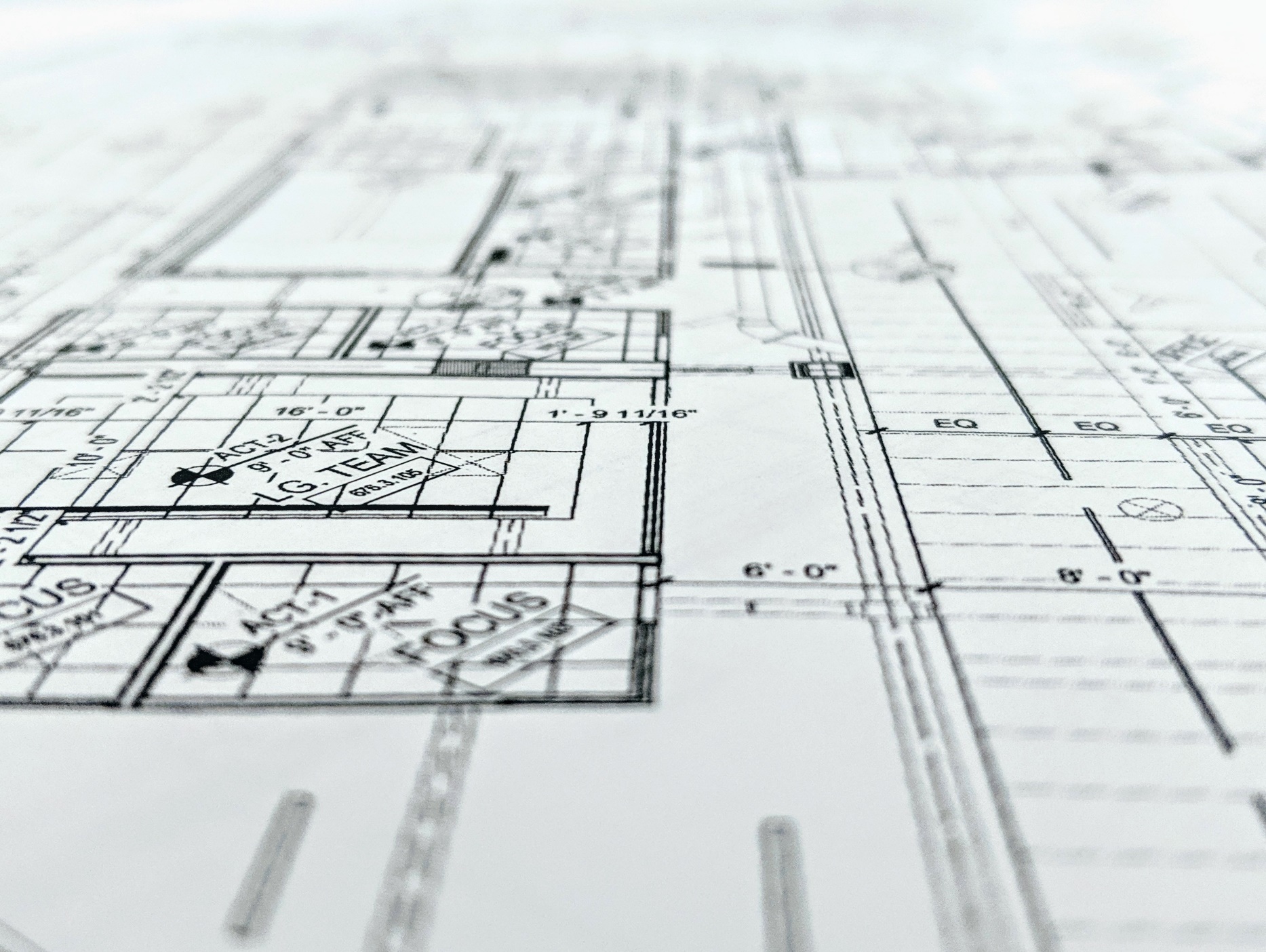
**CAD Standard**

Version Date: June 2018



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# Introduction

## Objective of this Document

This Computer-Aided Drafting (CAD) Standard document defines the requirements for creating, maintaining and submitting CAD drawings to San Francisco International Airport (“Airport” or “SFO”). It establishes requirements for the contents of AutoCAD® Drawings (DWGs), including use of paper and model space, handling of externally referenced files, layers to be used, symbology and plotting requirements. It also explains how to correctly organize drawing sheets into drawing sets, as well as how to submit completed drawing sets to the Airport. The content of this manual supersedes all previously published Airport CAD Standard versions and is subject to change without notice. The Airport shall not be liable for errors and omissions in this Standard.

## Scope of this Document

This document defines requirements for all CAD drawings created for or used by the Airport. These drawings are used throughout the planning, design, construction, operations, and maintenance phases of a facility or asset’s lifecycle. These drawings also include CAD working documents that are exchanged internally at the Airport, or between the Airport and its consultants, agencies, the City and County of San Francisco, and other stakeholders. The requirements for these drawings, as documented in this Standard, apply to all consultants and staff responsible for creating or maintaining these drawings.

## Intended Audience

The intended audience for this document includes Airport staff, as well as CAD technicians who work for consultants, subconsultants, and tenants to create or alter DWGs that are submitted to or used by the Airport. These individuals should have a thorough understanding of the requirements in this document and be able to meet them. Those who view and extract but do not change data in Airport DWGs may also wish to become familiar with the structure of drawing sets and the organization of data within them so that they can efficiently find the data that is most relevant to them. Airport Project Managers (PM) and consultant Project Managers who supervise projects that include DWG deliverables should also become familiar with the requirements described in this document.

Consultants and subconsultants should use this document to fulfill the obligations of Airport contract specifications and/or agreements. Tenants should use this document to fulfill tenant improvement obligations associated with Airport-approved work permits. If there are any discrepancies between this manual and an Airport contract, specification, or agreement, please contact your Airport PM or Lease Manager for clarification.

## Organization of this Document

This document defines the requirements for developing and maintaining Airport DWGs, from their most fundamental components to complete deliverable packages. The graphical objects that depict real world features, as well as alphanumeric and graphical information about these features, are defined first. The organization of these objects onto layers within a drawing is covered next. The combination of these elements with a standard title block establishes sheets, which are then combined into drawing sets. Finally, the document discusses the delivery of these drawing sets to the Airport. A glossary of acronyms and commonly used terms is provided as a resource. Electronic resources that the Airport has provided to help consultants and staff members comply with this Standard are also noted, where relevant, throughout the document.

These requirements assume that readers have a basic understanding of CAD concepts and terminology. Readers who are new to the Airport’s CAD requirements may wish to review the document in its entirety. Those who are familiar with the requirements may wish to use the document as a reminder of the specifics to which they must adhere.

## Related Documents

This document is related to other documents, some of which contain additional requirements that must be met (i.e., normative references) and some of which contain reference information that may, at the submitter’s prerogative, be helpful when developing Airport CAD DWGs (i.e., informative references). Airport documents can be provided by the Airport PM of their representative project.

### Normative References

Relevant requirements in the following documents must be met when developing DWGs for the Airport. Relevant requirements are those that are applicable to Airport DWGs, unless otherwise specified in writing by the Airport. These documents include:

* The Airport’s contracts and agreements that require the delivery of Airport DWGs
* The Airport’s GIS Standard feature class attribute definitions and relevant domain value lists, if object data tables are required by a consultant’s contract or SFO staff data maintenance procedures
* Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-18 “General Guidance and Specification for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards,” which can be found at: <https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/74204>
* Code of Federal Regulations (CFR), Title 49, Chapter XII, Subchapter B, Part 1520, “Protection of Sensitive Security Information (SSI),” which can be found at:

<https://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol9/pdf/CFR-2011-title49-vol9-part1520.pdf>

### Informative References

The following documents provide additional information that may help developers and users of Airport DWGs create, update and use the data they contain. Any requirements defined in these documents may be applied at users’ discretion, but are not necessarily required and must not conflict with the requirements of this document. These documents include:

* San Francisco International Airport BIM Guide
* San Francisco International Airport GIS Standard
* San Francisco International Airport Building Level and Space Numbering Guide
* San Francisco International Airport Sheet Numbering Guidelines
* National Institute of Building Sciences’ National CAD Standard (NCS), which can be found at: <https://www.nationalcadstandard.org>
* United States Army Corps of Engineers (USACE) CAD-BIM Technology Center’s A/E/C CAD Standard, which can be found at: <https://cadbimcenter.erdc.dren.mil/default.aspx?p=a&t=1&i=7>

## Revision History

This document has and will continue to evolve to meet the needs of the Airport, accommodate requests by consultants that are approved by the Airport and enable the use of new technologies. Following is a list of the versions of this document that have been published. It is the responsibility of those developing and maintaining Airport DWGs to use the latest version of this document. All drawings submitted in fulfillment of contractual obligations shall follow the most recent version of this document at the time of contract execution.

**Table 1—Document Revisions**

|  |  |  |
| --- | --- | --- |
| **Revision Number** | **Date Published** | **Summary of Changes Made** |
| 1 | May 2010 | Initial version |
| 2 | April 2017 | Detailed list of required layers, topology between objects, and SSI requirement were added |
| 3 | Feb 2018 | Updated list of layers including those for the interior of buildings, special considerations for layer naming for security and utilities |

## Suggestions to Change this Document

Consultants and Airport staff members are encouraged to recommend changes to this document that they feel will improve their ability to meet the Airport’s needs. These changes may be clarifications, additions, or deletions. Requests to add layers shall follow the layer naming conventions specified in the latest version of the NCS or A/E/C CAD Standard. Any changes that deviate from the requirements in this document will not be implemented until approved by the Airport. Approved deviations must be implemented before the first drawings of a contract are submitted. Change requests shall be submitted by emailing the form provided in Appendix A to [CADstandard@flysfo.com](file:///C:/Users/rmurp/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/32WVWLU0/CADstandard@flysfo.com).

# Software Requirements & Resources

Airport DWGs shall be compatible with the three most recent releases of AutoCAD, AutoCAD MAP 3D®, or AutoCAD Civil 3D®. In cases where the AutoCAD version used by the Consultant natively saves to a newer format than the third most recent release, the file should be saved in the third most recent release format (for example: if the version used by the Consultant natively saves to 2018 but the third most recent release natively saves to 2013, the file should be saved to the 2013 version). Consultants who do not use this software shall ensure that all requirements defined in this document are met in DWGs they create and convert from other software, without any loss of quality or accuracy when they are opened in Autodesk software.

The following are a list of Airport-provided AutoCAD files that shall be downloaded by the consultant at <http://sfoconstruction.com> and used when creating DWGs for the Airport:

* AutoCAD files for Cover Sheet, Title Block and Attribute files
* AutoCAD Template, SFO.dwt, for drawing entities: Layers, Text Styles, Dimension Styles and Symbols/Blocks
* Custom Linetype file: SFO.lin
* Custom Color Table files: BlackGray.ctb and BlackGray10Colors.ctb

The basemap AutoCAD file is an exception, as it will be provided only through special written request from the consultant to the SFO Project Manager stating why the basemap is needed. Provide a DWG with a layer called C-LOCN-OTLN-PROJ that has a closed polyline showing the extent of the basemap area required. This can be placed on top of the key map for visual reference.

# Objects in CAD Drawings

Objects are graphics that are placed onto drawings to represent real-world features such as manholes, airfield markings, and runways. Objects may also include text, dimensions, leader lines, callouts and revision clouds that further describe these features or the drawing as a whole.

## Object Types

Objects placed on drawings that depict real-world features shall be of the following geometry types:

* Point features such as airfield lights, manholes and values shall be symbolized by the appropriate AutoCAD block. The insertion point should be at the location of the real-world object to within the accuracy tolerance specified.
* Linear features such as utility pipes and marking lines shall be represented by AutoCAD lines or polylines.
* Polygonal features such as space boundaries shall be represented by AutoCAD closed polylines. Hatch patterns may be used within polygonal features.

Objects in drawings that are used to convey graphical references or alphanumeric information, such as annotations, text, dimensions and leader lines may use other AutoCAD object types, including construction lines, revision clouds and wipeouts. All text used, whether it is annotations associated with features, values within title blocks, or other text, shall be multiline text (MTEXT).

## Coordinate Systems

Objects in SFO DWGs that depict real-world location of features shall be drawn using the SFO-B local coordinate system. The SFO-B coordinate system, both horizontally and vertically, is defined by Record of Survey #2925 (Vol. 43 of LLS Maps, Pages 44-45, San Mateo County Records). SFO-B establishes the horizontal axis (x-axis) as the centerline of Runway 10L-28R. Axes x and y, respectively, are parallel and perpendicular to the centerline of this runway. Vertical (z coordinates) coordinates shall be based on the North American Vertical Datum of 1988 (NAVD88). The origin of SFO-B is located 180 feet left of the threshold of Runway 10L on center. A block representing the origin of the SFO-B coordinate system shall be placed on the C-TOPO-SFOB-ORIG layer and can be found in the SFO.dwt template file.

Features in drawings may be scaled by a factor of 12 for conversion to architectural units, but must keep the origin of SFO-B unchanged. Do not use the ROTATE command for changing the orientation of features in the drawing. If it is necessary to present drawings in an orientation that differs from the coordinate system, a new Universal Coordinate System (UCS) may be used, so long as it is named on the drawing.

For projects that also utilize Revit, please also refer to Appendix D – Coordinate System Setup of Airport’s BIM Guide for instruction.

## Topology

Topology refers to the positional relationship between features. All features are required to meet the following topology rules:

* **Collocated Vertices (see Figure 1)—**Collocated vertices must share the same X, Y and Z coordinates.

|  |
| --- |
| 1. Collocated Vertices |
|  |
|  |

* **Lines Meet at Endpoints (see Figure 2)—**Line segments and polylines that join to represent one continuous string of linear features (e.g., a utility network) should have collocated vertices as endpoints.

|  |
| --- |
| 1. Lines Meet at Endpoints |
|  |
| Source: FAA AC150/5300-18B, Change 1 |

* **Sufficient Density of Vertices (see Figure 3)—**Lines and polygon edges should contain one or more segments with vertices placed at intervals so the feature does not stray from the actual object it represents by more than half of the defined accuracy limit.

|  |
| --- |
| 1. Density Vertices |
|  |
| Source: FAA AC150/5300-18B, Change 1 |

* **Shared Vertices between Adjacent Features (see Figure 4)—**Features that are intended to be adjacent to one another should share all collocated vertices along their common edge(s). This ensures that there are no unintentional gaps (empty space) or slivers (overlaps) between adjacent features.

|  |
| --- |
| 1. Shared Vertices |
|  |
| Source: FAA AC150/5300-18B, Change 1 |

* **Polygons must be closed (see Figure 5)—**The endpoints of line segments that form a polygon must be collocated and closed in the CAD program.

|  |
| --- |
| 1. Closed Polygons |
|  |
| Source: FAA AC150/5300-18B, Change 1 |

## Accuracy & Precision

Horizontal and vertical positional accuracies required for newly collected data may be specified within a contract. If so, all objects that represent real-world objects shall be located within the specified tolerance from the real-world object they represent (i.e., absolute positional accuracy). The tolerances specified must be achieved at a 95-percent confidence level, meaning that, statistically, 95 percent or more of the objects will be at this accuracy level or better. Coordinate values shall be recorded to a precision (i.e., number of decimal places in the coordinate value) that is at least sufficient to represent the accuracy level specified.

## Object Data

Object data tables shall be connected to objects where attribute data and metadata are required, as specified in consultant contracts or the Airport’s GIS Standard. These tables are defined based on the feature class to be used for each type of object. Values for object data table fields must be of the type and within the length specified in the Airport’s GIS Standard. Where fields are tied to a domain, the values used must be one of the acceptable values defined in the Airport’s GIS Standard.

## Object Graphics

Regardless of whether they are being used to represent real-world features, provide additional information that describes those features, or provide metadata about the drawing as a whole, objects shall use graphics that meet the following requirements:

### Blocks

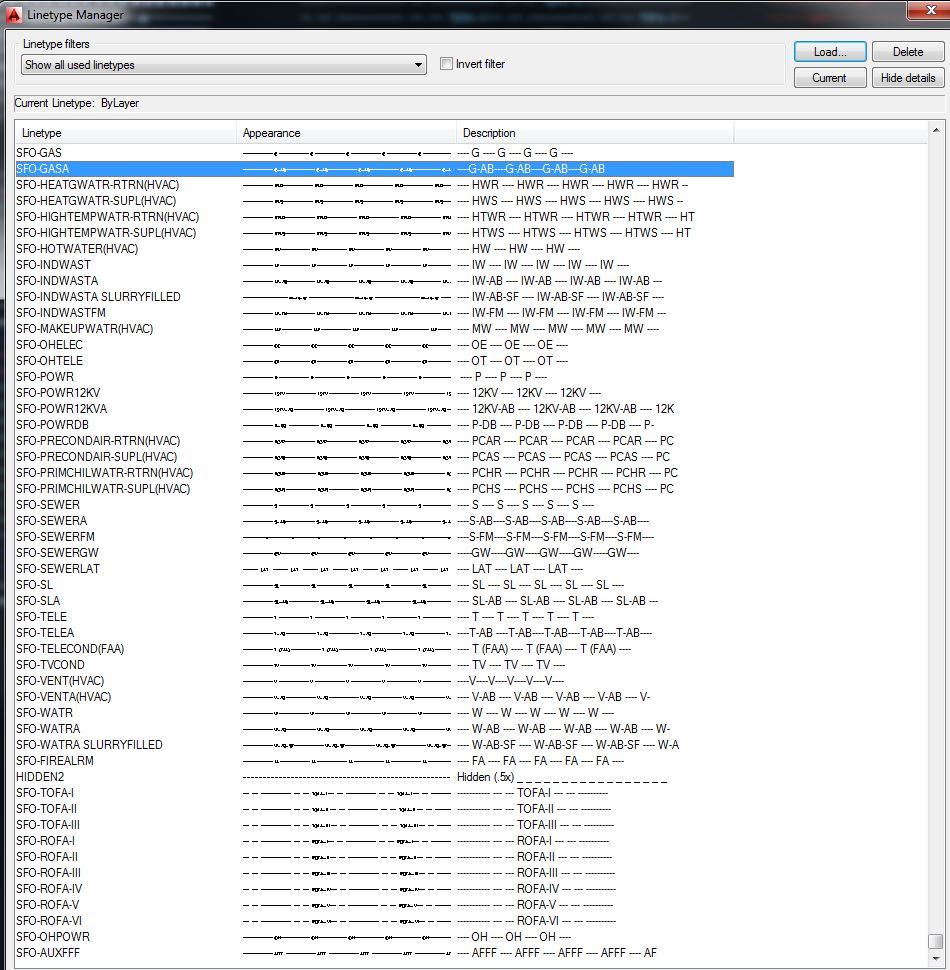
Point features are represented by blocks. The insertion point of these blocks are at the location of the object represented by the feature. AutoCAD default blocks, as well as those defined by the Airport, are acceptable. These block definitions are provided in the SFO.dwt template file. Blocks shall be created in layer 0 (zero) and no block may be nested. All block properties shall be By Layer.

### Linetypes

The Airport accepts both AutoCAD default and custom linetypes. SFO.lin is available for download. The use of AutoCAD default linetypes shall be in accordance with industry standards. These generally include center, continuous, dashed, hidden and phantom linetypes.

Currently, the list of acceptable linetypes includes utilities and fence lines, which are shown in Figure 6, below. The naming convention is “SFO” and a description, followed by a single digit number and specific alpha characters. The single digit number indicates the relative spacing between the annotated characters. As the number increases, the spacing between annotated characters increases. Refer to the template files for the complete list of linetypes. Examples of alpha characters include “A” and “AB” for Abandoned, “F” and “FM” for Force Main, “DB” for Duct Bank, and “IW” for Industrial Waste.

1. Linetypes



### Lineweights

Lineweights shall be controlled via the layer manager and dimension style manager only. Polylines shall only be used to control lineweights in the Airport-provided title block sheets. All lineweights for color table (.ctb) files shall use object lineweight. The consultant shall utilize the following Airport Color Table files:

* BlackGray.ctb: Plots all colors black through 255, except colors 8, 9 and 250, which plot in their own gray shade of color and color 156, which uses object color for plotting the SFO logo.
* BlackGray10Colors.ctb: Plots similar to the BlackGray.ctb, except each color that ends with the character 0 (zero) plots in their own color, beginning with the number 10. For example, color 10 plots in color 10, color 20 in color 20, color 30 in color 30…color 240 in color 240.

### Linework

New work (object lines) and text shall be of the same lineweight, approximately 0.013 inches. Dimension, hidden, center, background and phantom lines shall be approximately one-half the width of object lines. These lines may be tinted with a dark gray shade. These fundamental guidelines may be deviated from, but must be defined by the individual drafters in a consistent manner. Should the first drawing submittal prove to show an obvious degree of inconsistency, illegibility and/or disorganization, the drawings will be rejected and more stringent guidelines will be imposed.

### Text Styles

Annotation text within the drawing shall be in the Swis721 Cn BT font. Text within the border sheet shall be in the Swis721 Cn BT font. These fonts may be modified in size, color or style (bold, italics, underline, outline, etc.) as needed for additional emphasis or de-emphasis. These fonts are installed by default on most computers running the Microsoft Windows™ operating system. Other versions of these fonts are not permitted.

### Dimensions/Multileaders

The dimension style has lineweights defined for dimension lines and extension lines at 0.006 inches. Extend beyond dim lines and offset from origin lines are set at 0.0625 inches. Arrowheads are closed and filled at 0.125 inches in size. The text height is 0.125 inches with text alignment set to horizontal. The format, structure, and content of the multileader style is similar to that of the dimension style. The dimension style and multileader style are provided in SFO.dwt.

# Layers on Which Objects are Placed

Objects shall be placed on a layer that corresponds to the type of real-world feature it represents. Objects that are used to provide supplemental information about features such as annotations, dimensions, leader lines, and revision clouds should be placed on layers designated for this purpose

.

## Layer Name Format

This Standard complies with the NCS’s layer naming conventions—with the placement of the status code before the discipline code as a single exception. Each layer name is made up of four or five parts, as shown in Figure 7 and described below.

* **Discipline—**A one-character code that represents the discipline that typically designs or records the type of features on those layers. The following discipline codes are used in this Standard:

**Table 2—Disciplines**

|  |  |
| --- | --- |
| Code | Discipline |
| V | Survey (see specific use as described below) |
| C | Civil |
| L | Landscape |
| U | Utilities (see specific use as described below) |
| S | Structural |
| A | Architectural |
| I | Interior |
| F | Fire Protection |
| M | Mechanical |
| E | Electrical |

* **Status—**A one-character code is added after the discipline code to indicate the status of the real-world feature the object represents. The placement of the status code after the discipline code is a deviation from the NCS, which places the status code at the end of the layer name. The status codes are:

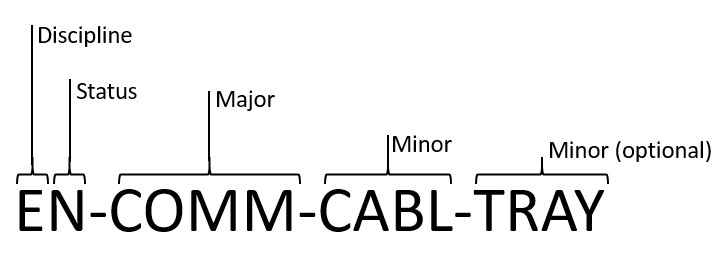
**Table 3 - Status Codes**

|  |  |
| --- | --- |
| Code | Status |
| A | Abandoned |
| D | Demolish\* |
| F | Future\* |
| I | Inactive |
| N | New\* |
| R | Relocate\* |
| T | Temporary\* |
| U | Unverified |

\* These status codes indicate a status that is applicable only during the life of a project and should therefore only be used in design drawings. Drawings that represent the as-built or recorded final condition at the end of a project should not use these status codes. In other words, all layer names that do not specify a status code represent what is existing in the real-world on the date of the drawing or its most recent revision.

* **Major—**After a dash delimiter, a four-character code is added to represent the type of system, general area, or grouping of similar types of features.
* **Minor—**After a dash delimiter, a four-character code is added to represent the specific class of feature. Feature classes define features that share similar types of attributes and are to be represented by a specific type of graphical object. For example, all buildings may be defined as a class because they share similar attributes, such as square footage and height, and are to be represented as polygons.
* **Second Minor (optional)—**After a dash delimiter, a four-character code may be added to represent the specific type of feature.
* **Phase—**After a dash delimiter, a four-character phase number may be used to indicate the phase in which objects on these layers will be constructed. The phase indicator shall start with “PHS” and then a single digit number between 1 and 9 to indicate the phase. The meaning of this phase indicator, as it relates to the specific project, should be included in the notes section of the sheet border.

1. Layer Name Format



## Layers to Use

Only layers listed in Appendix E—with the appropriate status code added—may be used in Airport DWGs. The most appropriate layer for each object shall be selected from these lists. In some cases, specific business requirements may necessitate deviations from these layer names. These permitted layer name deviations are described in Appendix F. If additional layers are required, a change request form (provided in Appendix A) shall be submitted to the Airport for consideration. Layers not listed in Appendix E shall not be used without the Airport’s written approval.

## Dimensions, Text, and Annotation Layers

Dimensions, text, annotations, and hatching patterns used in reference to specific drawing objects outside of the title block shall be placed on layer names with DIMS, TEXT, ANNO, and PATT respectively. These designators shall be appended to the end of the layer on which the reference objects appear after a dash, based on the following rules.

* Dimensions are used to indicate distances, sizes, and measurements of or between objects. For example, dimensions related to specific bridges on a drawing should appear on the C-ROAD-BRDG-DIMS layer.
* Annotations are used to provide additional details about specific objects. For example, the diameter of a storm pipe shall be placed on the C-STRM-PIPE-ANNO layer. Leader lines connecting an annotation with their corresponding objects shall appear on the same layer as the annotation itself. In some cases, such as with pavement markings, text is a physical feature or object that belongs on a specific layer and not on an ANNO layer. For example, letters such as taxiway designators that are painted on the pavement of a taxiway would appear on the C-TAXI-MRKG-PVTX layer, whereas a label placed on the drawing that is not physically painted on the taxiway would appear on the C-TAXI-TEXT layer.
* Text is used to provide notes or general information that is not specific to objects. For example, text related to communications objects in general that appear on a drawing shall be placed on the E-COMM-TEXT layer.
* Hatch patterns are used to fill an area with a color and/or pattern. For example, hatch patterns use to fill property boundaries shall appear on C-PROP-BNDY-PATT.

## Non-Plot Layers

Sometimes it is advantageous to include text and graphical references that are visible to the drawing developer but are not intended to be plotted when the drawing is plotted. To conveniently turn these layers off, a non-plot designator NPLT shall be appended to the end of the layer name to which the references apply.

# Drawing Components

Drawings are made up of objects placed onto appropriate layers within model space or paper space. This work must be done in a methodical and organized manner that yields clear, consistent and legible results.

## Model Space

All drawing objects shall be drawn at full scale, meaning that the true size is reflected in the same number of drawing units (i.e., 1:1 scale). Dimensions, annotations, and text (as described above) shall be set to Annotative to be displayed at the proper Annotative Scale.

## Paper Space (Layout)

The cover sheet and title block shall be placed in paper space. Notes, tables, details, diagrams and other entities not requiring scaling or external referencing should be placed in paper space.

The paper space tabs shall be renamed to reflect the sheet number as defined below

.

## Color Table

The color table (.ctb) file intended for use when plotting should be indicated in the “page setup” properties. Only Airport-approved color table files shall be used. Style table (.stb) files shall never be used.

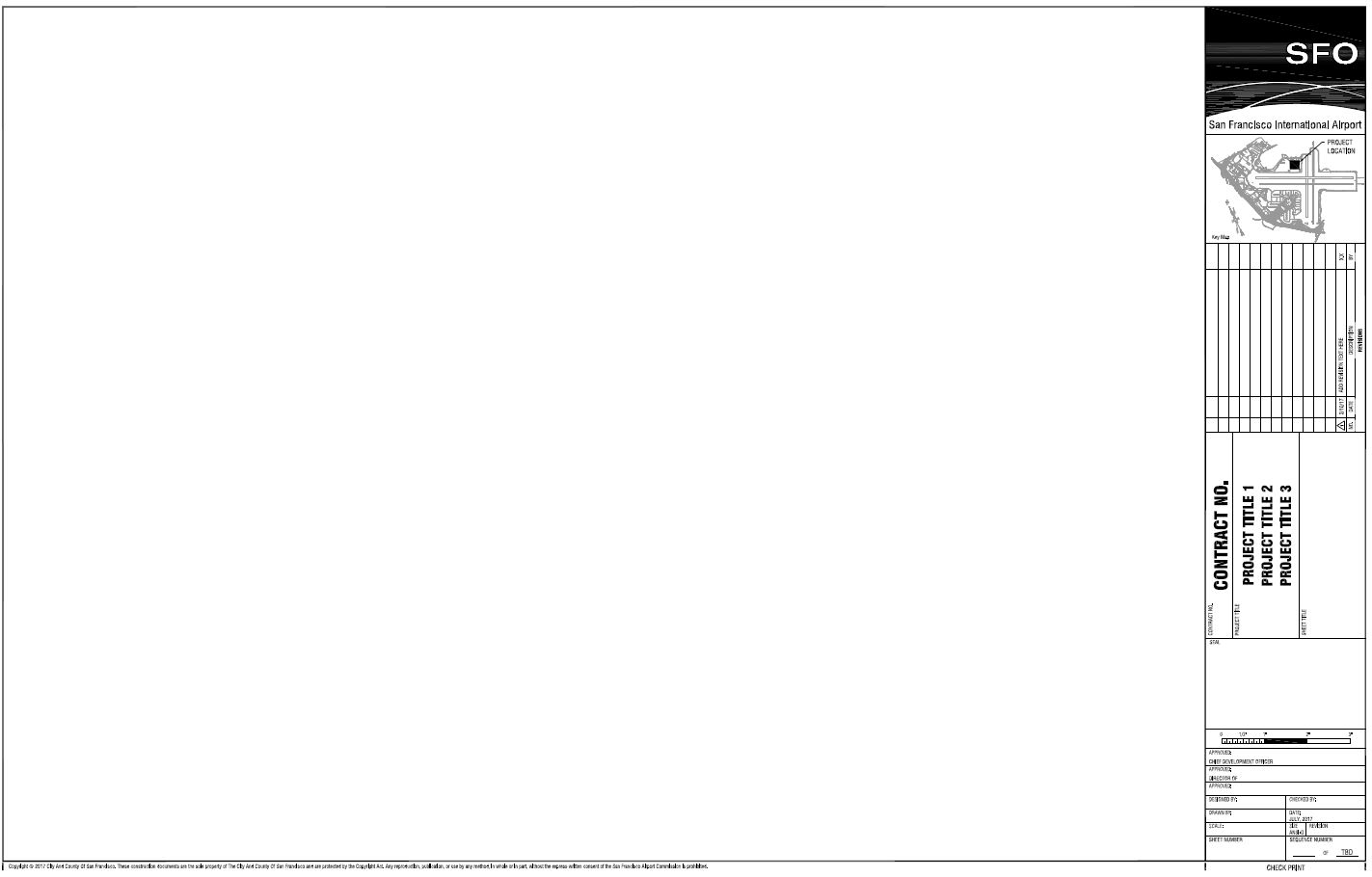
## Sheet Size & Scale

Drawing shall be ANSI D (34” x 22”) in size. If a drawing accompanies a Building Information Modeling (BIM) file, ARCH-D sized sheets may be used, if approved in advance by the Airport PM. Only one sheet size may be used for the entire drawing set.

## Sheet Border and Title Block

Drawings that are required to be plotted either in hard copy or Portable Document Format (PDF) must have a border and title block of the proper format that is populated with all relevant information about the drawing (i.e., metadata). The format of this information and fields to be used to populate metadata are described below and provided in the template files. The format of these elements shall not be changed and specific layers, as indicated in Appendix D, “Title Block Layers,” shall be used. The lineweights for the title block are defined through polylines and the layer properties manager. The plotting scheme shall conform to these values. There are small circles located at the corners of the sheet which define the plot area when selecting the centers by window. A bar scale is proved to verify that the plotting is 1:1. Figure 8 below shows an example of an SFO title block:

1. SFO Title Block



### Logo

The SFO logo in black and white will appear on all drawings created for or by the Airport. The logo to use has been included in the template files. Consultant or other logos may appear on drawings submitted to the Airport, subject to approval by the Airport PM.

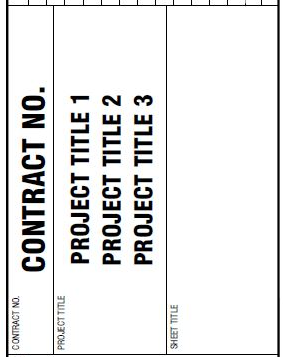
### Key Map and North Arrow

A key map will be provided that shows the full extent of the Airport basemap and highlights with a rectangle the area shown on this sheet. The key map should contain a north arrow that indicates the direction of True North relative to the SFO-B Local Coordinate System.

### Contract Information

The contract number and title under which the drawing was developed should appear in the title block in the locations shown in Figure 9, exactly as they are presented in the executed contract. Contract numbers should be formatted as “nnnnn.nn” and confirmed with the Airport Contract Manager or PM. Internal documents created by Airport staff shall enter “SFO Internal” in this field.

1. Contract Information



Project Line 1 Provide

Copyright Year

Project Line 2 Provide

Contact Number

Project Line 1 Provide

Contact Name

### 

### Scale Bar

A scale bar should be provided in the title block. The scale bar should be in imperial units with a sufficient number of intervals to estimate drawing distances either visually or with a ruler.

### Copyright

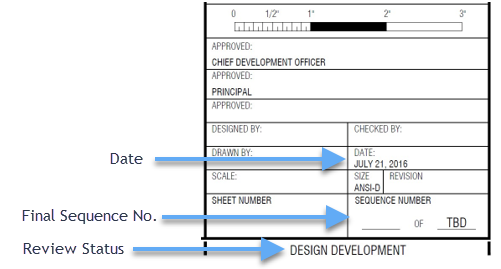
All drawings are copyright of the Airport. The copyright shall appear along the bottom left border of the title block as shown in Figure 8, as well as on the cover sheet. The year should indicate the calendar year in which the final deliverables are due, unless otherwise indicated by the Airport PM. It is the responsibility of the drawing provider to update the year in the template title block accordingly

.

### Metadata Elements

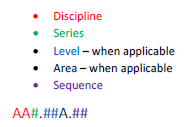
Additional information about the data presented in a drawing also appears in the title block. This information (metadata) is shown in Figure 10 and described in the subsequent sections:

1. Metadata in the Title Block



### Sheet Number

The sheet number shall be entered into the title block as shown in Figure 8. Sheet numbers are composed of five components: discipline, series, level, area, and sequence. There is a decimal between the series and level, and between the level or area and sequence. See Figure 11.Refer to the San Francisco International Airport Sheet Numbering Guidelines for additional information.



### Review Status

The review status is indicative of the stage of the drawing/design. It is used to differentiate various iterations of the drawing so that the person using the drawing knows which stage of the design process the project is in. Some examples are “DESIGN DEVELOPMENT,” “30% REVIEW,” “65% REVIEW,” “FINAL REVIEW,” and “AS-BUILT.” The Airport PM will provide direction to the consultant about the composition of the review status indicator in each case for submittal.

### Dates

The date indicated shall coincide with the date upon which the drawing was submitted, unless otherwise indicated. All dates shall spell out the full name of the month with all letters capitalized, followed by a space and the number representing the day of the month, followed by a comma then a space, and finally the four-digit number for the year (e.g., “JULY 4, 2016”).

### Sensitive Security Information Label

If the drawing contains Sensitive Security Information (SSI) as defined by the Code of Federal Regulations (CFR), Title 49, Chapter XII, Subchapter B, Part 1520, then the Distribution Limitation Statement, shown below, must appear on the bottom of each sheet that contains SSI, as well as the cover sheet of a drawing set that includes one or more sheets that contain SSI. The protective marking “SENSITIVE SECURITY INFORMATION” must also appear on the top each sheet that contains SSI.

WARNING: This record contains Sensitive Security Information that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a “need to know”, as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 49 CFR parts 15 and 1520.

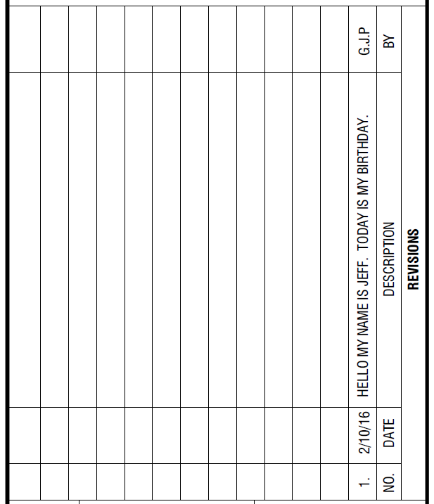
### Revisions

Throughout design development and up to the original version, the drawing shall be indicated as Revision – (dash). These iterations are differentiated by the Review Status, as described above. When the drawing is initially submitted as complete, it shall be Revision 0.

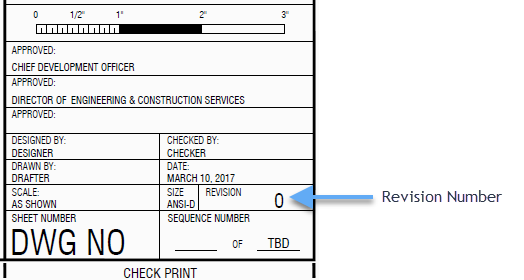
If the need for drawing revision arises, such as in the case of addendums, two areas of the drawing shall be changed: the drawing area and the title block. Revisions shall be sequentially numbered (i.e., 1, 2, 3, etc.).

All revised drafting work in the drawing area shall be enclosed by cloud, and each cloud shall have a revision triangle, including the pertinent number, as its callout (see Figure 14). The cloud shall be appropriately dark and bold so that the contractor can clearly see what is different from the previous submittal. The title block shall be changed in two places: the revision number (see Figure 13), and the revision column (see Figure 12). The revision column shall also include the revision triangle, as an exact match to the triangle in the drawing area (see Figure 14).

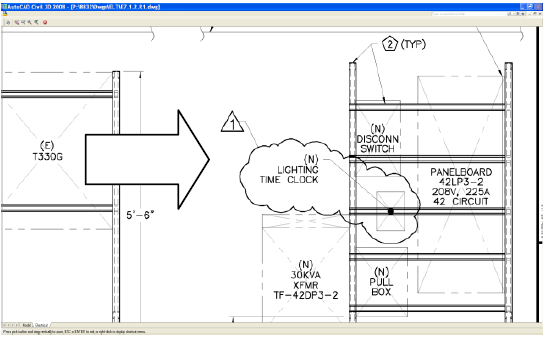
1. Revision Delta and Description Column



1. Revision Number



1. Revision Cloud & Triangle



## Electronic File Naming

Each sheet shall be saved as a separate electronic file. For construction drawings, the name of those files shall match those of the sheet numbers, as shown below:

**Table 4—Example File Names for Construction Drawings**

|  |  |  |
| --- | --- | --- |
| **Sheet Number** | **Revision** | **Filename** |
| A1.2.2 | 0 | A1.2.2.DWG |
| M3.R.1 | 2 | M3.R.1.R2.DWG |

For as-built drawings, the name of those files shall match those of the sheet numbers with AB at the end, as shown below:

**Table 5—Example File Names for Construction Drawings**

|  |  |  |
| --- | --- | --- |
| **Sheet Number** | **Revision** | **Filename** |
| A1.2.2 | AB | A1.2.2.AB.DWG |
| M3.3.1 | AB | M3.3.1.AB.DWG |

PDF files of drawings shall be numbered the same as the drawing, with the corresponding revision for the particular revised sheet only, as shown in Table 6:

**Table 6—Example File Names for PDF**

|  |  |  |
| --- | --- | --- |
| **Sheet Number** | **Revision** | **Filename** |
| A1.2.2 | 0 | A1.2.2.PDF |
| M3.3 | 2 | M3.3.R2.PDF |

When an entire set of drawings for the same contract is submitted as a single PDF, the file shall be named with the contract number and latest revision separated by a dash, for example: 10634.51-R4.PDF.

## Externally Referenced Files

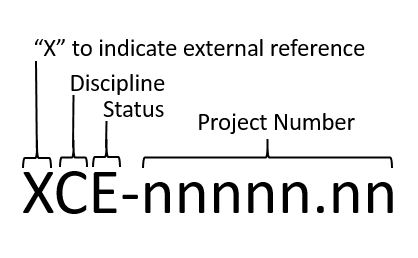
Basemaps and related drawings being developed by others may be incorporated into a separate drawing for reference. These eXternally Referenced (XRef) drawings allow objects to be available for viewing and reference without the need to redundantly store a copy of these objects in the drawing itself. The insertion point for XRefs shall be 0,0,0.

All external reference files shall be attached as an overlay (rather than as an attachment) with the relative path unbound and located within the same folder structure to allow for relative path selection. The folder structure shall be maintained on the submittal media so as not to require the re-attaching of external references upon receipt by the Airport. Airport staff may add XRefs in Airport-networked file folders.

XRef files should be appropriately and uniquely named. XRefs prepared specifically for a project shall be named with “X” for XRef, discipline, condition, a delimiter dash, and contract number. Contract numbers should be formatted as “nnnnn.nn” and confirmed with the Airport Contract Manager or PM. If desired, a word or brief phrase that describes the contents of the XRef may be added after the file name. The format of XRef file names is shown below in Figure 15.

There shall be only two status codes used for XRef drawings, E for existing and N for new. The existing condition file shall contain all AutoCAD entities prior to the proposed construction, including the entities intended for demolition, which shall be managed using layers. The new condition file shall contain only those AutoCAD entities which are new, and these new entities should be located such that XRefing the existing condition file matches both new and existing entities together.

1. Naming of Externally Referenced Files



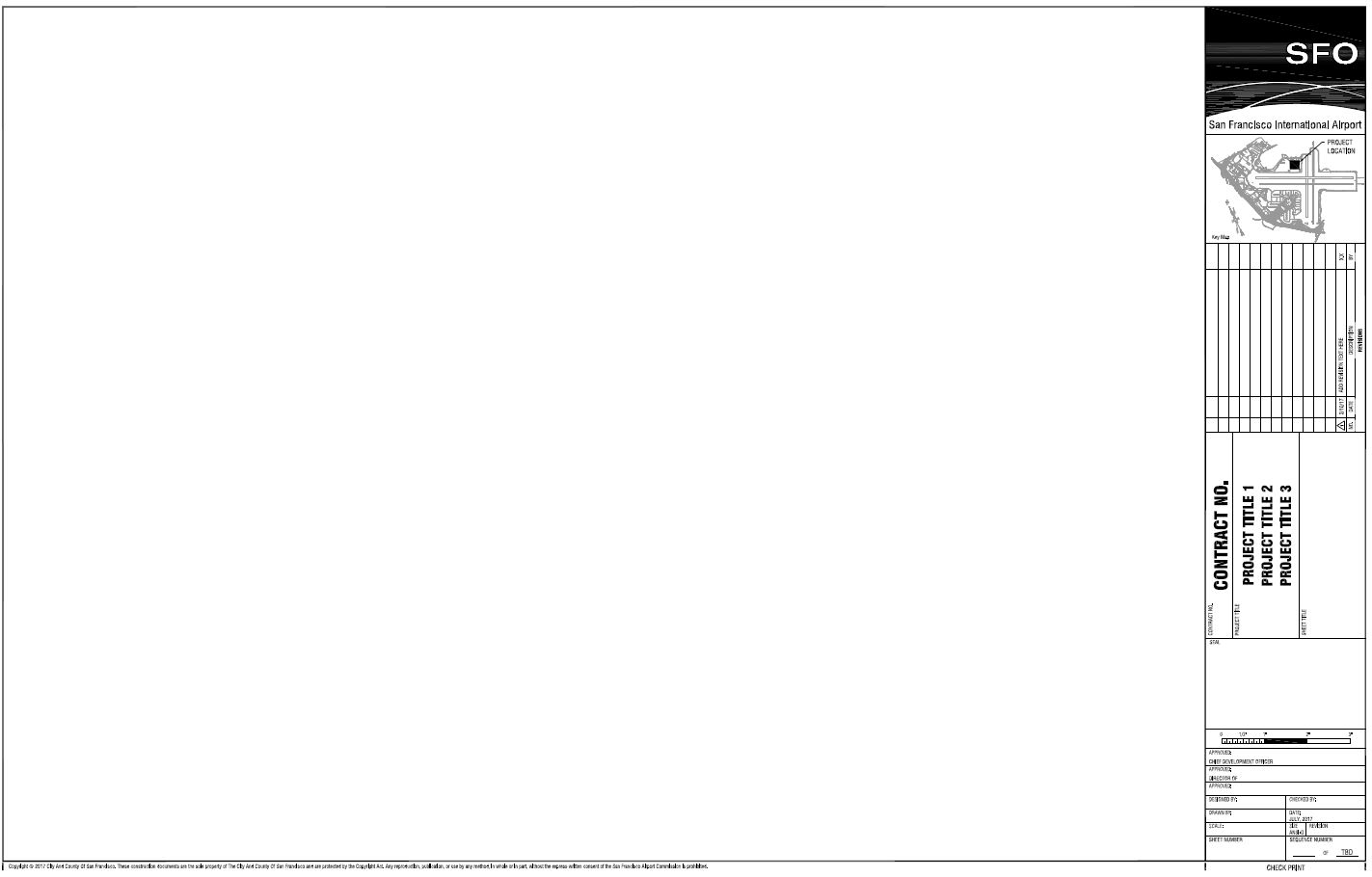
# Drawing Set Assembly

Drawing sets are composed of a number of sheets. The first sheet is a cover sheet followed by a series of drawing sheets in a specified order.

## Cover Sheet

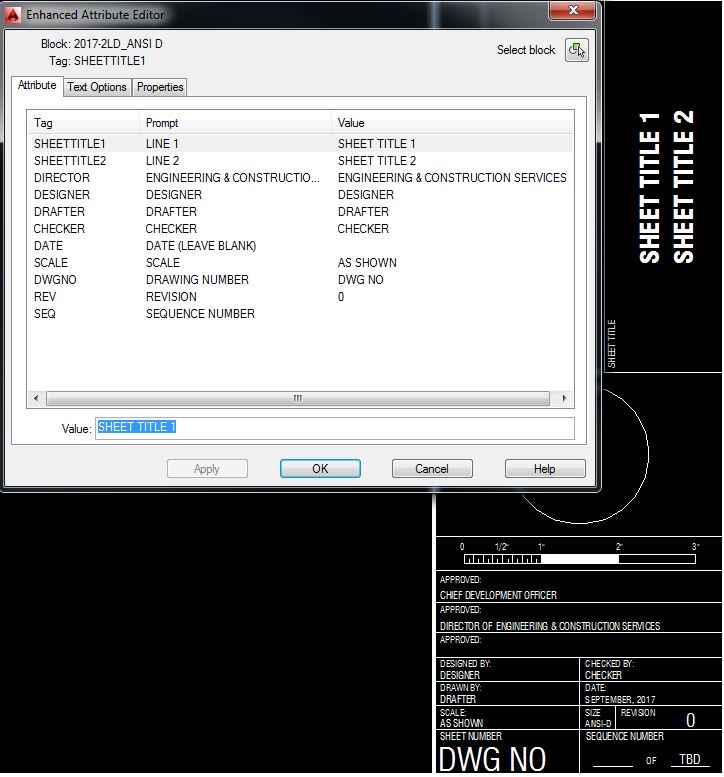
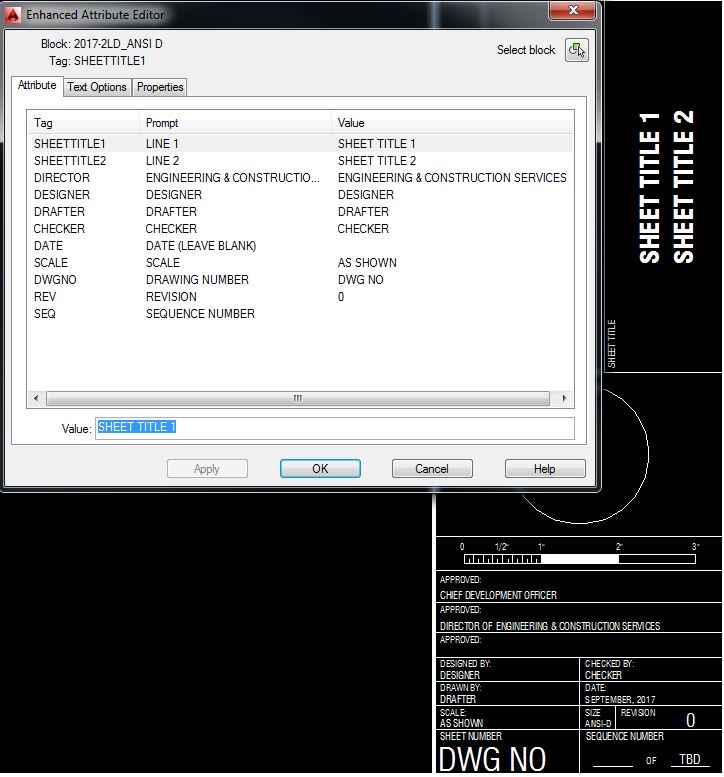
The cover sheet (see Figure 16) fills the drawing area of the title block, and should be exploded and manipulated as necessary to accommodate the particular contract. The section that contains the title information should remain intact, except for appropriate changes to the contract number and contract title. The lower sections shall be modified to suit the particular contract, which may include adding more sheets, as necessary. Specific layers shall be used for the cover sheet, as indicated in Appendix D.

1. SFO Cover Sheet



The “2L” and “3L” files contain attributes (see Figure 17, which have the title block information, such as sheet title, drawn by, designed by, check by, date, sheet number, etc. These attribute files differ from each other in the number of lines for sheet title. Sheets that have 2 lines in the title should have a “2L” file name used, whereas sheets that have 3 lines (or one, leaving lines 1 and 3 blank) in the title should use a “3L” file name. The reason for the variation is it allows the sheet title to be centered within the space allotted within the title block for a more professional appearance. The field(s) in the attribute dialog box prompting “ARCHITECT or ENGINEER” shall be filled in the same with either “ARCHITECT” or “ENGINEER”. The choice is determined by the discipline of the individual whose professional seal is to be placed on the drawing.

1. Title Block Attributes



## Ordering of Drawing Sheets

Drawing sheets should appear after the cover sheet and be ordered by discipline in the sequence shown in Table 7, below. Title sheets shall begin with a G and appear first. Reference sheets shall begin with an R and appear last. Within each discipline, sheets should be ordered in alphanumeric sequence.

**Table 7—Sheet Order**

|  |  |
| --- | --- |
| Code | Discipline |
| V | Survey |
| C | Civil |
| L | Landscape |
| U | Utilities |
| S | Structural |
| A | Architectural |
| I | Interior |
| M | Mechanical |
| F | Fire Protection |
| E | Electrical |

# Drawing Delivery

## Quality Assurance

Before consultants submit DWGs to the Airport and before staff share DWGs with other staff members or consultants, they are responsible for conducting Quality Assurance (QA) on those drawings. QA should be conducted by an individual who is familiar with the content and the requirements of this document, but who did not directly work on the data in the drawing being checked. Quality assurance shall check the drawing(s) against all applicable requirements in this document, including but not limited to:

* Objects have the correct geometry, adhere to topology rules, and are on correct layers
* Proper title block is used with metadata fields filled in correctly and completely
* Proper cover sheet is used with metadata fields filled in correctly and completely
* Sheets are numbered correctly and provided in the correct order
* Filenames are correct

QA should also check to ensure that the data in the drawing is comprehensive, accurate, and correct. It may not be feasible to check all objects on drawings. At a minimum a statistically valid sample of objects to establish a 95 percent confidence level in the data shall be checked. Objects shall be sampled randomly but their location shall be distributed across the extent of the drawing’s contents. Objects on numerous layers shall be selected. All properties of the selected objects (i.e., geometry type, topology, layer, symbology, and object data, if present) shall be checked. If any property is not correctly recorded, then the object shall be considered a failure. All failures shall be corrected. If a pattern of failures (e.g., on a specific layer or in a specific area) is evident or a large number of failures are found, then all content in the drawing shall be thoroughly checked and corrected before QA recommences.

## Plotted Drawings

Drawing sets shall be printed to PDF for delivery, unless otherwise directed by the Airport PM. PDFs should be printed at the full sheet size as described above. When printing to PDF in AutoCAD, the DWG To PDF.pc3 plotter configuration file shall be used. The scale shall be 1:1 and the sheet size shall be of the full bleed variety for the particular paper size selected. Also, the “Include Layer Information” interface shall NOT be checked in the Custom Properties setting within the Plotter Configuration Editor.

## Electronic Delivery

Drawing sets shall be saved to electronic media such as a DVD, CD-ROM, or portable drive. In some cases, transfer of files via File Transfer Protocol (FTP) may be permitted. AutoCAD’s eTransmit function may be used for informal exchange of drawings (e.g., as an email attachment), but the formal submittal of drawings shall not be provided using eTransmit and shall be provided in a proper directory structure and not compressed to maintain external reference overlaying. When submitting drawings electronically, the following requirements must be met:

* Physical media must be labelled with the SFO contract number and name, as they appear on the fully executed copy of the contract; the prime consulting firm’s name, the date of the submittal, the title of the drawing set and the review status. If any drawing, file, or additional information provided on the media contains SSI, then the media must be labelled with the statement SENSITIVE SECURITY INFORMATION along with the SSI distribution limitation statement indicated above. If multiple physical media devices are delivered together as a set, the label must indicate a sequence number and the total number in the sequence.
* Appropriate color table (.ctb) files shall be included.
* A tabulated Index of Sheets (.doc or .xls) shall be included. The table shall be titled “Electronic File Submittal Index—Contract ‘XXXX’” and have three columns: Electronic (AutoCAD) File Name, Drawing Number and Drawing Title. In addition, the table shall include a listing of file names and descriptions of external references. The description shall be placed under the heading of Drawing Title.
* The final drawings must be tiled into Paper Space, layer set to 0, zoomed to extents and purged prior to saving and closing.

# Glossary

Following is a list of acronyms and terms that are commonly used in this document. This information is provided for reference and to ensure a consistent understanding of terminology.

AIA American Institute of Architects

AM Asset Management

ANSI American National Standards Institute

CAD Computer-Aided Drafting

DWG AutoCAD Drawing

DWF Drawing Web Format

DWT Drawing Template

FAA Federal Aviation Administration

FTP File Transfer Protocol

GIS Geographic Information System

NAD North American Datum

NAVD North American Vertical Datum

NCS National CAD Standard

OSHA Occupational Safety and Health Administration

PDF Portable Document Format

PM Project Manager

UCS Universal Coordinate System

# Appendix A: Change Request Form

The following form should be used to suggest changes to this Standard. Completed forms shall be emailed by copying the text below into the body of an email and filling in the appropriate information. The subject of the email should read “Suggested Change to Airport CAD Standard.” Completed e-mails shall be sent to [CADstandard@flysfo.com](mailto:CADstandard@flysfo.com).

**Airport CAD Standard  
Change Request Form**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Brief Summary of Change Requested (15 words or less): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of Change (check one): [ ] Text Clarification [ ] Layer [ ] Title Block [ ] Electronic Materials [ ] Other

If other is selected, please describe the type of change: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Relevant Page in Standard: \_\_\_\_\_\_\_\_\_\_

Layer Name (if applicable): \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Electronic File Name (if applicable): \_\_\_\_\_\_\_\_\_\_\_\_

Change Requested:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Reason for Change:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Contact information of individual requesting change:

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Company or Airport Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Email Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   
Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Airport Contract Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Appendix B: Contact Information

The development of the Airport’s CAD Standard is the result of a collaborative effort of the San Francisco International Airport CAD Committee. The information contained herein is based on our knowledge, experience, and hardware and software technologies at the time of this publication. We recognize the importance of continued CAD Standard development and welcome your comments.

CAD Standard Working Group

Planning, Design & Construction

P.O. Box 8097

San Francisco, CA 94128

[CADstandard@flysfo.com](file:///C:/Users/rmurp/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/32WVWLU0/CADstandard@flysfo.com)

# Appendix C: Data Request and Release

**Airport Commission**

**San Francisco International Airport**

**Digital Data License and Non-Disclosure Agreement**

**License Agreement No.**

This Digital Data License Agreement (“AGREEMENT”) is entered into by the City and County of San Francisco, a municipal corporation acting by and through its Airport Commission (“AIRPORT”), and the undersigned licensee ("LICENSEE").

AIRPORT Contract No.       [NAME OF CONTRACT] (the “Contract”)

Project Manager:

Reason for Request:

Description of Request:

**GENERAL TERMS AND CONDITIONS**

The following terms and conditions shall be applicable to all Digital Data of the AIRPORT that are licensed to LICENSEE and shall govern the use and distribution by the LICENSE of all Digital Data or works derived there from. Use of the Digital Data by LICENSEE indicates LICENSEE’S acceptance of these terms and conditions.

1. **Digital Data.** AIRPORT owns Digital Data for use in virtual modeling, geospatial databases, and computer-aided plans, which includes representations of information, data communication, drawings, designs, models, maps, and imageries of AIRPORT property and facilities created or stored in a digital form. ALL DIGITAL DATA PROVIDED UNDER THIS AGREEMENT IS CONFIDENTIAL INFORMATION AS PROVIDED UNDER SECTION 3 BELOW.

AIRPORT geospatial infrastructure data and models are currently being maintained in NAD83 CA State Plane Zone III. AIRPORT elevations are based on a mean derived NAVD88 using PACS/SACS and adjusted NGVD29 leveled benchmarks.

AIRPORT will deliver Digital Data to the LICENSEE **[by electronic file transfer / by e-mail /by regular mail]**.

1. **License.**

**2.1**. **Grant of License.** AIRPORT grants LICENSEE a revocable, non-exclusive, and non-transferable limited license to use Digital Data for the sole purpose of LICENSEE’s performance of services for the AIRPORT as specified under the Contract for the above-stated Reason of Request.

**2.2.** **Restrictions on Use.** LICENSEE shall have the right to load and use the Digital Data on its own computer equipment for its normal business activity in performance of its services under the Contract for the above-stated Reason of Request (subject to limitations defined by this License Agreement) and for no other purpose. The Digital Data may be copied in whole or in part only onto the LICENSEE’S own computer equipment only with prior written approval of the AIRPORT.

**2.3.** **Individual Personnel.** LICENSEE shall limit the persons with access to the Digital Data to only those individual principals and employees of the LICENSEE whose job duties require such access and information. LICENSEE shall take affirmative steps to assure that only the following individuals will have access to the Digital Data:

**2.4. Subcontractors.** LICENSEE shall limit the subcontractors with access to the Digital Data to only those entities performing services under the Contract and requiring access to the Digital Data to perform such services. In providing such access, LICENSEE shall require each subcontractor to execute a non-disclosure agreement in conformance with this Agreement. The following subcontractors and their individual principals and employees will have access to the Digital Data:

Name of Subcontractor Individuals

1. **Nondisclosure.**

**3.1. Confidential Information.** All Digital Data provided under this License Agreement and any Derivative of the Digital Data is considered to be Confidential Information pursuant to San Francisco Administrative Code Chapter 12M and may be Protected Critical Infrastructure Information as defined under the Homeland Security Act of 2002 and 6 CFR §29.2. “Derivative” means written or electronic material created from or with, or based on Confidential Information (*i.e*., a report analyzing Confidential Information shall also be considered Confidential Information). Confidential Information shall also mean proprietary, trade secret or other protected information, identified as Confidential Information by the AIRPORT.

**3.2. Use of Confidential Information**. LICENSEE agrees to accept the AIRPORT’S Confidential Information solely for use in connection with LICENSEE’S duties in performing services for the AIRPORT. LICENSEE shall not disclose, publish, or disseminate Confidential Information to anyone other than certain individuals on a need-to-know basis. LICENSEE shall inform individuals having access to the AIRPORT’S Confidential Information of the confidential nature of this information and the restrictions on its use, dissemination, duplication and disclosure, and shall assume the responsibility that such employees, agents and contractors will preserve the confidentiality of such information as to third parties. [**Insert if highly sensitive information:** **Each employee, agent, and contractor of LICENSEE identified as having a "need-to-know" in connection with the LICENSE, for review or evaluation of the Confidential Information shall be required to execute a Non-Disclosure Agreement under the same terms as stated in this Section 8. LICENSEE shall provide the AIRPORT with a copy of the executed Non-Disclosure Agreements and a master list of the employees, agents, and contractors and their respective duties in connection with the services involving Confidential Information**].

**3.3. Protection of Confidential Information**. LICENSEE shall handle and safeguard Confidential Information in a manner that affords sufficient protection to prevent the unauthorized disclosure of or inadvertent access to such information. The AIRPORT has placed special confidence and trust in LICENSEE and LICENSEE is obligated to protect Confidential Information from unauthorized disclosure, in accordance with the terms of this License Agreement and the laws, regulations, and directives applicable to the specific categories of information to which LICENSEE is granted access. LICNESEE understands that the AIRPORT or other governmental entities may conduct inspections, at any time or place, for the purpose of ensuring compliance with the condition for access, dissemination, handling and safeguarding information under this License Agreement. LICENSEE shall promptly report to the AIRPORT any loss, theft, misuse, misplacement, unauthorized disclosure, or other security violation LICENSEE has knowledge of, whether or not LICENSEE has direct involvement in such circumstances. The reporting individual’s anonymity will be kept to the extent possible when reporting security violations.

**3.4. Compliance with Court Order or Public Disclosure Laws.** In the event that disclosure of Confidential Information is mandated by a court order or express governmental directive, LICENSEE shall immediately notify the AIRPORT and shall take all reasonable steps to enable the AIRPORT to seek a protective order or take other appropriate action. LICENSEE will also, at no cost or expense to the AIRPORT, cooperate in the AIRPORT's efforts to obtain a protective order or other reasonable assurance that confidential treatment will be afforded the Confidential Information. If, in the absence of a protective order, LICENSEE is required as a matter of law to disclose the Confidential Information, it may disclose to the party compelling the disclosure only the part of the Confidential Information required by law to be disclosed (in which case, where possible prior to such disclosure, LICENSEE will advise and consult with the AIRPORT and its counsel as to such disclosure). Nothing in this License Agreement shall require LICENSEE to take any action, or to refuse to release information where to do so would violate applicable law.

**3.5. Remedies.** LICENSEE acknowledges and agrees that violation of this nondisclosure provision shall constitute a material breach of this License Agreement and may be grounds for termination of the Contract for fault. Violation of this nondisclosure provision may be grounds for denying further access to any AIRPORT Confidential Information. Violation of this nondisclosure provision may also result in administrative debarment and/or civil or criminal action. The AIRPORT shall be entitled to specific performance and injunctive and other equitable relief, in addition to any other remedies or money damages available at law or in equity.

**3.6. Independent Knowledge.** This nondisclosure provision imposes no obligation upon LICENSEE with respect to information that: (a) was in LICENSEE's possession before receipt from the AIRPORT; or (b) is or becomes a matter of public knowledge through no fault of LICENSEE; or (c) is received by LICENSEE from a third party without a duty of confidentiality; or (d) is disclosed by LICENSEE with the AIRPORT’s prior written approval; or (e) is developed by LICENSEE without reference to Confidential Information.

1. **Ownership and Title.** AIRPORT owns all Digital Data provided under this License Agreement. LICENSEE shall have no right, title, or interest in any Digital Data, except as provided under this Agreement. This Agreement shall be binding upon LICENSEE and its officers, directors, employees, governing board, parent corporations, subsidiaries, affiliates, successors and assigns. In addition, all Digital Data shall remain the exclusive property of AIRPORT, and LICENSEE shall have no rights, by license or otherwise, to have access to or use the Digital Data except as expressly provided under this Agreement. No patent, copyright, trademark, trade secret, service mark or other legally protected proprietary right is licensed, granted, or otherwise conveyed by this Agreement with respect to the Digital Data.
2. **Disclaimer of Liability and Warranties.** AIRPORT makes no express or implied warranties or conditions, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. **Digital Data “As Is”:** LICENSEE understands and agrees that the Digital Data may contain errors and/or omissions and agrees to take the data “as is.” LICENSEE accepts the Digital Data subject to all risks of such errors and/or omissions, or arising from the use or inability to use this Digital Data.
3. **Limitation of Remedies and Liabilities.** In no event shall AIRPORT or its employees or officers be liable, regardless whether any claim is based on contract or tort, for any direct, indirect, incidental, special or consequential damages, including, but not limited to, lost profits, arising out of or in connection with this Agreement or the License granted under this Agreement. LICENSE agrees to hold harmless the AIRPORT, the CITY and its officials (elected or appointed), officers, employees, servants and agents from any and all liability, claims, losses, damages, injuries, costs and attorney fees arising out of use of the Digital Data that is subject to this Agreement.
4. **AIRPORT Intellectual Property.** Under AIRPORT Resolution No. 01-0118, adopted on April 18, 2001, AIRPORT affirmed that it will not tolerate the unauthorized use of its intellectual property, including the SFO logo, CADD designs, and copyrighted publications. All proposers, bidders, contractors, tenants, permittees, and others doing business with or at the AIRPORT (including subcontractors and subtenants) may not use the AIRPORT intellectual property, or any intellectual property confusingly similar to the AIRPORT intellectual property, without the AIRPORT Director’s prior consent.
5. **Proprietary Markings and Security Warnings.** LICENSEE agrees not to remove or destroy any proprietary markings, proprietary legends, or security warnings placed upon or contained within the Digital Data or any related materials or documentation.
6. **Termination.** If the LICENSEE fails to adhere to any of its obligations under this License Agreement, AIRPORT may revoke the license and terminate this License Agreement immediately. In such event, LICENSEE shall within five calendar days of the revocation or termination certify that all Digital Data in LICENSEE’S possession or distributed by LICENSEE have been deleted or destroyed completely and removed from any data storage system.

Upon completion, termination, or expiration of the Contract, this License Agreement shall simultaneously and immediately terminate. Within five calendar days of such termination, LICENSEE shall certify that all electronic copies of the Digital Data in LICENSEE’S possession or control, including but not limited to that Digital Data shared with individuals or subcontractors as provided in Section 2 above, has been deleted completely and removed from any data storage system.

1. **Assignment:** This License Agreement, the license granted hereunder, and the Digital Data may not be assigned or transferred to third parties without the prior written consent of the AIRPORT, which the AIRPORT may withhold at the AIRPORT’S sole discretion.
2. **Agreement Limitation:**

**10.1.** LICENSEE acknowledges and agrees that this Agreement contains the entire and only understanding between them relating to the license granted to LICENSEE for the Digital Data, and that any representation, promise or condition not contained in this License Agreement shall not be binding on either party. This Agreement may be modified only in writing signed by an authorized representative of the LICENSEE and the authorized AIRPORT representative.

**10.2.** If any provision of this Agreement is determined by a court to be invalid under any applicable statute or rule of law, such provision is, to that extent, deemed omitted and this Agreement shall remain otherwise in effect.

**10.3.** This Agreement shall be governed by the laws of the State of California.

1. **Approval:** If any portion of this pre-printed Agreement is deleted, or additional provisions are added under Section 12 or otherwise, the Agreement shall be of no force or effect unless and until it is approved as to form and legality and signed on its face by the authorized AIRPORT representative.

|  |  |
| --- | --- |
|  | 1. **LICENSEE**     Authorized Signature    Printed Name    Title    Company Name    City Vendor Number    Address    City, State, ZIP    Telephone Number |

# Appendix D: Title Block Layers

**Table 8 – Title Block Layers**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Layer Name** | **Color** | **Linetype** | **Lineweight** | **Plot** | **Description** |
| G-TTBK-BRDR | 7 (White) | Continuous | Default | - | Lines and Polylines That Make Up the Border |
| G-TTBK-LOGO | 7 (White) | Continuous | 0.012 in. | - | Layer for the SFO logo |
| G-TTBK-SCAL-BAR | 7 (White) | Continuous | 0.006 in. | - | Scale bar |
| G-TTBK-TITL | 7 (White) | Continuous | 0.006 in. | - | Contract Title and Number |
| G-TTBK-WIND-SLCT | 2 (Yellow) | Continuous | Default | NO | Little circles near each corner for selecting when plotting by window |
| G-TTBK-REVW-STAT | 7 (White) | Continuous | 0.006 in. | - | Text located lower right-hand corner "CHECK "PRINT" |
| G-TTBK-SEQC-NMBR | 7 (White) | Continuous | 0.006 in. | - | The Total Number of sheets “TBD” |
| G-TTBK-2LD-ATTR | 7 (White) | Continuous | 0.012 in. | - | Title block attributes in a 2 line definition |
| G-TTBK-3LD-ATTR | 7 (White) | Continuous | 0.012 in. | - | Title block attributes in a 3 line definition |
| G-TTBK-LINE | 7 (White) | Continuous | 0.006 in. | - | Titleblock Wide lines |
| G-TTBK-LOCN-HTCH | 7 (White) | Continuous | Default | - | Titleblock Location Map Hatch |
| G-TTBK-LOCN-ARRW | 7 (White) | Continuous | 0.002 in. |  | Titleblock Location Map North Arrow |
| G-TTBK-LOCN-MAP | 253 | Continuous | Default | - | Titleblock Location Map |
| G-TTBK-LOCN-TEXT | 7 (White) | Continuous | Default | - | Titleblock Location Map Text |
| G-TTBK-TEXT | 7 (White) | Continuous | 0.012 in. | - | General Text |
| G-TTBK-DATE | 7 (White) | Continuous | 0.012 in. | - | The date in the Titleblock |
| G-VPRT-NPLT | 7 (White) | Continuous | 0.012 in. | - | Viewport |

**Table 9 - Cover Sheet Layers**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Layer Name** | **Color** | **Linetype** | **Lineweight** | **Plot** | **Description** |
| G-TTBK-TITL | 7 (White) | Continuous | 0. 006 in. | - | Contract Title and Number |
| G-TTBK-LOCN-HTCH | 7 (White) | Continuous | Default | - | Titleblock Location Map Hatch |
| G-TTBK-LOCN-ARRW | 7 (White) | Continuous | 0.002 in. |  | Titleblock Location Map North Arrow |
| G-TTBK-LOCN-MAP | 253 | Continuous | Default | - | Titleblock Location Map |
| G-TTBK-LOCN-TEXT | 7 (White) | Continuous | Default | - | Titleblock Location Map Text |

# Appendix E: Acceptable Layer Names

Following is a list of acceptable layer names that shall be used to represent real-world objects on SFO DWGs. These layer names conform to the layer name format of the National CAD Standard. Components of layer names in italics have been customized for SFO use.

| **Layer** | **Discipline** | **Major** | **Minor** | **Second Minor** | **Color** | **Linetype** | **Noplot** | **Off** | **Freeze** | **Lweight (In.)** | **LayerDesc** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A-AREA | Architectural | Area |  |  | 77 | Continuous | 0 | 0 | 0 | 0.0200 | Architectural Area Boundary Lines |
| A-AREA-CALC | Architectural | Area | Calculation |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Area Calculation |
| A-CLNG-BNDY | Architectural | Ceiling | Boundary |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Ceiling Boundary |
| A-CLNG-BRAC | Architectural | Ceiling | Bracing |  | 0,0,255 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Bracing |
| A-CLNG-GRID | Architectural | Ceiling | Grid |  | 7 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Ceiling Grid |
| A-CLNG-OPNG | Architectural | Ceiling | Openings |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Openings |
| A-CLNG-OUTL | Architectural | Ceiling | Outline |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Outline |
| A-CLNG-PANL | Architectural | Ceiling | Panels |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Ceiling Panels |
| A-CLNG-SECT | Architectural | Ceiling | Section |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Section |
| A-CLNG-SEIS | Architectural | Ceiling | Seismic |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Seismic |
| A-CLNG-SFFT | Architectural | Ceiling | Soffits |  | 1 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Ceiling Soffits |
| A-CLNG-SKLT-FRMG | Architectural | Ceiling | Skylight | Framing | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Skylight Framing |
| A-CLNG-SKLT-GLAZ | Architectural | Ceiling | Skylight | Glazing | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Skylight Glazing |
| A-CLNG-SKLT-MULL | Architectural | Ceiling | Skylight | Mullion | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ceiling Skylight Mullion |
| A-CONV-BAGS-BELT | Architectural | Conveying Systems | Baggage | Wire Rope, Chains, And Belts | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Conveyor System Baggage Wire Ropes, Chains And Belts |
| A-CONV-BAGS-EQPM | Architectural | Conveying Systems | Baggage | Motor Equipment | 7 | Continuous | 0 | 0 | 0 | 0.0200 | Architectural Conveyor System Baggage Wire Ropes, Chains And Belts |
| A-CONV-BAGS-FRMG | Architectural | Conveying Systems | Baggage | Framing | 128,128,128 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Conveyor System Baggage Motor Equipment |
| A-CONV-BAGS-PLAT | Architectural | Conveying Systems | Baggage | Platform | 128,128,128 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Conveyor System Baggage Framing |
| A-CONV-BAGS-PUSH | Architectural | Conveying Systems | Baggage | Direct Push | 128,128,128 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Conveyor System Baggage Direct Push |
| A-DETL-BNDY | Architectural | Detail | Boundary |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail Boundary |
| a-detl-genf | Architectural | Detail | General |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail General |
| A-DETL-HIDD | Architectural | Detail | Objects Or Lines Hidden From View |  | 252 | Hidden | 0 | 0 | 0 | 0.0065 | Architectural Detail Objects Or Lines Hidden From View |
| A-DETL-MATC | Architectural | Detail | Match Lines |  | 1 | Center | 0 | 0 | 0 | 0.0280 | Architectural Detail Match Lines |
| A-DETL-MBND | Architectural | Detail | Material Beyond Cut |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail Material Beyond Cut |
| A-DETL-MCUT | Architectural | Detail | Material Cut By The View |  | 77 | Continuous | 0 | 0 | 0 | 0.0200 | Architectural Detail Material Cut By The View |
| A-DETL-MCUT-OTLN | Architectural | Detail | Material Cut By The View | Outlines | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail Material Cut By The View Outlines |
| A-DETL-OTHR | Architectural | Detail | Other |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail Others |
| A-DETL-OUTL | Architectural | Detail | Outlines |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Detail Outlines |
| A-DOOR | Architectural | Doors |  |  | 1 | Continuous | 0 | 0 | 0 | .0100 | Architectural Doors |
| A-DOOR-FRMG | Architectural | Doors | Framing |  | 70 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Doors Framing |
| A-DOOR-GLAZ | Architectural | Doors | Glazing |  | 1 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Doors Glazing |
| A-DOOR-PANL | Architectural | Doors | Panels |  | 7 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Doors Panels |
| A-DOOR-SWNG | Architectural | Doors | Door Swing |  | 1 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Doors Swing |
| A-FLOR-BNDY | Architectural | Floor | Boundary |  | 5 | Continuous | 0 | 0 | 0 | 0.0280 | Architectural Floor Boundary |
| A-FLOR-FIXT | Architectural | Floor | Fixture |  | 252 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Floor Fixture |
| A-FLOR-FNSH | Architectural | Floor | Finishes |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Floor Finishes |
| A-FLOR-MATL | Architectural | Floor | Match Lines |  | 1 | Center | 0 | 0 | 0 | 0.0280 | Architectural Floor Match Lines |
| A-FLOR-OTLN | Architectural | Floor | Outlines |  | 77 | Continuous | 0 | 0 | 0 | 0.0280 | Architectural Floor Outlines |
| A-FLOR-OVHD | Architectural | Floor | Overhead |  | 77 | Dashed | 0 | 0 | 0 | 0.065 | Architectural Door Overhead |
| A-FLOR-SECT | Architectural | Floor | Section |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Floor Section |
| A-FURN-CSWK | Architectural | Floor | Casework |  | 70 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Floor Casework |
| A-GLAZ | Architectural | Glazing |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Glazing |
| A-GLAZ-CURT | Architectural | Glazing | Curtain Walls and Panels |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Glazing Curtain Walls and Panels |
| A-GLAZ-FRMG | Architectural | Glazing | Framing |  | 70 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Glazing Framing |
| A-GLAZ-MULL | Architectural | Glazing | Mullion |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Glazing Mullion |
| A-GRID | Architectural | Grid |  |  | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Grid Lines |
| A-HRAL | Architectural | Handrail |  |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Handrail for Ramps and Other Locations (non-structural) |
| A-RAMP | Architectural | Ramp |  |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Ramps |
| A-ROOF-CNPY | Architectural | Roof | Canopy |  | 252 | Dashed | 0 | 0 | 0 | 0.0065 | Architectural Roof Overhangs & Canopies |
| A-ROOF-EQPM | Architectural | Roof | Equipment |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Roof Equipment |
| A-ROOF-FIXT | Architectural | Roof | Fixtures |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Roof Fixtures |
| A-ROOF-HRAL | Architectural | Roof | Handrails/Guard Rails |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Roof Stair Handrails, Nosings, Guard Rails |
| A-ROOF-JNTC | Architectural | Roof | Control Joint |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Roof Control Joints |
| A-ROOF-MECH-OPNG | Architectural | Roof | Mechanical | Openings | 252 | Dashed | 0 | 0 | 0 | 0.0065 | Architectural Roof Opening For Mechanical Equipment |
| A-ROOF-OTHR | Architectural | Roof | Other |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Roof Other Elements |
| A-ROOF-OUTL | Architectural | Roof | Outlines |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Architectural Roof Perimeter/Edge, Roof Geometry |
| A-ROOF-SHFT | Architectural | Roof | Shaft |  | 252 | Dashed | 0 | 0 | 0 | 0.0065 | Architectural Roof Shafts |
| A-SECT-BNDY | Architectural | Section | Boundary |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Section Boundary |
| A-SECT-MBNC | Architectural | Section | Beyond |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Section Material Beyond Section Cut |
| A-WALL | Architectural | Walls |  |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Walls |
| A-WALL-EXTR | Architectural | Walls | Exterior |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Exterior Walls |
| A-WALL-INTR | Architectural | Walls | Interior |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Architectural Interior Walls |
| A-WALL-TPTN | Architectural | Walls | Toilet Partitions |  | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Architectural Wall Toilet Partitions |
| C-AFLD-DSRF-BLDR | Civil | Airfield | Design Surfaces | Sfo-Brl | 2 | Sfo-Brl | 0 | 0 | 0 | 0.0065 | Airfield Design Surface Building Restriction Line |
| C-AFLD-DSRF-FATO | Civil | Airfield | Design Surfaces | Final Approach And Takeoff Clearance Surface | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Fato |
| C-AFLD-DSRF-IAOZ | Civil | Airfield | Design Surfaces | Inner Approach Obstacle Free Zone | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Inner Approach Obstacle Free Zone |
| C-AFLD-DSRF-IOFZ | Civil | Airfield | Design Surfaces | Inner Obstacle Free Zone | 4 | Ofz | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Inner Obstacle Free Zone |
| C-AFLD-DSRF-ITOZ | Civil | Airfield | Design Surfaces | Inner Transitional Obstacle Free Zone | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Inner Transitional Obstacle Free Zone |
| C-AFLD-DSRF-KEYH | Civil | Airfield | Design Surfaces | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Key Holes |
| C-AFLD-DSRF-NMOV | Civil | Airfield | Design Surfaces | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Aircraft Non-Movement Area |
| C-AFLD-DSRF-OFZN | Civil | Airfield | Design Surfaces | Ofz | 3 | Ofz | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Object Free Zone |
| C-AFLD-DSRF-OTHR | Civil | Airfield | Design Surfaces | Other | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Other |
| C-AFLD-DSRF-POFZ | Civil | Airfield | Design Surfaces | Precision Obstacle Free Zone | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Precision Obstacle Free Zone |
| C-AFLD-DSRF-PSEP | Civil | Airfield | Design Surfaces | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Prsifr |
| C-AFLD-DSRF-PSPV | Civil | Airfield | Design Surfaces | Precision Vfr | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Prsvfr |
| C-AFLD-DSRF-RESA | Civil | Airfield | Design Surfaces | Runway End Safety Area | 3 | Rsa | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Runway End Safety Area |
| C-AFLD-DSRF-ROFA | Civil | Airfield | Design Surfaces | Runway Object Free Area | 161 | Sfo-Rofa | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Runway Object Free Area |
| C-AFLD-DSRF-ROFZ | Civil | Airfield | Design Surfaces | Runway Obstacle Freee Zone | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Runway Obstacle Free Zone |
| C-AFLD-DSRF-RPTX | Civil | Airfield | Design Surfaces | Runway To Parallel Taxiway And Taxilane Separation | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Rwyptx |
| C-AFLD-DSRF-RPZN | Civil | Airfield | Design Surfaces | Rpz | 3 | Rpz | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Runway Protection Zone |
| C-AFLD-DSRF-RSAR | Civil | Airfield | Design Surfaces | Rsa | 3 | Rsa | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Runway Safety Area |
| C-AFLD-DSRF-TOFA | Civil | Airfield | Design Surfaces | Taxiway And Taxiway Object Free Area | 161 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Tofa |
| C-AFLD-DSRF-TSS~ | Civil | Airfield | Design Surfaces | Threshold Siting Surface | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Tss |
| C-AFLD-DSRF-TXSA | Civil | Airfield | Design Surfaces | Taxiway/Taxilane Safety Area | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Txsa |
| C-AFLD-DSRF-VGSI | Civil | Airfield | Design Surfaces | Visual Glide Slope Indicator Protection Area | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Design Surfaces Vgsi |
| C-AFLD-LMTA-PERI | Civil | Airfield | Limited Access | Perimeter | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Limited Access Security Perimeter Line |
| C-AFLD-LMTA-RSTR | Civil | Airfield | Limited Access | Continuous | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Limited Access Military Restricted Access Boundary |
| C-AFLD-LMTA-SECA | Civil | Airfield | Limited Access | Continuous | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Limited Access Security Area |
| C-AFLD-LMTA-SIDA | Civil | Airfield | Limited Access | Continuous | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Limited Access Security Identification Display Area |
| C-AFLD-LMTA-STER | Civil | Airfield | Limited Access | Continuous | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Limited Access Sterile Area |
| C-AFLD-NAID-ALS~ | Civil | Airfield | Navigation Aids | Approach Lighting System |  | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Als |
| C-AFLD-NAID-APAP | Civil | Airfield | Navigation Aids | Abbreviated Precision Approach Path Indicator | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Apapi |
| C-AFLD-NAID-APBN | Civil | Airfield | Navigation Aids | Airport Beacon | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Apbn |
| C-AFLD-NAID-ARSR | Civil | Airfield | Navigation Aids | Air Route Surveillance Radar | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Arsr |
| C-AFLD-NAID-BECN | Civil | Airfield | Navigation Aids | Continuous | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Ndb/C |
| C-AFLD-NAID-COMM | Civil | Airfield | Navigation Aids | Communications | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Communications |
| C-AFLD-NAID-CRIT | Civil | Airfield | Navigation Aids | Critical | 3 | Navaid | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Critical Area |
| C-AFLD-NAID-DIRF | Civil | Airfield | Navigation Aids | Direction Finding Equipment | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Df |
| C-AFLD-NAID-DMEQ | Civil | Airfield | Navigation Aids | Direction Measuring Equipment | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Dme |
| C-AFLD-NAID-FMKR | Civil | Airfield | Navigation Aids | Fan Marker | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Fm |
| C-AFLD-NAID-GBAS | Civil | Airfield | Navigation Aids | Ground-Based Augmentation System | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gbas |
| C-AFLD-NAID-GCAR | Civil | Airfield | Navigation Aids | Ground Controlled Approach Touchdown Reflector | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gca |
| C-AFLD-NAID-GLSY | Civil | Airfield | Navigation Aids | Ground-Based Augmentation System Landing System | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gls |
| C-AFLD-NAID-GNSS | Civil | Airfield | Navigation Aids | Global Navigation Satellite System | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gnss |
| C-AFLD-NAID-GPS\_ | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Gps |
| C-AFLD-NAID-GSCE | Civil | Airfield | Navigation Aids | Glide Slope - Capture Effect | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gs Ce |
| C-AFLD-NAID-GSEF | Civil | Airfield | Navigation Aids | Glide Slope - End Fire | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gs Ef |
| C-AFLD-NAID-GSNR | Civil | Airfield | Navigation Aids | Glide Slope - Null Reference | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gs Nr |
| C-AFLD-NAID-GSSB | Civil | Airfield | Navigation Aids | Glide Slope - Side Band | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Gs Sb |
| C-AFLD-NAID-ILS\_ | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Instrument Landing System |
| C-AFLD-NAID-ILSY | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Dme |
| C-AFLD-NAID-IMKR | Civil | Airfield | Navigation Aids | Inner Marker | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Im |
| C-AFLD-NAID-INSY | Civil | Airfield | Navigation Aids | Inertial Navigation System | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Ins |
| C-AFLD-NAID-LDA~ | Civil | Airfield | Navigation Aids | Localizer Type Directional Aid | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Lda |
| C-AFLD-NAID-LMMK | Civil | Airfield | Navigation Aids | Locator Middle Marker | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Lmm |
| C-AFLD-NAID-LOCD | Civil | Airfield | Navigation Aids | Localizer Collocated With Dme | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Loc\_Dme |
| C-AFLD-NAID-LOCL | Civil | Airfield | Navigation Aids | Localizer | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Loc |
| C-AFLD-NAID-LORN | Civil | Airfield | Navigation Aids | Long Range Navigation Receiver | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Loran |
| C-AFLD-NAID-MCWV | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Microwave |
| C-AFLD-NAID-MISC | Civil | Airfield | Navigation Aids | Miscellaneous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Miscellaneous - Windcones And Beacons |
| C-AFLD-NAID-MLSD | Civil | Airfield | Navigation Aids | Microwave Landing System Dme | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Mlsdme |
| C-AFLD-NAID-MLSE | Civil | Airfield | Navigation Aids | Microwave Landing System Elevation Antenna | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Mlsel |
| C-AFLD-NAID-MLSZ | Civil | Airfield | Navigation Aids | Microwave Landing System Azimuth Antenna | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Mlsaz |
| C-AFLD-NAID-MMKR | Civil | Airfield | Navigation Aids | Middle Marker | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Mm |
| C-AFLD-NAID-MSBD | Civil | Airfield | Navigation Aids | Microwave Scan Beam Landing System - Distance Measuring Equipment | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Msbls-Dme |
| C-AFLD-NAID-MSBE | Civil | Airfield | Navigation Aids | Microwave Scan Beam Landing System - Elevation Antenna | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Msbls-El |
| C-AFLD-NAID-MSBZ | Civil | Airfield | Navigation Aids | Microwave Scan Beam Landing System - Azimuth Antenna | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Msbls-Az |
| C-AFLD-NAID-MTIR | Civil | Airfield | Navigation Aids | Moving Target Indicator Reflector | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Mti |
| C-AFLD-NAID-NDBC | Civil | Airfield | Navigation Aids | Non-Directional Radio Beacon - Compass Locator | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Ndb/C |
| C-AFLD-NAID-NDBD | Civil | Airfield | Navigation Aids | Ndb Collocated With Dme | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aid Ndb\_Dme |
| C-AFLD-NAID-NDBH | Civil | Airfield | Navigation Aids | Non-Directional Radio Beacon - High Frequency | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aid Ndb/H |
| C-AFLD-NAID-NDBM | Civil | Airfield | Navigation Aids | Non-Directional Radio Beacon - Medium Hf | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aid Ndb/M |
| C-AFLD-NAID-NDBU | Civil | Airfield | Navigation Aids | Non-Directional Radio Beacon - Ultra Hf | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Ndb/U |
| C-AFLD-NAID-OMKR | Civil | Airfield | Navigation Aids | Outer Marker | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Om |
| C-AFLD-NAID-OTHR | Civil | Airfield | Navigation Aids | Other | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Other |
| C-AFLD-NAID-PAPI | Civil | Airfield | Navigation Aids | Precision Approach Path Indicator | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Papi |
| C-AFLD-NAID-PARD | Civil | Airfield | Navigation Aids | Precision Approach Radar | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Par |
| C-AFLD-NAID-PLAS | Civil | Airfield | Navigation Aids | Pulse Light Approach Slope Indicator | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Plasi |
| C-AFLD-NAID-PRMN | Civil | Airfield | Navigation Aids | Precision Runway Monitor | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Prm |
| C-AFLD-NAID-PVAS | Civil | Airfield | Navigation Aids | Pulsating Visual Approach Slope Indicator | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Pvasi |
| C-AFLD-NAID-RADI | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Radio |
| C-AFLD-NAID-RADR | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Radar |
| C-AFLD-NAID-REIL | Civil | Airfield | Navigation Aids | Runway End Identifier Light | 203 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Reil |
| C-AFLD-NAID-RMTE | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Remote |
| C-AFLD-NAID-SCRA | Civil | Airfield | Navigation Aids | Secondary Radar Antenna | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Secra |
| C-AFLD-NAID-SDFC | Civil | Airfield | Navigation Aids | Simplified Directional Facility | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Sdf |
| C-AFLD-NAID-SITE | Civil | Airfield | Navigation Aids | Site Features | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Site Features |
| C-AFLD-NAID-STRB | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Strobe Beacons |
| C-AFLD-NAID-TCAN | Civil | Airfield | Navigation Aids | Tactical Air Navigation | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Tacan |
| C-AFLD-NAID-TLSG | Civil | Airfield | Navigation Aids | Transponder Landing System Approach Glideslope | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Tls-Apgs |
| C-AFLD-NAID-TLSL | Civil | Airfield | Navigation Aids | Transponder Landing System - Localizer | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Tls-Loc |
| C-AFLD-NAID-TLSY | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Tls-Apgs |
| C-AFLD-NAID-TRCV | Civil | Airfield | Navigation Aids | Tricolor Visual Approach Slope Indicator | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Trcv |
| C-AFLD-NAID-TVAS | Civil | Airfield | Navigation Aids | T Visual Approach Slope Indicator | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids T-Vasi |
| C-AFLD-NAID-VASI | Civil | Airfield | Navigation Aids | Visual Approach Slope Indicator | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Vasi |
| C-AFLD-NAID-VISI | Civil | Airfield | Navigation Aids | Continuous | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Nav Aids Visual |
| C-AFLD-NAID-VOR~ | Civil | Airfield | Navigation Aids | Vhf Omnidirectional Range | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Vor |
| C-AFLD-NAID-VORD | Civil | Airfield | Navigation Aids | Vor Collocated With Dme | 203 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Vor\_Dme |
| C-AFLD-NAID-VORT | Civil | Airfield | Navigation Aids | Vor Collocated With Tacan | 203 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Vortac |
| C-AFLD-NAID-VORX | Civil | Airfield | Navigation Aids | Vor Test Facility | 203 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Vot |
| C-AFLD-NAID-WAAS | Civil | Airfield | Navigation Aids | Wide Area Augmentation System |  | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aids Waas |
| C-AFLD-OTLN-AHOA | Civil | Airfield | Outline | Operations Area | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Air Operations Area Outline |
| C-AFLD-OTLN-FREQ | Civil | Airfield | Outline | Frequency Area | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Frequency Area Outline |
| C-AFLD-OTLN-INFL | Civil | Airfield | Outline | Infield Area | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Infield Areas Outline |
| C-AFLD-OTLN-MOVM | Civil | Airfield | Outline | Movement Area | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Movement Areas Outline |
| C-AFLD-WTHR-EQPM | Civil | Airfield | Weather | Equipment | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Airfield Navigational Aid Weather Equipment |
| C-AIRS-OBJT | Civil | Airport Airspace Related Features | Objects |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Obstruction |
| C-AIRS-OBJT-OTLN | Civil | Airport Airspace Related Features | Objects | Outline | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Obstructions Outline Area |
| C-AIRS-OBSC-APRC | Civil | Airport Airspace Related Features | Obstruction Identification Surface | App | 1 | App | 0 | 0 | 0 | 0.0065 | Airspace Far Part 77 Approach Surface |
| C-AIRS-OBSC-CONL | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Far Part 77 Conical Surface |
| C-AIRS-OBSC-DPRT | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Dep | 1 | Dep | 0 | 0 | 0 | 0.0065 | Airspace Departure Surface (Dept) |
| C-AIRS-OBSC-HORZ | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Horizontal | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Far Part 77 Horizontal Surface |
| C-AIRS-OBSC-OEI\_ | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace One Engine Inoperative Surface |
| C-AIRS-OBSC-OTHR | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Other | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Other Airspace Surfaces |
| C-AIRS-OBSC-PRIM | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Primary | 1 | P77 | 0 | 0 | 0 | 0.0065 | Airspace Far Part 77 Primary Surface |
| C-AIRS-OBSC-TERP | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Terps | 151 | Sfo-Tsa | 0 | 0 | 0 | 0.0065 | Airspace Terps Surfaces |
| C-AIRS-OBSC-TRNS | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Far Part 77 Transitional Surface |
| C-AIRS-OBSC-VAPR | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Approach Surface (Aaaa) |
| C-AIRS-OBSC-VCON | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Conical Surface (Aaac) |
| C-AIRS-OBSC-VHOR | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Horizontal Surface (Aaah) |
| C-AIRS-OBSC-VPRM | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Runway Primary Surface (Aaap) |
| C-AIRS-OBSC-VPRO | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Vertically Guided Transitional | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Protection Surface (Aaav) |
| C-AIRS-OBSC-VTRN | Civil | Airport Airspace Related Features | Obstruction Identification Surface | Continuous | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Airspace Vertically Guided Approach Transitional Surface (Aaat) |
| C-ANNO-BRNG | Civil | Annotation | Bearings And Distance Labels |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Bearings And Distance Labels |
| C-ANNO-COOR | Civil | Annotation | Coordinates / Northing Easting |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Coordinates / Northing Easting |
| C-ANNO-IDEN | Civil | Annotation | Identification Tags |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Identification Tags |
| C-ANNO-KEYN | Civil | Annotation | Keynotes |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Keynotes |
| C-ANNO-LABL | Civil | Annotation | Labels |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Labels |
| C-ANNO-LEGN | Civil | Annotation | Legend, Symbols Keys |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Legends, Symbol Keys |
| C-ANNO-MARK | Civil | Annotation | Markers, Break Marks, Leaders |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Markers, Break Marks, Leaders |
| C-ANNO-MATC | Civil | Annotation | Match Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Match Lines |
| C-ANNO-NOTE | Civil | Annotation | Notes |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Notes |
| C-ANNO-NPLT | Civil | Annotation | Non-Plotting Graphic Information |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Non-Plotting Graphic Information |
| C-ANNO-RDME | Civil | Annotation | Read-Me Layer (Not Plotted) |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Read-Me Layer (Not Plotted) |
| C-ANNO-REDL | Civil | Annotation | Redlines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Redlines |
| C-ANNO-REF1-TBLK | Civil | Annotation | Reference 1 | Title Block | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Reference 1 Title Block |
| C-ANNO-REF2-BMAP | Civil | Annotation | Reference 2 | Basemap | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Reference 2 Basemap |
| C-ANNO-REF3-UTIL | Civil | Annotation | Reference 3 | Utilities | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Reference 3 Utilities |
| C-ANNO-REFR | Civil | Annotation | Reference, External Files |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation External Reference Files (Xref) |
| C-ANNO-REVC | Civil | Annotation | Revision Clouds |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Revision Clouds |
| C-ANNO-REVS | Civil | Annotation | Revision Indicators And Text |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Revision Indicators And Text |
| C-ANNO-SCHD | Civil | Annotation | Schedules |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Schedules |
| C-ANNO-SYMB | Civil | Annotation | Reference Symbols |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Reference Symbols |
| C-ANNO-TABL | Civil | Annotation | Data Tables |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Table |
| C-ANNO-TABL-TITL | Civil | Annotation | Data Tables | Table Title | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Table Title |
| C-ANNO-TABL-TTBL | Civil | Annotation | Data Tables | Table Borders | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Table Borders |
| C-ANNO-TITL | Civil | Annotation | Drawing Or Detail Titles | Drawing Or Detail Titles | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Drawing Or Detail Titles |
| C-ANNO-TTLB | Civil | Annotation | Border And Titleblock | Border And Title Block | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotationborder And Title Block |
| C-ANNO-VFRM | Civil | Annotation | Vertical Format |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Annotation Vertically Formatted |
| C-APRN-ACPK | Civil | Apron Related Features | Aircraft Parking |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Aircraft Parking |
| C-APRN-ANOM | Civil | Apron Related Features | Lines |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Aircraft Non-Movement Area |
| C-APRN-JETB | Civil | Apron Related Features | Airport Jetbridge |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Aircraft Jetbridge |
| C-APRN-MRKG-BUSP | Civil | Apron Related Features | Pavement Markings | Bus Parking | 6 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Pavement Marking Bus Parking |
| C-APRN-MRKG-FLPK | Civil | Apron Related Features | Pavement Markings | Fuel Cart Parking | 77 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Pavement Marking Fuelcard Parking |
| C-APRN-MRKG-FLPT | Civil | Apron Related Features | Pavement Markings | Fuelpit | 77 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Pavement Marking Fuelpit |
| C-APRN-MRKG-FREQ | Civil | Apron Related Features | Pavement Markings | (Vor) Receiver Marking | 77 | Continuous | 0 | 0 | 0 | 0.0100 | Apron (Vor) Receiver Pavement Marking |
| C-APRN-MRKG-GSE~ | Civil | Apron Related Features | Pavement Markings | Ground Service Equipment | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Ground Service Equipment Pavement Marking |
| C-APRN-MRKG-INGZ | Civil | Apron Related Features | Pavement Markings | Ingestion Zone | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Aircraft Ingestion Zone Pavement Marking |
| C-APRN-MRKG-LDID | Civil | Apron Related Features | Pavement Markings | Lead In Id | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Lead In Id Pavement Marking |
| C-APRN-MRKG-LDIN | Civil | Apron Related Features | Pavement Markings | Lead In Line | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Lead In Line Pavement Marking |
| C-APRN-MRKG-LDOT | Civil | Apron Related Features | Pavement Markings | Lead Out Line | 77 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Lead Out Line Pavement Marking |
| C-APRN-MRKG-LDTX | Civil | Apron Related Features | Pavement Markings | Lead Line Text | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Lead In Text Pavement Marking |
| C-APRN-MRKG-LDZN | Civil | Apron Related Features | Pavement Markings | Lead Line Zone | 6 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Lead In Zone Pavement Marking |
| C-APRN-MRKG-MVNM | Civil | Apron Related Features | Pavement Markings | Movement - Non Movement | 6 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Movement-Non Movement Pavement Marking |
| C-APRN-MRKG-NOPK | Civil | Apron Related Features | Pavement Markings | No Parking | 6 | Continuous | 0 | 0 | 0 | 0.0100 | Apron No Parking Pavement Marking |
| C-APRN-MRKG-OTHL | Civil | Apron Related Features | Pavement Markings | Other Line | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Other Line Pavement Marking |
| C-APRN-MRKG-PBBZ | Civil | Apron Related Features | Pavement Markings | Passenger Boarding Bridge Zone | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Passenger Boarding Bridge Zone Pavement Marking |
| C-APRN-MRKG-PBRD | Civil | Apron Related Features | Pavement Markings | Push Back Road | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Push Back Road Pavement Marking |
| C-APRN-MRKG-PBWT | Civil | Apron Related Features | Pavement Markings | Push Back With Tug | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Apron Push Back With Tug Pavement Marking |
| C-APRN-MRKG-PLBE | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking Plbe |
| C-APRN-MRKG-PLBH | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking Plbh |
| C-APRN-MRKG-PLBS | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking Plbs |
| C-APRN-MRKG-PVTX | Civil | Apron Related Features | Pavement Markings | Pavement Text | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking Text |
| C-APRN-MRKG-RPTB | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking |
| C-APRN-MRKG-RPTW | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking |
| C-APRN-MRKG-SBAR | Civil | Apron Related Features | Pavement Markings | Stopbar | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Stopbar Pavement Marking |
| C-APRN-MRKG-SBTX | Civil | Apron Related Features | Pavement Markings | Stopbar Text | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Stopbar Text Pavement Marking |
| C-APRN-MRKG-SENV | Civil | Apron Related Features | Pavement Markings | Safety Envelope | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Service Envelope Pavement Marking |
| C-APRN-MRKG-TXLN | Civil | Apron Related Features | Pavement Markings | Taxilane Crossing | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Taxilane Crossing Pavement Marking |
| C-APRN-MRKG-WALK | Civil | Apron Related Features | Pavement Markings | Walkway | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Walk Pavement Marking |
| C-APRN-MRKG-WGTR | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking |
| C-APRN-MRKG-WKGR | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking |
| C-APRN-MRKG-WKWT | Civil | Apron Related Features | Pavement Markings |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Marking |
| C-APRN-OTLN | Civil | Apron Related Features | Outline |  | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Outlines |
| C-APRN-PVMT-OTHR | Civil | Apron Related Features | Pavement | Other | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Pavement Features Not Listed Elsewhere |
| C-APRN-SIGN | Civil | Apron Related Features | Sign |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Apron Signage |
| C-BARR-HDRL | Civil | Barrier | Handrail |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Barrier Handrail |
| C-BARR-KRAL | Civil | Barrier | K-Rail |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Barrier K-Rail |
| C-BARR-LOWP | Civil | Barrier | Low Point |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Barrier Low Point |
| C-BARR-WATR | Civil | Barrier | Water Supply |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Barrier Water Supply |
| C-BLDG-OTLN | Civil | Buildings And Primary Structures | Outline |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Buildings And Primary Structures Outline |
| C-BLDG-ROOF | Civil | Buildings And Primary Structures | Roof |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Buildings And Primary Structures Roof |
| C-BLDG-TOWR | Civil | Buildings And Primary Structures | Towers |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Buildings And Primary Structures Tower |
| C-DETL-LINE | Civil | Detail | Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Details - Line |
| C-ESMT-ROAD | Civil | Easements | Roadways |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Easements |
| C-FENC-AOA\_ | Civil | Fences | Air Operations Area |  | 7 | Sfo-Aoa-Fenc | 0 | 0 | 0 | 0.0065 | Fence - Air Operations Area (Aoa) |
| C-FENC-BLST | Civil | Fences | Blast Area |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Fence - Blast |
| C-FENC-CMBN | Civil | Fences | Combination Chain-Link And K-Rail |  | 7 | Sfo-Fenc Square | 0 | 0 | 0 | 0.0065 | Fence - Combination Chainlink And K-Rail |
| C-FENC-CNLK | Civil | Fences | Chainlink |  | 7 | Sfo-Fenc Circle | 0 | 0 | 0 | 0.0065 | Fence - Chainlink |
| C-FENC-HDRL | Civil | Fences | Handrail |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Fence - Handrail |
| C-FENC-KRAL | Civil | Fences | K-Rail |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Fence - K-Rail |
| C-FENC-NAOA | Civil | Fences | Non-Air Operations Area |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Fence - Non-Air Operations Area (Aoa) |
| C-FENC-SERT | Civil | Fences | Security |  | 7 | Sfo-Fenc X | 0 | 0 | 0 | 0.0065 | Fence - Security |
| C-FENC-TEMP | Civil | Fences | Temporary |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Fence - Temporary |
| C-GATE-LINE | Civil | Gate | Lines |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Gates Incidental To Structure |
| C-GRID-MAJR | Civil | Grids | Major |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Major Grid Lines |
| C-GRID-MINR | Civil | Grids | Minor |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Minor Grid Lines |
| C-HYDR-CTCH | Civil | Hydraulic Structure | Catchment Area |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Hydraulic Structure Catchment Area |
| C-LOCN-OTLN-PROJ | Civil | Limits Of Construction | Outline | Projector System | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Limits Of Construction Outline |
| C-LOCN-OTLN-STAG | Civil | Limits Of Construction | Outline |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Limits Of Construction Staging Outline |
| C-PRKG-BLRD | Civil | Parking | Bollard |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Bollard |
| C-PRKG-CURB | Civil | Parking | Curb |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Curb |
| C-PRKG-MRKG | Civil | Parking | Pavement Markings |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Pavement Marking Line/Symbol |
| C-PRKG-MRKG-PVTX | Civil | Parking | Pavement Markings | Text | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Pavement Marking Text |
| C-PRKG-BARR | Civil | Parking | Barrier |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Barrier |
| C-PRKG-OTLN | Civil | Parking | Outline |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Parking Lot Outlines |
| C-PROF-ROAD | Civil | Profile | Roadways |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Road Profile |
| C-PROP-BNDY | Civil | Property | Political Boundaries |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Property Boundary |
| C-PROP-BRNG | Civil | Property | Bearings And Distance Labels |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Property Bearing And Distance |
| C-PROP-ESMT | Civil | Property | Easements |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Property Easement |
| C-PROP-LEAS | Civil | Property | Lease |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Property Lease |
| C-PROP-LINE | Civil | Property | Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Property Lines |
| C-PROP-LOTS | Civil | Property | Parking Lots |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Property Lots |
| C-PROP-RSRV | Civil | Property | Reservation |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Property Reservation |
| C-PVMT-CONF | Civil | Pavement | Conform |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Pavement Conform |
| C-PVMT-OTLN-SECT | Civil | Pavement | Outline | Section | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Pavement Section Outline |
| C-PVMT-OTLN-SLAB | Civil | Pavement | Outline | Slab | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Pavement Slab Outline |
| C-RAIL-BRDG-ATRN | Civil | Railroad | Bridge | Air Train | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Air Train Bridge |
| C-RAIL-BRDG-BART | Civil | Railroad | Bridge | Bay Area Rapid Transit | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Bart Bridge |
| C-RAIL-BRDG-OTHR | Civil | Railroad | Bridge | Other | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Other Bridge |
| C-RAIL-CNTR-ATRN | Civil | Railroad | Center | Air Train | 253 | Center2 | 0 | 0 | 0 | 0.0065 | Railroad Air Train Centerline |
| C-RAIL-CNTR-BART | Civil | Railroad | Center | Bay Area Rapid Transit | 253 | Center2 | 0 | 0 | 0 | 0.0065 | Railroad Bart Track Centerline |
| C-RAIL-CNTR-OTHR | Civil | Railroad | Center | Other | 253 | Center2 | 0 | 0 | 0 | 0.0065 | Railroad Other Track Centerline |
| C-RAIL-COLS-ATRN | Civil | Railroad | Columns | Air Train | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Air Train Supporting Columns |
| C-RAIL-COLS-BART | Civil | Railroad | Columns | Bay Area Rapid Transit | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Bart Supporting Columns |
| C-RAIL-COLS-OTHR | Civil | Railroad | Columns | Other | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Other Supporting Columns |
| C-RAIL-OTLN-YARD | Civil | Railroad | Outline |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Yard |
| C-RAIL-STAT-ATRN | Civil | Railroad | State | Air Train | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Air Train State-Owned |
| C-RAIL-STAT-BART | Civil | Railroad | State | Bay Area Rapid Transit | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Bart Track State-Owned |
| C-RAIL-STAT-OTHR | Civil | Railroad | State | Other | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Other Airport Train Station |
| C-RAIL-STRS-ATRN | Civil | Railroad | Stairs | Air Train | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Railroad Air Train Stairs |
| C-RAIL-TRAK-ATRN | Civil | Railroad | Track | Air Train | 253 | Sfo-Tracks | 0 | 0 | 0 | 0.0065 | Railroad Air Train Track |
| C-RAIL-TRAK-BART | Civil | Railroad | Track | Bay Area Rapid Transit | 253 | Sfo-Tracks | 0 | 0 | 0 | 0.0065 | Railroad Bart Track |
| C-ROAD-ASSM | Civil | Roadways | Assemblies And Subassemblies |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Assemblies And Subassemblies |
| C-ROAD-ASSM-BLIN | Civil | Roadways | Assembly | Baseline | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Assembly Baseline |
| C-ROAD-ASSM-OFFS | Civil | Roadways | Assembly | Offset | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Assembly Offset |
| C-ROAD-BLRD | Civil | Roadways | Bollard |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Bollard |
| C-ROAD-BRDG | Civil | Roadways | Bridge |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Bridge Outline |
| C-ROAD-BRDG-ROAD | Civil | Roadways | Bridge | Roadways | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Bridge Roadway |
| C-ROAD-CNTR | Civil | Roadways | Center |  | 6 | Center2 | 0 | 0 | 0 | 0.0065 | Roadway Centerline |
| C-ROAD-CORR | Civil | Roadways | Corridor |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Corridor |
| C-ROAD-CORR-BNDY | Civil | Roadways | Corridor | Political Boundaries | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Corridor Boundary |
| C-ROAD-CURB | Civil | Roadways | Curb |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Curb |
| C-ROAD-CURB-EDGE | Civil | Roadways | Curb | Edge | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Curb Edge |
| C-ROAD-CURV | Civil | Roadways | Curve |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Curves |
| C-ROAD-DEVC | Civil | Roadways | Devices |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Devices |
| C-ROAD-DRIV | Civil | Roadways | Driveways |  | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Driveway Edge Of Pavement |
| C-ROAD-DRIV-CNTR | Civil | Roadways | Driveways | Center | 4 | Center2 | 0 | 0 | 0 | 0.0065 | Roadway Driveway Centerline |
| C-ROAD-EDGE | Civil | Roadways | Edge |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Edge Of Pavement |
| C-ROAD-FEAT | Civil | Roadways | Feature (General) |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Featureline |
| C-ROAD-GUTR | Civil | Roadways | Gutter |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Gutter |
| C-ROAD-INTS | Civil | Roadways | Intersections |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Intersections |
| C-ROAD-LABL | Civil | Roadways | Labels |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Labels |
| C-ROAD-LINE | Civil | Roadways | Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Tangent Lines |
| C-ROAD-LINE-EXTN | Civil | Roadways | Lines | Pvi Extension Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pvi Extension Lines |
| C-ROAD-LINK | Civil | Roadways | Chain Link |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Corridor And Section Links |
| C-ROAD-MARK | Civil | Roadways | Markers, Break Marks, Leaders |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Corridor And Section Marks |
| C-ROAD-MASS-LINE | Civil | Roadways | Mass Haul | Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul Line |
| C-ROAD-MASS-LINE-FREE | Civil | Roadways | Mass Haul | Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Free Haul Area Hatch |
| C-ROAD-MASS-LINE-OVER | Civil | Roadways | Mass Haul | Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Overhaul Area Hatch |
| C-ROAD-MASS-VIEW | Civil | Roadways | Mass Haul | Triangulation View | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul View |
| C-ROAD-MASS-VIEW-GRID-MAJR | Civil | Roadways | Mass Haul | Triangulation View | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul View Major Grid |
| C-ROAD-MASS-VIEW-GRID-MINR | Civil | Roadways | Mass Haul | Triangulation View | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul View Minor Grid |
| C-ROAD-MASS-VIEW-TITL | Civil | Roadways | Mass Haul | Triangulation View | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul View Titles |
| C-ROAD-MASS-VIEW-TTLB | Civil | Roadways | Mass Haul | Triangulation View | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Mass Haul Stations And Ticks |
| C-ROAD-MRKG-BIKE | Civil | Roadways | Pavement Markings | Bicycles | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Bicycle Pavement Markings |
| C-ROAD-MRKG-CNTR | Civil | Roadways | Pavement Markings | Center | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Centerline Pavement Markings |
| C-ROAD-MRKG-CURB | Civil | Roadways | Pavement Markings | Curb | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Curb Pavement Markings |
| C-ROAD-MRKG-EDGE | Civil | Roadways | Pavement Markings | Edge | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Edge Pavement Markings |
| C-ROAD-MRKG-GUTR | Civil | Roadways | Pavement Markings | Gutter | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Gutter Pavement Markings |
| C-ROAD-MRKG-LANE | Civil | Roadways | Pavement Markings | Lane | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Lane Pavement Markings |
| C-ROAD-MRKG-SBAR | Civil | Roadways | Pavement Markings | Stopbar | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Stopbar Pavement Markings |
| C-ROAD-MRKG-SHLD | Civil | Roadways | Pavement Markings | Shoulder | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Shoulder Pavement Markings |
| C-ROAD-MRKG-SIGN | Civil | Roadways | Pavement Markings | Sign | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sign Pavement Markings |
| C-ROAD-OTLN | Civil | Roadways | Outline |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Road Outlines |
| C-ROAD-PROF | Civil | Roadways | Profile |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profiles |
| C-ROAD-PROF-ASMC | Civil | Roadways | Profile | Asymmetrical Curves | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Assymetrical Curves |
| C-ROAD-PROF-CURV | Civil | Roadways | Profile | Curve | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Vertical Curves |
| C-ROAD-PROF-DIAG | Civil | Roadways | Profile | Diagrams | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Band Diagrams |
| C-ROAD-PROF-GRID | Civil | Roadways | Profile | Grids | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Grid |
| C-ROAD-PROF-GRID-GEOM | Civil | Roadways | Profile | Grids | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Grid At Horizontal Geometry Points |
| C-ROAD-PROF-GRID-MAJR | Civil | Roadways | Profile | Grids | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Major Grid |
| C-ROAD-PROF-GRID-MINR | Civil | Roadways | Profile | Grids | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Minor Grid |
| C-ROAD-PROF-LABL | Civil | Roadways | Profile | Labels | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Label |
| C-ROAD-PROF-LINE | Civil | Roadways | Profile | Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Lines |
| C-ROAD-PROF-LINE-EXTN | Civil | Roadways | Profile | Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Line And Parabolic Curve Extensions |
| C-ROAD-PROF-LTOF | Civil | Roadways | Profile | Left Offset Sample Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Left Offset Sample Lines |
| C-ROAD-PROF-PARB | Civil | Roadways | Profile | Parabolic Curves | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Parabolic Curves |
| C-ROAD-PROF-PNTS | Civil | Roadways | Profile | Geometry Points | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Geometry Points |
| C-ROAD-PROF-PROJ | Civil | Roadways | Profile | Projector System | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Projection |
| C-ROAD-PROF-PROP | Civil | Roadways | Profile | Property | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadways: Profile New |
| C-ROAD-PROF-RTOF | Civil | Roadways | Profile | Right Offset Sample Lines | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Right Offset Sample Lines |
| C-ROAD-PROF-STAN-GEOM | Civil | Roadways | Profile | Stationing | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Geometry Point Station Labels |
| C-ROAD-PROF-STAN-MAJR | Civil | Roadways | Profile | Stationing | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Major Station Labels |
| C-ROAD-PROF-STAN-MINR | Civil | Roadways | Profile | Stationing | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Minor Station Labels |
| C-ROAD-PROF-TICK | Civil | Roadways | Profile | Tick Marks | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile Tick Marks |
| C-ROAD-PROF-TITL | Civil | Roadways | Profile | Drawing Or Detail Titles | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile View Title |
| C-ROAD-PROF-TTLB | Civil | Roadways | Profile | Border And Titleblock | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Profile View Border Line |
| C-ROAD-PVMT | Civil | Roadways | Pavement |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement |
| C-ROAD-PVMT-CURB | Civil | Roadways | Pavement | Curb | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement Curb |
| C-ROAD-PVMT-GUTR | Civil | Roadways | Pavement | Gutter | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement Gutter |
| C-ROAD-PVMT-ISLD | Civil | Roadways | Pavement | Island | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement Island |
| C-ROAD-PVMT-SHLD | Civil | Roadways | Pavement | Shoulder | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement Shoulder |
| C-ROAD-SAMP | Civil | Roadways | Sample Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sample Lines |
| C-ROAD-SWLK | Civil | Roadways | Pavement | Sidewalk | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Pavement Sidewalk |
| C-ROAD-SECT | Civil | Roadways | Section |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section Views |
| C-ROAD-SECT-DIAG | Civil | Roadways | Section | Diagrams | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section View Diagrams |
| C-ROAD-SECT-GRID | Civil | Roadways | Section | Grids | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section View Grid |
| C-ROAD-SECT-LABL | Civil | Roadways | Section | Labels | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section Labels |
| C-ROAD-SECT-PROJ | Civil | Roadways | Section | Projector System | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section Projections |
| C-ROAD-SECT-SHET | Civil | Roadways | Section | Sheets | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section Sheets |
| C-ROAD-SECT-TABL | Civil | Roadways | Section | Data Tables | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section Data Tables |
| C-ROAD-SECT-TICK | Civil | Roadways | Section | Tick Marks | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section View Tick Marks |
| C-ROAD-SECT-TITL | Civil | Roadways | Section | Drawing Or Detail Titles | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section View Title |
| C-ROAD-SECT-TTLB | Civil | Roadways | Section | Border And Titleblock | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Section View Border Line |
| C-ROAD-SGHT-EYE-PATH | Civil | Roadways | Sight Distance | Eye | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Eye Path |
| C-ROAD-SGHT-LIMT-LINE | Civil | Roadways | Sight Distance | Limit | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Sight Limitation Line |
| C-ROAD-SGHT-OBST-AREA | Civil | Roadways | Sight Distance | Obstructions | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Obstructed Area |
| C-ROAD-SGHT-OBST-LINE | Civil | Roadways | Sight Distance | Obstructions | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Obstructed Sight Line |
| C-ROAD-SGHT-OBST-PATH | Civil | Roadways | Sight Distance | Obstructions | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Obstructed Eye Path |
| C-ROAD-SGHT-VIS-LINE | Civil | Roadways | Sight Distance | Visible | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Sight Distance Visible Sight Lines |
| C-ROAD-SHAP | Civil | Roadways | Corridor And Section Shapes |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Corridor And Section Shapes |
| C-ROAD-SIGN | Civil | Roadways | Sign |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Signs |
| C-ROAD-SIGN-STOP | Civil | Roadways | Sign | Stop Sign | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Stop Sign |
| C-ROAD-SIGN-YILD | Civil | Roadways | Sign | Yield Sign | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Yield Sign |
| C-ROAD-SPIR | Civil | Roadways | Spirals |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Spirals |
| C-ROAD-STAN | Civil | Roadways | Stationing |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Stations |
| C-ROAD-STAN-MAJR | Civil | Roadways | Stationing | Major | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Major Station Labels |
| C-ROAD-STAN-MINR | Civil | Roadways | Stationing | Minor | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Minor Station Labels |
| C-ROAD-TABL | Civil | Roadways | Data Tables |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Roadway Data Tables |
| C-RUNW-CNTR-DISP | Civil | Runway | Center | Displaced Threshold Point/Position | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Center Displaced Threshold Point |
| C-RUNW-CNTR-ENDP | Civil | Runway | Center | End Point | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Center Endpoint |
| C-RUNW-CNTR-THRS | Civil | Runway | Center | Threshold Point/Position | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Center Threshold Point |
| C-RUNW-EDGE | Civil | Runway | Edge |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Edge |
| C-RUNW-LABL | Civil | Runway | Labels |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Labels |
| C-RUNW-LABL-BOTM | Civil | Runway | Labels | Bottom | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Label Marking Point |
| C-RUNW-LINE | Civil | Runway | Lines |  | 7 | Center2 | 0 | 0 | 0 | 0.0065 | Runway Centerlines |
| C-RUNW-LINE-LAHS | Civil | Runway | Lines | Land And Hold Short Position/Area | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Land And Hold Short Area (Lahso) |
| C-RUNW-MRKG-AMPT | Civil | Runway | Pavement Markings | Aiming Point | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Aiming Point Marking (Aiming\_Point) |
| C-RUNW-MRKG-ARWS | Civil | Runway | Pavement Markings | Displaced Threshold Arrowhead Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Arrowhead Marking (Arrow\_Head) |
| C-RUNW-MRKG-CENT | Civil | Runway | Pavement Markings | Centerline Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Centerline Marking (Rwy\_Cl) |
| C-RUNW-MRKG-CHEV | Civil | Runway | Pavement Markings | Blastpad/Non-Aircraft Area Chevron Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Chevron Marking (Chevron) |
| C-RUNW-MRKG-CNTR | Civil | Runway | Pavement Markings | Center | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Centerline Markings |
| C-RUNW-MRKG-DESG | Civil | Runway | Pavement Markings | Runway Designator Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Designated Name Marking (Rwy\_Id) |
| C-RUNW-MRKG-DISP | Civil | Runway | Pavement Markings | Displaced Threshold Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Displaced Threshold Markings |
| C-RUNW-MRKG-DIST | Civil | Runway | Pavement Markings | Fixed Distance Marking | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Fixed Distance Markings |
| C-RUNW-MRKG-EDGE | Civil | Runway | Pavement Markings | Edge | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Edge Striping |
| C-RUNW-MRKG-LABL | Civil | Runway | Pavement Markings | Labels | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Intersection Marking |
| C-RUNW-MRKG-RHLD | Civil | Runway | Pavement Markings | Runway Hold Marking | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Hold (Rwy\_Hold) |
| C-RUNW-MRKG-SHLD | Civil | Runway | Pavement Markings | Shoulder | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Shoulder Markings |
| C-RUNW-MRKG-TBAR | Civil | Runway | Pavement Markings | Threshold Bar Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Threshold Bar (Thrsh\_Bar) |
| C-RUNW-MRKG-TDWN | Civil | Runway | Pavement Markings | Touchdown Zone Marking | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Touch Down Marking (Tdz\_Mark) |
| C-RUNW-MRKG-THRS | Civil | Runway | Pavement Markings | Threshold Marker | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Threshold Markers |
| C-RUNW-OTLN | Civil | Runway | Outline |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Edges |
| C-RUNW-OTLN-ARST | Civil | Runway | Outline | Arresting Gear Location | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Arresting Gear Location |
| C-RUNW-OTLN-BLST | Civil | Runway | Outline | Blastpad/Stopway Marking | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Blast Pad And Stopway Markings |
| C-RUNW-OTLN-INTS | Civil | Runway | Outline | Intersection | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Intersection Outline |
| C-RUNW-OTLN-SEGM | Civil | Runway | Outline | Segment | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Segment |
| C-RUNW-OTLN-STWY | Civil | Runway | Outline | Stopway | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Stopway Markings |
| C-RUNW-PVMT-SHLD | Civil | Runway | Pavement | Shoulder | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Pavement Area Shoulder |
| C-RUNW-SAFT | Civil | Runway | Safety Areas |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Safety Area |
| C-RUNW-SHLD | Civil | Runway | Shoulder |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Shoulder Markings |
| C-RUNW-SIGN | Civil | Runway | Sign |  | 8 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Signs |
| C-SIGN-BUOY | Civil | Sign | Buoy |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Sign Buoys |
| C-SIGN-POLE | Civil | Sign | Poles |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Sign Poles |
| C-SITE-FENC | Civil | Site Features | Fences |  | 253 | Sfo-Fenc X | 0 | 0 | 0 | 0.0065 | Site Features Fences And Handrails |
| C-SITE-OTLN-TUNL | Civil | Site Features | Outline | Tunnel | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Site Features Tunnels Outline |
| C-SLUR-FILL | Civil | Slurry | Fill And Cover Material |  | 7 | Sfo-Abandoned & Slurry Filled | 0 | 0 | 0 | 0.0065 | Abandoned And Slurry Filled |
| C-STRM-BASN | Civil | Storm Drain | Stilling And Settling Basin |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Stilling And Settling Basin |
| C-STRM-CAP~ | Civil | Storm Drain | Plug |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Plug/Cap |
| C-STRM-CBSN | Civil | Storm Drain | Catch Basin |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Catch Basin |
| C-STRM-COUT | Civil | Storm Drain | Cleanout |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Clean Out |
| C-STRM-ENPT | Civil | Storm Drain | End Cap |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain End Cap |
| C-STRM-FDRN | Civil | Storm Drain | Flood Drain |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Flood Drain |
| C-STRM-FORC | Civil | Storm Drain | Force Main |  | 124 | Sfo-Drainfm | 0 | 0 | 0 | 0.0065 | Storm Drain Force Main |
| C-STRM-HWAL | Civil | Storm Drain | Headwall |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Headwalls And Endwalls |
| C-STRM-INLET | Civil | Storm Drain | Inlet |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Inlet |
| C-STRM-JUNC | Civil | Storm Drain | Junction |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Junction |
| C-STRM-MHOL | Civil | Storm Drain | Manhole |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Manhole |
| C-STRM-PIPE | Civil | Storm Sewer | Piping |  | 124 | Sfo-Draina | 0 | 0 | 0 | 0.0065 | Storm Drain Abandoned |
| C-STRM-PIPE | Civil | Storm Drain | Piping |  | 124 | Sfo-Drain | 0 | 0 | 0 | 0.0065 | Storm Drain Piping |
| C-STRM-PIPE-MAIN | Civil | Storm Drain | Piping | Mainline | 124 | Sfo-Drain | 0 | 0 | 0 | 0.0065 | Storm Drain Mainline Piping |
| C-STRM-PIPE-SLUR | Civil | Storm Sewer | Piping | Sfo-Draina Slurryfilled | 124 | Sfo-Draina Slurryfilled | 0 | 0 | 0 | 0.0065 | Storm Drain Abandoned And Slurry Filled |
| C-STRM-POC | Civil | Storm Drain | Point Of Connection |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Point Of Connection |
| C-STRM-POND | Civil | Storm Drain | Ponds |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Retention Pond |
| C-STRM-PROF | Civil | Storm Drain | Profile |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Profile |
| C-STRM-RFDR | Civil | Storm Drain | Roof Drains |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Roof Drains |
| C-STRM-SCTN | Civil | Storm Drain | Section |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Section |
| C-STRM-SRVC | Civil | Storm Drain | Service Connector |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Service Connection |
| C-STRM-STBO | Civil | Storm Drain | Stubout |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Stubout |
| C-STRM-TABL | Civil | Storm Drain | Data Tables |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Data Tables |
| C-STRM-TRNC | Civil | Storm Drain | Trench |  | 124 | Sfo-Draintd | 0 | 0 | 0 | 0.0065 | Storm Drain Trench Drain |
| C-TAXI-LINE-HOLD | Civil | Airport Taxiway Or Taxilane | Lines | Holding Position | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Holding Lines |
| C-TAXI-MRKG-CNTR | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Center | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Centerline (Twy\_Cl) |
| C-TAXI-MRKG-DECP | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Deceptive Bar | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Deceptive Bar |
| C-TAXI-MRKG-DIRS | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Surface-Painted Directional Sign | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Directional Sign |
| C-TAXI-MRKG-EDGE | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Edge | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Edge Markings |
| C-TAXI-MRKG-HBAR | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Hold Bar | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Hold Bar Line (Twy\_Hold) |
| C-TAXI-MRKG-HINT | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Intersection Hold | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Intersection Hold (Intersection\_Hold) |
| C-TAXI-MRKG-HLDS | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Surface-Painted Hold Sign | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Hold Sign |
| C-TAXI-MRKG-MNMV | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Movement/Non-Movement Area | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Movement Area Boundary |
| C-TAXI-MRKG-NAME | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Name | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Indicator Bubble |
| C-TAXI-MRKG-NOMV | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Non-Movement Area (Non\_Move\_Area) | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Non-Movement Area (Non\_Move\_Area) |
| C-TAXI-MRKG-PAD\_ | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Ingestion Zone | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Ingestion Zone |
| C-TAXI-MRKG-PVTX | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Text | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Pavement Marking Text |
| C-TAXI-MRKG-SDLR-GREN | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Shoulder | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Shoulder Markings |
| C-TAXI-MRKG-SHLD | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Shoulder | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Shoulders With Annotation |
| C-TAXI-MRKG-THLD | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Taxiway Hold Position | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Hold (Twy\_Hold) |
| C-TAXI-MRKG-TLOC | Civil | Airport Taxiway Or Taxilane | Pavement Markings | Surface-Painted Taxiway Location Sign | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Location Sign Marking (Location\_Sign) |
| C-TAXI-OTLN | Civil | Airport Taxiway Or Taxilane | Outline |  | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Outlines |
| C-TAXI-OTLN-INTS | Civil | Airport Taxiway Or Taxilane | Outline | Intersection | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Intersection Outline |
| C-TAXI-PVMT | Civil | Airport Taxiway Or Taxilane | Pavement |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Pavement |
| C-TAXI-PVMT-OTHR | Civil | Airport Taxiway Or Taxilane | Pavement | Other | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Other Pavement |
| C-TAXI-SHLD | Civil | Airport Taxiway Or Taxilane | Shoulder |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Shoulders With Annotation |
| C-TAXI-SIGN | Civil | Airport Taxiway Or Taxilane | Sign |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Signs |
| C-TAXI-SIGN-HILS | Civil | Airport Taxiway Or Taxilane | Sign | Ils Hold | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Hold Instrument Landing System Sign |
| C-TAXI-SIGN-HRAP | Civil | Airport Taxiway Or Taxilane | Sign | Approach Area Hold | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Hold Runway Approach Sign |
| C-TAXI-SIGN-TDIR | Civil | Airport Taxiway Or Taxilane | Sign | Tempered Di Return-System | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Direction Return System Sign |
| C-TAXI-SIGN-TEND | Civil | Airport Taxiway Or Taxilane | Sign | Taxiway End | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway End Sign |
| C-TAXI-SIGN-TERM | Civil | Airport Taxiway Or Taxilane | Sign | Terminal | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Terminal Sign |
| C-TAXI-SIGN-TLOC | Civil | Airport Taxiway Or Taxilane | Sign | Taxiway Location | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Location Sign |
| C-TAXI-TOFA | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area |  | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-I~~~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group I | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-II~~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group Iii | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-III~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group Iii | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-IV~~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group Iv | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-V~~~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group V | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TAXI-TOFA-VI~~ | Civil | Airport Taxiway Or Taxilane | Taxiway Object Free Area | Aircraft Design Group Vi | 141 | Sfo-Tofa | 0 | 0 | 0 | 0.0065 | Taxiway Object Free Area |
| C-TINN | Civil | Triangulated Irregular Network |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Triangulated Irregular Network |
| C-TINN-BNDY | Civil | Triangulated Irregular Network | Political Boundaries |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Triangulated Irregular Network Boundary |
| C-TINN-VIEW | Civil | Triangulated Irregular Network | Triangulation View |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Triangulated Irregular Network Triangle View |
| C-TOPO-CNTR-GENL | Civil | Topographic Feature | Center | General | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topographic General Control |
| C-TOPO-CNTR-GEOD | Civil | Topographic Feature | Center | Geodetic | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topographic Geodetic Control |
| C-TOPO-CNTR-SPOT | Civil | Topographic Feature | Center | Spot Elevations | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topographic Control Spot Elevations |
| C-TOPO-FEAT | Civil | Topographic Feature | Feature |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Featureline |
| C-TOPO-GRAD | Civil | Topographic Feature | Grading Work |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Grading Object |
| C-TOPO-GRAD-CUTS | Civil | Topographic Feature | Grading Work | Cut Material | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Grading Cut Material |
| C-TOPO-GRAD-FILL | Civil | Topographic Feature | Grading Work | Fill And Cover Material | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Grading Fill Material |
| C-TOPO-MAJR | Civil | Topographic Feature | Major |  | 3 | X-Con5 | 0 | 0 | 0 | 0.0065 | Topography Major Contours |
| C-TOPO-MINR | Civil | Topographic Feature | Minor |  | 3 | X-Con1 | 0 | 0 | 0 | 0.0065 | Topography Minor Contours |
| C-TOPO-OTLN-AUZN | Civil | Topographic Feature | Outline | Noise Contour/Zone | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Noise Contour/Zone |
| C-TOPO-SFOB-ORIG |  | Topographic Feature |  |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Sfo-B Origin Marker |
| C-TOPO-USER | Civil | Topographic Feature | User |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Topography User Defined Contours |
| C-TOPO-WATR | Civil | Topographic Feature | Water Supply |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Water Level Reference (Lwrp, After-Grading Lwrp, Swl, Etc) |
| C-TOPO-WATR-MNHI | Civil | Topographic Feature | Water Supply | Mean High Water | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Water Mean High Level |
| C-TOPO-WATR-MNLO | Civil | Topographic Feature | Water Supply | Mean Low Water | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Mean Low Level |
| C-TOPO-WATR-MNSL | Civil | Topographic Feature | Water Supply | Mean Sea Level | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Mean Sea Level |
| C-TOPO-WDRP | Civil | Topographic Feature | Water Drop |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Water Drop |
| C-TOPO-WSHD | Civil | Topographic Feature | Watershed |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Topography Watershed |
| C-TRAF-CNTR-STOP | Civil | Traffic | Center | Transportation Vehicle Stop | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Traffic Bus Stop |
| C-TRAF-GRAL | Civil | Traffic | Guard Rail |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Traffic Guard Rail |
| C-TRAF-MARK | Civil | Traffic | Markers, Break Marks, Leaders |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Traffic Marking |
| C-TRAF-SWLK | Civil | Traffic | Sidewalks |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Traffic Walks, Trails And Bicycle Paths |
| C-VSRD-MRKG-ARRW | Civil | Vehicle Service Road On Airfield | Pavement Markings | Arrow | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Arrow Pavement Marking |
| C-VSRD-MRKG-CNTR | Civil | Vehicle Service Road On Airfield | Pavement Markings | Center | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Centerline Pavement Marking |
| C-VSRD-MRKG-EDGE | Civil | Vehicle Service Road On Airfield | Pavement Markings | Edge | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Edge Pavement Marking |
| C-VSRD-MRKG-EDZP | Civil | Vehicle Service Road On Airfield | Pavement Markings |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Pavement Marking |
| C-VSRD-MRKG-SBAR | Civil | Vehicle Service Road On Airfield | Pavement Markings | Stop Bar | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Stop Bar Pavement Marking |
| C-VSRD-MRKG-SBTX | Civil | Vehicle Service Road On Airfield | Pavement Markings | Stop Bar Text | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Stop Bar Pavement Marking Text |
| C-VSRD-MRKG-SPLT-RED~ | Civil | Vehicle Service Road On Airfield | Pavement Markings | Red | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Pavement Marking |
| C-VSRD-MRKG-SPLT-WHIT | Civil | Vehicle Service Road On Airfield | Pavement Markings | White | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Vehicle Service Road Pavement Marking Red |
| E-COMM-ACCS-DEVC | Electrical | Communications | Access | Devices | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Security Access Devices White |
| E-COMM-ANTN | Electrical | Communications | Antenna |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Antenna |
| E-COMM-BLIN | Electrical | Communications | Baseline |  | 30 | Sfo-Comm | 0 | 0 | 0 | 0.0065 | Communications Baseline |
| E-COMM-CABL | Electrical | Communications | Cable Systems |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Coax Cable |
| E-COMM-CABL-TRAY | Electrical | Communications | Cable Systems | Cabletray And Wireways | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Cabletray |
| E-COMM-CNDT | Electrical | Communications | Conduit |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Conduit |
| E-COMM-CNTR | Electrical | Communications | Controller |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Controller |
| E-COMM-COVR-AREA | Electrical | Communications | Coverage | Area | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Coverage Area |
| E-COMM-DEVC | Electrical | Communications | Devices |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communication Devices |
| E-COMM-DISC | Electrical | Communications | Disconnect |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communication Disconnect |
| E-COMM-DUCT | Electrical | Communications | Ductwork |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Ductbank |
| E-COMM-EQPM | Electrical | Communications | Equipment |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Equipment |
| E-COMM-FIBR | Electrical | Communications | Fiber Optics Cable |  | 30 | Sfo-Fob | 0 | 0 | 0 | 0.0065 | Communications Fiber Optics Cable |
| E-COMM-JBOX | Electrical | Communications | Junction Box |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Junction Boxes |
| E-COMM-JBOX-HAND | Electrical | Communications | Junction Box | Hand Hole | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Handhole |
| E-COMM-JUNC | Electrical | Communications | Junction |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Junction |
| E-COMM-LINE-OVHD | Electrical | Communications | Lines | Overhead | 30 | Sfo-Ohtele | 0 | 0 | 0 | 0.0065 | Overhead Communications Lines |
| E-COMM-MHOL | Electrical | Communications | Manhole |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Manhole |
| E-COMM-PBOX | Electrical | Communications | Pullbox |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Pull Boxes |
| E-COMM-POLE | Electrical | Communications | Poles |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Poles |
| E-COMM-RISR | Electrical | Communications | Risers |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Risers |
| E-COMM-SOUN-DEVC | Electrical | Communications | Sound System | Devices | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Sound System Devices |
| E-COMM-SWBD | Electrical | Communications | Switchboard |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Pull Switchboards |
| E-COMM-SWCH | Electrical | Communications | Switches |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Switches |
| E-COMM-TBOX | Electrical | Communications | Terminal Box |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Pull Terminal Boxes |
| E-COMM-VALT | Electrical | Communications | Vault & Pits |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Vault Or Pit |
| E-DETL-1LIN | Electrical | Details | One Line Diagrams |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications One Line Diagrams |
| E-DETL-DIAG | Electrical | Details | Diagrams Other Than One-Line |  | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications One Line Diagrams |
| E-FIRE-ALRM | Electrical | Fire Protection System | Alarm System | Devices | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Communications Diagrams Other Than One-Line |
| E-LITE-CNDT | Electrical | Lighting | Conduit |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Conduits |
| E-LITE-EMER | Electrical | Lighting | Emergency |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Emergency Fixtures |
| E-LITE-EXIT | Electrical | Lighting | Exit |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Fire Protection Exit Fixtures |
| E-LITE-EXTR-CIRC | Electrical | Lighting | Exterior | Circuits | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Lighting Exterior Circuits |
| E-LITE-EXTR-GRND | Electrical | Lighting | Exterior | Ground System | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Exterior Ground System |
| E-LITE-EXTR-JBOX | Electrical | Lighting | Exterior | Junction Box | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Exterior Junction Boxes |
| E-LITE-EXTR-PANL | Electrical | Lighting | Exterior | Panels | 6 | Dot2 | 0 | 0 | 0 | 0.0065 | Lighting Exterior Panels |
| E-LITE-EXTR-POLE | Electrical | Lighting | Exterior | Poles | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Exterior Poles |
| E-LITE-EXTR-SWCH | Electrical | Lighting | Exterior | Switches | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Contactors, Photoelectric Controls, Low-Voltage Lighting Controls, Etc. |
| E-LITE-EXTR-WALL | Electrical | Lighting | Exterior | Walls | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Exterior Wall Lights |
| E-LITE-FIXT | Electrical | Lighting | Fixture |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Fixture |
| E-LITE-OBST | Electrical | Lighting | Obstructions |  | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Obstructions Lighting |
| E-LITE-OBST-CIRC | Electrical | Lighting | Obstructions | Circuits | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Obstructions Lighting Circuits |
| E-LITE-OBST-JBOX | Electrical | Lighting | Obstructions | Junction Box | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Obstructions Lighting Junction Box |
| E-LITE-RUNW-CNTR | Electrical | Lighting | Runway | Center | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Runway Center Lighting |
| E-LITE-RUNW-CNTR-CIRC | Electrical | Lighting | Runway | Center | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Runway Center Lighting Circuits |
| E-LITE-RUNW-CNTR-JBOX | Electrical | Lighting | Runway | Center | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Center Lighting Junction Box |
| E-LITE-RUNW-EDGE | Electrical | Lighting | Runway | Edge | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Runway Edge Lighting |
| E-LITE-RUNW-EDGE-CIRC | Electrical | Lighting | Runway | Edge | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Runway Edge Lighting Circuits |
| E-LITE-RUNW-EDGE-JBOX | Electrical | Lighting | Runway | Edge | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Edge Lighting Junction Box |
| E-LITE-RUNW-GARD | Electrical | Lighting | Runway | Guard Light | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Runway Guard Light |
| E-LITE-RUNW-GARD-CIRC | Electrical | Lighting | Runway | Guard Light | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Runway Guard Light Circuits |
| E-LITE-RUNW-GARD-JBOX | Electrical | Lighting | Runway | Guard Light | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Guard Light Junction Box |
| E-LITE-RUNW-STOP | Electrical | Lighting | Runway | Stop Light | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Runway Stop Light |
| E-LITE-RUNW-STOP-CIRC | Electrical | Lighting | Runway | Stop Light | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Runway Stop Light Circuits |
| E-LITE-RUNW-STOP-JBOX | Electrical | Lighting | Runway | Stop Light | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Stop Light Junction Box |
| E-LITE-RUNW-TDZN | Electrical | Lighting | Runway | Touchdown Zone | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Runway Touchdown Zone Light |
| E-LITE-RUNW-TDZN-CIRC | Electrical | Lighting | Runway | Touchdown Zone | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Runway Touchdown Zone Light Circuits |
| E-LITE-RUNW-TDZN-JBOX | Electrical | Lighting | Runway | Touchdown Zone | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Runway Touchdown Zone Light Junction Box |
| E-LITE-SIGN-RC28 | Electrical | Lighting | Sign | Remote Lighting Controller 28 | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 28 Sign |
| E-LITE-SIGN-RC28-CIRC | Electrical | Lighting | Sign | Remote Lighting Controller 28 | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 28 Sign Circuits |
| E-LITE-SIGN-RC28-JBOX | Electrical | Lighting | Sign | Remote Lighting Controller 28 | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 28 Sign Junction Box |
| E-LITE-SIGN-RC29 | Electrical | Lighting | Sign | Remote Lighting Controller 29 | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 29 Sign |
| E-LITE-SIGN-RC29-CIRC | Electrical | Lighting | Sign | Remote Lighting Controller 29 | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 29 Sign Circuits |
| E-LITE-SIGN-RC29-JBOX | Electrical | Lighting | Sign | Remote Lighting Controller 29 | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 29 Sign Junction Box |
| E-LITE-SIGN-RC35 | Electrical | Lighting | Sign | Remote Lighting Controller 36 | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 36 Sign |
| E-LITE-SIGN-RC35-CIRC | Electrical | Lighting | Sign | Remote Lighting Controller 36 | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 36 Sign Circuits |
| E-LITE-SIGN-RC35-JBOX | Electrical | Lighting | Sign | Remote Lighting Controller 36 | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 36 Sign Junction Box |
| E-LITE-SIGN-RC7~ | Electrical | Lighting | Sign | Remote Lighting Controller 7 | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 7 Sign |
| E-LITE-SIGN-RC7~-CIRC | Electrical | Lighting | Sign | Remote Lighting Controller 7 | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 7 Sign Circuits |
| E-LITE-SIGN-RC7~-JBOX | Electrical | Lighting | Sign | Remote Lighting Controller 7 | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 7 Sign Junction Box |
| E-LITE-SIGN-RC8~ | Electrical | Lighting | Sign | Remote Lighting Controller 8 | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 8 Sign |
| E-LITE-SIGN-RC8~-CIRC | Electrical | Lighting | Sign | Remote Lighting Controller 8 | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 8 Sign Circuits |
| E-LITE-SIGN-RC8~-JBOX | Electrical | Lighting | Sign | Remote Lighting Controller 8 | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Remote Lighting Controller 8 Sign Junction Box |
| E-LITE-SWCH | Electrical | Lighting | Switch |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Lighting Switch |
| E-LITE-TAXI-CNTL | Electrical | Lighting | Airport Taxiway Or Taxilane | Centerline | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Taxiway Centerline Lights |
| E-LITE-TAXI-CNTL-CIRC | Electrical | Lighting | Airport Taxiway Or Taxilane | Centerline | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Taxiway Centerline Lights Circuits |
| E-LITE-TAXI-CNTL-JBOX | Electrical | Lighting | Airport Taxiway Or Taxilane | Centerline | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Centerline Lights Junction Box |
| E-LITE-TAXI-EDGE | Electrical | Lighting | Airport Taxiway Or Taxilane | Edge | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Taxiway Edge Lighting |
| E-LITE-TAXI-EDGE-CIRC | Electrical | Lighting | Airport Taxiway Or Taxilane | Edge | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Taxiway Edge Lighting Circuits |
| E-LITE-TAXI-EDGE-JBOX | Electrical | Lighting | Airport Taxiway Or Taxilane | Edge | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Edge Lighting Junction Box |
| E-LITE-TAXI-SPARE-CIRC | Electrical | Lighting | Airport Taxiway Or Taxilane | Spare | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Taxiway Lighting Spare Circuits |
| E-LITE-TAXI-SPARE-JBOX | Electrical | Lighting | Airport Taxiway Or Taxilane | Spare | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Taxiway Lighting Spare Junction Box |
| E-LITE-THRS | Electrical | Lighting | Threshold |  | 3 | Dot2 | 0 | 0 | 0 | 0.0065 | Threshold Lighting |
| E-LITE-THRS-CIRC | Electrical | Lighting | Threshold | Circuits | 6 | Circuit | 0 | 0 | 0 | 0.0065 | Threshold Lighing Circuits |
| E-LITE-THRS-JBOX | Electrical | Lighting | Threshold | Junction Box | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Threshold Lighting Junction Box |
| E-POWR-CNDT | Electrical | Power | Conduit |  | 252 | Continuous | 0 | 0 | 0 | 0.0200 | Power Conduit |
| E-POWR-CNTR | Electrical | Power | Controller |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Power Controller |
| E-POWR-DISC | Electrical | Power | Disconnect |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Power Disconnect |
| E-POWR-DUCT | Electrical | Power | Ductwork |  | 10 | Sfo-Powrdb | 0 | 0 | 0 | 0.0065 | Power Ductbank |
| E-POWR-EQPM | Electrical | Power | Equipment |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Power Equipment |
| E-POWR-GENR | Electrical | Power | Generators |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Generators And Auxiliary Equipment |
| E-POWR-JUNC | Electrical | Power | Junction |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Junction |
| E-POWR-LINE | Electrical | Power | Lines |  | 10 | Sfo-Powr | 0 | 0 | 0 | 0.0065 | Power Line |
| E-POWR-LINE-12KV | Electrical | Power | Lines | 12kv | 10 | Sfo-Powr12kva | 0 | 0 | 0 | 0.0065 | Abandoned Power - 12kv |
| E-POWR-LINE-OVHD | Electrical | Power | Lines | Overhead | 10 | Sfo-Ohpowr | 0 | 0 | 0 | 0.0065 | Overhead Power Line |
| E-POWR-MARK | Electrical | Power | Markers, Break Marks, Leaders |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Markers |
| E-POWR-METR | Electrical | Power | Metering Devices |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Meter |
| E-POWR-MHOL | Electrical | Power | Manhole |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Manhole |
| E-POWR-PANL | Electrical | Power | Panels |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Panelboards, Switchboards, Mcc, Unit Substations, Backing Boards, Patch Panel Racks |
| E-POWR-PBOX | Electrical | Power | Pullbox |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Pullbox |
| E-POWR-POLE | Electrical | Power | Poles |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Poles |
| E-POWR-POLE-GUYS | Electrical | Power | Poles | Guying | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Guying Equipment |
| E-POWR-SBST | Electrical | Power | Substations |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Substation |
| E-POWR-SWCH | Electrical | Power | Switches |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Fuse Cutouts, Motor Starters, Contactors, Pole Mounted Switches, Circuit Breakers, Gang Operated Disconnects, Reclosers, Cubicle Switches |
| E-POWR-VALT | Electrical | Power | Vault & Pits |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Vault And Pits |
| E-POWR-WIRE | Electrical | Power | Wire |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Power Wire |
| E-POWR-XFMR | Electrical | Power | Transformers |  | 10 | Continuous | 0 | 0 | 0 | 0.0065 | Power Transformer |
| E-SERT-ACCS-CABL | Electrical | Security System | Access | Cable | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Access Cable |
| E-SERT-ACCS-EQPM | Electrical | Security System | Access | Equipment | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Access Equipment |
| E-SERT-ACCS-JBOX | Electrical | Security System | Access | Junction Box | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Access Junction Box |
| E-SERT-ACCS-RISR | Electrical | Security System | Access | Riser | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Access Riser |
| E-SERT-ALRM | Electrical | Security System | Alarm |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Alarm |
| E-SERT-CCTV-CABL | Electrical | Security System | Closed-Circuit Television System | Cable | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Security System Closed-Circuit Television Cable |
| E-SERT-CCTV-EQPM | Electrical | Communications | Closed-Circuit Television System | Equipment | 30 | Continuous | 0 | 0 | 0 | 0.0065 | Security System Closed-Circuit Television Equipment |
| E-SERT-CCTV-JBOX | Electrical | Security System | Closed-Circuit Television System | Junction Box | 1 | Continuous | 0 | 0 | 0 |  | Security System Closed-Circuit Television Junction Box |
| E-SERT-CCTV-RISR | Electrical | Security System | Closed-Circuit Television System | Riser | 1 | Continuous | 0 | 0 | 0 |  | Security System Closed-Circuit Television Riser |
| F-AFFF-EQPM | Fire Protection | Aqueous Film-Forming Foam System | Equipment |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Fire Protection Aqueous Film-Forming Foam System Equipment |
| F-AFFF-PIPE | Fire Protection | Aqueous Film-Forming Foam System | Piping |  | 1 | Sfo-Auxfff | 0 | 0 | 0 | 0.0065 | Fire Protection Aqueous Film-Forming Foam System Piping |
| F-CO2S-EQPM | Fire Protection | Co2 System | Equipment |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Fire Protection Co2 System Equipment |
| F-CO2S-PIPE | Fire Protection | Co2 System | Piping |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Fire Protection Co2 System Piping |
| F-CTRL-PANL | Fire Protection | Control Points | Panels |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Fire Protection Control Panels |
| F-EQPM-STOR | Fire Protection | Equipment | Storage |  |  |  | 0 | 0 | 0 |  | Fire Protection Storage |
| F-SPKL-DEVC | Fire Protection | Sprinklers | Devices |  |  |  | 0 | 0 | 0 |  | Fire Protection Water Sprinklers |
| F-SPKL-PIPE | Fire Protection | Sprinklers | Pipe |  | 1 | Sfo-Firesprk | 0 | 0 | 0 | 0.0065 | Fire Protection Sprinkler Line |
| F-WATR-EQPM | Fire Protection | Water Supply | Equipment |  |  |  | 0 | 0 | 0 |  | Fire Protection Water Supply Equipment |
| F-WATR-HOSE | Fire Protection | Fire Protection System | Hoses |  | 1 | Sfo-Fireprot | 0 | 0 | 0 | 0.0065 | Fire Protection Hoses |
| F-WATR-PIPE | Fire Protection | Water Supply | Piping |  | 1 | Sfo-Firewatr | 0 | 0 | 0 | 0.0065 | Fire Protection Water Supply Piping |
| F-WATR-PUMP | Fire Protection | Water Supply | Pumps |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Fire Protection Water Supply Pumps |
| G-TTBK-2LD-ATTR | General | Title Block | Second Line | Attribute | 7 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Attributes In A 2 Line Definition |
| G-TTBK-3LD-ATTR | General | Title Block | Third Line | Attribute | 7 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Attributes In A 3 Line Definition |
| G-TTBK-ARRW | General | Title Block | North Arrow |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock North Arrow |
| G-TTBK-BRDR | General | Title Block | Border |  | 7 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Border |
| G-TTBK-DATE | General | Title Block | Date |  | 7 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Project Submission Date |
| G-TTBK-KEYM | General | Title Block | Keymap |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Keymap |
| G-TTBK-LINE | General | Title Block | Lines |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Wide Lines |
| G-TTBK-LOCN-ARRW | General | Title Block | Location Map | North Arrow | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Location Map North Arrow |
| G-TTBK-LOCN-MAP | General | Title Block | Location | Map | 252 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Location Map |
| G-TTBK-LOGO | General | Title Block | Logos |  | 156 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Sfo Logo |
| G-TTBK-MTCH-LINE | General | Title Block | Match | Lines | 7 | Phantom2 | 0 | 0 | 0 | 0.0065 | Titleblock Matchline |
| G-TTBK-REVW-STAT | General | Title Block | Revision | Status | 7 | Continuous | 0 | 0 | 0 | 0.0240 | Titleblock Review Status - "Check Print" Text In Lower Right Corner |
| G-TTBK-SCAL-BAR | General | Title Block | Scale | Bar | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Scale Bar |
| G-TTBK-SEQC-NMBR | General | Title Block | Sequence | Number | 7 | Continuous | 0 | 0 | 0 | 0.0120 | Titleblock Total Number Of Sheets "Tbd" |
| G-TTBK-STMP | General | Title Block | Stamp |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Stamp, Add Engineer's Initials 2 Letters |
| G-TTBK-TITL | General | Title Block | Title |  | 7 | Continuous | 0 | 0 | 0 | 0.0240 | Titleblock Contract Title And Number |
| G-TTBK-WIND-SLCT | General | Title Block |  |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Titleblock Plot Window Selection Circles |
| I-EQPM | Interior | Equipment |  |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Interior Equipment |
| I-FURN-ACCS | Interior | Furnishing | Accessories |  | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Furnishing Accessories |
| I-FURN-ARTW | Interior | Furnishing | Artwork |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Furnishing Artwork |
| I-FURN-CASE | Interior | Furnishing | Casework |  | 1 | Continuous | 0 | 0 | 0 | 0.0100 | Furnishing Casework |
| I-FURN-FREE | Interior | Furnishing | Freestanding |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Furnishing Freestanding |
| I-FURN-MLWK | Interior | Furnishing | Milwork |  | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Furnishing Milwork |
| I-FURN-OTHR | Interior | Furnishing | Other |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Furnishing Other |
| I-FURN-PLNT | Interior | Furnishing | Plants |  | 70 | Continuous | 0 | 0 | 0 | 0.0100 | Furnishing Plants |
| I-FURN-PNLS | Interior | Furnishing | System Panels |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Furnishing System Panels |
| I-FURN-SEAT | Interior | Furnishing | Seating |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Furnishing Seating |
| I-FLOR-SIGN | Interior | Floor | Signage |  | 7 | Continuous | 0 | 0 | 0 | 0.0100 | Furnishing Interior Signs |
| I-FURN-STOR | Interior | Furnishing | Storage (Component System) |  | 1 | Continuous | 0 | 0 | 0 | 0.0140 | Furnishing Storage (Component System) |
| L-PLNT-BEDS | Landscape | Plant And Landscape Material | Perennial And Annual Beds |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Perennial And Annual Beds |
| L-PLNT-BUSH | Landscape | Plant And Landscape Material | Bushes And Shrubs |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Bushes And Shrubs |
| L-PLNT-CTNR | Landscape | Plant And Landscape Material | Container Or Planter |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Container Or Planter |
| L-PLNT-MLCH | Landscape | Plant And Landscape Material | Mulches-Organic And Inorganic |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Mulches - Organic And Inorganic |
| L-PLNT-TREE | Landscape | Plant And Landscape Material | Trees |  | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Trees |
| L-PLNT-TURF | Landscape | Plant And Landscape Material | Lawn Areas |  | 2 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Lawn Areas |
| L-SITE-BRDG | Landscape | Site Features | Bridge |  | 4 | Continuous | 0 | 0 | 0 | 0.0065 | Landscape Bridge Site Features |
| L-SITE-FENC | Landscape | Site Features | Fences |  | 5 | Sfo-Fenc X | 0 | 0 | 0 | 0.0065 | Landscape Fences Site Features |
| L-SITE-GRND | Landscape | Site Features | Ground System |  |  |  | 0 | 0 | 0 | 0.0065 | Landscape Ground Cover |
| M-CHEM-EQPM | Mechanical | Chemical Treatment System | Equipment |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Chemical Treatment System Equipment |
| M-CHEM-PIPE | Mechanical | Chemical Treatment System | Piping |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Chemical Treatment System Piping |
| M-CMPA-AIRD | Mechanical | Compressed/Processed Air Systems | Air Drain Separator |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Air Drain Separator Point |
| M-CMPA-EQPM | Mechanical | Compressed/Processed Air Systems | Equipment |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Equipment |
| M-CMPA-PIPE | Mechanical | Compressed/Processed Air Systems | Piping |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Piping |
| M-CMPA-PIPE-RETN | Mechanical | Compressed/Processed Air Systems | Piping | Return | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Piping Return |
| M-CMPA-PIPE-SUPL | Mechanical | Compressed/Processed Air Systems | Piping | Supply | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Piping Supply |
| M-CMPA-POU~ | Mechanical | Compressed/Processed Air Systems | Point Of Use |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Point Of Use |
| M-CMPA-REGL | Mechanical | Compressed/Processed Air Systems | Regulator |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Regulator |
| M-CMPA-VALV | Mechanical | Compressed/Processed Air Systems | Valves |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Compressed/Processed Air Systems Piping Valve |
| M-CNDW-EQPM | Mechanical | Condenser Water Systems | Equipment |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Condenser Water Systems Equipment |
| M-CNDW-PIPE | Mechanical | Condenser Water Systems | Piping |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Condenser Water Systems Piping |
| M-CNDW-PIPE-RETN | Mechanical | Condenser Water Systems | Piping | Return | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Condenser Water Systems Piping Return |
| M-CNDW-PIPE-SUPL | Mechanical | Condenser Water Systems | Piping | Supply | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Condenser Water Systems Piping Supply |
| M-CONT-PIPE | Mechanical | Controls And Instrumentation | Piping |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Controls And Instrumentation Piping |
| M-CONT-THER | Mechanical | Controls And Instrumentation | Thermostats |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Controls And Instrumentation Thermostats |
| M-CONT-WIRE | Mechanical | Controls And Instrumentation | Wiring |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Controls And Instrumentation Low Voltage Wiring |
| M-CWTR-EQPM | Mechanical | Chilled Water Systems | Equipment |  | 7 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Equipment |
| M-CWTR-PIPE | Mechanical | Chilled Water Systems | Piping |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Piping |
| M-CWTR-PIPE-RETN | Mechanical | Chilled Water Systems | Piping | Return | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Piping Return |
| M-CWTR-PIPE-SUPL | Mechanical | Chilled Water Systems | Piping | Supply | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Piping Supply |
| M-CWTR-RETN | Mechanical | Chilled Water Systems | Water Return |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Water Return |
| M-CWTR-SPLY | Mechanical | Chilled Water Systems | Water Supply |  | 1 | Continuous | 0 | 0 | 0 | 0.0065 | Chilled Water Systems Water Supply |
| M-DETL-DIAG | Mechanical | Detail | Diagrams |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Diagram Line |
| M-DETL-DUCT | Mechanical | Detail | Ductwork |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Ductwork |
| M-DETL-ELEV | Mechanical | Detail | Elevation |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Elevation |
| M-DETL-OTHR | Mechanical | Detail | Other |  |  |  | 0 | 0 | 0 | 0.0065 | Mechanical Detail Object Line |
| M-DETL-PIPE | Mechanical | Detail | Piping |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Piping |
| M-DETL-PUMP | Mechanical | Detail | Pumps |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Pumps |
| M-DETL-SCHM | Mechanical | Detail | Schematic |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Schematics |
| M-DETL-SECT | Mechanical | Detail | Section |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Section |
| M-DETL-TANK | Mechanical | Detail | Storage Tanks |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Storage Tanks |
| M-DETL-VENT | Mechanical | Detail | Vents |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Vents |
| M-DETL-WIRE | Mechanical | Detail | Wiring |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Detail Wiring |
| M-EMCS-DUCT | Mechanical | Energy Monitoring Control System | Ductwork |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Energy Monitoring Control System Ductwork |
| M-EMCS-EMER | Mechanical | Energy Monitoring Control System | Emergency |  |  |  | 0 | 0 | 0 |  | Emergency Systems Equipment |
| M-EMCS-JBOX | Mechanical | Energy Monitoring Control System | Junction Box |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Energy Monitoring Control System Junction Box |
| M-EMCS-SIGN | Mechanical | Energy Monitoring Control System | Sign |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Energy Monitoring Control System Signs |
| M-EQPM | Mechanical | Equipment |  |  |  |  | 0 | 0 | 0 |  |  |
| M-ESCA | Mechanical | Escalators |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Escalator |
| M-EVTR | Mechanical | Elevators |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Elevator |
| M-FUEL-JBOX | Mechanical | Fuel Systems | Junction Box |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Junction Boxes, Manholes, Handholes, Test Boxes |
| M-FUEL-MARK | Mechanical | Fuel Systems | Markers, Break Marks, Leaders |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Markers, Break Marks, Leaders |
| M-FUEL-VALV | Mechanical | Fuel Systems | Valves |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Valves |
| M-GLYC-DRAN-BASN | Mechanical | Glycol/Deicing Systems | Drains | Stilling And Settling Basin | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Drainage Basin |
| M-GLYC-EQPM | Mechanical | Glycol/Deicing Systems | Equipment |  | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Equipment |
| M-GLYC-EQPM-VLVE | Mechanical | Glycol/Deicing Systems | Equipment | Valve | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Valve |
| M-GLYC-MARK | Mechanical | Glycol/Deicing Systems | Markers, Break Marks, Leaders |  | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Marker |
| M-GLYC-PIPE-RETN | Mechanical | Glycol/Deicing Systems | Piping | Return | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Piping Return |
| M-GLYC-PIPE-SUPL | Mechanical | Glycol/Deicing Systems | Piping | Supply | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Piping Supply |
| M-GLYC-PIPE-VALV | Mechanical | Glycol/Deicing Systems | Piping | Valves | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Piping Valve |
| M-GLYC-PUMP | Mechanical | Glycol/Deicing Systems | Pumps |  | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Pumps |
| M-GLYC-STAT-PUMP | Mechanical | Glycol/Deicing Systems | State | Pumps | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Pump Station |
| M-GLYC-TANK | Mechanical | Glycol/Deicing Systems | Storage Tanks |  | 20 | Continuous | 0 | 0 | 0 | 0.0065 | Glycol/Deicing Systems Tank |
| M-HVAC-GRIL | Mechanical | Heating And Cooling Systems | Grilles |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Systems Grills |
| M-HVAC-AHU~ | Mechanical | Heating And Cooling Systems | Air Handling Unit |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Air Handling Unit |
| M-HVAC-CDFF | Mechanical | Heating And Cooling Systems | Ceiling Diffusers |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Ceiling Diffusers |
| M-HVAC-DMPR | Mechanical | Heating And Cooling Systems | Damper |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Damper |
| M-HVAC-DMPR-BACD | Mechanical | Heating And Cooling Systems | Fire, Smoke, Volume Damper | Backdraft Damper | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Backdraft Damper |
| M-HVAC-DMPR-BLNC | Mechanical | Heating And Cooling Systems | Fire, Smoke, Volume Damper | Balancing Damper |  |  | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Balancing Damper |
| M-HVAC-DMPR-FSD | Mechanical | Heating And Cooling Systems | Fire, Smoke, Volume Damper | Fire-Smoke Damper | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Fire Smoke Damper |
| M-HVAC-DUCT | Mechanical | Heating And Cooling Systems | Ductwork |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Ductwork |
| M-HVAC-DUCT-EXHT | Mechanical | Heating And Cooling Systems | Ductwork | Exhaust Air Duct | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Exhaust Air Ductwork |
| M-HVAC-DUCT-OSA~ | Mechanical | Heating And Cooling Systems | Ductwork | Outside Air Duct | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Outside Air Ductwork |
| M-HVAC-DUCT-OTHR | Mechanical | Heating And Cooling Systems | Ductwork | Other | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Other Air Ductwork |
| M-HVAC-DUCT-RETN | Mechanical | Heating And Cooling Systems | Ductwork | Return | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Return Air Ductwork |
| M-HVAC-DUCT-SUPL | Mechanical | Heating And Cooling Systems | Ductwork | Supply | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Supply Air Ductwork |
| M-HVAC-EHTR | Mechanical | Heating And Cooling Systems | Electric Space Heater |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Electric Space Heater |
| M-HVAC-EQPM | Mechanical | Heating And Cooling Systems | Equipment |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Equipment |
| M-HVAC-LINE | Mechanical | Heating And Cooling Systems | Lines |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Lines |
| M-HVAC-LOUV | Mechanical | Heating And Cooling Systems | Louvers |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Louvers |
| M-HVAC-LUVR | Mechanical | Heating And Cooling Systems | Louvers |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Louvers |
| M-HVAC-METR | Mechanical | Heating And Cooling Systems | Metering Devices |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Meter |
| M-HVAC-MKUP | Mechanical | Heating And Cooling Systems | Make Up |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Make Up Water |
| M-HVAC-PUMP | Mechanical | Heating And Cooling Systems | Pumps |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Pump |
| M-HVAC-REFG | Mechanical | Heating And Cooling Systems | Refrigeration Systems |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Refrigerant Lines |
| M-HVAC-RETN | Mechanical | Heating And Cooling Systems | Return |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Return Ductwork |
| M-HVAC-RETN-CNTR | Mechanical | Heating And Cooling Systems | Return | Center | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Return Ductwork Centerlines |
| M-HVAC-RETN-PIPE | Mechanical | Heating And Cooling Systems | Return | Piping | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Return Piping |
| M-HVAC-ROOF | Mechanical | Heating And Cooling Systems | Roof |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Roof |
| M-HVAC-STAT | Mechanical | Heating And Cooling Systems | State |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Thermostats |
| M-HVAC-THER | Mechanical | Heating And Cooling Systems | Thermostat |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Thermostat |
| M-HVAC-VALT | Mechanical | Heating And Cooling Systems | Vault & Pits |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Vault And Pit |
| M-HVAC-VALV | Mechanical | Heating And Cooling Systems | Valves |  | 122 | Continuous | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Valves |
| M-HVAC-VENT | Mechanical | Heating And Cooling Systems | Vents |  | 76 | Sfo-Venta(Hvac) | 0 | 0 | 0 | 0.0065 | Heating And Cooling Systems Abandoned Hvac Vent |
| M-HWTR-EQPM | Mechanical | Hot Water Heating System | Equipment |  | 11 | Continuous | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Equipment |
| M-HWTR-EWH~ | Mechanical | Hot Water Heating System | Electric Water Heater |  | 11 | Continuous | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Electric Water Heater |
| M-HWTR-HPIP-RETN | Mechanical | Hot Water Heating System | Hot Water/High-Pressure Piping | Return | 10 | Sfo-Hightempwatr-Rtrn(Hvac) | 0 | 0 | 0 | 0.0065 | Hot Water Heating System High Temp Water Return |
| M-HWTR-HPIP-SPLY | Mechanical | Hot Water Heating System | Hot Water/High-Pressure Piping | Supply | 10 | Sfo-Hightempwatr-Supl(Hvac) | 0 | 0 | 0 | 0.0065 | Hot Water Heating System High Temp Water Supply |
| M-HWTR-PIPE | Mechanical | Hot Water Heating System | Piping |  | 12 | Sfo-Hotwater(Hvac) | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Piping |
| M-HWTR-PIPE-RETN | Mechanical | Hot Water Heating System | Piping | Return | 11 | Sfo-Heatgwatr-Rtrn(Hvac) | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Piping Return |
| M-HWTR-PIPE-SUPL | Mechanical | Hot Water Heating System | Piping | Supply | 11 | Sfo-Heatgwatr-Supl(Hvac) | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Piping Supply |
| M-HWTR-TANK | Mechanical | Hot Water Heating System | Storage Tanks |  | 11 | Continuous | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Tank |
| M-HWTR-VALV | Mechanical | Hot Water Heating System | Valves |  | 11 | Continuous | 0 | 0 | 0 | 0.0065 | Hot Water Heating System Piping Valve |
| M-HYDR-EQPM | Mechanical | Hydraulic Structure | Equipment |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Hydraulic Structure Equipment |
| M-HYDR-PIPE | Mechanical | Hydraulic Structure | Piping |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Hydraulic Structure Piping |
| M-IW~~-CBSN | Mechanical | Industrial Waste Systems | Catch Basin |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Catch Basin |
| M-IW~~-COUT | Mechanical | Industrial Waste Systems | Cleanout |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Cleanout |
| M-IW~~-DISC | Mechanical | Industrial Waste Systems | Discharge |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Discharge Point |
| M-IW~~-JUNC | Mechanical | Industrial Waste Systems | Discharge Point |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Junction |
| M-IW~~-LSTA | Mechanical | Industrial Waste Systems | Lift Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Lift Station |
| M-IW~~-MARK | Mechanical | Industrial Waste Systems | Markers, Break Marks, Leaders |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Surface Markers/Signs |
| M-IW~~-MHOL | Mechanical | Industrial Waste Systems | Manhole |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Manhole |
| M-IW~~-OWSP | Mechanical | Industrial Waste Systems | Oil Water Separator |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Oil Water Separator |
| M-IW~~-PIPE | Mechanical | Industrial Waste Systems | Piping |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping |
| M-IW~~-PLUG | Mechanical | Industrial Waste Systems | Plug |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Plug |
| M-IW~~-PSTA | Mechanical | Industrial Waste Systems | Pump Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Pump Station |
| M-IW~~-REDU | Mechanical | Industrial Waste Systems | Piping Reducer |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Reducer |
| M-IW~~-STBO | Mechanical | Industrial Waste Systems | Stubout |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Stub Out |
| M-IW~~-STOR | Mechanical | Industrial Waste Systems | Storage |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Storage Area |
| M-IW~~-TANK | Mechanical | Industrial Waste Systems | Tanks |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Tanks |
| M-IW~~-TEST | Mechanical | Industrial Waste Systems | Test Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Electrolysis Test Station |
| M-IW~~-VALV-AIR~ | Mechanical | Industrial Waste Systems | Valve | Release | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Air Vacuum Release Valve |
| M-IW~~-VALV-SHUT | Mechanical | Industrial Waste Systems | Valve | Shutoff | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Shutoff Valve |
| M-IW~~-WASH | Mechanical | Industrial Waste Systems | Washrack |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Wash Rack |
| M-NGAS-MARK | Mechanical | Natural Gas Systems | Markers, Break Marks, Leaders |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Markers, Break Marks, Leaders |
| M-NGAS-METR | Mechanical | Natural Gas Systems | Meter |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Meter |
| M-NGAS-PIPE | Mechanical | Natural Gas Systems | Pipe |  | 6 | Sfo-Gasa | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Abandoned Pipe |
| M-NGAS-PLUG | Mechanical | Natural Gas Systems | Plug |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Plug |
| M-NGAS-PUMP | Mechanical | Natural Gas Systems | Pumps |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Pumps |
| M-NGAS-REG | Mechanical | Natural Gas Systems | Regulator |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Regulator |
| M-NGAS-STBO | Mechanical | Natural Gas Systems | Stubout |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Stubout |
| M-NGAS-TANK | Mechanical | Natural Gas Systems | Storage Tanks |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Tank |
| M-NGAS-VALT | Mechanical | Natural Gas Systems | Vault & Pits |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Vault |
| M-NGAS-VALV-SHUT | Mechanical | Natural Gas Systems | Valve | Shutoff | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Shutoff Valve |
| M-NGAS-VENT | Mechanical | Natural Gas Systems | Vents |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Vents |
| M-PIPE | Mechanical | Piping |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Mechanical Pipe |
| M-REFG-EQPM | Mechanical | Refrigeration Systems | Equipment |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Refrigeration Systems Equipment |
| M-REFG-PIPE | Mechanical | Refrigeration Systems | Piping |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Refrigeration Systems Piping |
| M-SANR-FIXT | Mechanical | Sanitary Sewer |  |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Fixture |
| M-SSWR-MARK | Mechanical | Sanitary Sewer | Markers, Break Marks, Leaders |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Markers/Signs |
| M-SSWR-METR | Mechanical | Sanitary Sewer | Metering Devices |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Metering Devices |
| M-SSWR-OWSP | Mechanical | Sanitary Sewer | Oil Water Separator |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Oil Water Separator |
| M-SSWR-PIPE | Mechanical | Sanitary Sewer | Piping |  | 3 | Sfo-Sewer | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Piping |
| M-SSWR-PLNT | Mechanical | Sanitary Sewer | Plant And Landscape Material |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Treatment Plants |
| M-SSWR-PROF | Mechanical | Sanitary Sewer | Profile |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Profile |
| M-SSWR-STRC | Mechanical | Sanitary Sewer | Structures |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Structure |
| M-SSWR-TANK-DISP | Mechanical | Sanitary Sewer | Storage Tanks | Disposal | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Disposal Tanks |
| M-SSWR-TANK-SEPT | Mechanical | Sanitary Sewer | Storage Tanks | Septic | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Septic Tanks |
| M-SWLK | Mechanical | Sidewalk |  |  | 252 | Continuous | 0 | 0 | 0 | 0.0065 | Moving Walkway |
| M-STEM-EQPM | Mechanical | Steam System | Equipment |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Steam System Equipment |
| M-STEM-PIPE | Mechanical | Steam System | Piping |  | 131 | Continuous | 0 | 0 | 0 | 0.0065 | Steam System Piping |
| M-WATR-BKFL | Mechanical | Water Supply | Backflow Preventer |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Backflow Preventer |
| M-WATR-FDSC | Mechanical | Water Supply | Fire Department Service Connection |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Fire Department Service Connection |
| M-WATR-HBIB | Mechanical | Water Supply | Hose Bib |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Hose Bib |
| M-WATR-MARK | Mechanical | Water Supply | Markers, Break Marks, Leaders |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Marker |
| M-WATR-METR | Mechanical | Water Supply | Meter |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Meter |
| M-WATR-MHOL | Mechanical | Water Supply | Manhole |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Manhole |
| M-WATR-PIPE | Mechanical | Water Supply | Piping |  | 5 | Sfo-Domwatr Or Drinkgwatr | 0 | 0 | 0 | 0.0065 | Water Supply Piping |
| M-WATR-PLUG | Mechanical | Water Supply | Plug |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Piping Plug |
| M-WATR-PUMP | Mechanical | Water Supply | Pumps |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Pumps |
| M-WATR-REDU | Mechanical | Water Supply | Reducer |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Piping Reducer |
| M-WATR-REGL | Mechanical | Water Supply | Devices | Regulator/Reducer | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Regulator |
| M-WATR-SMPL | Mechanical | Water Supply | Devices | Sampling Location | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Sampling Devices |
| M-WATR-STBO | Mechanical | Water Supply | Stubout |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Stubout |
| M-WATR-TANK | Mechanical | Water Supply | Tanks |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Storage Tanks |
| M-WATR-VALV-AIR | Mechanical | Water Supply | Valves | Release | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Air Release Valves |
| M-WATR-VALV-SHUT | Mechanical | Water Supply | Valve | Shutoff | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Shutoff Valve |
| S-BEAM | Structural | Beams |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Beams |
| S-BRCG | Structural | Bracing |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Bracing |
| S-COLS | Structural | Columns |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Columns |
| S-CURB | Structural | Curb |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Curb |
| S-DECK | Structural | Deck |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Deck |
| S-FNDN | Structural | Foundation |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Foundation |
| S-FNDN-PIER | Structural | Foundation | Drilled Piers |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Drilled Piers Foundation |
| S-FNDN-PILE | Structural | Foundation | Piles |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Piles Foundation |
| S-GRID | Structural | Grids |  |  | 253 | Center2 | 0 | 0 | 0 | 0.0065 | Structural Grid |
| S-JNTS | Structural | Joints |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Joints |
| S-JOIS | Structural | Joists |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Joists |
| S-PADS | Structural | Pads |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Pads |
| S-SIGN-FRMG | Structural | Sign | Framing |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Sign Framing |
| S-STRS-HRAL | Structural | Stairs | Hand Rails |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Stairs Handrail |
| S-STRS-LADD | Structural | Stairs | Ladders And Ladder Assemblies |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Stairs Ladders |
| S-STRS-OTHR | Structural | Stairs | Other |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Stairs Other |
| S-STRS-RISR | Structural | Stairs | Risers |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Stairs Riser |
| S-STRS-TRED | Structural | Stairs | Tread |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Stairs Tread |
| S-TRUS | Structural | Trusses |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Trusses |
| S-VALT | Structural | Vaults And Pits |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural |
| S-WALL | Structural | Walls |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Structural Walls |
| U-FUEL-AIRE | Utilities | Fuel Systems | Air Eliminator |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Air Eliminator |
| U-FUEL-ANTS | Utilities | Fuel Systems | Anode Test Station |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Electrolysis Test Station |
| U-FUEL-DEVC-HYDR | Utilities | Fuel Systems | Devices | Hydraulic Structure | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Hydrant Devices |
| U-FUEL-HIPT | Utilities | Fuel Systems | Highpoint Vent |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Highpoint Vent |
| U-FUEL-HYDR | Utilities | Fuel Systems | Hydraulic Structure |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Hydrant |
| U-FUEL-JUNC | Utilities | Fuel Systems | Junction |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Junction |
| U-FUEL-LOPT | Utilities | Fuel Systems | Lowpoint |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Lowpoint Drain |
| U-FUEL-MAIN | Utilities | Fuel Systems | Mainline |  | 241 | Sfo-Airfuel | 0 | 0 | 0 | 0.0065 | Fuel Systems Mainline |
| U-FUEL-METR | Utilities | Fuel Systems | Metering Devices |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Meters |
| U-FUEL-MWEL | Utilities | Fuel Systems | Monitoring Well |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Monitoring Well |
| U-FUEL-PIPE | Utilities | Fuel Systems | Piping |  | 241 | Sfo-Airfuel | 0 | 0 | 0 | 0.0065 | Fuel Systems Piping |
| U-FUEL-PIPE-RETN | Utilities | Fuel Systems | Piping | Return | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Piping Return |
| U-FUEL-PIPE-SUPL | Utilities | Fuel Systems | Piping | Supply | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Piping Supply |
| U-FUEL-PIT~ | Utilities | Fuel Systems | Pit |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Pit |
| U-FUEL-PLUG | Utilities | Fuel Systems | Plug |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Plug |
| U-FUEL-PUMP | Utilities | Fuel Systems | Pumps |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Pumps |
| U-FUEL-SURG-ABSO | Utilities | Fuel Systems | Surge Absorber | Surge Absorber | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Surge Absorber |
| U-FUEL-TANK | Utilities | Fuel Systems | Storage Tanks |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Storage Tanks |
| U-FUEL-VALT | Utilities | Fuel Systems | Vault & Pits |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Vault And Pit |
| U-FUEL-VALV-SHUT | Utilities | Fuel Systems | Valves | Shutoff | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Shutoff Valve |
| U-FUEL-VENT | Utilities | Fuel Systems | Vents |  | 241 | Continuous | 0 | 0 | 0 | 0.0065 | Fuel Systems Vents |
| U-IW~~-ANTS | Utilities | Industrial Waste Systems | Anode Test Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Electrolysis Test Station |
| U-IW~~-CBSN | Utilities | Industrial Waste Systems | Catch Basin |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Catch Basin |
| U-IW~~-COUT | Utilities | Industrial Waste Systems | Cleanout |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Cleanout |
| U-IW~~-FORC | Utilities | Industrial Waste Systems | Force Main |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Force Main |
| U-IW~~-JUNC | Utilities | Industrial Waste Systems | Junction |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Junction |
| U-IW~~-LSTA | Utilities | Industrial Waste Systems | Lift Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Lift Station |
| U-IW~~-MARK | Utilities | Industrial Waste Systems | Markers, Break Marks, Leaders |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Surface Markers/Signs |
| U-IW~~-MHOL | Utilities | Industrial Waste Systems | Manhole |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Manhole |
| U-IW~~-OWSP | Utilities | Industrial Waste Systems | Oil Water Separator |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Oil Water Separator |
| U-IW~~-PIPE | Utilities | Industrial Waste Systems | Piping |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping |
| U-IW~~-PLUG | Utilities | Industrial Waste Systems | Plug |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Plug |
| U-IW~~-PSTA | Utilities | Industrial Waste Systems | Pump Station |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Pump Station |
| U-IW~~-REDU | Utilities | Industrial Waste Systems | Reducer |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Reducer |
| U-IW~~-STBO | Utilities | Industrial Waste Systems | Stubout |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Piping Stub Out |
| U-IW~~-STOR | Utilities | Industrial Waste Systems | Storage Area |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Storage Area |
| U-IW~~-TANK | Utilities | Industrial Waste Systems | Storage Tanks |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Tanks |
| U-IW~~-VALV-AIR | Utilities | Industrial Waste Systems | Valves | Air Vacuum Release Valve | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Air Vacuum Release Valve |
| U-IW~~-VALV-SHUT | Utilities | Industrial Waste Systems | Valves | Shutoff | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Shutoff Valve |
| U-IW~~-WASH | Utilities | Industrial Waste Systems | Washrack |  | 255,63,0 | Continuous | 0 | 0 | 0 | 0.0065 | Industrial Waste Systems Wash Rack |
| U-NGAS-ANTS | Utilities | Natural Gas Systems | Anode Test Station |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Electrolysis Test Station |
| U-NGAS-JUNC | Utilities | Natural Gas Systems |  |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Junction |
| U-NGAS-MARK | Utilities | Natural Gas Systems |  |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Markers, Break Marks, Leaders |
| U-NGAS-METR | Utilities | Natural Gas Systems | Metering Devices |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Meters |
| U-NGAS-MHOL | Utilities | Natural Gas Systems |  |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Manhole |
| U-NGAS-PIPE | Utilities | Natural Gas Systems |  |  | 6 | Sfo-Gas | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping |
| U-NGAS-PLUG | Utilities | Natural Gas Systems | Plug |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Plug |
| U-NGAS-PUMP | Utilities | Natural Gas Systems |  |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Pumps |
| U-NGAS-REG | Utilities | Natural Gas Systems | Regulator |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Regulator |
| U-NGAS-STBO | Utilities | Natural Gas Systems | Stubout |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Stubout |
| U-NGAS-TANK | Utilities | Natural Gas Systems |  |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Tank |
| U-NGAS-VALV-SHUT | Utilities | Natural Gas Systems | Valves | Shutoff | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Piping Shutoff Valve |
| U-NGAS-VAULT | Utilities | Natural Gas Systems | Vault |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Vault |
| U-NGAS-VENT | Utilities | Natural Gas Systems | Vents |  | 6 | Continuous | 0 | 0 | 0 | 0.0065 | Natural Gas Systems Vents |
| U-SSWR-CBSN | Utilities | Sanitary Sewer | Catch Basin |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Catch Basin |
| U-SSWR-COUT | Utilities | Sanitary Sewer | Cleanout |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Cleanout |
| U-SSWR-FDRN | Utilities | Sanitary Sewer | Floor Drain |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Floor Drain |
| U-SSWR-FMAIN | Utilities | Sanitary Sewer | Force Main |  | 3 | Sfo-Sewerfm | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Force Main |
| U-SSWR-GRSE-INTE | Utilities | Sanitary Sewer | Grease Interceptor | Grease Interceptor | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Grease Interceptor |
| U-SSWR-GWTR | Utilities | Sanitary Sewer | Ground Water |  | 3 | Sfo-Sewergw | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Gray Water |
| U-SSWR-JUNC | Utilities | Sanitary Sewer | Junction |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Junction |
| U-SSWR-MAIN | Utilities | Sanitary Sewer | Mainline |  | 3 | Sfo-Sewer | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Mainline |
| U-SSWR-MHOL | Utilities | Sanitary Sewer | Manhole |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Manhole |
| U-SSWR-PIPE | Utilities | Sanitary Sewer | Piping |  | 3 | Sfo-Sewer | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Piping |
| U-SSWR-PLUG | Utilities | Sanitary Sewer | Plug |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Plug |
| U-SSWR-POC | Utilities | Sanitary Sewer | Point Of Connection |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Point Of Connection |
| U-SSWR-PROF | Utilities | Sanitary Sewer | Profile |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Profile |
| U-SSWR-PSTA | Utilities | Sanitary Sewer | Pump Station |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Pump Station |
| U-SSWR-PUMP | Utilities | Sanitary Sewer | Pumps |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Pumps |
| U-SSWR-REDU | Utilities | Sanitary Sewer | Reducer |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Piping Reducer |
| U-SSWR-SRVC | Utilities | Sanitary Sewer | Service Connect |  | 3 | Sfo-Sewerlat | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Service Connection |
| U-SSWR-STBO | Utilities | Sanitary Sewer | Stubout |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Piping Plug |
| U-SSWR-STRC | Utilities | Sanitary Sewer | Structures |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Structures |
| U-SSWR-TANK | Utilities | Sanitary Sewer | Storage Tanks |  | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Storage Tanks |
| U-SSWR-VALV-AIR | Utilities | Sanitary Sewer | Valves | Air Vacuum Release Valve | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Air Vacuum Release Valve |
| U-SSWR-VALV-SHUT | Utilities | Sanitary Sewer | Valves | Shutoff | 3 | Continuous | 0 | 0 | 0 | 0.0065 | Sanitary Sewer Shutoff Valve |
| U-STRM-OUTF | Utilities | Storm Drain | Outfall |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Outfall |
| U-STRM-PSTA | Utilities | Storm Drain | Pump Station |  | 124 | Continuous | 0 | 0 | 0 | 0.0065 | Storm Drain Pump Station |
| U-WATR-BKFL | Utilities | Water Supply | Backflow Preventer |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Backflow Preventer |
| U-WATR-FDSC | Utilities | Water Supply | Fire Department Service Connector |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Fire Department Service Connection |
| U-WATR-FHYD | Utilities | Water Supply | Fire Hydrant |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Fire Hydrant |
| U-WATR-HBIB | Utilities | Water Supply | Hose Bib |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Hose Bib |
| U-WATR-METR | Utilities | Water Supply | Meter |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Meter |
| U-WATR-PIPE | Utilities | Water Supply | Piping |  | 5 | Sfo-Watr | 0 | 0 | 0 | 0.0065 | Water Supply Piping |
| U-WATR-PLUG | Utilities | Water Supply | Plug |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Piping Plug |
| U-WATR-RECL | Utilities | Water Supply | Reclaimed |  | 171 | Sfo-Reclmwatr | 0 | 0 | 0 | 0.0065 | Water Supply Reclaimed Water |
| U-WATR-REDU | Utilities | Water Supply | Reducer |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Piping Reducer |
| U-WATR-REGL | Utilities | Water Supply | Regulator |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Piping Regulator |
| U-WATR-SMPL | Utilities | Water Supply | Sample Devices |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Sampling Station |
| U-WATR-SRVC | Utilities | Water Supply | Service Connect |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Service Connect |
| U-WATR-STBO | Utilities | Water Supply | Stubout |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Stubout |
| U-WATR-TANK | Utilities | Water Supply | Storage Tanks |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Storage Tanks |
| U-WATR-VALV-AIR~ | Utilities | Water Supply | Valves | Air Release Valve | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Air Release Valves |
| U-WATR-VALV-POST | Utilities | Water Supply | Valves | Posts | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Post Indicator Valve |
| U-WATR-VALV-SHUT | Utilities | Water Supply | Valves | Shutoff | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Shutoff Valve |
| U-WATR-VAULT | Utilities | Water Supply | Vault |  | 5 | Continuous | 0 | 0 | 0 | 0.0065 | Water Supply Vault |
| V-AERI-OTLN-IMAG | Survey / Mapping | Aerial Survey | Outline | Imagery | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Aerial Imagery Outline |
| V-CTRL-BMRK | Survey / Mapping | Control Points | Benchmarks |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Benchmark Control Points |
| V-CTRL-HCPT | Survey / Mapping | Control Points | Horizontal Control Point |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Horizontal Control Points |
| V-CTRL-KNOW | Survey / Mapping | Control Points | Known Point |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Known Control Points |
| V-CTRL-LINE-NETW | Survey / Mapping | Control Points | Lines | Traverse Network | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Traverse Lines Control Points Network |
| V-CTRL-LINE-SHOT | Survey / Mapping | Control Points | Lines | Traverse Sideshot | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Traverse Control Points Sideshot |
| V-CTRL-SHOT | Survey / Mapping | Control Points | Sideshot Point |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Side Shot Control Points |
| V-CTRL-TRAV | Survey / Mapping | Control Points | Transverse | Traverse | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Traverse Control Points |
| V-CTRL-TRAV-ERRO | Survey / Mapping | Control Points | Transverse | Error | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Traverse Control Points Errors |
| V-CTRL-UNKN | Survey / Mapping | Control Points | Unknown Point |  | 253 | Continuous | 0 | 0 | 0 |  | Survey/Mapping Unknown Control Points |
| V-CTRL-VCPT | Survey / Mapping | Control Points | Vertical Control Point | Vertical Control Point | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Vertical Control Points |
| V-FLHA-025Y | Survey / Mapping | Flood Hazard Area | 25-Year Mark |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Flood Hazard Area 25 Year Mark |
| V-FLHA-050Y | Survey / Mapping | Flood Hazard Area | 50-Year Mark |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Flood Hazard Area 50 Year Mark |
| V-FLHA-100Y | Survey / Mapping | Flood Hazard Area | 100-Year Mark |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Flood Hazard Area 100 Year Mark |
| V-FLHA-200Y | Survey / Mapping | Flood Hazard Area | 200-Year Mark |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Flood Hazard Area 200 Year Mark |
| V-NODE | Survey / Mapping | Node |  |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Node |
| V-PROP-ESMT | Survey / Mapping | Property | Easements |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Easements |
| V-PROP-LEAS | Survey / Mapping | Property | Lease |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Lease Line (Interior) |
| V-PROP-OTLN-CUSE | Survey / Mapping | Property | Outline | Current Land Use | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Land Use Area Outline |
| V-PROP-OTLN-FUSE | Survey / Mapping | Property | Outline | Future Land Use | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Future Land Use Area Outline |
| V-PROP-OTLN-HIST | Survey / Mapping | Property | Outline | Historic | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Historic Preservation Area Outline |
| V-PROP-OTLN-ZONG | Survey / Mapping | Property | Outline | Zoning | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Zoning Areas Outline |
| V-PROP-PRCL | Survey / Mapping | Property | Parcels | Parcel | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Parcels |
| V-PROP-PRCL-AFLD | Survey / Mapping | Property | Parcels | Airfields | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Airfield Parcels |
| V-SITE-SCAN | Survey / Mapping | Site Features | Laser Scanning Data |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Laser Scanning Data |
| V-SURV-LINE | Survey / Mapping | Survey | Lines |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Lines |
| V-SURV-NTWK | Survey / Mapping | Survey | Network |  | 253 | Continuous | 0 | 0 | 0 | 0.0065 | Survey/Mapping Network |

# Appendix F: Special Layer Naming Considerations

In some cases, specific business requirements necessitate deviations to the layer naming convention described in the body of this standard. These permitted deviations are described below. Other deviations from the layer naming requirements of this standard must be requested using the Change Request Form provided in Appendix A.

## Survey Layers

Features that have been surveyed by a registered land surveyor should be represented by objects on layers where a “V” is used in place of the discipline code. The remaining elements of the layer name shall be as described above and as listed in Appendix F. Care should be taken to ensure that features that have not been surveyed are not represented on layers that begin with a “V.”

## 

While not required, it is permissible to add UGND and OVHD minors to the end of a utility layer name to indicate utilities that are underground or overhead, respectively.

In some cases, utility objects are contained within other utility objects (e.g. fiber within a duct) but are not individually drawn. In these cases, the second character of the layer name (i.e. after the one character discipline code) should be used to indicate the status of the containing object, as indicated above. If no second charter is used, the containing feature is assumed to be existing. The primary portions of the layer name (i.e. the left most major and minors) should describe this containing object (e.g. E-COMM-DUCT). The contained object will be indicated with the addition of another four character minor code at the end of the layer. If this contained object has a different status than the containing object, then an additional status code can be added at the end after a dash. For example, new fiber in an existing conduit should be placed on a layer named E-COMM-DUCT-FIBR-N. New fiber placed in a new duct would appear on a layer named EN-COMM-DUCT-FIBR-N.

Similar utility features that share the same major and minor layer designators shall include different discipline designators based on the location of those features within the utility network. The rules listed in Table 10 define when the Civil, Mechanical, and Utilities discipline codes shall be used based on the location of the utility feature.

**Table 10—Organization of Utilities Layers**

|  |  |  |  |
| --- | --- | --- | --- |
| Utility Type | Use Mechanical (M) Discipline Code | Use Utility (U)  Discipline Code | Use Civil (C) Discipline Code |
| Storm | Not Applicable | Downstream of pump stations (including stations) | Upstream of pump stations |
| Sewer/Industrial Waste | Within 5’ of building envelope | Outside of building envelope | Not Applicable |
| Water (Domestic and Fire) | Downstream of Backflow Preventer | Upstream of Backflow Preventer | Not Applicable |

## Space Boundary Layers

The A-AREA and A-AREA-CALC layers are used to delineate space within buildings. Closed polylines that represent the extent of the space shall be placed on the A-AREA-CALC layer. These will be used to calculate the square footage of the space. Hatch patterns used to indicate how the space is used shall have the same boundary and the corresponding closed polyline. Each hatch pattern on an A-AREA layer must have one closed polyline on the A-AREA-CALC layer, and vice versa. Tenant names or space uses may be added to the end of the A-AREA layer separated by a dash.

The A-AREA layer may contain overlapping polygons, especially in areas within spaces that are used for other purpose (e.g. a common use utility shaft within broader spaces used by a tenant). The A-AREA-CALC layer must have these internal areas (aka ‘donuts’) delineated so that the square footage is properly calculated. For this reason, no areas delineated on the A-AREA-CALC layer may overlap with another area on that layer.