



MARYLAND AVIATION ADMINISTRATION

2008 Design Standards

Volume III of III (Appendix J)



DIVISION OF FACILITIES DESIGN

February 2008

TABLE OF CONTENTS**Volume I of III**

INTRODUCTION.....	1
SECTION I: GENERAL PROCEDURES AND POLICIES	3
CHAPTER 1: INTRODUCTION.....	3
1.1 PURPOSE.....	3
1.2 BACKGROUND	3
1.2.1 Baltimore/Washington International Thurgood Marshall (BWI Marshall) Airport.....	3
1.2.2 Martin State (MTN) Airport	4
CHAPTER 2: GENERAL DESIGN AND CONSTRUCTION POLICIES	5
2.1 SECURITY REQUIREMENTS	5
2.1.1 Vehicle Access on BWI Marshall Airport Movement Area.....	5
2.2 SAFETY REQUIREMENTS.....	5
2.2.1 Confined Space Requirements for Designers	5
2.2.2 Requirements for Designers Regarding Identification and Reporting of Confined Spaces during the Design Process.....	8
SECTION II: DESIGN PROCEDURES	9
CHAPTER 3: GENERAL ARCHITECT/ENGINEER CONTRACT MANAGEMENT ...	9
CHAPTER 4: DESIGN PHASE	10
4.1 AIRPORT CONSTRUCTION PROJECT CHECKLIST.....	10
4.2 FAA REQUIREMENTS FOR PROPOSED DEVELOPMENT	10
4.3 PROPOSAL PREPARATION/SCOPING MEETING / SCOPE OF SERVICES.....	12
4.4 DESIGN MEETING MINUTES	18
4.5 DESIGN REPORTS AND STUDIES	18
4.6 DESIGN REVIEWS	18
4.7.1 Process	18
4.7 ALP COORDINATION	18
4.8 ENVIRONMENTAL COORDINATION	19
4.8.1 MDE.....	19
4.9 FAA COORDINATION	20
4.9.1 Radar Reflectors.....	20
4.10 DESIGN PHASES AND SUBMITTAL REQUIREMENTS	20
4.10.1 Programming and Schematic Design Submittal	20
4.10.2 Design Development (30% Review) Submittal.....	20
4.10.3 Construction Documents 60% Submittal.....	20
4.10.4 Construction Documents 100% Submittal.....	20
4.10.5 Bid Documents.....	20

4.10.6	Professional Engineer Titleblock Rules.....	21
4.10.7	Electronic Non-CAD Document Deliverable Requirements.....	21
4.10.8	Identification and Reporting of Confined Spaces during the Design Process	25
4.11	DRAWING REQUIREMENTS	26
4.11.1	GIS Standards	26
4.11.2	Standard Drawings.....	27
4.11.3	Stormwater Management Plans	31
4.12	CONSTRUCTION SPECIFICATIONS	31
4.12.1	General Specification Requirements.....	31
4.12.2	Building Specification Format.....	32
4.12.3	Site Work Specifications.....	32
4.12.4	Sole Source Specifications.....	33
4.13	Security plan and specification requirements	34
4.13.1	Security Specification (X-1)	34
4.13.2	Security Plan	34
4.14	CONSTRUCTION SAFETY AND PHASING PLANS.....	35
4.14.1	Placement of Construction Barricades.....	35
4.15	COST ESTIMATING	35
4.15.1	Development of Cost Estimates.....	35
4.15.2	Liquidated Damages	36
CHAPTER 5:	BIDDING AND PROCUREMENT.....	37
5.1	CONFORMED CONSTRUCTION DOCUMENTS.....	37
CHAPTER 6:	CONSTRUCTION ADMINISTRATION	38
6.1	SHOP DRAWING/SUBMITTAL REVIEW	38
6.1.1	Fire Marshal Comments.....	38
6.1.2	Design Changes	38
6.2	REQUEST FOR INFORMATION.....	38
6.3	RECORD DRAWING PREPARATION	38
SECTION III:	DESIGN CRITERIA	42
CHAPTER 7:	GENERAL REQUIREMENTS.....	42
7.1	CODE REQUIREMENTS.....	42
7.1.1	Fire Egress Analysis	43
7.1.2	Terminal Evacuation Plans	48
7.1.3	Identification and Reporting of Confined Spaces During the Design Process	48
7.2	RUNWAY, TAXIWAY, AND TAXILANE CLOSURES	48
7.2.1	Runway 10-28 and 15R-33L Intersection Closure	48
7.3	USE OF LIFTS WITHIN THE TERMINAL BUILDING.....	49
7.4	SAFETY AND SECURITY DURING CONSTRUCTION.....	49
7.4.1	Traffic Cones	49
7.4.2	Dust Control.....	49
CHAPTER 8:	SITE DEVELOPMENT	50
8.1	GENERAL SITE WORK AND UTILITIES.....	50

8.1.1	Survey Control	50
8.1.2	Site Preparation	51
8.1.3	Underground Utility Trenches, Utility Markings, and Manhole/Handhole Covers/LIDS	51
8.1.4	Water Mains.....	53
8.1.5	Sanitary Sewers.....	53
8.1.6	Electric/Phone/Telecommunications	53
8.1.7	Miscellaneous Site Elements	53
8.2	AIRFIELD CIVIL/SITEWORK.....	59
8.2.1	Pavement Design	59
8.2.2	Pavement Marking	61
8.3	LANDSIDE CIVIL/SITEWORK	61
8.3.1	Roadways and Parking.....	61
8.3.2	Pavement Design	62
8.3.3	Landscaping	62
CHAPTER 9:	PASSENGER BOARDING BRIDGES.....	63
9.1	GENERAL	63
9.1.1	Pre-Conditioned Air and 400 Hertz Systems (and Associated Loading Bridge Requirements	63
9.1.2	Grounding Protection.....	64
CHAPTER 10:	ENVIRONMENTAL PROCEDURES AND REQUIREMENTS.....	65
10.1	SEDIMENT CONTROLS AND STORMWATER MANAGEMENT.....	65
10.1.1	Sediment and Erosion Control	65
10.1.2	Stormwater Management Facilities (SWM)	65
10.1.3	Stream Restoration.....	75
10.2	BIRD DETERRENT SYSTEMS.....	78
10.2.1	Waterfowl Deterrent System for Sediment Traps at BWI Marshall Airport.....	78
10.3	UNDERGROUND STORAGE TANKS (UST).....	83
10.4	ABOVE GROUND STORAGE TANKS	83
10.4.1	Glycol ASTs.....	84
10.5	ASBESTOS AND OTHER HAZARDOUS MATERIALS	86
10.5.1	Renovation Work	87
10.5.2	Lead Paint	87
10.5.3	Asbestos	88
10.6	GLYCOL COLLECTION	88
10.7	FUEL TRUCK PARKING	88
CHAPTER 11:	ARCHITECTURAL / Buildings.....	90
11.1	DESIGN CONTINUITY	90
11.1.1	Domestic Terminal Baggage Claim Areas	90
11.1.2	Domestic Terminal Ticketing Concourse	90
11.1.3	Domestic Terminal Security Checkpoints	90
11.1.4	Domestic Terminal and Pier E Holdrooms.....	91
11.1.5	Commercial Storefronts and Signage	91
11.1.6	Service Areas	91
11.1.7	Offices.....	91

11.1.8	FIDS/BIDS Enclosures	91
11.1.9	Bomb Mitigation Design.....	91
11.2	AESTHETICS.....	92
11.2.1	Sustainable Design Innovation	92
11.3	TENANT IMPROVEMENTS	92
11.3.1	New International Pier Millwork.....	92
11.4	PUBLIC AREA MATERIALS, FINISHES AND COLORS	93
11.4.1	Restrooms	93
11.5	ROOF SYSTEMS.....	93
11.5.1	Satellite Dish Locations.....	95
11.6	FLOOR AND WALL COVERINGS	95
11.6.1	Restrooms	95
11.6.2	Tile	95
11.6.3	Carpet Tile	95
11.6.4	Painting	95
11.6.5	Wall Covering.....	95
11.6.6	Solid Surfacing Material	96
11.6.7	Plastic Laminate.....	96
11.6.8	Waterproofing.....	96
11.7	LOCK SYSTEM.....	105
11.7.1	Finish Hardware.....	105
11.7.2	Cipher Locks.....	105
11.8	RESTROOM STANDARDS.....	105
11.9	DOORS/WINDOWS	105
11.9.1	Roll-up Doors.....	105
11.9.2	Door Numbers.....	106
11.9.3	Sterile Area Access Doors	106
11.9.4	Window Opaque	106
11.10	FURNISHINGS	113
11.10.1	Holdroom Tandem Seating.....	113
11.10.2	Exterior Benches and Bike Racks.....	113
11.10.3	Trash Receptacles	113
11.10.4	Master Clock System	113
11.11	PASSENGER CONVEYANCE	113
11.11.1	Elevators	113
CHAPTER 12: STRUCTURAL AND STRUCTURAL SYSTEMS		115
12.1	MATERIALS.....	115
12.1.1	Reinforced Concrete (With Subcategories)	115
12.2	BOMB MITIGATION DESIGN	115
12.3	CORE DRILLING OF CONCRETE FLOORS	115
CHAPTER 13: HEATING, VENTILATION, AND AIR CONDITIONING (HVAC).....		116
13.1	DUCTWORK	116
13.1.1	Duct Liner	116
13.2	PARTICULATE AIR FILTRATION.....	116
13.3	HVAC PIPE FLUSHING	116

13.3.1	Background	117
13.3.2	Design Specification Requirements:.....	117
13.4	BOILERS AND PRESSURE VESSELS.....	119
13.5	NATURAL GAS PIPING.....	120
CHAPTER 14: PLUMBING.....		123
14.1	BACKFLOW PREVENTERS.....	123
14.2	GREASE INTERCEPTORS.....	123
CHAPTER 15: FIRE SUPPRESSION SYSTEMS		125
15.1	SPRINKLER SYSTEMS.....	125
15.1.1	Dry Pipe Sprinkler Systems.....	125
15.1.2	Sprinkler for Dumpsters and Chutes.....	125
15.2	FIRE HYDRANTS	126
15.2.1	Aboveground Fire Hydrants	126
15.2.2	Underground Fire Hydrants (Non-Aircraft Loading Areas).....	126
15.2.3	Underground Fire Hydrants (Aircraft Loading Areas)	126
15.2.4	Construction Phasing for Fire Hydrants and Water Mains.....	130
15.3	CERTIFICATION OF FIRE PROTECTION AND DETECTION SYSTEM DESIGN.....	130
CHAPTER 16: FIRE ALARM, LIFE SAFETY, AND SECURITY SYSTEMS.....		132
16.1	SECURITY SYSTEM DRAWINGS.....	132
16.2	BWI MARSHALL AIRPORT FIRE ALARM SYSTEM.....	132
16.2.1	Smoke Detectors	132
16.3	BUILDING SECURITY ALARM SYSTEM	133
16.3.1	Knox Box System	133
16.4	AIRPORT IT STANDARDS.....	133
CHAPTER 17: ELECTRICAL		134
17.1	GENERAL ELECTRICAL REQUIREMENTS.....	134
17.1.1	UPS Protection.....	134
17.1.2	Total Harmonic Distortion.....	134
17.1.3	Approved Testing Laboratories	135
17.1.4	Aluminum Electrical Wire.....	136
17.1.5	Final Cleaning of Electrical/Communication/IT Closets.....	136
17.2	GROUNDING AND LIGHTNING PROTECTION.....	136
17.2.1	Grounding	136
17.2.2	Surge Suppression, Bonding and Grounding for Outdoor Systems	136
17.3	POWER DISTRIBUTION SYSTEM AND EQUIPMENT	144
17.3.1	Substations	144
17.3.2	Medium Voltage Electrical Phasing and Rotation (BWI Thurgood Marshall Airport only)	149
17.4	EQUIPMENT	152
17.4.1	Panelboards (Power and Lighting).....	152
17.4.2	Raceways	152
17.4.3	Boxes and Wiring Devices.....	153
17.5	EMERGENCY AND STANDBY POWER SYSTEMS	154
17.5.1	Diesel Powered Engine – Generator Load Bank	154

17.6	METERING OF POWER.....	154
17.7	TEMPORARY ELECTRIC POWER SERVICE	155
17.7.1	Back-up Generator Requirements for Electrical Work (BWI Marshall Only)	155
17.8	AIRFIELD ELECTRICAL.....	157
CHAPTER 18: LIGHTING.....		158
18.1	INTERIOR LIGHTING.....	158
18.1.1	Lamp Ballasts.....	158
18.2	EXTERIOR LIGHTING.....	158
18.2.1	Apron Lighting.....	158
18.2.2	Airfield Lighting	159
18.2.3	Landside Lighting (Parking and Roadways).....	161
CHAPTER 19: SIGNAGE AND GRAPHICS		163
19.1	EXTERIOR SIGNAGE	163
19.1.1	Landside/Roadway Signage.....	163
19.1.2	Apron/Airfield Signage.....	163
19.2	INTERIOR SIGNAGE	163
19.3	DIRECTIONAL SIGNAGE	163
19.3.1	Door Identification Signs.....	163

TABLE OF CONTENTS CONTINUED**EXHIBITS/STANDARD DETAILS**

LIST OF DELIVERABLES	17
RECORD DRAWING STAMP	40
CD INSERTS	41
SAMPLE FIRE EGRESS PLAN.....	47
MANHOLE/HANDHOLE COVER LIDS.....	52
ELECTRICAL STRUCTURE DRAIN DETAIL (PLAN).....	55
ELECTRICAL STRUCTURE DRAIN DETAIL (SECTION)	56
PIPE CONNECTION DETAIL	57
RODENT SCREEN	58
 MARTIN STATE AIRPORT SECTION	 60
BIRD DETERRENT SYSTEM FOR SEDIMENT TRAPS AND SEDIMENT BASINS:.....	79
WATER FOWL DETERRENT SYSTEM FOR SEDIMENT TRAPS	80-81
FLOOR DRAIN – COMPOSITE SLAB CONDITION.....	100
FLOOR DRAIN – SUSPENDED REINFORCED CONCRETE SLAB CONDITION	101
FLOOR SINK – COMPOSITE SLAB CONDITION	102
FLOOR SINK – SUSPENDED REINFORCED CONCRETE SLAB CONDITION	103
FLOOR PENETRATION	104
WINDOW OPAQUE – EXISTING WALL SECTION @ DOMESTIC TERMINAL	108
WINDOW OPAQUE – WALL SECTION – STANDARD DETAIL @ DOMESTIC TERMINAL	109
WINDOW OPAQUE – DETAILS @ HARDBOARD PANEL	110
WINDOW OPAQUE – DETAILS @ HORIZONTAL HARDBOARD PANEL, CONCOURSE A & B, AND A/B.....	111
WINDOW OPAQUE – DETAILS @ VERTICAL HARDBOARD PANEL, CONCOURSE B	112
FIRE HYDRANT SETTING DETAIL	127
FLUSH TYPE FIRE HYDRANT AND VAULT DETAIL (FOR AIRCRAFT MOVEMENT AREAS ONLY	128-129
SUBSTATION ONE-LINE DIAGRAM.....	146
SUBSTATION SEQUENCE OF OPERATION	147
BWI MEDIUM VOLTAGE DISTRIBUTION SYSTEM THREE – LINE DIAGRAM	151
LIGHT POLE	160
SIGNS	165-167

Volume II of III**APPENDICES**

AIRPORT CONSTRUCTION PROJECT CHECKLIST:.....	APPENDIX A
STANDARD FORMS:	APPENDIX B

CADD DESIGN STANDARDS: APPENDIX C

MAA STANDARD CONTRACT DRAWINGS: APPENDIX D

STANDARD SPECIFICATIONS: APPENDIX E

MARTIN STATE SURVEY CONTROL MANUAL: APPENDIX F

RESTROOM DESIGN STANDARDS: APPENDIX G

AIRPORT WIDE STANDARD FOR INTERFACE OF FIRE ALARM,
LIFE SAFETY, AND SECURITY SYSTEMS AT BWI AIRPORT..... APPENDIX H

TEMPORARY SUPPORT OF EXCAVATION: APPENDIX I

Volume III of III

GIS STANDARDS: APPENDIX J

APPENDIX J

AIRPORT ENGINEERING INFORMATION SYSTEM GIS DATA STANDARD



AEIS

Maryland Aviation Administration

Office of Engineering and Construction Management

Airport Engineering Information System

**GEOGRAPHIC INFORMATION
SYSTEM
DATA STANDARD**

Version 1.1

July 2007

Geographic Information System Data Standard Utilities Supplement For the Maryland Aviation Administration Version 1.1, July 2007

This document defines communications and utilities feature classes that are included in MAA's Geographic Information System (GIS) Data Standard. This document is a supplement to Appendix A of the MAA Geographic Information System Data Standard and should be used by anyone developing or checking GIS data for MAA that includes communications or utility features. This document is related to the content included in the Geographic Information System Data Standard and should only be used in conjunction with that document.

The following pages list each of the 218 GIS Feature Types defined by this supplement. The Feature Types are grouped into categories (i.e., General, Electrical, Communications, etc.) for ease of use. For each Feature Type, the class name, geometry type, sensitivity level, and a definition are provided. Suggested accuracies are also provided. Accuracies are indicated at a reasonable level that will meet a broad range of end user requirements. Individual project scopes, technical limitations and other factors may require data to be of a higher or lower level of accuracy. Attributes are also provided along with their type and definition. The following figure provides a key to the information provided in this supplement.

Figure 1 - Legend

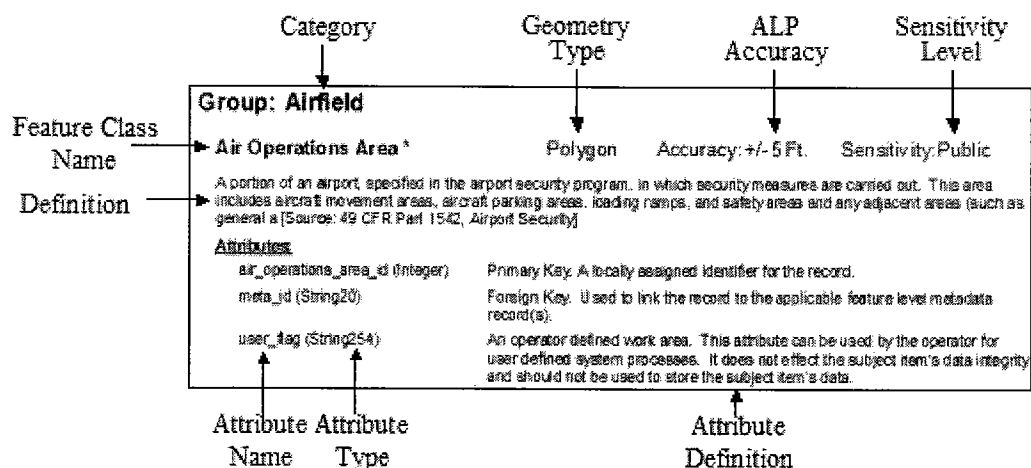


Table of Contents to Appendix A

Following is a table of contents of the feature type definitions in Appendix A. For ease in referencing, the 218 feature types defined are subdivided into 11 categories.

GROUP: GENERAL.....	9
ConduitCenterline.....	9
SolarPanelPoint.....	9
TunnelCenterline.....	9
UndefinedUtilityLine.....	9
UnknownTankSite	10
UtilityArea	11
UtilityPoleConduitPoint.....	11
UtilityPoleGuyLine.....	12
UtilityPoleGuyPoint.....	12
UtilityPoleTowerSite	13
UtilUtilidorLine	13
UtUndefinedFeaturePoint	14
GROUP: COMMUNICATIONS	14
AccessCoverageArea	14
AccessPoint.....	15
CameraSurveillancePoint.....	16
CommAirpipeLine	16
CommAirPressureDevicePoint	17
CommAmplifierPoint	18
CommAntennaLine.....	18
CommAntennaSite.....	19
CommAttenuatorPoint	20
CommCableBridgeLine	21
CommCableLadderPoint.....	21
CommCableRackLine.....	22
CommCableTrayLine	22
CommCableTroughLine	22
CommCoaxialLine.....	23
CommDevicePoint.....	24
CommDuctbankLine.....	24
CommDuctLine.....	25
CommEquipPoint.....	25
CommFiberopticLine	28
CommGroundplanePolygon	28
CommGroundPoint.....	29
CommGroundwavePolygon.....	29
CommHandholePoint.....	29
CommImpedanceMatching.....	30
CommLineOfSightLine	30
CommManholeSite	31

CommMultihopPolygonArea.....	32
CommOtherTypeCableLine.....	32
CommPathNodeSite.....	33
CommPathSegmentLine	33
CommPullboxSite.....	34
CommRiserPoint.....	34
CommSensorPoint	35
CommSplitterPoint	35
CommTelephoneBoothSite.....	36
CommTelephonePoint	36
CommTerminatorPoint	37
CommTwistedPairLine.....	38
CommVaultSite.....	38
CommWaveguideLine	39
DbspliceSite	40
ElectronicMarkerPoint.....	40
InternetCenterSite	41
JunctionNodePoint.....	41
LoadCapacitorPoint	41
LoadCoilPoint.....	42
MediaConverterPoint.....	43
NetworkSystemsSite	43
RadarSite.....	44
RadioPoint.....	44
RadioReceiverSite.....	44
RadioTransmitterSite	45
RelayStationPoint	46
RepeaterPoint.....	47
SatellitePoint.....	47
SegmentedCableLine	48
SegmentedCableSite	48
ServiceLoopPoint.....	49
SpeakerPoint	49
VerticalSite	50
VideoSite.....	50
VoiceSwitchSite.....	51
GROUP: UTILITIES AIR.....	52
CompressedAirDrainSepPoint.....	52
CompressedAirFittingPoint	52
CompressedAirPipeLine	53
CompressedAirTankPoint.....	53
CompressedAirValvePoint	53
GROUP: ELECTRICAL	54
ElectHeadBoltOutletPoint.....	54
ElectricalBusLine.....	54
ElectricalCableLine.....	55

ElectricalDuctbankLine	55
ElectricalGeneratorPoint.....	56
ElectricalGroundPoint.....	57
ElectricalJunctionSite	57
ElectricalMarkerPoint.....	58
ElectricalMeterPoint	58
ElectricalMotorPoint.....	59
ElectricalRegulatorPoint.....	60
ElectricalRiserPoint	61
ElectricalSplicePoint.....	61
ElectricalSubstationSite	61
ElectricalSwitchPoint.....	62
ElectTransformrBankPoint	63
ElectXformerVaultPoint	64
ExteriorLightingPoint	64
UtilityElectricUtilitySite	65
GROUP: FUEL.....	65
FuelAirEliminatorPoint.....	65
FuelAnodePoint	66
FuelFarmSite.....	66
FuelFilterStrainerPoint.....	67
FuelFittingPoint	67
FuelHydrantPoint.....	68
FuelJunctionSite.....	68
FuelLine	69
FuelMarkerPoint	70
FuelMeterPoint	70
FuelOilWaterSeparatorPoint.....	71
FuelPumpBoosterStatnPoint.....	72
FuelPumpPoint.....	72
FuelRectifierPoint	73
FuelRegulatorReducerPoint.....	74
FuelSourcePoint.....	74
FuelTankSite	75
FuelValvePoint	76
GROUP: GAS	77
NatGasRegReducerPoint	77
NaturalGasAnodePoint	77
NaturalGasFillPoint	78
NaturalGasFittingPoint	78
NaturalGasJunctionPoint	79
NaturalGasLine	80
NaturalGasMarkerPoint	81
NaturalGasMeterPoint	81
NaturalGasSourcePoint.....	82
NaturalGasValvePoint	82

UtilityGasUtilitySite	83
GROUP: HEATING & COOLING SYSTEMS	83
HeatCoolAnchorPoint.....	83
HeatCoolAnodePoint	84
HeatCoolFittingPoint	84
HeatCoolJunctionSite	85
HeatCoolLine.....	86
HeatCoolMarkerPoint.....	87
HeatCoolMeterPoint	87
HeatCoolPlantArea	88
HeatCoolPumpPoint	89
HeatCoolRectifierPoint.....	89
HeatCoolRegulatorPoint	90
HeatCoolValvePoint	91
GROUP: STORM.....	91
CulvertCenterline.....	91
StmswrDrainageBasinArea.....	92
StmswrDrainageDivideLine	92
StmswrOilWatSeparatorSite	92
StmswrStillingBasinSite	93
StormCulvertSite.....	94
StormSewerArmorPoint.....	94
StormSewerCulvertLine	95
StormSewerDischargePoint.....	96
StormSewerDownspoutPoint.....	96
StormSewerFittingPoint.....	97
StormSewerFloodArea.....	98
StormSewerFlowControlPoint.....	98
StormSewerGatePoint.....	99
StormSewerHeadwallLine	99
StormSewerHeadwallPoint.....	100
StormSewerInletPoint	100
StormSewerJunctionPoint.....	101
StormSewerLine	101
StormSewerMarkerPoint.....	102
StormSewerOpenDrainage	102
StormSewerOpenDrainage	103
StormSewerPumpPoint.....	104
StormSewerPumpStation	104
StormSewerReservoirPoint.....	105
StormSewerValvePoint.....	106
GROUP: TRANSMISSION.....	107
PipeLine.....	107
PipelineSegmentLine	107
GROUP: WASTEWATER.....	108

WastewaterAnodePoint.....	108
WastewaterDischargePoint.....	108
WastewaterDisposalTank	109
WastewaterDownspoutPoint.....	110
WastewaterDrainFieldArea.....	111
WastewaterFiltrationBedArea.....	111
WastewaterFittingPoint.....	111
WastewaterGreaseTrapPoint.....	112
WastewaterGritChamberPoint	113
WastewaterInletPoint.....	113
WastewaterJunctionPoint.....	114
WastewaterLagoonArea.....	115
WastewaterLine	116
WastewaterMarkerPoint	117
WastewaterMeterPoint.....	117
WastewaterNeutralizerPoint	118
WastewaterPumpPoint.....	119
WastewaterRectifierPoint	119
WastewaterSepticTankPoint.....	120
WastewaterSludgeBedArea	121
WastewaterTreatPlantSite.....	122
WastewaterUtilitySite.....	122
WastewaterValvePoint.....	123
WstewatOilWatSeparatrSite	123
WstewatPumpEjectrStnSite	124
WstewatTreatmentUnitSite.....	125
GROUP: WATER	126
DrinkingWaterSamplePoint.....	126
PigLaunchPoint.....	127
UtilityWaterUtilitySite.....	127
WaterAnodePoint.....	128
WaterFireConnectionPoint	128
WaterFittingPoint.....	129
WaterHydrantPoint	130
WaterIntakeLine	131
WaterIntakePoint	131
WaterJunctionPoint.....	132
WaterLine	132
WaterMarkerPoint.....	133
WaterMeterPoint.....	134
WaterPumpPoint.....	135
WaterPumpStationSite	136
WaterRectifierPoint	137
WaterRegulatorReducerPoint	137
WaterSourceSite	138
WaterTankSite	138

WaterTreatmentPlantArea	140
WaterTreatmentUnitArea	140
WaterValvePoint.....	141
WaterVentPoint.....	142
WatPressReducingStatnPoint	142

Group: General

ConduitCenterline

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe, structure, tube, or tile used to house or protect piping, cables, or wires for various utilities. [Source: SDSFIE]

Attributes:

SDSFIE Entity conduit_centerline

impedance (Real)

The number representing the total opposition to flow.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

SolarPanelPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device consisting of solar cells that convert light into energy. [Source: SDSFIE]

Attributes:

SDSFIE Entity solar_panel_point

panel_id (Number*)

Primary Key. A locally assigned identifier for the record.

user_flag (String20)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

feat_name (String30)

The name of the fuel feature. [Source: AIR FORCE]

narrative (String240)

A description or other unique information concerning the subject item, limited to 240 characters. [Source: AIR FORCE]

juntionType (Enumeration16)

An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

TunnelCenterline

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

An opening which goes through an area which holds piping, cables, or wires for various utilities, and typically is inaccessible. [Source: SDSFIE NGB]

Attributes:

SDSFIE Entity tunnel_centerline

uttunnl_id (Number*)

Primary Key. A unique, user defined identifier for each record or instance of an entity.

user_flag (String20)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

feat_desc (String60)

Any brief description of the feature.

feat_len (Real)

The overall length of the feature. [Source: Center]

impedance (Real)

The number representing the total opposition to flow.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

UndefinedUtilityLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe for which it's use and utility association is not currently known or defined (e.g., location identified by aerial

photography but not yet verified by follow-up investigation). [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>undefined_utility_line</i>
genpipe_id (Number*)	Primary Key.	A locally assigned identifier for the record.
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .	[Source: Aerial Data Service]
mat_d (Enumeration16)	The code indicating the material composition of the subject item.	[Source: Aerial Data Service]
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).	[Source: Aerial Data Service]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	[Source: Aerial Data Service]
piplty_d (Enumeration16)	The code indicating the location of the pipeline in relevance to the earth's surface.	[Source: Aerial Data Service]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset..	[Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
impedance (Real)	The number representing the total opposition to flow.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

UnknownTankSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A tank to which either of the following conditions apply: (1) It is not associated with a specific utility, (2) It's use and contents are not currently known or defined (e.g., location identified by aerial photography but not yet verified by follow-up inv [Source: SDSFIE Aerial Data Service]

Attributes:	<i>SDSFIE Entity</i>	<i>undefined_tank_site</i>
unktnk_id (Number*)	Primary Key.	A locally assigned identifier for the record.
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset..	[Source: Adopted from SDSFIE]
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum, if it is known.	
invert_elv (Real)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum, if it is known.	
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item, if it is known.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
serial_no (String16)	The code that indicates the manufacturer's serial, or unique identification number of the subject item, if it is known.	
tank_lgth (Real)	The dimension indicating the length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side, if it is known.	
tank_vol (Real)	The volume of the tank, if it is known.	
tank_width (Real)	The dimension indicating the exterior width of the tank, measured from	

top_elv (Real)	outside face of the exterior wall/side to outside face of the opposite exterior wall/side, if it is known. The dimension indicating the elevation of exterior top surface of the tank's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum, if it is known.
vol_u_d (Enumeration16)	The code indicating the unit of measure of the volume of the tank.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilityArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

An area of utility company responsibility or an area where special construction precautions are required to prevent damage to underground utility services. [Source: SDSFIE]

Attributes:

	SDSFIE Entity	utility_area
utlresp_id (Number*)	Primary Key. The unique identification number of defined areas of responsibility for utilities. [Source: REEGIS]	
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

UtilityPoleConduitPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pipe, structure, tube, or tile used to house or protect piping, cables, or wires for various utilities. [Source: SDSFIE]

Attributes:

	SDSFIE Entity	utility_pole_conduit_point
utcond_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
feat_desc (String60)	Any brief description of the feature.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
drng_pat_d (Enumeration16)	The drainage pattern of the material surrounding the conduit. [Source: CENTER]	
drng_tex_d (Enumeration16)	The texture of the material surrounding the conduit. [Source: Center]	
drng_zone (String50)	The local name of assigned the hydrographic drainage zone.	
feat_name (String30)	Any commonly used name of the culvert.	
inv_elv_1 (Real)	The dimension indicating the elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.	

inv_elv_2 (Real)	The dimension indicating the elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
lined_d (Enumeration16)	A boolean indicating whether the conduit is lined or not (Y = YES and N = NO)? [Source: Center]
mat_d (Enumeration16)	A code denoting the material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String16)	A code indicating the Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_u_d (Enumeration16)	The code indicating the unit of measure of slope.
area_size (Real)	The size of the area, zone, or polygon in square units.
con_lgth (Real)	The length of conduit, measured from node to node along the conduit centerline. [Source: Center]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilityPoleGuyLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A support configuration that spans between two structures, which generally includes connecting hardware, cables, and anchor components. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *utility_pole_guy_line*

impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

UtilityPoleGuyPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A support configuration, which generally includes connecting hardware, cables, and anchor components, used to stabilize structures (poles, towers, etc.). Down guys typically connect to the structures at key stress points and extend to an anchor at the gro [Source: SDSFIE Anteon]

Attributes:

SDSFIE Entity *utility_pole_guy_point*

guy_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
anchor_att (String15)	The type of anchor attachment to the pole or tower.
anchor_ty (String15)	The type of anchor used with this guy.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
design_d (Enumeration16)	Discriminator. The design code for a utility guy.
cbl_dia (Real)	The nominal diameter of the cable.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
guy_len (Real)	The length of the guy cable from pole connection to anchor.
cbl_mat_d (Enumeration16)	The material composition of the cable.
cbl_sht_d (Enumeration16)	The type sheath attached to the guy cable.
cbl_ten (Real)	The tensile force applied to the guy cable.
cbl_ty_d (Enumeration16)	The type of cable use for the guy.
cbl_dia_u_d (Enumeration16)	The unit of measure of the diameter.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
guy_ty_d (Enumeration16)	A code indicating the configuration of the guy construction.

ten_u_d (Enumeration16)	The unit of measure of tension .
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilityPoleTowerSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A structure used to elevate wires, cables, or other lines above the ground surface. [Source: SDSFIE]

Attributes:

SDSFIE Entity utility_pole_tower_site

pole_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
design_d (Enumeration16)	Discriminator. The design code for types of poles.
capped_d (Enumeration16)	Indicates whether or not the pole is capped (yes/no).
date_treat (Date)	The date that the pole was last treated. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
grounded_d (Enumeration16)	An indicator as to whether or not the pole is grounded. (yes or no)
pole_lgth (Real)	The overall length of the pole from tip to tip.
poleheight (Real)	The height of the pole measured from the ground surface to the top.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
p_class_d (Enumeration16)	A classification of the pole diameter, and consequently the breaking strength, of wooden poles.
treotyp_d (Enumeration16)	Defines any treatment applied to the pole to improve its life.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilUtilidorLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A tunnel system which may exist above or below ground used for horizontal conveyance of utilities including communications cables in arctic climates
[Source: SDSFIE REEGIS]

Attributes:

SDSFIE Entity utilities_utilidor_line

uti_id (Number*)	Primary Key. A locally assigned identifier for the record.
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user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
mat_d (Enumeration16)	The material composition of the utilidor
height (Real)	The depth of the utilidor from the ground surface.
width (Real)	A measurement of the shorter of two linear axes.
width_u_d (Enumeration16)	The unit of measure of width.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_len (Real)	A measure of the longer of the two linear axes.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtUndefinedFeaturePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A utility feature which it's use and utility association is not currently known or defined (e.g., location identified by aerial photography but not yet verified by follow-up investigation) [Source: SDSFIE Aerial Data Service]

Attributes:

SDSFIE Entity undefined_utility_feature_point

utfeat_id (Number*)	Primary Key. A locally assigned identifier for the record.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc. [Source: Aerial Data Service]
feat_typ_d (Enumeration16)	Discriminator. The type of undefined utility feature. [Source: Aerial Data Service]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: Aerial Data Service]
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum. [Source: Aerial Data Service]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Communications

AccessCoverageArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

The nominal coverage area for a wireless local area network (WLAN) access point. [Source: SDSFIE]

Attributes:

SDSFIE Entity access_coverage_area

wiraca_id (Number*)	Primary Key. A locally assigned identifier for the record.
avgss (Real)	Average Signal Strength for coverage area. [Source: AIR FORCE]
maxsnr (Real)	Maximum Signal to Noise Ratio (dbm) for coverage area. [Source: AIR FORCE]
minsnr (Real)	Minimum Signal to Noise Ratio (dbm) for coverage area. [Source: AIR FORCE]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

user_flag (String20)	responsibility of the utility asset.. [Source: Adopted from SDSFIE] An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
maxdr (Real)	Maximum Data Rate for the coverage area. [Source: AIR FORCE]
mindr (Real)	Minimum Data Rate for the coverage area. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
snr_u_d (Enumeration16)	The unit of measure for the MaxSNR and MinSNR [Source: AIR FORCE]
dr_u_d (Enumeration16)	The unit of measure for the MaxDR and MinDR (Most likely measured in Mbps). [Source: AIR FORCE]
cap_u_d (Enumeration16)	The unit of measure of capacitance. [Source: AIR FORCE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

AccessPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An access point is a station that transmits and receives data in a wireless local area network (WLAN). [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *access_point*

wiracp_id (Number*)	Primary Key. A locally assigned identifier for the record.
enc_prot_d (Enumeration16)	Protocol used to provide encryption for the access point (WEP, WPA, etc.). [Source: AIR FORCE]
ant_ty_d (Enumeration16)	The type of communications antenna used. [Source: AIR FORCE]
pomx (String16)	The Access Point designator as defined in the POMX Site Survey Report. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
ids_d (Enumeration16)	A boolean indicating whether the WLAN AP has an Intrusion Detection System (IDS). [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
ant_loc_d (Enumeration16)	A boolean indicating whether the antenna is located inside a building. [Source: AIR FORCE]
gain_u_d (Enumeration16)	The unit of measure for gain. [Source: AIR FORCE]
ssid (String50)	The service set identification of the device. [Source: AIR FORCE]
mac (String20)	The MAC address of the device. [Source: AIR FORCE]
num_sens (Integer)	The number of sensors used for the Intrusion Detection System (IDS). [Source: AIR FORCE]
name (String20)	The local name of the Access Point. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
standard (String16)	IEEE wireless standard used (i.e. 802.11a, b, g, etc.). [Source: AIR FORCE]
channel (Integer)	Channel number utilized. [Source: AIR FORCE]
gain (Real)	The measure of signal amplification. [Source: AIR FORCE]
height (Real)	Antenna height above ground level. [Source: AIR FORCE]
elevation (Real)	The height of the antenna as measured from a reference point or from sea level. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
ant_rad_d (Enumeration16)	The radiation pattern of the antenna. [Source: AIR FORCE]
size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]

dr_u_d (Enumeration16)	The unit of measure for the MaxDR and MinDR (Most likely measured in Mbps). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CameraSurveillancePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Top Secret

The location of a video camera used for surveillance purposes. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *camera_surveillance_point*

camera_id (Number*)	Primary Key. A locally assigned identifier for the record.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
color_d (Enumeration16)	A Boolean indicating whether the camera transmits images in color.
feat_desc (String60)	A brief description of the feature. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cam_typ_d (Enumeration16)	Discriminator - The type of surveillance camera. [Source: Tinker Air Force Base]
date_int (Date)	The date on which a well construction object was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: Tinker Air Force Base]
imag_fmt (String50)	The size of CCD Imager. [Source: Tinker Air Force Base]
lens_size (String50)	The size of the camera lens. [Source: Tinker Air Force Base]
location (String60)	Location of the camera (Interior or exterior). [Source: Tinker Air Force Base]
mount_d (Enumeration16)	Type of mounting for the surveillance camera. [Source: Tinker Air Force Base]
encl_typ_d (Enumeration16)	The type of enclosure used to protect the camera. [Source: Tinker Air Force Base]
camer_name (String50)	The camera name. [Source: Tinker Air Force Base]
cswitch_no (String50)	The switch in which the camera is connected. [Source: Tinker Air Force Base]
remarks (String240)	Any narrative remarks concerning the camera switch. [Source: Tinker Air Force Base]
camfil_d (Enumeration16)	Lens Filter Type. [Source: AIR FORCE]
ptz_typ_d (Enumeration16)	Point, tilt, and zoom type. [Source: AIR FORCE]
ccd_vres (Integer)	Resolution of the CCD in vertical pixels. [Source: AIR FORCE]
ccd_hres (Integer)	Resolution of the CCD in horizontal pixels. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommAirpipeLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe which conveys pressurized air to a pressurized telephone cable system [Source: SDSFIE Tinker Air Force

Attributes:

SDSFIE Entity *communications_airpipe_line*

coapipe_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the

	subject item's data integrity and should not be used to store the subject item's data.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
pipe_lgth (Real)	A measurement of the longer of two linear axes.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
grnd_elv_1 (Real)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
grnd_elv_2 (Real)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
press_norm (Real)	The manufacturer's or industry standard's normal pressure rating of the subject item.
press_u_d (Enumeration16)	The unit of measure for pressure.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommAirPressureDevicePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Any device which supports a cable pressurization system, for example valves, compressors, pressure transducers, air dryers, and pressure mete. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_air_pressure_device_point*

airprdv_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item.
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item.
airp_typ_d (Enumeration16)	The type of air pressure device. [Source: Austin and Pitts]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from list or entered from field inspections.
use_d (Enumeration16)	The site specific use of the valve.

dev_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
dev_size (Real)	The manufacturer's nominal size designation.
size_u_d (Enumeration16)	The unit of measure of size.
device_elv (Real)	The elevation measured at centerline of the valve, in feet (English Units) or meters (SI Units) above some datum.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
feat_desc (String60)	A description of the feature.
aplace_d (Enumeration16)	Indicates the placement of the device. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommAmplifierPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Any electronic device intended to boost the power or amplify the signal associated with a communications system.
[Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_amplifier_point*

amp_id (Number*)	Primary Key. A locally assigned identifier for the record.
gain (Real)	The measure of signal amplification. [Source: Tinker Air Force Base]
bandwidth (Real)	The difference between the highest and lowest frequencies that an amplifier can pass. [Source: Tinker Air Force Base]
power (Real)	The amplifier power. [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
amp_typ_d (Enumeration16)	Discriminator - Amplifier type [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
gain_u_d (Enumeration16)	The unit of measure of gain.
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
band_u_d (Enumeration16)	The unit of measure of bandwidth.
in_sig_lvl (Real)	The amount of the input signal to the amplifier. [Source: Tinker Air Force Base]
power_u_d (Enumeration16)	The unit of measure of power. [Source: Tinker Air Force Base]
outsig_lvl (Real)	The output level of the signal. [Source: Tinker Air Force Base]
level_u_d (Enumeration16)	The unit of measure for input and output signal level. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
imped_in (Real)	The input impedance of the amplifier [Source: Tinker Air Force Base]
imped_out (Real)	The output impedance of the amplifier. [Source: Tinker Air Force Base]
imped_u_d (Enumeration16)	The unit of measure of input and output impedance.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommAntennaLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Any device or wire which is intended to transmit or receive electromagnetic impulses to or from air or space.
[Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_antenna_line*

impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

CommAntennaSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of a communications antenna. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity communications_antenna_site

antenna_id (Number*)	Primary Key. A locally assigned identifier for the record.
feat_len (Real)	A measurement of the longer of two linear axes.
azimu_u_d (Enumeration16)	The unit of measure of azimuth.
feat_desc (String60)	A description of the feature.
diameter (Real)	The width of a cylindrical or circular antenna. [Source: Tinker Air Force Base]
ant_ty_d (Enumeration16)	Discriminator. The type of communications antenna. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
azimuth (Real)	The angle of horizontal deviation.
bandwidth (Real)	The difference between the highest and lowest frequencies that an antenna can pass. [Source: Tinker Air Force Base]
diam_u_d (Enumeration16)	The unit of measure of antenna diameter.
elevation (Real)	The height of the antenna as measured from a reference point or from sea level. [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
gain (Real)	The measure of signal amplification. [Source: Tinker Air Force Base]
band_u_d (Enumeration16)	The unit of measure of bandwidth.
tx_power (Real)	The transmission power rating of the antenna. [Source: Tinker Air Force Base]
power_u_d (Enumeration16)	Unit of measure for power.
tx_freq (Real)	The transmission frequency of the antenna. [Source: Tinker Air Force Base]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
ant_use_d (Enumeration16)	The usage of communications antenna. [Source: AIR FORCE]
beamwidth_e (Integer)	The measurement of vertical beamwidth at half power. [Source: Tinker Air Force Base]
beamwidth_h (Integer)	The measurement of horizontal beamwidth at half power. [Source: Tinker Air Force Base]
conn_type (String20)	The type of RF connector presented on the antenna. [Source: Tinker Air Force Base]
eq_fp_area (Real)	The surface area used for calculating wind loading for tower design. [Source: Tinker Air Force Base]
freq_mg_h (Integer)	The highest frequency antenna is designed to pass. [Source: Tinker Air Force Base]
freq_u_d (Enumeration16)	the unit of measure of frequency.
rx_freq (Real)	The receiving frequency of the antenna. [Source: Tinker Air Force Base]
freq_mg_l (Integer)	The lowest frequency antenna is designed to pass. [Source: Tinker Air Force Base]

avgpwr_u_d (Enumeration16)	The unit of measure for average power. [Source: AIR FORCE]
ftb_ratio (Integer)	The isolation provided by directional antennas away from the beam. [Source: HSIP]
height (Real)	The overall height of an antenna unit - base to top. [Source: HSIP]
imped (Real)	The impedance of antenna for cable matching (Ohms). apparent opposition in an electrical circuit to the flow of an alternating current. Analogous to the actual electrical resistance to a direct current. It is the ratio of effective electromotive force to the effective current. [Source: HSIP]
max_wind (Integer)	The maximum wind speed antenna is designed to withstand. [Source: HSIP]
polarizatn (Integer)	The rf polarization provided by antenna (as installed). [Source: Tinker Air Force Base]
rdome_dia (Integer)	The radome diameter. [Source: Tinker Air Force Base]
vswr (Integer)	The maximum voltage that the Standing Wave Ratio antenna will operate at over range. [Source: Tinker Air Force Base]
weight (Integer)	The weight of the antenna unit for use in tower loading calculations. [Source: Tinker Air Force Base]
corp_name (String80)	Name of station corporation. [Source: HSIP]
agl_u_d (Enumeration16)	Antenna height above ground level UOM. [Source: AIR FORCE]
efpa_u_d (Enumeration16)	The unit of measure for Equivalent Flat Plate Area. [Source: AIR FORCE]
polr_typ_d (Enumeration16)	Polarization type. [Source: AIR FORCE]
fr_rgl_u_d (Enumeration16)	The unit of measure for low frequency range. [Source: AIR FORCE]
agl (Real)	Antenna height above ground level. [Source: AIR FORCE]
tilt (Real)	Antenna tilt angle for dish and parabolic antennas. [Source: AIR FORCE]
peakpower (Real)	The peak amount of power the antenna can withstand. [Source: AIR FORCE]
avgpwr (Real)	Average power rating for this antenna. [Source: AIR FORCE]
ant_rad_d (Enumeration16)	The radiation pattern of the antenna. [Source: AIR FORCE]
tiltang_u_d (Enumeration16)	Antenna tilt angle UOM. [Source: AIR FORCE]
plarea_u_d (Enumeration16)	The unit of measure for the area of the plume above. [Source: NAVFAC]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: AIR FORCE]
rdmdia_u_d (Enumeration16)	The unit of measure for the radiomen diameter. [Source: AIR FORCE]
imped3_u_d (Enumeration16)	Tertiary. The unit of measure of for impedance. [Source: AIR FORCE]
fr_rgh_u_d (Enumeration16)	The unit of measure for high frequency range. [Source: AIR FORCE]
gain_u_d (Enumeration16)	The unit of measure for gain. [Source: AIR FORCE]
pekpwr_u_d (Enumeration16)	The peak power UOM. [Source: AIR FORCE]
mbrd_u_d (Enumeration16)	The unit of radius for the Minimum Bending Radius, Dynamic. [Source: AIR FORCE]
spd_u_d (Enumeration16)	The unit of measure for speed. [Source: USACE]
conn_typ_d (Enumeration16)	The type of RF connector presented on the antenna. [Source: AIR FORCE]
maxw_u_d (Enumeration16)	The unit of measure for max wind. [Source: AIR FORCE]
weight_u_d (Enumeration16)	The unit of measure for weight. [Source: AIR FORCE]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommAttenuatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device for reducing the amplitude of an electrical signal without appreciable distortion [Source: SDSFIE Tinker]

Air Force Base]

Attributes:

	<i>SDSFIE Entity</i>	<i>communications_attenuator_point</i>
atten_id (Number*)	Primary Key. A locally assigned identifier for the record.	
level_u_d (Enumeration16)	The unit of measure of input and output signal amplitude.	
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]	
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]	
attn_typ_d (Enumeration16)	The type of attenuator. [Source: Tinker Air Force Base]	
loss (Real)	The amount of signal loss of the attenuator. [Source: Tinker Air Force Base]	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
loss_u_d (Enumeration16)	The unit of measure of loss.	
bandwidth (Real)	The difference between the highest and lowest frequencies that an attenuator can pass. [Source: Tinker Air Force Base]	
band_u_d (Enumeration16)	The unit of measure of attenuator bandwidth.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
in_sig_lvl (Real)	The amplitude of the input signal. [Source: Tinker Air Force Base]	
outsig_lvl (Real)	The amplitude of the output signal. [Source: Tinker Air Force Base]	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
imped_in (Real)	The input impedance of the attenuator. [Source: Tinker Air Force Base]	
imped_out (Real)	The output impedance of the attenuator. [Source: Tinker Air Force Base]	
imped_u_d (Enumeration16)	The unit of measure for input and output impedance.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

CommCableBridgeLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A structure used for the horizontal conveyance of A communications cable that allows passage over or under an obstacle such as a river, chasm, mountain, road or railroad. [Source: SDSFIE Tinker Air Force Base]

Attributes:

	<i>SDSFIE Entity</i>	<i>communications_cable_bridge_line</i>
impedance (Real)	The number representing the total opposition to flow.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

CommCableLadderPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A ladder type structure used to support the vertical conveyance of communications cable. [Source: SDSFIE Tinker Air Force Base]

Attributes:

	<i>SDSFIE Entity</i>	<i>communications_cable_ladder_point</i>
cab_lad_id (Number*)	Primary Key. A locally assigned identifier for the record.	
height (Real)	The height of the cable ladder measured from the ground surface to the top. [Source: Tinker Air Force Base]	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
width_u_d (Enumeration16)	The unit of measure of width	
width (Real)	A measurement of the shorter of two linear axes. [Source: Tinker Air	

model_no (String16)	Force Base]
owner_d (Enumeration16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
narrative (String240)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	A description or other unique information concerning the subject item, limited to 240 characters.
meta_id (Integer)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommCableRackLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A ladder type structure used to support the horizontal conveyance of communications cable. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_cable_rack_line*

impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

CommCableTrayLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

An elevated structure enclosed on the bottom and sides usually fabricated from sheet metal which is used to support the horizontal conveyance of communications cable.
[Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_cable_tray_line*

caw_id (Number*)	Primary Key. A locally assigned identifier for the record.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
width (Real)	A measurement of the shorter of two linear axes. [Source: Tinker Air Force Base]
caw_typ_d (Enumeration16)	The type of cable way. [Source: Tinker Air Force Base]
mat_d (Enumeration16)	The material composition of the cable way. [Source: AIR FORCE]
height (Real)	The height of the cable way measured from the ground surface to the top. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
width_u_d (Enumeration16)	The unit of measure of width.
feat_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommCableTroughLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A trench along the ground used for the horizontal conveyance of communications cables. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_cable_trough_line*

cab_tro_id (Number*)	Primary Key. A locally assigned identifier for the record.
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mat_d (Enumeration16)	The material composition of the cable trough line. [Source: Tinker Air Force Base]
width (Real)	A measurement of the shorter of the two linear axes of the cable trough line. [Source: Tinker Air Force Base]
width_u_d (Enumeration16)	The unit of measure of width.
feat_len (Real)	A measurement of the longer of the two linear axes. [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommCoaxialLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

a transmission line that consists of a tube of electrically conducting material surrounding a central conductor held in place by insulators that is used to transmit telegraph, telephone, and television signals of high frequency [Source: SDSFIE Tinker Air Force Base]

Attributes:

	<i>SDSFIE Entity communications_coaxial_line</i>
cocoax_id (Number*)	Primary Key. A locally assigned identifier for the record.
no_cond (Integer)	The number of conductors within the coaxial cable. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cab_use_d (Enumeration16)	Discriminator - The overall use of the coaxial cable.
cab_no (String16)	The alphanumeric string assigned to the cable. [Source: Tinker Air Force Base]
offset_u_d (Enumeration16)	The unit of measure of offset. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cab_elev_d (Enumeration16)	The vertical location of the cable. [Source: Tinker Air Force Base]
cbl_mat_d (Enumeration16)	The material composition of the cable. [Source: Tinker Air Force Base]
river_mile (Real)	The reference of the river mile associated with the cable. [Source: REEGIS]
feat_name (String60)	Any commonly used name for the cable. [Source: Tinker Air Force Base]
vert_clr (Real)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage. [Source: Tinker Air Force Base]
vert_u_d (Enumeration16)	The unit of measure of vertical clearance
frequency (Real)	The number of cycles per unit time of the current in the coaxial cable. [Source: Tinker Air Force Base]
freq_u_d (Enumeration16)	The unit of measure of frequency. [Source: Tinker Air Force Base]
cab_offset (Real)	The distance to the cable as measured from the edge of a paved surface. [Source: Tinker Air Force Base]
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Austin and Pitts]
feat_desc (String60)	Any brief description of the feature. [Source: Tinker Air Force Base]
chl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
cbl_len (Real)	The length dimension of the cable. [Source: Tinker Air Force

diameter (Real)	Base] The width of a cylindrical or circular cable. [Source: Tinker Air Force Base]
diam_u_d (Enumeration16)	The unit of measure of cable diameter.
impedance (Real)	The number representing the total opposition to alternating current within an electrical circuit. [Source: Tinker Air Force Base]
imped_u_d (Enumeration16)	The number representing the total opposition to flow.
meta_id (Integer)	The unit of measure of for impedance. Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommDevicePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A communications system component that lies within the signal transmission path and modifies the transmission characteristics of the media. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity communications_device_point</i>
comdev_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
dgtl_in (Integer)	The total number of digital-in ports on the device.
dgtl_ot (Integer)	The total number of digital-out ports on the device.
imped (Real)	The apparent opposition in an electrical circuit to the flow of an alternating current. Analogous to the actual electrical resistance to a direct current. It is the ratio of effective electromotive force to the effective current. [Source: Tinker Air Force Base]
dev_name (String30)	Any commonly used name for the device. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_desc (String60)	A description of the feature [Source: Tinker Air Force Base]
no_pairlnk (Integer)	The number of cables attached to the device.
readout_d (Enumeration16)	The type of display or readout for the device.
anlg_in (Integer)	The total number of analog-in ports on the device.
anlg_ot (Integer)	The total number of analog-out ports on the device.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
imped_u_d (Enumeration16)	The unit of measure of impedance.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommDuctbankLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

One or more duct routed in parallel between two nodes [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity communications_ductbank_line</i>
commdbk_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
no_ducts (Integer)	The total number of ducts in the ductbank.
no_du_high (Integer)	The number of ducts in the y-direction
no_du_wide (Integer)	The number of ducts in the x-direction
no_spares (Integer)	The total number of ducts not used in the ductbank.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

dbk_size_d (Enumeration16)	responsibility of the utility asset.. [Source: Adopted from SDSFIE] A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m).
dbl_len (Real)	The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement.
conc_enc_d (Enumeration16)	A Boolean indicating whether the ductbank is encased in concrete. [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
diameter (Real)	Diameter (if round). [Source: AIR FORCE]
width (Real)	Width of horizontal cross section. [Source: AIR FORCE]
height (Real)	Height. [Source: AIR FORCE]
size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]
diam_u_d (Enumeration16)	The unit of measure for the diameter (inches or centimeters). [Source: AIR FORCE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommDuctLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Any linear component of a path for cable routing. [Source: SDSFIE]

Attributes:

SDSFIE Entity communications_duct_line

cduct_id (Number*)	Primary Key. A locally assigned identifier for the record.
duct_mat_d (Enumeration16)	The material composition of the duct.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
in_diam (Real)	The inside diameter of the duct.
diam_u_d (Enumeration16)	The unit of measure of diameter.
pullrope_d (Enumeration16)	A Boolean indicating the existence of a pullrope.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
feat_len (Real)	The overall length of the feature. [Source: Center]
mexcellc_d (Enumeration16)	The color code of the MaxCell product if a 3in/3 cell is used. [Source: AIR FORCE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
maxcellt_d (Enumeration16)	For flexible MaxCell inner ducts, this indicates the type used. [Source: AIR FORCE]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommEquipPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A generic piece of communications equipment, that has not otherwise been defined with the communications equipment entity class. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity communications_equip_point

coequip_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the

	operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
eqp_name (String60)	The name or type of the equipment. [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
port_num (String50)	The port identifier corresponding to port's location on the device(slot/card/port). [Source: Air Force]
port_vlan (String50)	The VLAN(s) port is assigned to. [Source: Air Force]
stdsy_name (String50)	The standard system name. [Source: Air Force]
ncc_d (Enumeration16)	A boolean indicating whether it is under The Network Control Center control (Y = YES or N = NO)? [Source: Air Force]
coeqlpinid (String20)	The identifying number of the input equipment. [Source: Air Force]
inst_date (Integer)	The date of the Installation. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: Air Force]
sec_fac (String50)	The secondary facility name. [Source: Air Force]
pri_fac_na (String30)	The primary facility name. [Source: Air Force]
platform (String50)	The processor class. [Source: Air Force]
pri_fac_no (String20)	The primary facility number. [Source: Air Force]
contrid (Integer)	The access control system for this portal. [Source: Air Force]
equitytp_d (Enumeration16)	The different types of equipment. [Source: Air Force]
bar_code (String50)	The IPMS Bar Code. [Source: Air Force]
bandwidth (Real)	The bandwidth of network adapter. [Source: Air Force]
media_ty_d (Enumeration16)	The different types of media. [Source: Air Force]
ant_use_d (Enumeration16)	The different usages of communications antenna. [Source: Air Force]
auto_sys (String20)	The Automation System. [Source: Air Force]
card_ports (String50)	The total ports used/available on card. [Source: Air Force]
por_duplex (String50)	The transmission duplex of the port. [Source: Air Force]
port_loc (String50)	The location of the portal. [Source: Air Force]
card_type (String50)	The model/version of card. [Source: Air Force]
crd_no_use (Integer)	The total number of expansion slots in chassis in use. [Source: Air Force]
if_mac (String50)	The MAC Address of interface. [Source: Air Force]
proc_desc (String50)	The identifier of processor. [Source: Air Force]
dev_class (String50)	The class of device. [Source: Air Force]
dev_mac (String50)	The MAC Address of device. [Source: Air Force]
dev_ip (String50)	The IP Address of device. [Source: Air Force]
os_ver (String50)	The software version/I.O.S. of device. [Source: Air Force]
date_intl (Date)	The date the camera switch was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: Air Force]
remarks (String240)	Additional information about the camera switch. [Source: Air Force]
camera_no (Integer)	The number of cameras on the switch. [Source: Air Force]
monitor_no (Integer)	The number of monitors on the switch. [Source: Air Force]
keybord_no (Integer)	The number of keyboards on the switch. [Source: Air Force]
max_cam_no (Integer)	The maximum number of cameras switch can have. [Source: Air Force]
max_mon_no (Integer)	The maximum of monitors switch can have. [Source: Air Force]
max_key_no (Integer)	The maximum number of keyboards a switch can have. [Source: Air Force]

num_sens (Integer)	The number of sensors on an annunciator. [Source: Air Force]
max_sen_no (Integer)	The maximum number of sensors annunciator you can have. [Source: Air Force]
int_vid_d (Enumeration16)	A boolean indicating of it is integrated w/a video switch (Y = YES and N = NO)? [Source: Air Force]
cbl_ty_d (Enumeration16)	The type of cable. [Source: Air Force]
onlnmptos (String25)	The name of the operating system. [Source: Air Force]
soft_ver (String50)	The version of the software being used. [Source: Air Force]
cntr_ty_d (Enumeration16)	The list of control type codes. [Source: Air Force]
portal_no (Integer)	The number of controlled portals. [Source: Air Force]
dns_name (String50)	The Domain Name Server name of device if applicable. [Source: Air Force]
net_ver_no (String50)	The version number of network device. [Source: Air Force]
phys_dim (Real)	The physical dimensions of network device (HxWxD). [Source: Air Force]
pwr_in_tpy (String50)	The required input power type. [Source: Air Force]
pwr_supply (Integer)	The number of power supplies network device was designed for. [Source: Air Force]
pwr_sup_no (Integer)	The number of power supplies network device has installed. [Source: Air Force]
total_if (Integer)	The total number of network interfaces/ports network device has. [Source: Air Force]
card_slots (Integer)	The total number of expansion slots in chassis. [Source: Air Force]
cntrl_lvl (String50)	The level of control at the portal. [Source: Air Force]
radio_cap (Integer)	The radio circuit capacity system. [Source: Air Force]
if_ip (String50)	The IP Address of interface. [Source: Air Force]
if_protocol (String50)	The protocol by which interface communicates. [Source: Air Force]
if_speed (String50)	The interface bit rate. [Source: Air Force]
if_mtu (String50)	The maximum transmission unit of interface. [Source: Air Force]
if_app (String50)	The application for interface. [Source: Air Force]
if_app_des (String50)	The destination interface/port number. [Source: Air Force]
b_lan_name (String50)	The domain name. [Source: Air Force]
prt_mod_no (String50)	The physical module number. [Source: Air Force]
fan_tray (String50)	The description of the number of fans that are operational. [Source: Air Force]
max_por_no (Integer)	The maximum number of controlled portals. [Source: Air Force]
port_index (String50)	The physical port number. [Source: Air Force]
voltage_d (Enumeration16)	The voltage requirements. [Source: Air Force]
mon_type (String50)	The primary or remote annunciator. [Source: Air Force]
if_tpy (String50)	The physical/electrical type of interface. [Source: Air Force]
rack_desc (String50)	The identifier of rack chassis is located in. [Source: Air Force]
card_ip (String50)	The IP Address of device. [Source: Air Force]
intrf_desc (String50)	A unique Identifier of interface that port corresponds to. [Source: Air Force]
card_mac (String50)	The MAC Address of device. [Source: Air Force]
coeqpoutid (String20)	The identifying number of the output equipment. [Source: Air Force]
rem_ind (String50)	The type of remote indicators. [Source: Air Force]
crypto_d (Enumeration16)	A boolean indicating whether the data is classified or unclassified (Y = YES and N = NO)? [Source: Air Force]
line_cap (Integer)	The landline circuit capacity system. [Source: Air Force]
num_op_pos (Integer)	The number of operator positions. [Source: Air Force]
runway (String50)	The name of the runway. [Source: Air Force]
numautscop (Integer)	The number of automation scopes or positions. [Source: Air Force]
fl_ck_date (Integer)	The date of the flight check. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: Air Force]
reflc_loc (String50)	The name of the reflector location. [Source: Air Force]

remindloc (String50)	The location position of the remote indicator. [Source: Air Force]
sec_fac_no (Integer)	The secondary facility number. [Source: Air Force]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommFiberopticLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Thin transparent fibers of glass or plastic that are enclosed by material of a lower index of refraction and that transmit light throughout their length by internal reflections [Source: SDSFIE]

Attributes:

SDSFIE Entity communications_fiberoptic_line

fiberop_id (Number*)	Primary Key. A locally assigned identifier for the record.
vert_clr (Real)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage. [Source: REEGIS]
vert_u_d (Enumeration16)	the unit of measure of vertical clearance.
diam_u_d (Enumeration16)	The unit of measure of cable diameter.
cab_elev_d (Enumeration16)	The vertical location of the cable. [Source: Tinker Air Force Base]
river_mile (Real)	The river mile marker. [Source: REEGIS]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_name (String60)	The name of the feature. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cab_use_d (Enumeration16)	Discriminator - The overall use of the fiberoptic cable.
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
cbl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
feat_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
diameter (Real)	The width of a cylindrical or circular cable. [Source: Tinker Air Force Base]
cab_offset (Real)	The distance to the cable as measured from the edge of a paved surface. [Source: Tinker Air Force Base]
offset_u_d (Enumeration16)	The unit of measure of cable offset.
fc_sm (Integer)	The number of single-mode fibers [Source: Tinker Air Force Base]
fc_mm (Integer)	The number of multi-mode fibers in the cable. [Source: Tinker Air Force Base]
fc_ds (Integer)	The number of dispersion-shifted fibers in the cable. [Source: Tinker Air Force Base]
fc_total (Integer)	The total number of fibers in the cable. [Source: Tinker Air Force Base]
cbl_mat_d (Enumeration16)	Types of communication cable. [Source: HSIP]
net_affil (String32)	Network affiliation. [Source: HSIP]
stat_name (String12)	Commercial identifier. [Source: HSIP]
corp_name (String80)	Name of station corporation. [Source: HSIP]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommGroundplanePolygon

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A series of ground points electrically connected in a mesh formation necessary to minimize ground resistance and electromagnetic radiation, for example lightning strikes, in support of critical communications systems. [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_groundplane_polygon_area</i>
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

CommGroundPoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

The location where the communication configuration is grounded. [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_ground_point</i>
ground_id (Number*)	Primary Key. A locally assigned identifier for the record.	
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
resistance (Real)	The measured resistance of the cable. [Source: Tinker Air Force Base]	
resist_u_d (Enumeration16)	The unit of measure of resistance.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
feat_desc (String60)	A description of the feature.	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

CommGroundwavePolygon

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Confidential

An emanation pattern of Low Frequency Electromagnetic transmissions which use a ground path for transmission. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_groundwave_polygon_area</i>
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

CommHandholePoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

A chamber, just below the earth's surface, too small for a man to enter, in the route of one or more cable runs where cables may be accessed. [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_handhole_point</i>
handhol_id (Number*)	Primary Key. A locally assigned identifier for the record.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
no_cables (Integer)	The number of cables in the handhole.	
type_d (Enumeration16)	The handhole type.	
mat_d (Enumeration16)	The material composition of the handhole.	
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

function_d (Enumeration16)	The function of the handhole.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommImpedanceMatching

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that matches the impedance between two transmissions in order to minimize signal attenuation and distortion [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_impedance_matching_point</i>
impmat_id (Number*)	Primary Key. A locally assigned identifier for the record.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]	
imp_typ_d (Enumeration16)	The impedance matching device type. [Source: Tinker Air Force Base]	
loss (Real)	The signal amplitude loss of matching device. [Source: Tinker Air Force Base]	
loss_u_d (Enumeration16)	The unit of measure of loss.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
bandwidth (Real)	The difference between the highest and lowest frequencies. [Source: Tinker Air Force Base]	
band_u_d (Enumeration16)	The unit of measure of bandwidth.	
in_sig_lvl (Real)	The amplitude of the input signal. [Source: Tinker Air Force Base]	
outsig_lvl (Real)	The amplitude of the output signal. [Source: Tinker Air Force Base]	
level_u_d (Enumeration16)	The unit of measure for input and output signal level.	
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
imped_in (Real)	The input impedance. [Source: Tinker Air Force Base]	
imped_out (Real)	The output impedance. [Source: Tinker Air Force Base]	
imped_u_d (Enumeration16)	The unit of measure of input and output impedance.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

CommLineOfSightLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

An electromagnetic transmission signal path requiring line of sight such as microwave or laser transmission [Source: SDSFIE Tinker Air Force Base]

Attributes:	<i>SDSFIE Entity</i>	<i>communications_line_of_sight_line</i>
los_id (Number*)	Primary Key. A locally assigned identifier for the record.	
frequency (Real)	The frequency of the signal in the LOS transmission path.	
freq_u_d (Enumeration16)	The unit of measure of frequency.	
power (Real)	The power of the signal in the LOS transmission path.	
power_u_d (Enumeration16)	The unit of measure of signal power.	
feat_desc (String60)	A description of the feature.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
tx_len (Real)	The length of the LOS transmission path.	
vert_clr (Real)	The clearance in feet MHW between the lowest point under the transmission path. [Source: REEGIS]	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the	

vert_u_d (Enumeration16)	subject item's data integrity and should not be used to store the subject item's data.
river_mile (Real)	The unit of measure of vertical clearance.
feat_name (String30)	The river mile marker.
impedance (Real)	Any commonly used name for the signal path.
meta_id (Integer)	The number representing the total opposition to flow.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommManholeSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A subsurface chamber, large enough for a person to enter, in the route of one or more duct runs, and affording facilities for placing and maintaining the runs, conductors, cables, and associated apparatus. [Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_manhole_site*

comhl_id (Number*)	Primary Key. A locally assigned identifier for the record.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
drain_ty_d (Enumeration16)	An indication of the method of removing stormwater from the manhole.
fc_typ_d (Enumeration16)	he type of manhole frame/cover. [Source: Austin and Pitts]
function_d (Enumeration16)	The function of the manhole. [Source: Austin and Pitts]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
no_lat_dct (Integer)	The number of lateral ducts in the manhole. [Source: Tinker Air Force Base]
spl_rck_d (Enumeration16)	A Boolean indicating the presence of splicing racks. [Source: Tinker Air Force Base]
plugs_d (Enumeration16)	A Boolean indicating the presence of ducts equipped with plugs [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
mh_size_d (Enumeration16)	The exact dimensions of a standard size manhole. [Source: Tinker Air Force Base]
rim_elv (Real)	The height of the top of the rim of the manhole measured from grade.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. [Source: FGDC]
road_name (String30)	A common name or street name used to refer to the stretch of road that the manhole cover was located. [Source: FGDC]
area_size (Real)	The size of the area, zone, or polygon in square units.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
mhl_type_d (Enumeration16)	The type of manhole. [Source: Tinker Air Force Base]
mh_mat_d (Enumeration16)	The material composition of the manhole. [Source: AIR FORCE]
no_cables (Integer)	A number representing the total number of cables in the manhole. A cable passing through the manhole counts as one cable and a cable tying into another cable inside the manhole counts as one cable.
floor_elv (Real)	The height (or depth) of the bottom of the manhole measured from grade.
name (String20)	The standard identifier name (i.e. MH-19). [Source: AIR FORCE]
diameter (Real)	Diameter. [Source: AIR FORCE]
depth (Real)	Depth of horizontal cross-section. [Source: AIR FORCE]
width (Real)	Width of horizontal cross section. [Source: AIR FORCE]
height (Real)	Height. [Source: AIR FORCE]

size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]
date_int (Date)	Date (and Time if available) installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommMultihopPolygonArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A radio broadcast transmission which consist of a larger network such as cellular telephone; polygon represents coverage area. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_multihop_polygon_area*

gww_id (Number*)	Primary Key. A locally assigned identifier for the record.
river_mile (Real)	The river mile marker. [Source: REEGIS]
feat_name (String30)	any commonly used name for the feature. [Source: REEGIS]
feat_desc (String60)	A description of the feature.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
frequency (Real)	The frequency of the signal. [Source: Tinker Air Force Base]
freq_u_d (Enumeration16)	The unit of measure of frequency.
power (Real)	The amount power of the transmission signal. [Source: Tinker Air Force Base]
power_u_d (Enumeration16)	The unit of measure of power.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommOtherTypeCableLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Any type of communications cable transmission not otherwise specified in the SDS. [Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_other_type_cable_line*

coother_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cab_use_d (Enumeration16)	Discriminator - The overall use of the cable.
offset_u_d (Enumeration16)	The unit of measure of cable offset.
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Tinker Air Force Base]
diameter (Real)	The width of a cylindrical or circular cable. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
diam_u_d (Enumeration16)	The unit of measure of diameter.
cab_elev_d (Enumeration16)	The vertical location of the cable. [Source: Tinker Air Force Base]
river_mile (Real)	The river mile marker. [Source: REEGIS]
cbl_mat_d (Enumeration16)	The material composition of the cable. [Source: Tinker Air Force Base]
feat_name (String60)	Any commonly used name for the cable. [Source: Tinker Air Force Base]

vert_clr (Real)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage. [Source: REEGIS]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
cbl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
cbl_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
vert_u_d (Enumeration16)	The unit of measure of vertical clearance.
coffset (Real)	The distance to the cable as measured from the edge of a paved surface. [Source: Tinker Air Force Base]
icefac_clr (Real)	The clearance in feet between the lowest point under the cable line and the ice facility surface. [Source: S-57]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommPathNodeSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Node that represents a transition of different communications path segment types (i.e. duct to aerial) or attributes (i.e. duct material type from PVC to PE). [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i> <i>communications_path_node_site</i>
copathn_id (Number*)	Primary Key. A locally assigned identifier for the record.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
node_typ_d (Enumeration16)	Discriminator. The type of node this represents. [Source: AIR FORCE]
duct_flap (String20)	The flap on which this duct opening is located (i.e. N, NNE, NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, and NNW). [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
duct_tag (String8)	The location of the duct within the flap (i.e. A3). [Source: AIR FORCE]
in_diam (Real)	The inside diameter measurement of the duct, stub out, or hole. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
diam_u_d (Enumeration16)	The unit of measure for the diameter (inches or centimeters). [Source: AIR FORCE]
size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommPathSegmentLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Link that represents an enclosure path of communications items outside of a building, manhole, pedestal, or other enclosed structures. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i> <i>communications_path_segment_line</i>
compath_id (Number*)	Primary Key. A locally assigned identifier for the record.

path_typ_d (Enumeration16)	A field that describes what type of thing this segment is representing. [Source: AIR FORCE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
path_cnt_d (Enumeration16)	A field that indicates what the path contains. [Source: AIR FORCE]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
percent_d (Enumeration16)	The code that represents Percent Modifier of Reef Ground Cover. [Source: NAVFAC]
cabins_d (Enumeration16)	A field to describe the type of installation. [Source: AIR FORCE]
remarks (String240)	Any narrative remarks. [Source: AIR FORCE]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground communications path. [Source: AIR FORCE]
date_int (Date)	Date Installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]
mbrs_u_d (Enumeration16)	The unit of radius for the Minimum Bending Radius, Static. [Source: AIR FORCE]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommPullboxSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box with cover used as an aid for pulling cable. [Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_pullbox_site*

copbx_id (Number*)	Primary Key. A locally assigned identifier for the record.
area_size (Real)	The size of the area, zone, or polygon in square units.
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommRiserPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pipe-like structure used for the vertical conveyance of cable [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_riser_point*

rid_id (Number*)	Primary Key. A locally assigned identifier for the record.
duct_d (Enumeration16)	A Boolean indicating the presence of a duct. [Source: Tinker Air Force Base]

height (Real)	The height of the riser duct measured from the ground surface to the top. [Source: Tinker Air Force Base]
diameter (Real)	The width of a cylindrical or circular riser as measured from the ground surface to the top. [Source: Tinker Air Force Base]
diam_u_d (Enumeration16)	The unit of measure of diameter.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
mat_d (Enumeration16)	The code used to determine the type of material the riser is made of.
date_instl (Date)	The date the riser was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommSensorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of equipment used to detect and measure various environmental conditions (e.g. Temperature, Fire, Intrusion, etc.) [Source: SDSFIE Austin and Pitts]

Attributes:

SDSFIE Entity communications_sensor_point

cosensr_id (Number*)	Primary Key. A locally assigned identifier for the record.
sensor_typ (String16)	The type of sensor. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
office_typ (String30)	National Hurricane Center, Nat. Severe Storm Forecast Center. [Source: HSIP]
bus_name (String80)	Name of the Weather Forecast Office.
sens_loc (String50)	The sensor location (Interior or exterior). [Source: Tinker Air Force Base]
cbl_typ_d (Enumeration16)	Sensor cable connectivity type. [Source: Tinker Air Force Base]
sens_zone (String50)	The Detection zone. [Source: Tinker Air Force Base]
annun_num (String50)	The Annunciator in which the sensor is connected. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommSplitterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device to split a signal transmission into two or more signal paths while minimizing attenuation and distortion; generally used in broadband cable systems [Source: SDSFIE]

Attributes:

SDSFIE Entity communications_splitter_point

splittr_id (Number*)	Primary Key. A locally assigned identifier for the record.
in_sig_lvl (Real)	The input signal amplitude. [Source: Tinker Air Force Base]
outsig_lvl (Real)	The amplitude of the output signal. [Source: Tinker Air Force Base]
level_u_d (Enumeration16)	The unit of measure for input and output signal level. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
splt_typ_d (Enumeration16)	Discriminator - Splitter Type. [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
loss (Real)	The signal amplitude loss of splitter. [Source: Tinker Air Force Base]
loss_u_d (Enumeration16)	The unit of measure of loss.
bandwidth (Real)	The difference between the highest and lowest frequencies that a splitter can pass. [Source: Tinker Air Force Base]
band_u_d (Enumeration16)	The unit of measure of bandwidth. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
imped_in (Real)	The input impedance of the amplifier [Source: Tinker Air Force Base]
imped_out (Real)	The output impedance of the amplifier [Source: Tinker Air Force Base]
imped_u_d (Enumeration16)	The unit of measure of input and output impedance.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommTelephoneBoothSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of one or more outdoor telephones either in an open air bank or enclosed within a booth or other enclosure. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity communications_telephone_booth_site

tpbooth_id (Number*)	Primary Key. A locally assigned identifier for the record.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
area_size (Real)	The size of the area, zone, or polygon in square units.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommTelephonePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of an end user telephone set used for voice communications. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity

communications_telephone_point

phone_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
color_d (Enumeration16)	The color of the emergency telephone. [Source: FGDC]
appearance (String50)	A description of the appearance of phone. [Source: FGDC]
status_d (Enumeration16)	A description of the status of the emergency telephone. [Source: FGDC]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. [Source: FGDC]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
phn_typ_d (Enumeration16)	The type of phone. [Source: Tinker Air Force Base]
phone_no (String16)	The phone number of the location. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
feat_name (String80)	Indicates the name of the feature. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommTerminatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that terminates an electrical or optical transmission media. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity

communications_terminator_point

termint_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
term_typ_d (Enumeration16)	The type of terminator. [Source: AIR FORCE]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
connt_d (Enumeration16)	The type of connector used for the terminator. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cbldim3_d (Enumeration16)	Tertiary. Wire Gauge (AWG) or Core Size (in um). [Source: AIR FORCE]
impedance (Real)	A measure of the apparent opposition in an electrical circuit to the flow of an alternating current that is analogous to the actual electrical resistance to a direct current and that is the ratio of effective electromotive force to the effective current. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
imped_u_d (Enumeration16)	The unit of measure of impedance.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommTwistedPairLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Multi-conductor Communications cable generally consisting of copper wire, with each pair being twisted in order to minimize signal loss due to electromagnetic radiation. [Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_twisted_pair_line*

twpcbl_id (Number*)	Primary Key. A locally assigned identifier for the record.
vert_clr (Real)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage. [Source: REEGIS]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cab_use_d (Enumeration16)	Discriminator - The overall use of the cable.
offset_u_d (Enumeration16)	The unit of measure of offset
no_pairs (Integer)	The number of wire pairs in the cable
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
cbl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
vert_u_d (Enumeration16)	The unit of measure of vertical clearance
river_mile (Real)	The reference of the river mile associated with the cable. [Source: REEGIS]
feat_name (String60)	The name of the feature. [Source: Tinker Air Force Base]
cbl_size_d (Enumeration16)	The wire gauge of the cable. [Source: Austin and Pitts]
resistance (Real)	The degree of tendency of the cable to oppose the flow of current.
resist_u_d (Enumeration16)	The unit of measure of resistance.
numpr_low (Integer)	The lowest numbered pair within the cable [Source: Tinker Air Force Base]
numpr_high (Integer)	The highest numbered pair within the cable [Source: Tinker Air Force Base]
core_typ_d (Enumeration16)	The type of core in the cable. [Source: Tinker Air Force Base]
cab_offset (Real)	The distance to the cable as measured from the edge of a paved surface. [Source: Tinker Air Force Base]
feat_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
diameter (Real)	The width of a cylindrical or circular cable. [Source: Tinker Air Force Base]
diam_u_d (Enumeration16)	The unit of measure of diameter
cab_elev_d (Enumeration16)	The vertical location of the cable.
cbl_mat_d (Enumeration16)	The material composition of the cable. [Source: Tinker Air Force Base]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommVaultSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A special structure for transitioning the outside cable plant from horizontal orientation to vertical orientation in preparation for termination on the distribution frame. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *communications_vault_site*

comvlt_id (Number*)	Primary Key. A locally assigned identifier for the record.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
no_circuit (Integer)	The number of circuits housed in the vault.

model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
vl_t_mat_d (Enumeration16)	Used to describe the material composition of the vault. [Source: AIR FORCE]
date_int (Date)	The date the vault was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]
name (String20)	The standard identifier name (i.e. MH-19). [Source: AIR FORCE]
diameter (Real)	Diameter. [Source: AIR FORCE]
depth (Real)	Depth of horizontal cross-section. [Source: AIR FORCE]
width (Real)	Width of horizontal cross section. [Source: AIR FORCE]
height (Real)	Height. [Source: AIR FORCE]
size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CommWaveguideLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A cable designed to confine and direct the propagation of electromagnetic waves. [Source: SDSFIE]

Attributes:

SDSFIE Entity *communications_waveguide_line*

wvg_id (Number*)	Primary Key. A locally assigned identifier for the record.
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
cbl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
feat_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
diameter (Real)	The width of a cylindrical or circular cable. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
diam_u_d (Enumeration16)	The unit of measure code.
cab_elev_d (Enumeration16)	The vertical location of the cable. [Source: Tinker Air Force Base]
cbl_mat_d (Enumeration16)	The material composition of the cable. [Source: Tinker Air Force Base]
river_mile (Real)	The river mile marker. [Source: REEGIS]
feat_name (String60)	The name of the feature. [Source: Tinker Air Force Base]
vert_clr (Real)	The clearance in feet between the lowest point under the cable line and the water's surface at Mean High Water (MHW) referenced to a reading on the appropriate gage. [Source: REEGIS]
vert_u_d (Enumeration16)	The unit of measure of vertical clearance.
cab_typ_d (Enumeration16)	The type of cable. [Source: Tinker Air Force Base]
frequency (Real)	The number of cycles per unit time of the energy in the waveguide..

freq_u_d (Enumeration16)	[Source: Tinker Air Force Base] The unit of measure of frequency.
cab_offset (Real)	The distance to the cable as measured from the edge of a paved surface. [Source: Tinker Air Force Base]
offset_u_d (Enumeration16)	The unit of measure of cable offset.
cab_use_d (Enumeration16)	Discriminator - The overall use of the cable.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

DbspliceSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A enclosed structure that represents a splice case (aerial or buried). [Source: SDSFIE Air Force]

Attributes:

SDSFIE Entity dbsplice_site

dbsplic_id (Number*)	Primary Key. A locally assigned identifier for the record.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
name (String20)	The standard identifier name (i.e. MH-19). [Source: AIR FORCE]
date_int (Date)	Date Installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
spec_con_d (Enumeration16)	The condition of the species at the time it was sighted. [Source: NAVFAC]
ecs_typ_d (Enumeration16)	The type of encapsulate used. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
cas_typ_d (Enumeration16)	Used to describe the type of splice case. [Source: AIR FORCE]
cas_mat_d (Enumeration16)	Used to describe the material composition of the splice case. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectronicMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device that aids location of buried communications equipment or pathways. [Source: SDSFIE NGA/NIMA]

Attributes:

SDSFIE Entity electronic_marker_point

elemrk_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject

passve_d (Enumeration16)	item's data.
remarks (String240)	Is it a passive device? (Y/N). [Source: AIR FORCE] A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
metertyp_d (Enumeration16)	A label describing the features of the electrical system that the meter is measuring. [Source: AIR FORCE]
elmpur_d (Enumeration16)	Purpose of this marker. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
type_d (Enumeration16)	Discriminator - The type of marker. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

InternetCenterSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A site that contains information about the internet center. [Source: SDSFIE Air Force]

Attributes:

SDSFIE Entity *internet_center_site*

intert_id (Number*)	Primary Key. A locally assigned identifier for the record.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
area_size (Real)	The size of the area, zone, or polygon in square units.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

JunctionNodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The communications junction node represents a transition node of cable path. For example, it can represent terminal, splice, or cross connection points. It can also indicate the transition of the cable into a duct opening.

Attributes:

SDSFIE Entity *junction_node_point*

cojunct_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
conectedto (String30)	Table name of Child Equipment that links to this node. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

LoadCapacitorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device used to eliminate problems with high-frequencies on long telephone lines using capacitance. Spliced into the line. [Source: SDSFIE]

Attributes:

SDSFIE Entity *load_capacitor_point*

cap_id (Number*)	Primary Key. A locally assigned identifier for the record.
dist_u_d (Enumeration16)	The unit of measure of distance to the CO. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cap_u_d (Enumeration16)	The unit of measure of capacitance. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
capacit (Real)	Capacitance of each capacitor. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
co_dist (Real)	Distance from the build-out unit to the Central Office. [Source: AIR FORCE]
narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
fr_rgl_u_d (Enumeration16)	The unit of measure for low frequency range. [Source: AIR FORCE]
ldcnum_d (Enumeration16)	Number of capacitors making up the build-out unit. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

LoadCoilPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device used to eliminate problems with high-frequencies on long telephone lines using inductance. Spliced into the line. [Source: SDSFIE Air Force]

Attributes:

SDSFIE Entity load_coil_point

coil_id (Number*)	Primary Key. A locally assigned identifier for the record.
ldccas_d (Enumeration16)	Type of case in which the load coil(s) are assembled. [Source: AIR FORCE]
ldctyp_d (Enumeration16)	Type of loading coils. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
dist_u_d (Enumeration16)	The unit of measure of distance to the CO. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
load_pt_no (Integer)	Load point number. [Source: AIR FORCE]
co_dist (Real)	Distance from the load coil assembly to the Central Office. [Source: AIR FORCE]
narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
agl_u_d (Enumeration16)	Antenna height above ground level UOM. [Source: AIR FORCE]
kingdom_d (Enumeration16)	Identifies one of the five kingdoms into which all living organisms are classified. [Source: NAVFAC]
ldcnum_d (Enumeration16)	Number of coils making up the load coil assembly. [Source: AIR FORCE]
ldcsym_d (Enumeration16)	Type of load coil system used. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

MediaConverterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device used to convert from one type of signal transmission media to another. [Source: SDSFIE Tinker Air Force

Attributes:

SDSFIE Entity media_converter_point

medcvt_id (Number*)	Primary Key. A locally assigned identifier for the record.
connt2_d (Enumeration16)	The connector type at port two. [Source: AIR FORCE]
maxcellt_d (Enumeration16)	For flexible MaxCell inner ducts, this indicates the type used. [Source: AIR FORCE]
mtimzone_d (Enumeration16)	Typical Maritime Zones. [Source: NAVFAC]
netbw_d (Enumeration16)	The data transmission rate through the repeater. [Source: AIR FORCE]
cbltyp1_d (Enumeration16)	The type of cable accommodated by port one. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cbltyp2_d (Enumeration16)	The type of cable accommodated by port two. [Source: AIR FORCE]
netprc_d (Enumeration16)	The network protocol accommodated by the media converter. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
vehtype_d (Enumeration16)	The type of vehicles located in the parking area. [Source: AIR FORCE]
connt1_d (Enumeration16)	The connector type at port one. [Source: AIR FORCE]
volt_req_d (Enumeration16)	Voltage Requirements. [Source: AIR FORCE]
mncvty_d (Enumeration16)	Converter Type. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NetworkSystemsSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The Network Standard System name, architecture (i.e. protocol), number of facilities where installed and number of users of system. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity network_systems_site

net_sys_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: Tinker Air Force Base]
net_aff_d (Enumeration16)	The broadcasting network to which the facility is associated. [Source: HSIP]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
conv_type (String50)	A type of media converter. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
feat_name (String80)	The name for the standard system. [Source: Tinker Air Force Base]

arch_prot1 (String60)	The Protocol Description. [Source: Tinker Air Force Base]
num_users (String50)	The number of users of standard system. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RadarSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of equipment used for determining the presence and position of an object by measure the direction and timing of electromagnetic waves. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *radar_site*

rdr_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
rad_typ_d (Enumeration16)	The operating spectrum of the radar. [Source: Tinker Air Force Base]
power (Real)	The amount of power the radar emits. [Source: Tinker Air Force Base]
power_u_d (Enumeration16)	The unit of measure of power.
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RadioPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location of equipment used to transmit and receive communications signals via electromagnetic waves. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *radio_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

RadioReceiverSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location to store individual radio receiver sections that may be in one piece of radio equipment. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity *radio_receiver_site*

radiorx_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: Tinker Air Force Base]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in

user_flag (String20)	linear units. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rf_asn_frq (String50)	The frequencies assigned to this unit. [Source: Tinker Air Force Base]
rf_high (Integer)	The highest capable operating frequency unit. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
rf_low (Integer)	The lowest capable operating frequency unit. [Source: Tinker Air Force Base]
rf_bndwidth (Integer)	The bandwidth of signal (LMR is 25k wide, 12.5k narrow). [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: Tinker Air Force Base]
mod_pos (Integer)	From the left of unit, module number for multiple transmitters in one radio. [Source: Tinker Air Force Base]
rf_p25t_d (Enumeration16)	Is the unit capable of operating P25 Trunking (Y/N)? [Source: Tinker Air Force Base]
rf_p25c_d (Enumeration16)	Is the unit capable of operation P25 Conventional (Y/N)? [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RadioTransmitterSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location to store individual radio transmitter sections that may be in one piece of radio equipment. [Source: SDSFIE Tinker Air Force Base]

Attributes:

	<i>SDSFIE Entity</i>	<i>radio_transmitter_site</i>
radiotx_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: Tinker Air Force Base]	
area_size (Real)	The size of the area, zone, or polygon in square units.	
rf_low (Integer)	The lowest capable operating frequency unit. [Source: Tinker Air Force Base]	
rf_p25t_d (Enumeration16)	Is the unit capable of operating P25 Trunking (Y/N)? [Source: Tinker Air Force Base]	
rf_p25c_d (Enumeration16)	Is the unit capable of operation P25 Conventional (Y/N)? [Source: Tinker Air Force Base]	
mod_pos (Integer)	From the left of unit, module number for multiple transmitters in one radio. [Source: Tinker Air Force Base]	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: Tinker Air Force Base]	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
rf_asn_frq (String50)	The frequencies assigned to this unit. [Source: Tinker Air Force Base]	
rf_fccid (String50)	FCC emission designators. [Source: Tinker Air Force Base]	
rf_bndwidth (Integer)	The bandwidth of signal (LMR is 25k wide, 12.5k narrow). [Source: Tinker Air Force Base]	
rf_maxwats (Integer)	The maximum output power of this unit in watts. [Source: Tinker Air Force Base]	

rf_high (Integer)	The highest capable operating frequency unit. [Source: Tinker Air Force Base]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RelayStationPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A piece of equipment used to relay communications signals. [Source: SDSFIE Air Force]

Attributes:

SDSFIE Entity relay_station_point

radio_id (Number*)	Primary Key. A locally assigned identifier for the record.
serial_no (String16)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
fac_typ_d (Enumeration16)	The type of broadcast facility located at this location. [Source: Tinker Air Force Base]
net_aff_d (Enumeration16)	The broadcasting network to which the facility is associated. [Source: Tinker Air Force Base]
radio_ty_d (Enumeration16)	Types of radio points [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rad_typ_d (Enumeration16)	Discriminator - Radio type [Source: Tinker Air Force Base]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
acct_code (String20)	The owners account code. [Source: Tinker Air Force Base]
base_iloc (String20)	ILC code of the installation where this equipment is located. [Source: Tinker Air Force Base]
deployab_d (Enumeration16)	Is unit flagged as deployable (Y/N)? [Source: Tinker Air Force Base]
enc_lvl (String20)	The level of encryption unit supports (TRS is not standard on this). [Source: Tinker Air Force Base]
enc_max_d (Enumeration16)	The highest level of encryption unit can operate . [Source: Tinker Air Force Base]
enc_prot_d (Enumeration16)	Type of protocol used to provide encryption. [Source: Tinker Air Force Base]
feat_name (String80)	Any commonly used name of the feature. [Source: HSIP]
lmr_net (String20)	The network is this unit assigned to (LMR or Conventional). [Source: Tinker Air Force Base]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: Tinker Air Force Base]
narrowbn_d (Enumeration16)	Narrowband operation 12.5kHz capable (Y/N)? [Source: Tinker Air Force Base]
power_d (Enumeration16)	Alternating Current or Direct Current (AC/DC). [Source: Tinker Air Force Base]
pwr_phase (Integer)	The phase requirement if AC. [Source: Tinker Air Force Base]
pwr_volt (Integer)	The voltage required in Volts. [Source: Tinker Air Force Base]
pwr_watts (Integer)	The maximum power draw. [Source: Tinker Air Force Base]
rack_no (String20)	The rack identifier the unit is in. [Source: Tinker Air Force Base]
rack_pos (String20)	The position in the rack if applicable. [Source: Tinker Air Force Base]
rf_lmrwd_d (Enumeration16)	Is the unit wideband operation capable (Y/N)? [Source: Tinker Air Force Base]
statn_name (String20)	Indicates the Commercial Identifier. [Source: HSIP]
supp_sys (String20)	The system that does this asset support (LMR, Giant Voice, Milstar).

t_load_u_d (Enumeration16)	[Source: Tinker Air Force Base]
therm_load (Integer)	Units used for thermal loading. [Source: Tinker Air Force Base]
trnk_p25_d (Enumeration16)	Thermal loading of unit for HVAC calculations. [Source: Tinker Air Force Base]
trunk_num (Integer)	Is the unit capable of operating trunking P25 (Y/N)? [Source: Tinker Air Force Base]
tx_analg_d (Enumeration16)	Trunking site ID (LMR). [Source: Tinker Air Force Base]
tx_digl_d (Enumeration16)	Analog transmission capable (Y/N)? [Source: Tinker Air Force Base]
vehicle_no (String20)	Digital transmission capable (Y/N)? [Source: Tinker Air Force Base]
juntionType (Enumeration16)	For mobile units assigned to vehicles (LMR). [Source: Tinker Air Force Base]
meta_id (Integer)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RepeaterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Device used to receive, clean up a signal, and then retransmit it. [Source: SDSFIE]

Attributes:

SDSFIE Entity repeater_point

repeatr_id (Number*)	Primary Key. A locally assigned identifier for the record.
netbw_d (Enumeration16)	The data transmission rate through the repeater. [Source: AIR FORCE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

SatellitePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Communications Satellite. Used to retransmit signals from space. [Source: SDSFIE]

Attributes:

SDSFIE Entity satellite_point

satelte_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
comn_name (String30)	Common Name. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
norad_no (String5)	NORAD Designation Number. [Source: AIR FORCE]
origin (String50)	Country of Origin. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
lvehicle (String25)	Launch vehicle used. [Source: AIR FORCE]
ldate (Integer)	Launch date. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]

narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SegmentedCableLine

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret

Used to represent a portion of the entire cable sheath as it is shown in an enclosed structure (building, manhole, vault, etc) so that the cable sheath does not have to be drawn between enclosed structures. [Source: SDSFIE Tinker]

Attributes:	<i>SDSFIE Entity</i> <i>segmented_cable_line</i>
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

SegmentedCableSite

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

The location all communication cable types. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i> <i>segmented_cable_site</i>
seg_cbl_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: Tinker Air Force Base]
core_typ_d (Enumeration16)	Attributes for Core Types. [Source: Air Force]
buf_typ_d (Enumeration16)	The types of buffers. [Source: Tinker Air Force Base]
cab_use_d (Enumeration16)	The overall use of the cable. [Source: Tinker Air Force Base]
ins_typ_d (Enumeration16)	The installation type code for cables. [Source: Tinker Air Force Base]
feat_desc (String60)	A description of the feature. [Source: Tinker Air Force Base]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cbl_sht_d (Enumeration16)	The type of cable sheathing or insulation. [Source: Tinker Air Force Base]
cbl_len (Real)	A measurement of the longer of two linear axes. [Source: Tinker Air Force Base]
diam_u_d (Enumeration16)	The unit of measure of diameter. [Source: Tinker Air Force Base]
feat_name (String60)	Any commonly used name for the cable. [Source: Tinker Air Force Base]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
seg_num (Integer)	The segment in which the cable section is located. [Source: Tinker Air Force Base]
cab_typ_d (Enumeration16)	The type of cable. [Source: Tinker Air Force Base]
cab_no (String16)	Cable name or number. [Source: Tinker Air Force Base]
begincount (Integer)	Starting count of pairs or strands. [Source: Tinker Air Force Base]
endcount (Integer)	Ending count of pairs or strands. [Source: Tinker Air Force Base]
totalcount (Integer)	Total number of pairs or strands associated with a particular cable. [Source: Tinker Air Force Base]

sheath_dia (Real)	Overall Diameter of sheath. [Source: Tinker Air Force Base]
media_diam (Real)	Diameter of gauge of individual media. [Source: Tinker Air Force Base]
media_ty_d (Enumeration16)	The types of media. [Source: Tinker Air Force Base]
date_ins (Date)	Date Installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ServiceLoopPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Service loops contain extra cable that may be required in the future. [Source: SDSFIE]

Attributes:

SDSFIE Entity *service_loop_point*

cosrvlp_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
length (Real)	The length of cable contained in the service loop. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

SpeakerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that converts an electrical signal into sound. Generally used as part of a public address, giant voice, or mass notification system. [Source: SDSFIE]

Attributes:

SDSFIE Entity *speaker_point*

cospekr_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections. [Source: AIR FORCE]
size_u_d (Enumeration16)	Size (Diameter, Depth, Width, Height) Unit of Measure. [Source: AIR FORCE]
weather_d (Enumeration16)	Indicates a weather proof speaker case. [Source: AIR FORCE]
mltp25_d (Enumeration16)	Indicates a 25 Volt multi-tap transformer. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
mltp70_d (Enumeration16)	Indicates a 70 Volt multi-tap transformer. [Source: AIR FORCE]
name (String20)	The local name of the Speaker. [Source: AIR FORCE]
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: AIR FORCE]
rms_watage (Integer)	Average power handling capability over time, in watts AKA average power or mean power. [Source: AIR FORCE]
diameter (Real)	Diameter, if round or cylindrical. [Source: AIR FORCE]
width (Real)	Width. [Source: AIR FORCE]

height (Real)	Height. [Source: AIR FORCE]
depth (Real)	Depth. [Source: AIR FORCE]
freq_rng_h (Integer)	Highest effective frequency speaker emits in Hz. [Source: AIR FORCE]
freq_rng_l (Integer)	Lowest effective frequency speaker emits in Hz. [Source: AIR FORCE]
weight (Real)	Weight of speaker. [Source: AIR FORCE]
dispertn_h (Integer)	Angle of horizontal sound dispersion in degrees. [Source: AIR FORCE]
dispertn_v (Integer)	Angle of vertical sound dispersion in degrees. [Source: AIR FORCE]
sensitivty (String50)	Speaker sensitivity or efficiency measured as dB/W/m - decibels output for an input of one nominal watt measured at on meter from the speaker. [Source: AIR FORCE]
narrative (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
dist_u_d (Enumeration16)	The unit of measure of distance to the CO. [Source: AIR FORCE]
weight_u_d (Enumeration16)	The unit of measure for weight. [Source: AIR FORCE]
spkimp_d (Enumeration16)	Input impedance. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

VerticalSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A vertical is part of a mainframe where the outside cable plant terminates. [Source: SDSFIE Tinker Air Force Base]

Attributes:

SDSFIE Entity vertical_site

covrtcl_id (Number*)	Primary Key. A locally assigned identifier for the record.
covtbk_d (Enumeration16)	The type of the connector block. [Source: AIR FORCE]
covtht_d (Enumeration16)	The height of this vertical in the frame. [Source: AIR FORCE]
covtma_d (Enumeration16)	The spacing between mounting brackets for mounting MDF connector blocks. [Source: AIR FORCE]
covtmb_d (Enumeration16)	The type of mounting bar. [Source: AIR FORCE]
covtsw_d (Enumeration16)	The width of the mounting shelf for connector blocks. [Source: AIR FORCE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
covtty_d (Enumeration16)	The type of vertical. [Source: AIR FORCE]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
grndbar_d (Enumeration16)	Indicates the presences of a grounding bar. [Source: AIR FORCE]
grdrails_d (Enumeration16)	Indicates the presences of a guardrail. [Source: AIR FORCE]
endguard_d (Enumeration16)	Indicates the presences of an end guard. [Source: AIR FORCE]
remarks (String240)	A description or other unique information concerning the subject item, unlimited length (SDSFIE export limited to first 240 characters). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

VideoSite

Geometry Type: Point**Accuracy: +/-1Ft.****Sensitivity: Secret**

The location of equipment used to receive or transmit the visual portion of a communications signal.
 used to receive or transmit
 the visual portion of a
 communications signal [Source: SDSFIE Tinker Air Force Base]

Attributes:

	<i>SDSFIE Entity</i>	<i>video_site</i>
video_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity. [Source: Tinker Air Force Base]	
conv_type (String60)	A type of media converter. [Source: Tinker Air Force Base]	
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
feat_name (String30)	Name of the recreation feature. [Source: Tinker Air Force Base]	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
model_no (String16)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]	
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]	
feat_desc (String30)	The name or type of the equipment. [Source: Tinker Air Force Base]	
sys_desc (String60)	The system description. [Source: Tinker Air Force Base]	
trans_type (String50)	The transmission type protocol. [Source: Tinker Air Force Base]	
bandwidth (Real)	The data rate. [Source: Tinker Air Force Base]	
crypto_d (Enumeration16)	Classified or Unclassified (Y/N)? [Source: Tinker Air Force Base]	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

VoiceSwitchSite**Geometry Type: Point****Accuracy: +/-1Ft.****Sensitivity: Secret**

The location of equipment used to receive or transmit the visual portion of a communications signal. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>voice_switch_site</i>
vswitch_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity. [Source: Tinker Air Force Base]	
voip_trk (String50)	Number of Trunks Voice IP switch -to- DCO PBX. [Source: Tinker Air Force Base]	
num_users (String50)	The number of users capability in Voice Mail system. [Source: Tinker Air Force Base]	
trk_used (String50)	The total number of trunk lines being used. [Source: Tinker Air Force Base]	
remarks (String240)	Any narrative remarks concerning the voice switch. [Source: Tinker Air Force Base]	
lin_cap_no (String50)	The number of lines capability. [Source: Tinker Air Force Base]	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
num_lused (String50)	The number of lines used. [Source: Tinker Air Force Base]	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	

sw_type (String20)	The code for the different switch types. [Source: Tinker Air Force Base]
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item. [Source: Tinker Air Force Base]
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item. [Source: Tinker Air Force Base]
soft_ver (String50)	The software version release number. [Source: Tinker Air Force Base]
sw_cap (String50)	The number of lines that the software is capable of running. [Source: Tinker Air Force Base]
hw_cap (String50)	The total hardware line capacity. [Source: Tinker Air Force Base]
anlg_lused (Integer)	The number of analog lines being used. [Source: Tinker Air Force Base]
digt_lused (Integer)	The number of digital lines being used. [Source: Tinker Air Force Base]
isdn_lused (Integer)	The number of ISDN lines being used. [Source: Tinker Air Force Base]
trk_cap (String50)	The total number of trunk lines capacity. [Source: Tinker Air Force Base]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Utilities Air

CompressedAirDrainSepPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

condensation drain in a compressed air line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *compressed_air_drain_sep_point*

PKAirsepID (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
UserFlag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
FeatDesc (String60)	Any brief description of the feature.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
CodeOwner (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

CompressedAirFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying compressed air. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *compressed_air_fitting_point*

PKAirflngID (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
UserFlag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
FeatDesc (String60)	Any brief description of the feature.
FittypDOM (Enumeration16)	Discriminator. The type of fitting used for the compressed air unit.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither

metadata (Integer)	in the network. Foreign Key. Used to link the record to the applicable feature level metadata record(s).
CodeOwner (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

CompressedAirPipeLine

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Secret

A pipe used to carry compressed air from location to location [Source: SDSFIE FGDC Utilities Classification]

Attributes: SDSFIE Entity compressed_air_pipe_line

PKAirpipeID (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
UserFlag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
FeatDesc (String60)	Any brief description of the feature.
DepthUOM (Enumeration16)	The unit of measure for depth. [Source: CENTER]
FeatLen (Real)	The overall length of the feature. [Source: Center]
Coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground air line pipe. [Source: Air Force]
CodeOwner (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
Impedance (Real)	The number representing the total opposition to flow.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

CompressedAirTankPoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

A chamber for holding compressed air prior to its use. [Source: SDSFIE FGDC Utilities Classification]

Attributes: SDSFIE Entity compressed_air_tank_point

PKAirtnkID (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
UserFlag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
FeatDesc (String60)	Any brief description of the feature.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
CodeOwner (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

CompressedAirValvePoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

A device to control flow through a compressed air line. [Source: SDSFIE REEGIS]

Attributes: SDSFIE Entity compressed_air_valve_point

PKAirvlID (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
UserFlag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
FeatDesc (String60)	Any brief description of the feature.

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
metadata (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
CodeOwner (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

Group: Electrical

ElectHeadBoltOutletPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device which supplies electric current in cold weather climates for vehicle heating. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_head_bolt_outlet_point*

headbol_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: Air Force]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
type_d (Enumeration16)	The type of head bold outlet. [Source: Air Force]
voltage_d (Enumeration16)	The type of voltage used. [Source: Air Force]
no_plugs (Integer)	The number of plug-ins available. [Source: Air Force]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: Air Force]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalBusLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A rigid metallic conductor (copper or aluminum), typically in the form of a flat bar, angle stock, or square tubing. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_bus_line*

busgrp_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
bil_rat_d (Enumeration16)	The insulators basic insulation level rating.
bus_mat_d (Enumeration16)	The material composition of the electrical bus group.
cbl_use_d (Enumeration16)	The use or purpose of the cable group.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
frame_ty_d (Enumeration16)	The substation structural frame configuration.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
voltage_d (Enumeration16)	The voltage of the bus group.
no_conduct (Integer)	The total number of ungrounded conductors in the cable.
no_neutral (Integer)	The number of neutral conductors.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
reactance (Real)	The reactance of the bus provided by the manufacturer.
sizeneut_d (Enumeration16)	The size of the neutral conductors.

resistance (Real)	The resistance of the bus provided by the manufacturer.
feat_len (Real)	The overall length of the feature. [Source: Center]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalCableLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A group of conductors used to carry electrical energy from point to point. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity *electrical_cable_line*

cblgrp_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
consize_d (Enumeration16)	The size of a single ungrounded conductor in the cable group in American Wire Gauge (AWG) units.
cbl_len (Real)	The length of the cable between nodes.
cbl_mat_d (Enumeration16)	The material composition of the cable.
cfg_ty_d (Enumeration16)	The cable mounting configuration on the pole or tower.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
voltage_d (Enumeration16)	The system voltage applied to the cable group.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
instl_ty_d (Enumeration16)	Discriminator. The installation type code.
insulmat_d (Enumeration16)	The type of material with which the conductors are insulated from each other and from their surroundings.
neutsize_d (Enumeration16)	The size of a single neutral conductor in American Wire Gauge (AWG) units.
no_conduct (Integer)	The total number of ungrounded conductors in the cable.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
no_neutral (Integer)	The total number of grounded conductors in a ductbank.
no_phases (Integer)	The number of phases routed by this cable group.
phas_itr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
river_mile (Real)	River mile marker. [Source: REEGIS]
feat_name (String30)	Any commonly used name for the feature. [Source: REEGIS]
cbl_typ_d (Enumeration16)	This value differentiates similar entities by use or type. [Source: REEGIS]
catnav_d (Enumeration16)	Category of navigation line [Source: S-57]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalDuctbankLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A tubular structure that provides protection for underground cables contained in conduit. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_ductbank_line*

ductbnk_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
duct_mat_d (Enumeration16)	An indication of the type of material of which the duct is composed.
dbk_len (Real)	The total length of the ductbank from source to load. Manholes and pullboxes should not break the measurement.
dbk_size_d (Enumeration16)	A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m).

dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
voltage_d (Enumeration16)	The maximum voltage in the ductbank.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
no_ducts (Integer)	An indicator of the number of conduits or wireways found in the ductbank.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
no_spares (Integer)	The number of spare ducts enclosed in the ductbank for future use.
river_mile (Real)	River mile marker. [Source: REEGIS]
feat_name (String30)	Name of the electrical underground conduit. [Source: REEGIS]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalGeneratorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A machine which converts mechanical energy into electrical energy. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_generator_point*

genratr_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
cool_ty_d (Enumeration16)	The type of cooling for the generator engine.
autotran_d (Enumeration16)	An indicator as to whether or not an automatic transfer switch exist. (yes or no) An automatic transfer switch is an electromechanical device used to automatically change states in the event of a power failure on the primary electrical service to use an
gen_ty_d (Enumeration16)	This value differentiates similar entities by use or type.
eng_model (String20)	The engine Model, Product, Catalog, or Item Number.
eng_ser_no (String20)	The engine serial number.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
engine_hp (Integer)	The power rating of the prime mover of the generator in horsepower.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_u_d (Enumeration16)	The unit of measure of oil capacity.
power_fact (Real)	The cosine of the phase angle between the voltage and the current that the generator creates.
fuel_ty_d (Enumeration16)	The type of fuel required to operate the prime mover of the generator.
hertz_d (Enumeration16)	The frequency of the electrical signal that the generator creates.
oil_cpcty (Real)	The manufacturer recommended amount of oil that the generator engine requires to operate properly.
voltage_d (Enumeration16)	The potential of the electrical energy that the generator creates.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
kva_rate (Integer)	The rating of the complex power that the generator creates.
kw_rate (Integer)	The rating of the real power that the generator creates.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
no_phases (Integer)	The number of phases to which this device provides reactive power.
sound_d (Enumeration16)	An indicator as to whether or not Insulation was added to dampen the transmission of noise. (yes or no)

phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
num_pipes (Integer)	The number of powerlines entering the power plant. [Source: HSIP]
cap_u_d (Enumeration16)	The unit of measure for the capacity. [Source: HSIP]
pwrsource (String65)	The source of the power used by the plant to generate electricity. [Source: HSIP]
fac_name (String65)	A commonly used name for the facility. [Source: HSIP]
fuel_del_d (Enumeration16)	The delivery method of the fuel used at the power plant. [Source: HSIP]
num_lines (Integer)	The total number of powerlines exiting the power plant. [Source: HSIP]
num_stat (Integer)	The total number of substations associated with the power plant. [Source: HSIP]
gen_cpcty (Real)	The total generating capacity of the power plant. [Source: HSIP]
com_aff (String80)	The name of the company that operates the power plant. [Source: HSIP]
num_gen (Integer)	The total number of generators at the power plant. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalGroundPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where the electrical configuration is grounded. [Source: SDSFIE Air Force]

Attributes:

SDSFIE Entity *electrical_ground_point*

elgrnd_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
feat_desc (String60)	Any brief description of the feature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

ElectricalJunctionSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or metal) typically located below grade with above grade access in which cables intersect, connect, or pass through. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_junction_site*

elemnhl_id (Number*)	Primary Key. An operator generated identifier unique for a electrical manhole.
drain_ty_d (Enumeration16)	An indication of the method of removing storm water from the manhole.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dia_u_d (Enumeration16)	The unit of measure for diameter.
floor_elv (Real)	The height (or depth) of the bottom of the manhole measured from grade.
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

	responsibility of the utility asset.. [Source: Adopted from SDSFIE]
mh_dia (Real)	The maximum linear distance measured horizontally across a manhole.
no_cables (Integer)	A number representing the total number of cables in the manhole. A cable passing through the manhole counts as one cable and a cable tying into another cable inside the manhole counts as one cable.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
rim_elv (Real)	The height of the top of the rim of the manhole measured from grade.
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc., identifying the location of the electrical equipment. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity electrical_marker_point

elmark_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
feat_desc (String60)	Any brief description of the feature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

ElectricalMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the electrical power supplied to a facility or through a section of line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity electrical_meter_point

meter_id (Number*)	Primary Key. An operator generated identifier unique for a electric meter.
amp_rate (Integer)	The maximum continuous current rating of the meter.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_kva (String12)	The limit of the complex power which the demand meter can record.
meter_ty_d (Enumeration16)	A label describing the features of the electrical system that the meter is measuring.
hertz_d (Enumeration16)	The frequency of the electrical system on which the meter should be used.

owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
voltage_d (Enumeration16)	The potential of the electrical system on which the meter may be used.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
kw_rate (Integer)	The power rating on the meter based on the current and potential transformer ratios.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
mtr_const (Integer)	The multiplication factor by which one must multiply the difference in present and previous meter readings to determine actual power consumed.
mtr_use_d (Enumeration16)	An indication of the type of service the meter is monitoring.
no_phases (Integer)	The number of phases that the meter monitors.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
drvesty_d (Enumeration16)	The types of dredging vessels. [Source: USACE]
metertyp_d (Enumeration16)	A label describing the features of the electrical system that the meter is measuring. [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalMotorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A machine that converts electrical energy into mechanical energy. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity electrical_motor_point

motor_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
enclty_d (Enumeration16)	The type enclosure the motor has to protect it from outside elements like the weather.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
power_fact (Real)	The nameplate power factor at which the motor operates at full load. The power factor is the cosine of the phase angle between the voltage and the current.
hertz_d (Enumeration16)	The nameplate frequency rating of the motor.
voltage_d (Enumeration16)	The nameplate voltage rating of the motor.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
insul_cl_d (Enumeration16)	The classification of the motor's insulation.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
start_ty_d (Enumeration16)	The startup configuration for the motor.
motor_hp (Real)	The output power rating of the motor in units of horsepower.
motor_ty_d (Enumeration16)	A label representing the name of a certain category of motors in which the motor fits based on common features of construction with other motors in the same category.

no_phases (Integer)	The number of phases at which the motor was designed to operate.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
wind_ty_d (Enumeration16)	A label representing the configuration of the stator winding connections.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalRegulatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An electrical device that maintains its output voltage at a certain level even though its input voltage varies in a certain range over time. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_regulator_point*

elereg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_manuf (Date)	The date of manufacturer for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
cool_ty_d (Enumeration16)	The method of controlling the temperature of the regulator.
instl_ty_d (Enumeration16)	The type installation of the subject item.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
fuse_rate (Integer)	The current rating of the fuse protecting the regulator. This will be on the primary side.
fuse_ty_d (Enumeration16)	A label chosen from a standard list of labels describing the characteristics of the fuse.
oil_cpcty (Real)	The manufacturer suggested volume of oil that should be maintained inside the regulator to assure safe and efficient operation.
prcnt_tap (Real)	The percentage of the voltage that will be changed by moving the connection up or down one tap.
kva_rate (Integer)	The maximum continuous complex power rating of the regulator.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
sec_volt_d (Enumeration16)	The voltage on the load side of the regulator with the associated units given.
weight_u_d (Enumeration16)	The unit of measure for weight.
no_phases (Integer)	The number of phases regulated by this device.
no_taps (Integer)	The number of available points of connection on the regulator which may be used to change the voltage.
pri_volt_d (Enumeration16)	The voltage on the source side of the regulator with the associated units given.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
reg_type_d (Enumeration16)	The type of voltage regulator.
reg_use_d (Enumeration16)	An indication of whether the regulator is on a line or in a substation.
reg_weight (Integer)	The force of the regulator toward the center of the earth due to the regulator's mass.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalRiserPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where underground cable transitions to overhead. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_riser_point*

riser_id (Number*)

Primary Key. A unique, user defined identifier for each record or instance of an entity.

mat_d (Enumeration16)

The material composition of the pole riser.

instl_date (Integer)

The date the riser was installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

narrative (String240)

A description or other unique information concerning the subject item, limited to 240 characters.

user_flag (String20)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

feat_desc (String60)

Any brief description of the feature.

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

juntionType (Enumeration16)

An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalSplicePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The connection of two separate cables at their ends or the tapping of a conductor along the path of another conductor. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_splice_point*

elsplce_id (Number*)

Primary Key. A unique, user defined identifier for each record or instance of an entity.

feat_desc (String60)

Any brief description of the feature.

user_flag (String20)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

juntionType (Enumeration16)

An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

ElectricalSubstationSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A facility in an electrical system where the voltage is reduced from transmission levels to distribution levels. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_substation_site*

substa_id (Number*)

Primary Key. A unique, user defined identifier for each record or instance of an entity.

volt_out_d (Enumeration16)

The line-to-line output voltage of the substation.

disposn_d (Enumeration16)

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

cpcty_oper (Integer)

The normal continuous amount of complex power that the substation provides.

cpcty_rate (Real)

The maximum continuous amount of complex power that the substation can provide.

cpcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
no_trans (Integer)	The total number of transformers presently in use at the substation.
no_circuit (Integer)	The total number of circuits that are being fed by the substation.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
sst_ty_d (Enumeration16)	A label indicating the type of service that the substation performs (e.g. distribution substation, facility substation).
no_spare (Integer)	The number of spare bays for possible substation expansion.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
volt_in_d (Enumeration16)	The line-to-line voltage of the transmission line that is the source for the substation.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
feat_name (String30)	Any commonly used name for the substation. [Source: USGS]
fac_name (String65)	A commonly used name for the facility. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectricalSwitchPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device which closes and opens (connects and disconnects) an electrical circuit. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity electrical_switch_point

switch_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
instl_ty_d (Enumeration16)	Discriminator. The installation type code.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
voltage_d (Enumeration16)	The system voltage of the electrical line at the point in which the switch is inserted.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
weight_u_d (Enumeration16)	The unit of measure for weight.
no_phases (Integer)	The number of phases opened by the switch
no_switch (Integer)	The number of switches at this installation. Each switch has its own record.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
sw_cub_no (String20)	A locally assigned switching cubicle number or designator.
switch_dim (String20)	A three dimensional description of the amount of space which a switch occupies (e.g., 2 x 1 x 4).
switch_rat (Integer)	The maximum continuous amount of current to which the switch should be subjected.

swt_sta_d (Enumeration16)	The positional condition of a switch during normal circuit conditions (e.g., normally-open, normally closed).
swt_ty_d (Enumeration16)	A label chosen from a standard list of labels indicating the characteristics of a switch.
swt_weight (Integer)	The force of the switch toward the center of the earth due to the switch's mass.
fuse_size (Integer)	The size of the fuse associated with the switch. [Source: Air Force]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectTransformrBankPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A location containing one or more transformers. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_transformer_bank_point*

tranbnk_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
no_trans (Integer)	The number of transformers in the transformer bank.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
sec_volt_d (Enumeration16)	The line-to-line voltage of the electrical system that the transformer bank serves.
tran_cap1 (Integer)	The capacity of the first transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
tran_cap2 (Integer)	The capacity of the second transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
tran_cap3 (Integer)	The capacity of the third transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
mount_d (Enumeration16)	Discriminator. The type of mounting for the transformer bank.
total_kva (Real)	The total kva rate for all transformers attached to the transformer bank.
feeder_no (String20)	An operator generated identifier locally used to identify the feeder to the transformer bank.
pri_volt_d (Enumeration16)	The line-to-line voltage of the electrical system that serves as the source for the transformer bank.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
date_instl (Date)	The date on which the subject item was originally installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
date_last (Date)	The last inspection date of the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
cond_d (Enumeration16)	The condition of the subject item when last inspected.
phase_1_d (Enumeration16)	The phase number for the first transformer group.
kva_1_d (Enumeration16)	The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.
no_tfrs_1 (Integer)	The number of transformers in the first group.
phase_2_d (Enumeration16)	The phase number for the second transformer group.
no_tfrs_2 (Integer)	The number of transformers in the second group.
kva_2_d (Enumeration16)	The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.

pcb_d (Enumeration16)	A boolean indicating whether the transformer contains PCB's and can be classified as wet or not (YES = Y and NO = N)? [Source: Air Force]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ElectXformerVaultPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An enclosure housing one or more transformers. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *electrical_transformer_vault_point*

tranvlt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
no_trans (Integer)	The number of transformers housed inside the transformer vault.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ExteriorLightingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Locations of point sources of general external lighting. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *exterior_lighting_point*

ext_lit_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
lit_typ_d (Enumeration16)	Discriminator - Various kinds of mounts for external lights.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
sensor_d (Enumeration16)	A Boolean code indicating whether or not the light has a night sensor. [Source: USACE OPERATIONS]
watts_d (Enumeration16)	The light fixture wattage specification.
voltage_d (Enumeration16)	The system voltage applied to the light fixture.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
no_lamps (Integer)	The total number of lamps in fixture.
fixture_ht (Real)	The height above the ground/base surface of the light fixture.
mount_ht (Real)	The fixture mounting height.
narrative (String240)	Any additional comments or text.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilityElectricUtilitySite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An electrical power utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority. [Source: SDSFIE]

Attributes:

SDSFIE Entity *utility_electric_utility_site*

e_util_id (Number*)	Primary Key. A locally assigned identifier for the record.
num_pipes (Integer)	Number of pipelines entering facility. [Source: HSIP]
num_lines (Integer)	Number of powerlines existing on a facility. [Source: HSIP]
num_gen (Integer)	Total number of power generators at the plant. [Source: HSIP]
num_stat (Integer)	Number of substations at the facility. [Source: HSIP]
area_size (Real)	The size of the area, zone, or polygon in square units.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
re_connect (Integer)	Total number of residential type service connections.
co_connect (Integer)	Total number of commercial (i.e., businesses, industrial) type service connections.
elutname (String50)	Name of electrical power utility or system.
pop_served (Integer)	Population served by electrical power utility or system.
elecuid (String30)	Identifier assigned to the electrical power utility or system by the appropriate federal, state, or local regulatory authority.
elecutcap (Real)	Total design capacity of the electrical power utility or system (e.g. megawatts per day).
capr_u_d (Enumeration16)	Capacity rate unit of measure (e.g., megawatt per day).
utilown_d (Enumeration16)	General category or type of electric utility or system owner.
elecsouce (String50)	Source of electrical power distributed by electric utility (e.g., electrical power plants owned by utility, electrical power purchased from other utilities).
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Fuel

FuelAirEliminatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device or structure placed in the fuel distribution system to separate air from petroleum products. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_air_eliminator_point*

fulair_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
feat_desc (String60)	Any brief description of the feature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

FuelAnodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A material used for fuel distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_anode_point*

fulanod_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
anode_wght (Real)	The initial weight of the anode or anode packet.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
material_d (Enumeration16)	The type of material composition of the anode or anode packet.
wght_u_d (Enumeration16)	The unit of measure for weight.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelFarmSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An area designated for the storage of POL products which normally includes multiple tanks (above or below ground), berms, and monitoring wells. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_farm_site*

fuelfar_id (Number*)	Primary Key. A locally assigned identifier for the record. [Source: HSIP]
jet_u_d (Enumeration16)	The unit of measure for the jet fuel storage quantity. [Source: HSIP]
feat_name (String30)	A commonly used name for the feature. [Source: HSIP]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
num_pipes (Integer)	The quantity of pipes that access the fuel farm. [Source: HSIP]
gas_u_d (Enumeration16)	The unit of measure for the gas storage quantity. [Source: HSIP]
jet_cpcty (Real)	The quantity of jet fuel that can be stored in the facility. [Source: HSIP]
lub_cpcty (Real)	The total storage capacity of lubricants at the fuel farm. [Source: HSIP]
lub_u_d (Enumeration16)	The unit of measure for the lubricant storage quantity. [Source: HSIP]
gas_cpcty (Real)	The total gas storage capacity for the fuel farm. [Source: HSIP]
num_tanks (Integer)	The total number of tanks in the fuel farm. [Source: HSIP]
oil_cpcty (Real)	The quantity of oil that can be stored in the facility. [Source: HSIP]
oil_u_d (Enumeration16)	The unit of measure for the oil storage quantity. [Source: HSIP]
strgpet_d (Enumeration16)	A boolean indicating whether the farm is a part of the Strategic Petroleum Reserve (Y - is a part of the reserve, N - is not a part of the reserve)? [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither

meta_id (Integer)	in the network. Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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FuelFilterStrainerPoint

Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
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A device through which fuel is passed to remove impurities to the fuel. Usually placed in fuel lines near fill points. [Source: SDSFIE FGDC Utilities Classification]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>fuel_filter_strainer_point</i>
fulfit_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
feat_desc (String60)	Any brief description of the feature.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

FuelFittingPoint

Geometry Type: Point	Accuracy: +/-1Ft.	Sensitivity: Secret
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A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying fuel. [Source: SDSFIE FGDC Utilities Classification]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>fuel_fitting_point</i>
fulfitt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
fit_lgth (Real)	The overall length of the fitting.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.	
fit_width (Real)	The width dimension of the subject item measured at its' widest point.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.	
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.	
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]	
coverdepth (Real)	Depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line fitting. [Source: Air Force]	
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level	

metadata record(s).

FuelHydrantPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Location where fuel is control discharged to users. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_hydrant_point*

fulhydr_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
hyd_ty_d (Enumeration16)	The particular kind, class, or group of hydrant.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
dia_u_d (Enumeration16)	The unit of measure for diameter.
outcon1dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the largest hydrant outlet.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
outcon2dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the second largest hydrant outlet.
outcon3dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the smallest hydrant outlet.
hyd_elv (Real)	The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
press_resd (Real)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
press_stat (Real)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
press_u_d (Enumeration16)	The unit of measure of pressure.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
vlv_st_d (Enumeration16)	The style of the valve.
country_d (Enumeration16)	The 2-letter Country Designator. [Source: Air Force]
no_hydrnts (Integer)	The number of Refill for the hydrants. [Source: Air Force]
nozzl_ty_d (Enumeration16)	Fuel System Hydrant Cart Nozzle Type Code. [Source: Air Force]
truck_nr (Integer)	The number of the cart truck. [Source: Air Force]
truck_ty_d (Enumeration16)	The different code types of the cart truck. [Source: Air Force]
remarks (String240)	Any narrative remarks about the fuel hydrant . [Source: Air Force]
nozzle_nr (Integer)	The number of fuel system hydrant cart nozzles. [Source: Air Force]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelJunctionSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in fuel systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_junction_site*

fulmnhl_id (Number*)	Primary Key. An operator generated identifier unique for a fuel manhole.
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airrvlv_d (Enumeration16)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drain_ty_d (Enumeration16)	The type of subject item drain.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
mh_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.
no_valves (Integer)	The number of valves inside the subject item.
mh_len (Real)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mh_width (Real)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
status_d (Enumeration16)	The status of the manhole indicating its' usability.
no_pipes (Integer)	The number of the pipes entering and exiting the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry fuel from location to location (main line, service line, vent line, etc). [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_line*

fulpipe_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
catprot_d (Enumeration16)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

fuel_ty_d (Enumeration16)	responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_norm (Real)	The type of fuel transported in this pipe.
inv_elv_1 (Real)	The normal operating pressure of the fuel pipe.
	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	Discriminator. The use code for a fuel line.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
press_u_d (Enumeration16)	The unit of measure for pressure.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
piply_d (Enumeration16)	The location of the pipeline in relevance to the earth's surface. [Source: USGS]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
coverdepth (Real)	Depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line pipe. [Source: Air Force]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of fuel lines. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_marker_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

FuelMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the quantity and or rate of fuel to a facility or through a section of line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_meter_point*

fulmetr_id (Number*)	Primary Key. An operator generated identifier unique for a fuel meter.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
instl_ty_d (Enumeration16)	The type installation of the subject item.
meter_elv (Real)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed,

model_no (String12)	abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	The Model, Product, Catalog, or Item Number of subject item. A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
mtr_custmr (String20)	The name of the individual, company, or government agency served by the subject item.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
srvc_mtr_d (Enumeration16)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelOilWaterSeparatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A filtering device placed in the fuel stream specifically to remove oil and water from the fuel. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity fuel_oil_water_separator_point

sep_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_per_x (Date)	The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
disposal (String30)	Brief description of how the waste is disposed.
cpcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_u_d (Enumeration16)	The unit of measure for flow rate.
grtchbr_d (Enumeration16)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
flowcpcty (Real)	The flow capacity of the subject item.
oil_cpcty (Real)	The retention capacity of the oil-water separator.
sep_code (String2)	The oil-water separator code. Usually defined as OW.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
sep_contnt (String20)	Separator contents
temp_optim (Real)	The optimum operating temperature for the subject item.
temp_u_d (Enumeration16)	The unit of measure for temperature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
sep_name (String12)	The site specific identification name or number assigned to the subject item.

sep_procss (String30)	The specific type of separation process.
sep_volume (Real)	The volume of the oil-water separator.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
vol_u_d (Enumeration16)	The unit of measure of volume.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelPumpBoosterStatnPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a fuel distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_pump_booster_station_point*

fulstat_id (Number*)	Primary Key. A unique operator generated designator used to identify a station (pump station, pressure reducing station).
dispostrn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
design_d (Enumeration16)	Discriminator. The design of the pump/booster station.
cpcty_alarm (Real)	Capacity alarm level.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
cpcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).
fuel_src_d (Enumeration16)	The source of fuel for the pumps.
nodal_elv (Real)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
sta_cpcty (Real)	The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
sta_len (Real)	The length dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
sta_ty_d (Enumeration16)	The type of station.
sta_width (Real)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
no_pumps (Integer)	The total number of pumps located at the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
feat_name (String30)	Any commonly used name for the fuel pump booster station point. [Source: USGS]
prodct_d (Enumeration16)	The product being pumped or carried by the pipeline. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelPumpPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A mechanical device for a fuel system that draws material into itself through an entrance port and forces the material out through an exhaust port. [Source: SDSFIE FGDC Utilities Classification]

Attributes:SDSFIE Entity *fuel_pump_point*

pump_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
outflw_act (Real)	The actual measured pump flow output.
cool_mth_d (Enumeration16)	The method by which the pump is cooled.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
cpcty_rate (Real)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_u_d (Enumeration16)	The unit of measure for flow rate.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	The particular application, or use the subject item.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
prime_meth (String15)	The method by which the pump is primed.
prim_rqd_d (Enumeration16)	An indicator as to whether or not the pump has to be primed? (yes or no).
pump_hp (Real)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
bank_d (Enumeration16)	The bankside of the river that the feature is located on. [Source: USACE]
river_mile (Real)	River mile marker. [Source: USACE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelRectifierPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the fuel distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:SDSFIE Entity *fuel_rectifier_point*

rect_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
cool_mth_d (Enumeration16)	The method by which the rectifier is cooled, typically air or oil.
encl_typ_d (Enumeration16)	The type of enclosure used to protect the rectifier.
volt_in_d (Enumeration16)	The input AC voltage to the rectifier.
curmnt_out (Real)	The output direct current from the rectifier to the anode system.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

currnt_u_d (Enumeration16)	responsibility of the utility asset.. [Source: Adopted from SDSFIE]
volt_out_d (Enumeration16)	The unit of measure for electrical current.
int_mtr_d (Enumeration16)	The output DC voltage from the rectifier to the anode system.
	An indicator as to whether or not the rectifier has an internal meter, yes/no.
no_phases (Integer)	The number of phases to which this device provides reactive power.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelRegulatorReducerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pressure regulator located in the fuel line automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_regulator_reducer_point*

reg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
press_in (Real)	The design fuel system pressure in the line on inlet side of the pressure regulator.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_out (Real)	The design or maximum system pressure in the line on outlet side of the pressure reducing station.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
press_reqd (Real)	The required maximum outlet pressure setting for the regulator.
press_u_d (Enumeration16)	The unit of measure for pressure.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelSourcePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The point from which the fuel is supplied a product for processing and distribution. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_source_point*

source_id (Number*)	Primary Key. A unique, user defined identifier for each record or
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	instance of an entity.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelTankSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An above or below grade receptacle or chamber for holding fuels on a temporary basis prior to transfer or use.

[Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *fuel_tank_site*

tank_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
alt_vlv_d (Enumeration16)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area_size (Real)	The size of the area, zone, or polygon in square units.
ovrflw_elv (Real)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
head_norm (Real)	The normal operating head for the subject item.
head_u_d (Enumeration16)	The unit of measure for head.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
fuel_ty_d (Enumeration16)	The type fuel stored in the tank.
press_norm (Real)	The normal operating pressure of the fuel tank.
invert_elv (Real)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
tank_st_d (Enumeration16)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tank_use_d (Enumeration16)	The particular kind or use of the tank.
tank_width (Real)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.

press_u_d (Enumeration16)	The unit of measure for pressure.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
tank_cpcty (Real)	The tank's storage capacity (e.g., gallons, ft3, etc).
tank_dia (Real)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
tank_lgth (Real)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
strgpet_d (Enumeration16)	A boolean indicating whether there is a Strategic Petroleum Reserve (Y = YES or N = NO). [Source: HSIP]
num_tanks (Integer)	Maximum number of storage tanks, all POL. [Source: HSIP]
num_pipes (Integer)	Number of pipelines entering/exiting facility. [Source: HSIP]
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
flstandrt (Integer)	The Rate of the Fillstand. [Source: Air Force]
remarks (String240)	The narrative remarks about the fuel tank. [Source: Air Force]
resply_cap (Integer)	The Resupply Capacity. [Source: Air Force]
country_d (Enumeration16)	2-letter Country Designator. [Source: Air Force]
sec_contam (String20)	The secondary containment that is present. [Source: Army]
sec_cont_d (Enumeration16)	A boolean indicating whether or not the secondary containment that is present (Y = YES or N = NO). [Source: AIR FORCE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FuelValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a fuel line. [Source: SDSFIE FGDC Utilities]

Attributes:

SDSFIE Entity *fuel_valve_point*

valve_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	The site specific use of the valve.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
viv_dia_d (Enumeration16)	The manufacturer's nominal diameter.
viv_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
feat_name (String30)	Any commonly used name for the fuel valve point. [Source: USGS]

coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Gas

NatGasRegReducerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_regulator_reducer_point*

gasreg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
press_in (Real)	The design gas system pressure in the line on inlet side of the pressure regulator.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_out (Real)	The design or maximum system pressure in the line on outlet side of the pressure reducing station.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
press_reqd (Real)	The required maximum outlet pressure setting for the regulator.
press_u_d (Enumeration16)	The unit of measure for pressure.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasAnodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A material used for natural gas distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [Source: SDSFIE FGDC Utilities]

Attributes:

SDSFIE Entity *natural_gas_anode_point*

anode_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
anode_wght (Real)	The initial weight of the anode or anode packet.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
material_d (Enumeration16)	The type of material composition of the anode or anode packet.

wght_u_d (Enumeration16)	The unit of measure for weight.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasFillPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Location where gas is control discharged to users. [Source: SDSFIE]

Attributes:

SDSFIE Entity natural_gas_fill_point

hydrant_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
hyd_ty_d (Enumeration16)	The particular kind, class, or group of hydrant.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dia_u_d (Enumeration16)	The unit of measure for diameter.
outcon1dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
outcon2dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon3dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
gas_ty_d (Enumeration16)	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject item.
hyd_elv (Real)	The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
source_d (Enumeration16)	The source of fuel for the subject item.
press_resd (Real)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
press_stat (Real)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
press_u_d (Enumeration16)	The unit of measure for pressure.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
vlv_st_d (Enumeration16)	The style of the valve.
capacity (Real)	The storage capacity of the hydrant.
cap_u_d (Enumeration16)	The hydrant storage capacity unit of measure.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Hardware used to cap, plug, or join pieces of pipe. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_fitting_point*

gasfitt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
fittin_len (Real)	The overall length of the fitting.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
fit_width (Real)	The width dimension of the subject item measured at its' widest point.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1 gas hydrant, 2 meter, 6 pipe).
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasJunctionPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in natural gas systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_junction_point*

gasmnhl_id (Number*)	Primary Key. An operator generated identifier unique for a natural gas manhole.
airrvlv_d (Enumeration16)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drain_ty_d (Enumeration16)	The type of subject item drain.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
mh_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
no_valves (Integer)	The number of valves inside the subject item.
mh_len (Real)	The length dimension of the subject item, from outside face of exterior

mh_width (Real)	wall/side to outside face of opposite exterior wall/side. The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.
no_pipes (Integer)	The number of the pipes entering and exiting the subject item.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry natural gas from location to location (main line, service line, vent line, etc). [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_line*

gaspipe_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
catprot_d (Enumeration16)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
gas_ty_d (Enumeration16)	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject item.
press_norm (Real)	The normal operating pressure of the gas pipe.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	Discriminator. The use code for natural gas pipes.
source_d (Enumeration16)	The source of fuel for the subject item.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in

press_u_d (Enumeration16)	meter, 6in pipe).
type_d (Enumeration16)	The unit of measure for pressure.
user_flag (String20)	A field indicating the kind, class, or group of the subject item. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
pipty_d (Enumeration16)	The location of the pipeline in relevance to the earth's surface. [Source: USGS]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate natural gas. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_marker_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

NaturalGasMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the quantity and or rate of gas to a facility or through a section of line.
[Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *natural_gas_meter_point*

gasmetr_id (Number*)	Primary Key. An operator generated identifier unique for a gas meter.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
instl_ty_d (Enumeration16)	The type installation of the subject item.
meter_elv (Real)	The elevation of the meter above a specific datum.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dia_u_d (Enumeration16)	The unit of measure for diameter.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
mtr_custmr (String20)	The name of the individual, company, or government agency served by the subject item.
source_d (Enumeration16)	The source of fuel for the subject item.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
srvc_mtr_d (Enumeration16)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.

user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_max (Real)	Maximum working pressure.
press_u_d (Enumeration16)	Pressure Unit of measure code.
capacity (Real)	Capacity of the gas meter.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasSourcePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The point from which natural gas is supplied for processing and distribution. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity *natural_gas_source_point*

gassrce_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NaturalGasValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a natural gas line. [Source: SDSFIE NGA/NIMA]

Attributes:

SDSFIE Entity *natural_gas_valve_point*

gasvlv_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
use_d (Enumeration16)	Discriminator. The site specific use of the valve.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the

viv_dia_d (Enumeration16)	operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
viv_st_d (Enumeration16)	The manufacturer's nominal diameter.
depth_u_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverdepth (Real)	The unit of measure for depth. [Source: Center]
	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground fuel line valve. [Source: CENTER]
end_date (Integer)	The date the evacuation route ended. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: NGA/NIMA]
branch_sys (String12)	An operator generated identifier that is a unique site specific name or number designation of a branch or isolated area of a natural gas distribution system.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

UtilityGasUtilitySite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A gas utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority. [Source: SDSFIE Army]

Attributes:

	<i>SDSFIE Entity</i>	<i>utility_gas_utility_site</i>
g_util_id (Number*)	Primary Key. A locally assigned identifier for the record.	
re_connect (Integer)	Total number of residential type service connections.	
co_connect (Integer)	Total number of commercial (i.e., businesses, industrial) type service connections.	
gassource (String50)	Source of natural gas distributed by gas utility (e.g., wells owned by gas utility, purchased from another gas utility (provide name), etc.).	
state (String30)	Name of state where gas utility or system provides service.	
city (String30)	Name of city served by gas utility or system (if applicable).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
utilown_d (Enumeration16)	General category or type of gas utility or system owner.	
gasutname (String50)	Name of the gas utility or system.	
gasutilid (String30)	Identifier assigned to the gas utility or system by the appropriate federal, state, or local regulatory authority.	
pop_served (Integer)	Population served by gas system or utility.	
gasutcap (Real)	Total design capacity of the gas utility or system. (e.g., cubic feet per day).	
capr_u_d (Enumeration16)	Capacity rate unit of measure (e.g., cubic feet per day).	
area_size (Real)	The size of the area, zone, or polygon in square units.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Group: Heating & Cooling Systems

HeatCoolAnchorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A structure, typically concrete, used to either guide the expansion of pipes or used to fix the movement of some part of the expansion section. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>heat_cool_anchor_point</i>
anchor_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
anch_typ_d (Enumeration16)	Discriminator.	This value differentiates similar entities by use or type.
narrative (String240)		A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
junctionType (Enumeration16)		An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

HeatCoolAnodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device used in utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>heat_cool_anode_point</i>
hcsanod_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
anode_wght (Real)		The initial weight of the anode or anode packet.
narrative (String240)		A description or other unique information concerning the subject item, limited to 240 characters.
material_d (Enumeration16)		The type of material composition of the anode or anode packet.
wght_u_d (Enumeration16)		The unit of measure for weight.
user_flag (String20)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
junctionType (Enumeration16)		An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

HeatCoolFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting is an item used to connect, cap, plug or otherwise attach to a heating and cooling system pipe. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>heat_cool_fitting_point</i>
hcsfitt_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)		The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
fit_elv (Real)		The elevation measured at centerline of the fitting, in feet (English units) or meters (SI units) above some datum.
date_acqrd (Date)		The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dia_in (Real)		The inside, or interior, diameter of the fitting.
dia_u_d (Enumeration16)		The unit of measure for the subject item diameter.
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
ground_elv (Real)		The elevation of the ground surface in feet (English units) or meters (SI

fit_lgth (Real)	units) above some datum.
fit_width (Real)	The overall length of the fitting.
mat_d (Enumeration16)	The width dimension of the subject item measured at its' widest point.
serial_no (String15)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size_u_d (Enumeration16)	The manufacturer's serial, or unique identification number of the subject item.
model_no (String12)	This attribute provides information concerning the unit of measure for size of the subject item.
narrative (String240)	The Model, Product, Catalog, or Item Number of subject item.
user_flag (String20)	A description or other unique information concerning the subject item, limited to 240 characters.
size_d (Enumeration16)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
type_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
coverdepth (Real)	Discriminator. The kind, class, or group of the subject item.
depth_u_d (Enumeration16)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line fitting. [Source: Air Force]
junctionType (Enumeration16)	The unit of measure for depth. [Source: CENTER]
meta_id (Integer)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolJunctionSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in heating/cooling systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

hcsmnhl_id (Number*)	<i>SDSFIE Entity</i> <i>heat_cool_junction_site</i> Primary Key. An operator generated identifier unique for a heating/cooling system manhole.
airrvlv_d (Enumeration16)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
drain_ty_d (Enumeration16)	The type of subject item drain.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
no_valves (Integer)	The number of valves inside the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.
mh_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
mh_len (Real)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mh_width (Real)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item,

no_pipes (Integer)	limited to 240 characters.
date_acqrd (Date)	The number of the pipes entering and exiting the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Date on which item was acquired or installed. [Source: Cherry Point]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.
area_size (Real)	The size of the area, zone, or polygon in square units. [Source: Cherry Point]
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units. [Source: Cherry Point]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry a heating/cooling substances from location to location (main line, service line, vent line, etc).
[Source: SDSFIE FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity heat_cool_line</i>
hcspipe_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
catprot_d (Enumeration16)	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
exp_loop_d (Enumeration16)	The expansion loop of the heating and cooling system.
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
grnd_elv_1 (Real)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
grnd_elv_2 (Real)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
slope_u_d (Enumeration16)	The unit of measure for slope.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
tape_d (Enumeration16)	Location marker tape or wire is installed above underground pipe to

use_d (Enumeration16)	facilitate locating with a magnetometer? (yes or no).
press_norm (Real)	Discriminator. The use code for heating and cooling pipes. The normal operating pressure of the heating and cooling system pipe.
temp_u_d (Enumeration16)	The unit of measure for temperature.
temp_norm (Real)	The normal operating temperature of the subject item.
temp_max (Real)	The manufacturer's or industry standard's maximum temperature rating of the subject item.
feat_desc (String60)	Narrative text providing a brief description of the feature. [Source: Cherry Point]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_u_d (Enumeration16)	The unit of measure for pressure.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line pipe. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc., installed either directly above or immediately adjacent heating/cooling equipment marking its location. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *heat_cool_marker_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

HeatCoolMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the quantity and or rate of water to a facility or through a section of line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *heat_cool_meter_point*

hcsmetr_id (Number*)	Primary Key. An operator generated identifier unique for a heating/cooling meter.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
instl_ty_d (Enumeration16)	The type installation of the subject item.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
meter_elv (Real)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
serial_no (String15)	The manufacturer's serial, or unique identification number of the

srvc_mtr_d (Enumeration16)	subject item. An indicator as to whether or not the meter is installed on a service line? (yes or no)
size_u_d (Enumeration16)	The unit of measure for size.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
mtr_custmr (String20)	The name of the individual, company, or government agency served by the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolPlantArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A building or structure containing boilers, furnaces, chillers, pumps and appurtenant equipment to produce the water temperature/pressure combinations which are distributed to other buildings and facilities. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i> <i>heat_cool_plant_area</i>
hcsplnt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
capac_cool (Real)	The plant's rated capacity (e.g., tons), which signifies the peak constant cooling ability of the plant.
capac_heat (Real)	The plant's rated capacity (e.g. boiler_hp), which signifies the peak constant heating ability of the plant.
area_size (Real)	The size of the area, zone, or polygon in square units.
cap_c_u_d (Enumeration16)	The unit of measure for cooling capacity.
cap_h_u_d (Enumeration16)	The unit of measure for heating capacity.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
press_cool (Real)	The nominal chilled water pressure leaving the plant.
press_heat (Real)	The nominal hot water or steam pressure leaving the plant.
prod_typ_d (Enumeration16)	The type of product (chilled water, high temp, etc) produced at this plant.
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
temp_cool (Real)	The nominal chilled water temperature leaving the plant.
temp_heat (Real)	The nominal hot water temperature leaving the plant.
temp_u_d (Enumeration16)	The unit of measure for temperature.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the

plant_elv (Real)	operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
plant_lgth (Real)	The finished floor elevation of the energy plant, in feet (English units) or meters (SI units) above some datum.
plantwidth (Real)	The overall length dimension of the energy plant.
press_u_d (Enumeration16)	The overall width dimension of the energy plant.
type_d (Enumeration16)	The unit of measure for pressure.
meta_id (Integer)	Discriminator. The kind, class, or group of the subject item.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolPumpPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A mechanical device for heating and cooling system that draws material into itself through an entrance port and forces the material out through an exhaust port. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity heat_cool_pump_point

hcsump_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cool_mth_d (Enumeration16)	The method by which the pump is cooled.
cpcty_act (Real)	The measured capacity of the pump operating under actual normal head and flow conditions.
cpcty_rate (Real)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gpm).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
pwr_req_d (Enumeration16)	The voltage of the electrical power required by the subject item.
prime_meth (String15)	The method by which the pump is primed.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
prim_rqrd_d (Enumeration16)	An indicator as to whether or not the pump has to be primed? (yes or no).
tdh_rated (Real)	The total dynamic head upon which the capacity_rated is based.
tdh_u_d (Enumeration16)	The unit of measure for Total Dynamic Head (TDH), usually expressed in feet (English units).
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
use_d (Enumeration16)	The particular application, or use the subject item.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolRectifierPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that changes alternating current to direct current for an impressed current cathodic protection system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity</i>	<i>heat_cool_rectifier_point</i>
hcsrect_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
narrative (String240)		A description or other unique information concerning the subject item, limited to 240 characters.
cool_mth_d (Enumeration16)		The method by which the rectifier is cooled, typically air or oil.
encl_typ_d (Enumeration16)		The type of enclosure used to protect the rectifier.
volt_in_d (Enumeration16)		The input AC voltage to the rectifier.
volt_out_d (Enumeration16)		The output DC voltage from the rectifier to the anode system.
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
currnt_out (Real)		The output direct current from the rectifier to the anode system.
currnt_u_d (Enumeration16)		The unit of measure for electrical current.
int_mtr_d (Enumeration16)		An indicator as to whether or not the rectifier has an internal meter, yes/no.
no_phases (Integer)		The number of phases to which this device provides reactive power.
user_flag (String20)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
phas_ltr_d (Enumeration16)		The letter(s) of the phase(s) for the subject item.
juntionType (Enumeration16)		An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)		Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolRegulatorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A regulator located in the heating/cooling line that automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity</i>	<i>heat_cool_regulator_point</i>
hcsreg_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)		The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)		The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)		The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
narrative (String240)		A description or other unique information concerning the subject item, limited to 240 characters.
serial_no (String15)		The manufacturer's serial, or unique identification number of the subject item.
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String12)		The Model, Product, Catalog, or Item Number of subject item.
press_in (Real)		The design water system pressure in the waterline on inlet side of the pressure regulator.
press_out (Real)		The design water system pressure in the waterline on outlet side of the pressure regulator.
press_reqd (Real)		The required maximum outlet pressure setting for the regulator.
user_flag (String20)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

press_u_d (Enumeration16)	The unit of measure for pressure.
reg_elv (Real)	The elevation of the pressure regulator, measured at the regulator centerline.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type_d (Enumeration16)	The kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HeatCoolValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a heating and cooling line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity heat_cool_valve_point

hcsvlv_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
size_u_d (Enumeration16)	The unit of measure for size.
use_d (Enumeration16)	The site specific use of the valve.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
vlv_size (Real)	The manufacturer's nominal size designation.
vlv_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground heating and cooling system line valve. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Storm

CulvertCenterline

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

The centerline of a pipe or structure, the purpose of which is for the interception and conveyance of surface water transported in open drainage lines and ditches. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity culvert_centerline

impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management

responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StmswrDrainageBasinArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

An area in which surface runoff collects and from which it is carried by a drainage system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_drainage_basin_area*

basin_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
area_size (Real)	The size of the area, zone, or polygon in square units.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
grade_mean (Real)	The average grade in the drainage basin.
grade_min (Real)	The minimum or shallowest grade in the drainage basin.
grade_u_d (Enumeration16)	The unit of measure for grade.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
grade_max (Real)	The maximum or steepest grade in the drainage basin.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StmswrDrainageDivideLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

The border of a drainage basin where one side directs runoff to one basin and the other side directs runoff to a different basin. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_drainage_divide_line*

sewdrn_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
feat_desc (String60)	Any brief description of the feature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StmswrOilWatSeparatorSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device or structure placed in the storm sewer stream to separate water from oil products. [Source: SDSFIE USMC]

Attributes:

SDSFIE Entity *storm_sewer_oil_water_separator_site*

stosep_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
date_per_x (Date)	The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)

dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
disposal (String30)	Brief description of how the waste is disposed.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_u_d (Enumeration16)	The unit of measure for flow rate.
grtchbr_d (Enumeration16)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
flowcpcty (Real)	The flow capacity of the subject item.
oil_cpcty (Real)	The retention capacity of the oil-water separator.
sep_code (String2)	The oil-water separator code. Usually defined as OW.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
temp_optim (Real)	The optimum operating temperature for the subject item.
temp_u_d (Enumeration16)	The unit of measure for temperature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
sep_contnt (String20)	Separator contents
sep_name (String12)	The site specific identification name or number assigned to the subject item.
sep_procss (String30)	The specific type of separation process.
sep_volume (Real)	The volume of the oil-water separator.
area_size (Real)	The size of the area, zone, or polygon in square units.
vol_u_d (Enumeration16)	The unit of measure of volume.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StmswrStillingBasinSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where the energy from turbulent water flow is reduced. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_stilling_basin_site*

sbn_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
date_const (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depth_avg (Real)	The average depth of containment measured from normal operating pool.
out_cntr (String12)	The outlet control.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
inv_elv_av (Real)	The average elevation of the bottom of the stilling basin.
sbn_len (Real)	The overall length of the stilling basin.

sbn_width (Real)	The average width dimension of the stilling basin, measured from top of opposite side slopes.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
x_dikes_d (Enumeration16)	An indicator whether cross dikes exists in the subject item or not (yes or no).
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormCulvertSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pipe or structure, the purpose of which is for the interception and conveyance of surface water transported in open drainage lines and ditches [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_culvert_site*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StormSewerArmorPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Any location where armor stone is used for erosion protection in an open channel. [Source: SDSFIE REEGIS]

Attributes:

SDSFIE Entity *storm_sewer_armor_point*

armor_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
bed_mat_d (Enumeration16)	The type of bedding material beneath the channel armor.
bot_width (Real)	The bottom width of the armor measured along the base of the armor.
armor_len (Real)	The overall length of the armor protection.
armor_ty_d (Enumeration16)	The type of channel armor used.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
inv_elv_1 (Real)	The elevation of the bottom of the armor at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of the armor at node_id_2 in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
reach_name (String20)	An operator generated identifier for the reach of an open channel.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.

slope_left (Real)	The slope of the left channel side expressed as a percentage.
slope_right (Real)	The slope of the right channel side expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
top_width (Real)	The top width of the armor.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerCulvertLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

The components of a storm drainage collection system including pipes, fittings, fixtures, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_culvert_line*

culvert_id (Number*)	Primary Key. A locally assigned identifier for the record.
angle (Real)	The angle that the structure symbol should appear on a map. [Source: USACE]
control (String30)	The means in which the water being controlled; i.e., by gate, weir, flashboard, pump, lock or uncontrolled? [Source: USACE]
peak_flow (Real)	Q10 runoff (cubic feet per second of the 10 year peak flow associated with a ten year storm). [Source: ARMY]
purpose (String30)	A summary of the intentions with which the data set was developed. [Source: USACE]
estuary (String25)	The name of the Estuary, if applicable. [Source: USACE]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
canal_name (String30)	The canal name that the structure is located on. [Source: USACE]
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
gat_type_d (Enumeration16)	Discriminator. The type of gate. [Source: Center]
drng_pat_d (Enumeration16)	The drainage pattern of the material surrounding the culvert. [Source: Center]
slope_u_d (Enumeration16)	The code indicating the unit of measure of slope. [Source: Center]
drng_zone (String50)	The local name of assigned the hydrographic drainage zone. [Source: Center]
feat_name (String30)	Any commonly used name of the culvert. [Source: Center]
mat_tex_d (Enumeration16)	The texture of the material surrounding the culvert. [Source: Center]
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage. [Source: Center]
inv_elv_2 (Real)	The dimension indicating the elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum. [Source: Center]
inv_elv_1 (Real)	The dimension indicating the elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum. [Source: Center]
culv_lgth (Real)	The length of culvert, measured from node to node along the culvert centerline. [Source: Center]
lined_d (Enumeration16)	A boolean indicating whether the culvert is lined or not (Y = YES and N = NO)? [Source: Center]

flow_type (String15)	The type of flow such as culvert, lock, pump, spillway or weir. [Source: USACE]
mat_d (Enumeration16)	The material composition of the subject item, such as concrete or corrugated metal, etc. [Source: USACE]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: ARMY]
source (String20)	The event's source of information. [Source: USACE]
verified_d (Enumeration16)	A boolean indicating whether that a structure has been repositioned and with good source (Y = YES or N = NO). [Source: USACE]
critical_d (Enumeration16)	A boolean indicating whether this is a 'critical' structure (Y = YES or N = NO). [Source: USACE]
volt_req_d (Enumeration16)	Voltage Requirements. [Source: AIR FORCE]
size_d (Enumeration16)	The size of the diameter of the pipe opening in inches. [Source: ARMY]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerDischargePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Any location where storm sewer pipes directly discharge effluent. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity storm_sewer_discharge_point

stodcrg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
systyp_d (Enumeration16)	The type of stormwater discharge system. [Source: USACE OPERATIONS]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerDownspoutPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or the storm sewer system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity storm_sewer_downspout_point

dnspt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dnspt_lgth (Real)	The length of the downspout, measured from highest point to its discharge point.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
base_elv (Real)	The elevation of the discharge point of the downspout in feet (English

date_acqrd (Date)	units) or meters (SI units) above some datum. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
grnd_elv (Real)	The elevation of the ground surface at the discharge point, in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying storm sewage. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity storm_sewer_fitting_point

stofitt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
fit_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.
fit_lgth (Real)	The overall length of the fitting.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
fit_width (Real)	The width dimension of the subject item measured at its' widest point.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line fitting. [Source: Air Force]

junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerFloodArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

Areas where the storm sewer drainage capacity has been exceeded resulting in localized flooding. [Source: SDSFIE FGDC Utilities Classification]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>storm_sewer_flood_area</i>
flood_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
area_size (Real)	The size of the area, zone, or polygon in square units.	
flow_u_d (Enumeration16)	The unit of measure for flow rate.	
flowwidth (Real)	The top flow width.	
fld_flow (Real)	The flow rate of the flood based on the flow elevation.	
fld_freq (Real)	The statistical reoccurring frequency of the flood measured in years up to the probable maximum flood (PMF). Typical values are 5-yr, 10-yr, 25-yr, 50-yr, 100-yr, 500-yr, etc.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
flow_elv (Real)	The average flood elevation.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

StormSewerFlowControlPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Devices for a storm water system to control the pressure in and out of the open channel. [Source: SDSFIE FGDC Utilities Classification]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>storm_sewer_flow_control_point</i>
fctdev_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
cntrl_elv (Real)	The elevation at the centerline of the flow control device, in feet (English units) or meters (SI units) above some datum.	
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
instl_ty_d (Enumeration16)	The type installation of the subject item.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
fct_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
fct_len (Real)	The overall length of the flow control.	
fct_width (Real)	The width dimension of the subject item, measured from opposite inside faces.	
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).	
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.	
narrative (String240)	A description or other unique information concerning the subject item,	

type_d (Enumeration16)	limited to 240 characters.
user_flag (String20)	A field indicating the kind, class, or group of the subject item. An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerGatePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A movable barrier used in an open channel. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity storm_sewer_gate_point

stogate_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
gate_st_d (Enumeration16)	The particular kind, class, or group of gate.
gate_width (Real)	The width dimension of the subject item, measured from opposite inside faces.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
gate_lgth (Real)	The overall length of the storm gate.
gate_cpcty (Real)	The flow capacity of the storm gate.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerHeadwallLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A wall (of any material) depicted as a line at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity storm_sewer_headwall_line

impedance (Real)	The number representing the total opposition to flow.
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meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StormSewerHeadwallPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A wall (of any material) depicted as a point at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity</i> <i>storm_sewer_headwall_point</i>
sewrwal_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
feat_desc (String60)	Any brief description of the feature.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
feat_name (String30)	Any commonly used name for the storm sewer headwall. [Source: REEGIS]
river_mile (Real)	River mile marker. [Source: REEGIS]
poll_typ_d (Enumeration16)	Pollution type. [Source: REEGIS]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
top_elv (Real)	The elevation of the top of wall above the pipe.
feat_len (Real)	The overall length of the feature. [Source: Center]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerInletPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where water is collected and received into the utility system. [Source: SDSFIE FGDC Utilities]

Attributes:	<i>SDSFIE Entity</i> <i>storm_sewer_inlet_point</i>
stointl_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_dgn (Real)	The design flow capacity of the subject item.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
inlet_st_d (Enumeration16)	Discriminator. The step domain code for an inlet.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
weir_elv (Real)	Elevation of the weir invert.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerJunctionPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in storm sewer systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

manhole_id (Number*)

SDSFIE Entity storm_sewer_junction_point

Primary Key. An operator generated identifier unique for a storm sewer manhole.

drain_ty_d (Enumeration16)

The type of subject item drain.

dispostn_d (Enumeration16)

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

use_d (Enumeration16)

Discriminator. An attribute that differentiates the use of the subject item.

mh_dia (Real)

The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.

mh_len (Real)

The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.

owner_d (Enumeration16)

A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

mh_width (Real)

The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.

invert_elv (Real)

The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.

mat_d (Enumeration16)

The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.

model_no (String12)

The Model, Product, Catalog, or Item Number of subject item.

narrative (String240)

A description or other unique information concerning the subject item, limited to 240 characters.

type_d (Enumeration16)

A field indicating the kind, class, or group of manhole for the subject utility.

user_flag (String20)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

no_pipes (Integer)

The number of the pipes entering and exiting the subject item.

rim_elv (Real)

The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.

junctionType (Enumeration16)

An indicator as to whether the feature serves as a source, sink or neither in the network.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry storm sewer water from location to location (main line, service line, vent line, etc). [Source: SDSFIE FGDC Utilities Classification]

Attributes:

stopipe_id (Number*)

SDSFIE Entity storm_sewer_line

Primary Key. A unique, user defined identifier for each record or instance of an entity.

dispostn_d (Enumeration16)

The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

drng_zon_d (Enumeration16)

Local name of assigned hydrographic drainage zones.

drng_pat_d (Enumeration16)

The drainage pattern of the material surrounding the pipe.

drng_tex_d (Enumeration16)

The texture of the material surrounding the pipe.

date_acqrd (Date)

The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994)

	= 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
pipe_width (Real)	The width dimension of the subject item, measured from opposite inside faces.
lined_d (Enumeration16)	An indicator as to whether the pipe is lined or not (yes/no).
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
scrm_ty_d (Enumeration16)	The type of screen used to cover the end of the culvert.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
use_d (Enumeration16)	Discriminator. The use code for storm sewer line.
press_norm (Real)	The normal operating pressure of the storm system pipe.
press_u_d (Enumeration16)	The unit of measure for pressure.
feat_name (String30)	Any commonly used name of the culvert. [Source: REEGIS]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line pipe. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of nearby storm sewer. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_marker_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StormSewerOpenDrainage

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

Interception and removal area of ground water or surface water. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_open_drainage_area*

meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

StormSewerOpenDrainage

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

Interception and removal of ground water or surface water by natural means. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity *storm_sewer_open_drainage_line*

stochan_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
chan_lgth (Real)	The overall length of the open channel.
chan_st_d (Enumeration16)	The style or geometric configuration of the channel
bed_mat_d (Enumeration16)	The type of bedding material beneath the channel armor.
bank_arm_d (Enumeration16)	The type of channel armor used.
design_d (Enumeration16)	Discriminator. The design code for open channel.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drng_zon_d (Enumeration16)	Local name of assigned hydrographic drainage zones.
bot_width (Real)	The bottom width of the open channel measured from the base of opposite side slopes.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
fld_zon_d (Enumeration16)	Local name of assigned hydrographic drainage zones.
fmean_elv (Real)	The elevation of the mean flow above a specific datum.
fmean_top (Real)	The average top width of the mean flow.
fmean_xar (Real)	The cross section area of the mean flow for the open channel.
flooddepth (Real)	The average depth of the specific flood.
flow_mean (Real)	The mean or average flow rate for the open channel.
inv_elv_1 (Real)	The elevation of the bottom of channel at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of channel at node_id_2 in feet (English units) or meters (SI units) above some datum.
no_floods (Integer)	The total number of floods recorded for this channel.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
reach_name (String20)	An operator generated identifier for the reach of an open channel.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_left (Real)	The slope of the left channel side expressed as a percentage.
slope_right (Real)	The slope of the right channel side expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
top_width (Real)	The top width of the open channel measured from the top of opposite side slopes.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units. [Source: USMC]
area_size (Real)	The size of the area, zone, or polygon in square units. [Source: USMC]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level

metadata record(s).

StormSewerPumpPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A mechanical device for storm sewer system that draws material into itself through an entrance port and forces the material out through an exhaust port. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_pump_point*

stopump_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
outflw_act (Real)	The actual measured pump flow output.
cool_mth_d (Enumeration16)	The method by which the pump is cooled.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_rate (Real)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
prim_rq_d (Enumeration16)	An indicator as to whether or not the pump has to be primed? (yes or no).
prime_meth (String15)	The method by which the pump is primed.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
use_d (Enumeration16)	The particular application, or use the subject item.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
pump_hp (Real)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerPumpStation

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a storm sewer distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_pump_station_site*

stostat_id (Number*)	Primary Key. A unique operator generated designator used to identify a station (pump station, pressure reducing station).
alarmlvlev (Real)	The elevation in the wet well that triggers an alarm indicating no additional storage capacity.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or

	purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
hi_wat_elv (Real)	The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
nodal_elv (Real)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
sta_width (Real)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
sta_len (Real)	The overall length of the pump station plant area.
wetwlcpcity (Real)	The wet well capacity.
area_size (Real)	The size of the area, zone, or polygon in square units.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
no_pumps (Integer)	The total number of pumps located at the subject item.
river_mile (Real)	River mile marker. [Source: REEGIS]
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
mx_dsgn_hd (Real)	The water elevation of the maximum design head of the pump in feet NGVD. [Source: REEGIS]
date_end (Date)	The date the project was actually completed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) [Source: REEGIS]
feat_name (String30)	Any commonly used name for the storm sewer pump station. [Source: REEGIS]
capacity (Real)	The pumping capacity at the maximum design head in cfs. [Source: REEGIS]
capcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute). [Source: REEGIS]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerReservoirPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where storm sewer water is collected. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_reservoir_point*

res_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
date_const (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e.,

depth_avg (Real)	September 15, 1994 = 19940915) The average depth of containment measured from normal operating pool.
inv_elv_av (Real)	The average elevation of the bottom of the reservoir.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
x_dikes_d (Enumeration16)	An indicator whether cross dikes exists in the subject item or not (yes or no).
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
out_cntr (String12)	The outlet control.
use_d (Enumeration16)	The particular application, or use the subject item.
res_len (Real)	The overall length of the reservoir.
res_typ_d (Enumeration16)	The type or classification of the reservoir.
res_width (Real)	The average width dimension of the reservoir, measured from top of opposite side slopes.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

StormSewerValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a storm sewer line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *storm_sewer_valve_point*

stovlv_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
use_d (Enumeration16)	The particular application, or use the subject item.
vlv_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground storm water line valve. [Source: Air Force]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level

metadata record(s).

Group: Transmission

PipeLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

An interstate or intrastate transmission line through which gas, oil, or hazardous liquid is transported for the purpose of supplying a local utility. [Source: SDSFIE DOT - NPMS]

Attributes:

SDSFIE Entity *pipeline_line*

txpipe_id (Number*)	Primary Key. A locally assigned identifier for the record.
oper_nm (String40)	The name of the company or organization that physically operates the pipeline system. [Source: DOT - NPMS]
sys_nm (String40)	The name of a single pipeline system. [Source: DOT - NPMS]
catpip_d (Enumeration16)	Category of pipe [Source: S-57]
vert_clr (Real)	Vertical Clearance of pipeline [Source: S-57]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
piprod_d (Enumeration16)	Discriminator. The type of product carried by pipeline. [Source: HSIP]
diameter (Real)	The diameter of the pipeline in either mm or cm. [Source: HSIP]
tank_st_d (Enumeration16)	The particular kind, class, or group of tank (e.g. elevated, on ground, below ground, floating, on water body bottom.). [Source: HSIP]
cpcty_u_d (Enumeration16)	The unit of measure of capacity. [Source: HSIP]
capacity (Real)	The capacity of the pipeline. [Source: HSIP]
intersta_d (Enumeration16)	Indication whether or not (yes or no) pipeline is an interstate pipeline. Yes = interstate, No = Intrastate. [Source: DOT - NPMS]
cmdty_desc (String40)	Comma separated list of the names of commodities carried by the pipeline system. [Source: DOT - NPMS]
commodity1_d (Enumeration16)	Code designation for the primary commodity carried by the pipeline system. [Source: DOT - NPMS]
commodity2_d (Enumeration16)	Code designation for a secondary commodity carried by the pipeline system (if applicable). Empty (EMT) is not valid. [Source: DOT - NPMS]
commodity3_d (Enumeration16)	Code designation for an additional secondary commodity carried by the pipeline system (if applicable). Empty (EMT) is not valid. [Source: DOT - NPMS]
prodct_d (Enumeration16)	Actual product that is being carried in pipeline [Source: S-57]
feat_len (Real)	The overall length of the feature. [Source: Center]
feat_name (String30)	Any commonly used name for the pipeline. [Source: USGS]
vert_loc_d (Enumeration16)	The vertical location for the pipeline relative to the surface. [Source: USGS]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

PipelineSegmentLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A linear feature representing part or all of a pipeline system. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. Each pipeline segment must be uniquely i [Source: SDSFIE CGDII]

Attributes:

SDSFIE Entity *pipeline_segment_line*

pipeseg_id (Number*)	Primary Key. A locally assigned identifier for the record.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe). [Source: DOT - NPMS]

status_d (Enumeration16)	Current status (disposition) of the pipeline segment. [Source: DOT - NPMS]
pos_acc_d (Enumeration16)	Estimated positional accuracy of the feature. [Source: DOT - NPMS]
feat_len (Real)	The length of pipe, measured from node to node along the pipeline segment centerline. [Source: DOT - NPMS]
subsys_nm (String40)	Name for the pipeline segment, or smaller sub-section of the pipeline system. [Source: DOT - NPMS]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Wastewater

WastewaterAnodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A material used in waste water distribution systems that is electrically connected to a less electrolytically-active material so that it will oxidize in the place of the less active material. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity wastewater_anode_point

wwtand_id (Number*)	Primary Key. A locally assigned identifier for the record.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
anode_wght (Real)	The initial weight of the anode or anode packet. [Source: FGDC Utilities Classification]
date_instl (Date)	The date on which the subject item was originally installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: FGDC Utilities Classification]
date_last (Date)	The date the anode was last inspected or checked. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: FGDC Utilities Classification]
material_d (Enumeration16)	The type of material composition of the anode or anode packet. [Source: FGDC Utilities Classification]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: FGDC Utilities Classification]
wght_u_d (Enumeration16)	The unit of measure of weight. [Source: FGDC Utilities Classification]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterDischargePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Any location where wastewater pipes directly discharge effluent. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_discharge_point

wwtdcrg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostrn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or

	purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
systyp_d (Enumeration16)	The type of wastewater system. [Source: USACE OPERATIONS]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterDisposalTank

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An above or below grade receptacle or chamber for holding waste water on a temporary basis prior to transfer or use. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_disposal_tank_site

wwtank_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
alt_vlv_d (Enumeration16)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area_size (Real)	The size of the area, zone, or polygon in square units.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
ovrflw_elv (Real)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
head_norm (Real)	The normal operating head for the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
head_u_d (Enumeration16)	The unit of measure for pressure head.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
top_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
invert_elv (Real)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
tank_lgth (Real)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tank_sty_d (Enumeration16)	The style of tank, such as underground, above ground, etc.
tank_use_d (Enumeration16)	The particular kind or use of the waste water tank.
tank_width (Real)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior

press_norm (Real)	wall/side. The manufacturer's (as rated by American Society of Mechanical Engineers (ASME) testing procedures) maximum pressure rating of the waste water tank.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_u_d (Enumeration16)	The unit of measure for pressure.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
tank_cpcty (Real)	The tank's storage capacity (e.g., gallons, ft3, etc).
tank_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.
tank_des_d (Enumeration16)	This value differentiates similar entities by use or type.
tank_dia (Real)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterDownspoutPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system for wastewater. [Source: SDSFIE FGDC Utilities

Attributes:	<i>SDSFIE Entity wastewater_downspout_point</i>
wwtdspt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
dnspt_lgth (Real)	The length of the downspout, measured from highest point to its discharge point.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
base_elv (Real)	The elevation of the discharge point of the downspout in feet (English units) or meters (SI units) above some datum.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
grnd_elv (Real)	The elevation of the ground surface at the discharge point, in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterDrainFieldArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>wastewater_drain_field_area</i>
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

WastewaterFiltrationBedArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A below grade system consisting of perforated piping installed in sand or gravel beds or trenches designed to permit the uniform distribution and absorption of effluent from a septic tank or aerobic unit into the soil. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>wastewater_filtration_bed_area</i>
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

WastewaterFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying wastewater. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>wastewater_fitting_point</i>
wwtfitt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
fit_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
fit_lgth (Real)	The overall length of the fitting.	
fit_width (Real)	The width dimension of the subject item measured at its' widest point.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).	
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.	
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.	
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.	
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.	
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground wastewater line fitting. [Source: Air Force]	

depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterGreaseTrapPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A tank which separates grease from water, collects the grease for removal, and allows the water to exit. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_grease_trap_point

trap_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dstbx_d (Enumeration16)	Indicates whether or not a distribution box exists for the subject item. (yes or no)
dstbx_i_el (Real)	The invert elevation of the inside bottom of the distribution box.
drnfl_st_d (Enumeration16)	The style of field drain system indicating the configuration and layout of the drain lines.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
drng_pat_d (Enumeration16)	The texture of the material surrounding the grease trap.
drng_tex_d (Enumeration16)	The texture of the material surrounding the grease trap.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
manhole_d (Enumeration16)	An indication as to whether or not is part of a manhole or has access via a manhole (yes/no).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
gtp_width (Real)	The width dimension of the subject item, measured from opposite inside faces.
lat_di_tot (Real)	The total diameter of all drainage laterals
lat_di_u_d (Enumeration16)	The unit of measure for the laterals diameter length.
latdimean (Real)	The average diameter of all drainage laterals
laterl_slp (Real)	The average slope of all drainage laterals.
laterl_tot (Real)	The total (sum) length of all drainage laterals.
laterlmean (Real)	The mean or average length of the drainage laterals.
latlgt_u_d (Enumeration16)	The unit of measure for length.
flow_rate (Real)	The flow rate of the feature.
perc_u_d (Enumeration16)	The unit of measure for soil percolation.
gtp_cpcty (Real)	The grease trap's storage capacity (e.g., gallons, ft3, etc).
gtp_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.
gtp_len (Integer)	The overall length of the grease trap.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
no_lateral (Integer)	The total number of laterals.

slope_u_d (Enumeration16)	The unit of measure for slope.
trap_st_d (Enumeration16)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
trench_wid (Real)	The trench width excavated for the field drains.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
soil_perc (Real)	The percolation rate of the soil in which the drain field lines are placed.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterGritChamberPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>wastewater_grit_chamber_point</i>
grtchbr_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
cpcty_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
o_w_sep_d (Enumeration16)	An indicator as to whether or not grit chamber has an integrated oil-water separator. (yes or no)	
flow_u_d (Enumeration16)	The unit of measure for flow rate.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
flowcpcty (Real)	The flow capacity of the subject item.	
grit_type (String12)	The predominate type of grit collected in the grit chamber.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.	
stor_cpcty (Real)	The grit chamber overall storage capacity.	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

WastewaterInletPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where waste water is collected and received into the utility system. [Source: SDSFIE FGDC Utilities

Attributes:

	<i>SDSFIE Entity</i>	<i>wastewater_inlet_point</i>
inlet_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
cpcty_dgn (Real)	The design flow capacity of the subject item.	

date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
inlet_st_d (Enumeration16)	Discriminator: This value differentiates similar entities by use or type.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
weir_elv (Real)	Elevation of the weir invert.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterJunctionPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in wastewater systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity wastewater_junction_point</i>
wwtmnhl_id (Number*)	Primary Key. An operator generated identifier unique for a sanitary sewer manhole.
drain_ty_d (Enumeration16)	The type of subject item drain.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.
liner_ty_d (Enumeration16)	The type of liner used if the pit/manhole is used for neutralizing chemicals.
mh_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
mh_len (Real)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mh_width (Real)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
reactant (String30)	The chemical in the incoming waste stream being neutralized.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
neut_agent (String30)	The chemical agent in the pit which chemically neutralizes the in stream reactant.

no_pipes (Integer)	The number of the pipes entering and exiting the subject item.
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
feat_desc (String60)	The text describing a wastewater manhole. [Source: Cherry Point]
date_acqrd (Date)	Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). Date on which the manhole or wastewater junction box was acquired, or installed. [Source: Cherry Point]
no_steps (Integer)	Number of manhole steps. [Source: Cherry Point]
illicit_d (Enumeration16)	Indication whether or not (yes/no) illicit flow was detected in manhole or box. [Source: Cherry Point]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterLagoonArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A shallow man made pool or pond for the purpose of providing treatment of domestic wastewater. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_lagoon_area

lagoon_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
aerator_d (Enumeration16)	Indicates whether or not the lagoon has aerators. (yes/no)
aeratr_pow (Real)	The power rating for the aerator, usually in terms of horse power (hp).
area_size (Real)	The size of the area, zone, or polygon in square units.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
date_anl (Date)	Date on which water quality analyses were performed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_const (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
depth_avg (Real)	The average depth of containment measured from normal operating pool.
lgn_len (Real)	The average length of the lagoon.
lgn_width (Real)	The average width dimension of the lagoon, measured from top of opposite side slopes.
out_cntr (String12)	The outlet control.
freq_u_d (Enumeration16)	The unit of measure for frequency.
manage_off (String12)	The office/organization responsible for managing the lagoon.
hp_u_d (Enumeration16)	The unit of measure for horse power.
test_ty_d (Enumeration16)	The type of test used to evaluate the contained material.
inv_elv_av (Real)	The average elevation of the bottom of the lagoon.
lab_name_d (Enumeration16)	The name of the laboratory primarily responsible for completing the required tests for the subject item.
lab_ty_d (Enumeration16)	The type of the laboratory primarily responsible for completing the required tests for the subject item.
user_ind_d (Enumeration16)	An indicator as to whether or not the lagoon is used for industrial wastewater. (yes or no)
user_san_d (Enumeration16)	An indicator as to whether or not the lagoon is used for wastewater. (yes or no)
smpl_freq (Integer)	The frequency at which material sampling is conducted.

soil_cdn_d (Enumeration16)	The consistency of the soil indicating soil condition and strength.
wer_outl_d (Enumeration16)	An indicator as to whether or not the subject item has weir outlets. (yes or no)
x_dikes_d (Enumeration16)	An indicator whether cross dikes exists in the subject item or not (yes or no).
mon_agency (String15)	The regulator agency that monitors inflow, containment, and discharge for the subject item.
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
no_pumps (Integer)	The total number of pumps located at the subject item.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
soil_ero_d (Enumeration16)	The erosion potential of the soil.
soil_fam_d (Enumeration16)	The soil family.
soil_tex_d (Enumeration16)	The soil texture.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
pip_outl_d (Enumeration16)	An indicator as to whether or not the lagoon has pipe outlets. (yes or no)
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry waste water from location to location (main line, service line, force main line, etc). [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_line

pipe_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
area_size (Real)	The size of the area, zone, or polygon in square units.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
drng_tex_d (Enumeration16)	The texture of the material surrounding the pipe.
drng_pat_d (Enumeration16)	The drainage pattern of the material surrounding the pipe.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
lined_d (Enumeration16)	An indicator as to whether the pipe is lined or not (yes/no).
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
slope_u_d (Enumeration16)	The unit of measure for slope.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.

model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	Discriminator. The use code for wastewater lines.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
press_norm (Real)	The normal operating pressure of the waste water system pipe.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_u_d (Enumeration16)	The unit of measure for pressure.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
piplty_d (Enumeration16)	The location of the pipeline in relevance to the earth's surface. [Source: USGS]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground wastewater line pipe. [Source: Air Force]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of waste water. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_marker_point

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

WastewaterMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the quantity and or rate of water through a section of line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_meter_point

wwtmetr_id (Number*)	Primary Key. An operator generated identifier unique for a wastewater meter.
design_d (Enumeration16)	Discriminator: The design of the water meter.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
instl_ty_d (Enumeration16)	The type installation of the subject item.
meter_elv (Real)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.

mtr_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.
meter_len (Real)	The overall length of the meter.
mtr_width (Real)	The overall width dimension of the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterNeutralizerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A receptacle or chamber where chemicals react with reactant materials, resulting in making liquid waste passing through chemically neutral for wastewater systems. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_neutralizer_point

wwtneut_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
drain_ty_d (Enumeration16)	The type of subject item drain.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
liner_ty_d (Enumeration16)	The type of liner used if the pit/manhole is used for neutralizing chemicals.
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
neut_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
neut_len (Real)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
neut_width (Real)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
reactant (String30)	The chemical in the incoming waste stream being neutralized.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
neut_agent (String30)	The chemical agent in the pit which chemically neutralizes the in stream reactant.
no_pipes (Integer)	The number of the pipes entering and exiting the subject item.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.

type_d (Enumeration16)	A field indicating the kind, class, or group of manhole/pit for the subject utility.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterPumpPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A mechanical device for wastewater system that draws material into itself through an entrance port and forces the material out through an exhaust port. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_pump_point

wwtpump_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
outflw_act (Real)	The actual measured pump flow output.
outflw_rat (Real)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
cool_mth_d (Enumeration16)	The method by which the pump is cooled.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_u_d (Enumeration16)	The unit of measure for flow rate.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
prim_rq_d (Enumeration16)	An indicator as to whether or not the pump has to be primed? (yes or no).
prime_meth (String15)	The method by which the pump is primed.
use_d (Enumeration16)	The particular application, or use the subject item.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
pump_hp (Real)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
feat_name (String30)	Any commonly used name for the pump/lift station. [Source: REEGIS]
river_mile (Real)	River mile marker. [Source: REEGIS]
no_pumps (Integer)	The number of pumps located at the station. [Source: REEGIS]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterRectifierPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the wastewater distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity wastewater_rectifier_point</i>
wwtrec_id (Number*)	Primary Key. A locally assigned identifier for the record.
volt_out_d (Enumeration16)	The output DC voltage from the rectifier to the anode system. [Source: FGDC Utilities Classification]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
cool_mth_d (Enumeration16)	The method by which the rectifier is cooled, typically air or oil. [Source: FGDC Utilities Classification]
currnt_out (Real)	The output direct current from the rectifier to the anode system. [Source: FGDC Utilities Classification]
currnt_u_d (Enumeration16)	The unit measure of current. [Source: FGDC Utilities Classification]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
encl_typ_d (Enumeration16)	The type of enclosure used to protect the rectifier. [Source: FGDC Utilities Classification]
int_mtr_d (Enumeration16)	An indicator as to whether or not the rectifier has an internal meter, yes/no. [Source: FGDC Utilities Classification]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: FGDC Utilities Classification]
no_phases (Integer)	The number of phases to which this device provides reactive power. [Source: FGDC Utilities Classification]
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item. [Source: FGDC Utilities Classification]
volt_in_d (Enumeration16)	The input AC voltage to the rectifier. [Source: FGDC Utilities Classification]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterSepticTankPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Typically, a below grade receptacle or chamber in which solid organic waste is decomposed and purified by anaerobic bacteria. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity wastewater_septic_tank_point</i>
wwstank_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
area_size (Real)	The size of the area, zone, or polygon in square units.
dstbx_d (Enumeration16)	Indicates whether or not a distribution box exists for the subject item. (yes or no)
dstbx_i_el (Real)	The invert elevation of the inside bottom of the distribution box.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
drng_tex_d (Enumeration16)	The texture of the material surrounding the tank.
drnfl_st_d (Enumeration16)	The style of field drain system indicating the configuration and layout of the drain lines.
drng_pat_d (Enumeration16)	The drainage pattern of the material surrounding the tank.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
manhole_d (Enumeration16)	An indication as to whether or not is part of a manhole or has access via a manhole (yes/no).

flow_u_d (Enumeration16)	The unit of measure for flow rate.
laterl_slp (Real)	The average slope of all drainage laterals.
laterl_tot (Real)	The total (sum) length of all drainage laterals.
laterlmean (Real)	The mean or average length of the drainage laterals.
flow_rate (Real)	The rate of flow through the device or pipe.
perc_u_d (Enumeration16)	The unit of measure for soil percolation.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
no_lateral (Integer)	The total number of laterals.
slope_u_d (Enumeration16)	The unit of measure for slope.
trench_wid (Real)	The trench width excavated for the field drains.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
tank_lgth (Real)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tank_st_d (Enumeration16)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tank_width (Real)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
use_d (Enumeration16)	This value differentiates similar entities by use or type.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
soil_perc (Real)	The percolation rate of the soil in which the drain field lines are placed.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
tank_cpcty (Real)	The tank's storage capacity (e.g., gallons, ft3, etc).
tank_depth (Real)	The depth below the ground surface or cover measured from the top of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterSludgeBedArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

An area used for spreading and drying waste sludge. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_sludge_bed_area

sldgbed_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
bed_width (Real)	The exterior width dimension of the sludge bed, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
bed_lgth (Real)	The length dimension of the sludge bed, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
bed_dia (Real)	The inside diameter of the sludge bed, measured from the interior wall surface to the opposite interior wall surface.
bed_depth (Real)	The depth measured from the top of the subject item.
invert_elv (Real)	The elevation measured at bottom of the sludge bed, in feet (English

owner_d (Enumeration16)	units) or meters (SI units) above some datum. mean sea level. A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
bed_cpcty (Real)	The sludge bed's storage capacity (e.g., gallons, ft3, etc).
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
area_size (Real)	The size of the area, zone, or polygon in square units.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
feat_name (String30)	Any commonly used name for the wastewater sludge bed area. [Source: USGS]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterTreatPlantSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A structure containing equipment used to treat and remove unwanted constituents from wastewater. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_treatment_plant_site

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

WastewaterUtilitySite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A wastewater utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority. [Source: SDSFIE]

Attributes:

SDSFIE Entity utility_wastewater_utility_site

ww_util_id (Number*)	Primary Key. A locally assigned identifier for the record.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
wwutilname (String50)	Name of the wastewater utility or system. [Source: EPA]
wwutilid (String30)	Identifier assigned to the water utility by the appropriate federal, state, or local regulatory authority. [Source: EPA]
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
city (String30)	Name of city served by wastewater utility or system (if applicable).

state (String30)	[Source: EPA] Name of state where wastewater utility or system provides service.
pop_served (Integer)	[Source: EPA] Population served by wastewater system or utility. [Source: EPA]
ww_plant (Integer)	Total number of wastewater treatment plants serving wastewater utility or system.
dtreatcap (Real)	Total design capacity of wastewater treatment plants serving wastewater utility or system. Usually expressed in mgd.
re_connect (Integer)	Total number of residential type service connections.
co_connect (Integer)	Total number of commercial (i.e., businesses, industrial) type service connections.
capr_u_d (Enumeration16)	Capacity rate unit of measure (e.g., million gallons per day (mgd)).
wwsystem_d (Enumeration16)	General type or category of a wastewater system or utility. [Source: EPA]
utilown_d (Enumeration16)	General category of type of utility owner.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WastewaterValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a wastewater line. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity wastewater_valve_point

wwtlv_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	The particular application, or use the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
vlv_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground wastewater line valve. [Source: Air Force]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WstewatOilWatSeparatrSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device or structure placed in the waste water stream to separate water from oil products. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity wastewater_oil_water_separator_site

wwtsep_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_per_x (Date)	The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
oil_cpcty (Real)	The retention capacity of the oil-water separator.
disposal (String30)	Brief description of how the waste is disposed.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
grtchbr_d (Enumeration16)	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
flow_u_d (Enumeration16)	The unit of measure for flow rate.
flowcpcty (Real)	The flow capacity of the subject item.
sep_code (String2)	The oil-water separator code. Usually defined as OW.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
temp_optim (Real)	The optimum operating temperature for the subject item.
temp_u_d (Enumeration16)	The unit of measure for temperature.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
sep_contnt (String20)	Separator contents
sep_name (String12)	The site specific identification name or number assigned to the subject item.
sep_procsc (String30)	The specific type of separation process.
sep_volume (Real)	The volume of the oil-water separator.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
vol_u_d (Enumeration16)	The unit of measure of volume.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
siz (Integer)	The manufacturer's designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 6 inches). [Source: Cherry Point]
size_u_d (Enumeration16)	Unit of measure code for size (e.g., inches or centimeters). [Source: Cherry Point]
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum. [Source: Cherry Point]
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum. [Source: Cherry Point]
juntyonType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WstewatPumpEjectrStnSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A building in which one or more pumps operate to pump wastewater flowing at adequate pressure to or from a distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	SDSFIE Entity	wastewater_pump_ejector_station_site
station_id (Number*)	Primary Key.	A unique operator generated designator used to identify a station (pump station, pressure reducing station).
alrmlevl (Real)		The elevation in the wet well that triggers an alarm indicating no additional storage capacity.
dispostn_d (Enumeration16)		The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cond_d (Enumeration16)		Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
design_d (Enumeration16)		Discriminator. The design of the pump station.
cpcty_u_d (Enumeration16)		The unit of measure for capacity data (e.g., gallons).
owner_d (Enumeration16)		A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)		The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
hi_wat_elv (Real)		The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
nodal_elv (Real)		The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
invert_elv (Real)		The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
wetwlcpcy (Real)		The wet well capacity.
sta_width (Real)		The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
narrative (String240)		A description or other unique information concerning the subject item, limited to 240 characters.
no_pumps (Integer)		The total number of pumps located at the subject item.
sta_len (Real)		The overall length of the pump station plant area.
tribut_cod (String20)		An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
user_flag (String20)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
pump_elv (Real)		The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
type_d (Enumeration16)		A field indicating the kind, class, or group of the subject item.
area_size (Real)		The size of the area, zone, or polygon in square units.
perim (Real)		The distance around the boundary of the area, zone, or subject item in linear units.
juntionType (Enumeration16)		An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)		Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WstewatTreatmentUnitSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A waste water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	SDSFIE Entity	wastewater_treatment_unit_site
wwtplnt_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
area_size (Real)		The size of the area, zone, or polygon in square units.
bypass_d (Enumeration16)		Indicates whether or not the treatment plant has a bypass line? (yes or

dispostn_d (Enumeration16)	no). The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_rated (Real)	The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements.
flow_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).
flow_act (Real)	The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
no_pumps (Integer)	The total number of pumps located at the subject item.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
plant_elv (Real)	The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum.
plant_lgth (Real)	The overall length dimension of the treatment plant.
plantwidth (Real)	The overall width dimension of the water treatment plant.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
rem_mth (String32)	The method used to remove solids from the wastewater during processing. [Source: HSIP]
trt_lev_d (Enumeration16)	The overall level of treatment for the wastewater process. [Source: HSIP]
com_aff (String80)	The name of the company that operates the wastewater treatment facility. [Source: HSIP]
chlorint_d (Enumeration16)	Chlorination (Y/N)? [Source: HSIP]
max_capac (Real)	Capacity rate of the plant. [Source: HSIP]
cpcty_rate (Real)	Maximum waste water treatment capacity. [Source: HSIP]
feat_name (String80)	Indicates the name for the sewage treatment plant. [Source: HSIP]
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Water

DrinkingWaterSamplePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A point location where one or more water samples are collected from a water utility or system.
[Source: SDSFIE]

Attributes:

	<i>SDSFIE Entity</i>	<i>utility_drinking_water_sample_collection_point</i>
dw_saml_id (Number*)	Primary Key. A locally assigned identifier for the record.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the	

dwslocname (String50)	subject item's data integrity and should not be used to store the subject item's data.
dwslocty_d (Enumeration16)	Commonly used name for the location where a drinking water sample was collected. [Source: EPA]
junctionType (Enumeration16)	Code designating the type of location where a drinking water sample was collected.
meta_id (Integer)	An indicator as to whether the feature serves as a source, sink or neither in the network.
owner_d (Enumeration16)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

PigLaunchPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

Fittings where a pigging device is inserted in order to clean or maintain a pipe. [Source: SDSFIE DOT - NPMS]

Attributes:

SDSFIE Entity pig_launch_point

junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

UtilityWaterUtilitySite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A water utility company or organization's certificated area of jurisdiction or responsibility as approved by a federal, state, or local utility regulatory authority.

[Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity utility_water_utility_site

w_util_id (Number*)	Primary Key. A locally assigned identifier for the record.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
utilown_d (Enumeration16)	General category or type of utility owner. [Source: AWWA]
waterutlid (String30)	Identifier assigned to the water utility by the appropriate federal, state, or local regulatory authority. [Source: AWWA]
wutilname (String50)	Name of the water utility or system.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
gstorcap (Real)	Total finished (treated) capacity in ground storage tanks. Usually expressed in million gallons. [Source: AWWA]
capr_u_d (Enumeration16)	Capacity rate unit of measure (e.g., million gallons per day (mgd)).
city (String30)	Name of city served by water utility (if applicable). [Source: AWWA]
pwsource_d (Enumeration16)	A water utility's primary type of water source. [Source: AWWA]
wsystem_d (Enumeration16)	General type of water utility or system. [Source: AWWA]
area_size (Real)	The size of the area, zone, or polygon in square units.
pop_served (Integer)	Population served by water system or utility. [Source: AWWA]
re_connect (Integer)	Total number of residential type service connections. [Source: AWWA]
co_connect (Integer)	Total number of commercial type service connections. [Source: AWWA]
watr_plant (Integer)	Total number of water treatment plants serving water utility or system. [Source: AWWA]
dtreatcap (Real)	Total design capacity of water treatment plants serving water utility or

watwellno (Integer)	system. Usually expressed in mgd. [Source: AWWA] Total number of water wells serving water utility or system. [Source: AWWA]
wellcino (Integer)	Total number of water well fields/clusters serving water utility or system. [Source: AWWA]
dsorcecap (Real)	Total design water supply or source capacity (e.g., water wells, surface water pumping capacity, purchased water capacity, etc.). Usually expressed in mgd. [Source: AWWA]
cap_u_d (Enumeration16)	Total volume capacity (e.g., million gallons).
etankcap (Real)	Total finished (treated) storage capacity in elevated and pressure tanks. Normally expressed in million gallons. [Source: AWWA]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterAnodePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A material used for water distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_anode_point*

watanod_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
anode_wght (Real)	The initial weight of the anode or anode packet.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
material_d (Enumeration16)	The type of material composition of the anode or anode packet.
wght_u_d (Enumeration16)	The unit of measure for weight.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterFireConnectionPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An apparatus which dispenses fluids for use in fire management. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_fire_connection_point*

firhydr_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
fire_flow (Real)	The code or regulation required fire flow rate from a fire hydrant or fire flow connection.
meas_ty_d (Enumeration16)	This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal).
con_type_d (Enumeration16)	Discriminator. This value differentiates fire connections by use or type.
hyd_ty_d (Enumeration16)	The particular kind, class, or group of hydrant.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
inlet_dia (Real)	The diameter of the hydrant inlet connection.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994)

	= 19940915).
dia_u_d (Enumeration16)	The unit of measure for diameter.
outcon1dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon2dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon3dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
flow_test (Integer)	The date of the last fire flow test conducted at the subject fire hydrant or fire department connection. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
flow_u_d (Enumeration16)	The unit of measure for flow rate.
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
hyd_elv (Real)	The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
size_u_d (Enumeration16)	The unit of measure for size.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_u_d (Enumeration16)	The unit of measure for pressure data (e.g., psi).
source_d (Enumeration16)	The point of origin of a water system's water supply.
press_resd (Real)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
press_stat (Real)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
hydclass_d (Enumeration16)	The hydrant classification according to their rated capacity according to the National Fire Protection Association.
viv_st_d (Enumeration16)	The style of the valve.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections. [Source: FGDC]
road_name (String30)	A common name or street name used to refer to the stretch of road that the hydrant is facing. [Source: FGDC]
verify_d (Enumeration16)	A boolean indicating whether the blue reflectors was placed correctly in the street (Y = YES and N = NO). [Source: FGDC]
location (String80)	The location of the fire hydrant. [Source: FGDC]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterFittingPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting is an item used to connect, cap, plug or otherwise alter a pipe carrying water. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_fitting_point*

fitting_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
fit_elv (Real)	The elevation measured at centerline of the fitting, in feet (English units) or meters (SI units) above some datum.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed,

date_acqrd (Date)	abandoned, etc.), from lists or entered from field inspections. The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dia_in (Real)	The inside, or interior, diameter of the fitting.
dia_u_d (Enumeration16)	The unit of measure for the subject item diameter.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
fit_lgth (Real)	The overall length of the fitting.
fit_width (Real)	The width dimension of the subject item measured at its' widest point.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	Discriminator. The kind, class, or group of the subject item.
size_u_d (Enumeration16)	This attribute provides information concerning the unit of measure for size of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
drawing_no (Integer)	The drawing number of the Pig Drawing. This is a separate field from media_id.
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground waterline fitting. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: CENTER]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterHydrantPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An apparatus which dispenses fluids. [Source: SDSFIE IENC]

Attributes:

SDSFIE Entity *water_hydrant_point*

wathydr_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
fire_flow (Real)	The code or regulation required fire flow rate from a fire hydrant or fire flow connection.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
meas_ty_d (Enumeration16)	This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal).
design_d (Enumeration16)	Discriminator. The design code for a water hydrant.
hyd_ty_d (Enumeration16)	The particular kind, class, or group of hydrant.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
hyd_elv (Real)	The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.

inlet_dia (Real)	The diameter of the hydrant inlet connection.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
dia_u_d (Enumeration16)	The unit of measure for diameter.
outcon1dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon2dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
outcon3dia (Real)	The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
flow_test (Integer)	The date of the last fire flow test conducted at the subject fire hydrant or fire department connection. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
flow_u_d (Enumeration16)	The unit of measure for flow rate.
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
size_u_d (Enumeration16)	The unit of measure for size.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
source_d (Enumeration16)	The point of origin of a water system's water supply.
press_resd (Real)	The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
press_stat (Real)	The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
press_u_d (Enumeration16)	The unit of measure for pressure data (e.g., psi).
vlv_st_d (Enumeration16)	The style of the valve.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterIntakeLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

The location where water is allowed into the water distribution system. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity *water_intake_line*

impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

WaterIntakePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The location where water is allowed into the water distribution system. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity *water_intake_point*

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
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meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

WaterJunctionPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A box or small vault (usually concrete, brick, or cast iron) in water systems located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>water_junction_point</i>
watmnhl_id (Number*)	Primary Key.	An operator generated identifier unique for a water manhole.
airrfvlv_d (Enumeration16)	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)	
drain_ty_d (Enumeration16)	The type of subject item drain.	
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.	
no_valves (Integer)	The number of valves inside the subject item.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
mh_dia (Real)	The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.	
mh_len (Real)	The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.	
mh_width (Real)	The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.	
invert_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.	
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.	
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
type_d (Enumeration16)	A field indicating the kind, class, or group of manhole for the subject utility.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
use_d (Enumeration16)	Discriminator. An attribute that differentiates the use of the subject item.	
no_pipes (Integer)	The number of the pipes entering and exiting the subject item.	
rim_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

WaterLine

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Secret

A pipe used to carry water from location to location (main line, service line, vent line, etc). [Source: SDSFIE FGDC Utilities Classification]

Attributes:

	<i>SDSFIE Entity</i>	<i>water_line</i>
watpipe_id (Number*)	Primary Key.	A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed,	

catprot_d (Enumeration16)	abandoned, etc.), from lists or entered from field inspections. Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
pipe_lgth (Real)	The length of pipe, measured from node to node along the pipe centerline .
press_max (Real)	The manufacturer's or industry standard's maximum pressure rating of the subject item.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
grnd_elv_1 (Real)	The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
grnd_elv_2 (Real)	The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
inv_elv_1 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_1 in feet (English units) or meters (SI units) above some datum.
inv_elv_2 (Real)	The elevation of the bottom of pipe (i.e., pipe invert) at node_id_2 in feet (English units) or meters (SI units) above some datum.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	The kind, class, or group of the subject item.
slope_bot (Real)	The slope of the bottom of the subject item expressed as a percentage.
slope_u_d (Enumeration16)	The unit of measure for slope.
tape_d (Enumeration16)	This attribute indicates whether or not location marker tape or wire been installed above the waterline pipe to facilitate it's location with a magnetometer? (yes or no).
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
use_d (Enumeration16)	Discriminator. The use code for water pipes.
press_norm (Real)	The normal operating pressure of the water system pipe.
press_u_d (Enumeration16)	The unit of measure for pressure.
source_d (Enumeration16)	The source type for the origin of a water system's water supply.
piplty_d (Enumeration16)	The location of the pipeline in relevance to the earth's surface. [Source: USGS]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground waterline pipe. [Source: Air Force]
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
impedance (Real)	The number representing the total opposition to flow.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterMarkerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc to indicate the presence of water. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_marker_point*

marker_id (Number*)

Primary Key. An operator generated identifier unique for a general utility marker.

dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
pole_mat_d (Enumeration16)	The material composition of the pole.
pole_depth (Real)	The depth the pole is buried in the foundation (usually the ground surface).
pole_hght (Real)	The distance the pole extends above the foundation (usually the ground surface).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
sign_hght (Real)	The height dimension of the sign.
sign_mat_d (Enumeration16)	The material composition of the sign.
sign_text (String30)	The text on the sign, up to 30 characters.
sign_width (Real)	The width dimension of the sign.
soil_cnd_d (Enumeration16)	The soil condition indicating the soil's strength and integrity.
rock_cnd_d (Enumeration16)	The condition of the rock relative to the rocks strength and integrity.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterMeterPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device installed in a line for measuring the quantity and or rate of water flowing to a facility or through a section of line. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity water_meter_point

watmetr_id (Number*)	Primary Key. An operator generated identifier unique for a water meter.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
instl_ty_d (Enumeration16)	The type installation of the subject item.
meter_elv (Real)	The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
size_u_d (Enumeration16)	The unit of measure for size.
mtr_custmr (String20)	The name of the individual, company, or government agency served by the subject item.

user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
source_d (Enumeration16)	The point of origin of a water system's water supply.
srvc_mtr_d (Enumeration16)	An indicator as to whether or not the meter is installed on a service line? (yes or no)
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterPumpPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A mechanical device for water system that draws material into itself through an entrance port and forces the material out through an exhaust port. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_pump_point*

watpump_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
cool_mth_d (Enumeration16)	The method by which the pump is cooled.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_act (Real)	The measured capacity of the pump operating under actual normal head and flow conditions.
cpcty_rate (Real)	The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gpm).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
pwr_gen (Real)	The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
pwr_req_d (Enumeration16)	The voltage of the electrical power required by the subject item.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
prim_rqd_d (Enumeration16)	An indicator as to whether or not the pump has to be primed? (yes or no).
prime_meth (String15)	The method by which the pump is primed.
tdh_rated (Real)	The total dynamic head upon which the capacity_rated is based.
tdh_u_d (Enumeration16)	The unit of measure for Total Dynamic Head (TDH), usually expressed in feet (English units).
use_d (Enumeration16)	The particular application, or use the subject item.
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither

meta_id (Integer)

in the network.

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterPumpStationSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A building in which one or more pumps operate to maintain flow at adequate pressure within a water distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_pump_station_site*

watstat_id (Number*)	Primary Key. A unique operator generated designator used to identify a station (pump station, pressure reducing station).
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
cpcty_u_d (Enumeration16)	The unit of measure for capacity data (e.g., gallons).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
hi_wat_elv (Real)	The high water or overflow elevation of the elevated water storage tank downstream of the pumping station, in feet (English units) or meters (SI units) above some datum.
nodal_elv (Real)	The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
wetwlcpcy (Real)	The wet well capacity.
sta_width (Real)	The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
sta_cpcty (Real)	The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
sta_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
sta_ty_d (Enumeration16)	Discriminator. The type of station.
no_pumps (Integer)	The total number of pumps located at the subject item.
source_d (Enumeration16)	The point of origin of a water system's water supply.
sta_len (Real)	The length dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tribut_cod (String20)	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
src_name_d (Enumeration16)	The name of the water source (e.g., Mississippi River, Bayou LaFouche, etc.).
pump_elv (Real)	The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.
tnkalmelv (Real)	Elevation of water in upstream ground water storage tank(s) which represents a low level which activates a low water/pressure alarm.
vol_u_d (Enumeration16)	The unit of measure of volume.
area_size (Real)	The size of the area, zone, or polygon in square units.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.

feat_name (String80)	The name of the pumping station. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterRectifierPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the water distribution system. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_rectifier_point*

watrect_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
cool_mth_d (Enumeration16)	The method by which the rectifier is cooled, typically air or oil.
encl_typ_d (Enumeration16)	The type of enclosure used to protect the rectifier.
volt_out_d (Enumeration16)	The output DC voltage from the rectifier to the anode system.
currnt_out (Real)	The output direct current from the rectifier to the anode system.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
currnt_u_d (Enumeration16)	The unit of measure for electrical current.
int_mtr_d (Enumeration16)	An indicator as to whether or not the rectifier has an internal meter, yes/no.
no_phases (Integer)	The number of phases to which this device provides reactive power.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
phas_ltr_d (Enumeration16)	The letter(s) of the phase(s) for the subject item.
volt_in_d (Enumeration16)	The input AC voltage to the rectifier.
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterRegulatorReducerPoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A pressure regulator located in the water line that automatically reduces the pressure on the downstream side of the valve to a preset magnitude. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_regulator_reducer_point*

watreg_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
size_d (Enumeration16)	The manufacturers designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1in gas hydrant, 2in meter, 6in pipe).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
narrative (String240)	A description or other unique information concerning the subject item,

model_no (String12)	limited to 240 characters.
press_in (Real)	The Model, Product, Catalog, or Item Number of subject item.
press_u_d (Enumeration16)	The design water system pressure in the waterline on inlet side of the pressure regulator.
type_d (Enumeration16)	The unit of measure for pressure.
press_out (Real)	Discriminator. The kind, class, or group of the subject item.
press_reqd (Real)	The design water system pressure in the waterline on outlet side of the pressure regulator.
reg_elv (Real)	The required maximum outlet pressure setting for the regulator.
serial_no (String15)	The elevation of the pressure regulator, measured at the regulator centerline.
juntionType (Enumeration16)	The manufacturer's serial, or unique identification number of the subject item.
meta_id (Integer)	An indicator as to whether the feature serves as a source, sink or neither in the network.
	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterSourceSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

The point from which water is supplied for processing and distribution. [Source: SDSFIE FGDC Utilities

Attributes:

SDSFIE Entity water_source_site

watsrce_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
area_size (Real)	The size of the area, zone, or polygon in square units.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
name_d (Enumeration16)	The name of a water system's water source.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
systyp_d (Enumeration16)	The type of water system. [Source: USACE OPERATIONS]
catpip_d (Enumeration16)	Category of pipe [Source: S-57]
feat_len (Real)	The overall length of the feature. [Source: Center]
flow_u_d (Enumeration16)	The unit of measure for flow rate. [Source: HSIP]
max_flow (Real)	The intake capacity of the pipe. [Source: HSIP]
feat_name (String80)	The name of the water intake. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterTankSite

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

An above or below grade receptacle or chamber used for holding water on a temporary basis prior to transfer or use. [Source: SDSFIE]

Attributes:

SDSFIE Entity water_tank_site

wattank_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
alarm_lvl (Real)	The elevation of the preset level in a tank which activates a low water level alarm, in feet (English units) or meters (SI units) above mean sea level. Mean sea level is universally considered as the elevation reference surface although local surveys may
alt_vlv_d (Enumeration16)	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
area_size (Real)	The size of the area, zone, or polygon in square units.
level_1_on (Real)	The elevation of the preset level in a tank which activates one pump or one control valve which supplies water to the tank, in feet (English units) or meters (SI units) above some datum.
level_2_on (Real)	The elevation of the preset level in a tank which activates a second pump, or control valve, which operates in conjunction with the first activated pump, or control valve, to supply water to the tank, in feet or meters above some datum.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
level_off (Real)	The elevation of the preset level in a tank which turns off the pump(s) or control valve(s) which supply water to the tank, in feet (English units) or meters (SI units) above some datum.
level_shut (Real)	The elevation of the preset level in a tank (ground storage or supply tank) which indicates a dangerously low water level in the tank and turns off all pumps which draw water from the tank, in feet (English units) or meters (SI units) above some datum.
ovrflw_elv (Real)	The elevation measured at the point of overflow, or entrance, into the tank overflow pipe,, in feet (English units) or meters (SI units) above some datum.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
head_norm (Real)	The normal operating head for the subject item.
head_u_d (Enumeration16)	The unit of measure for pressure head.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
press_alm (Real)	The preset pressure setting of a tank which activates a low tank pressure alarm.
press_high (Real)	The preset high, or maximum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting at which all pumps supplying water to the tank, and all air compressors supplying compressed air to the tank, are off.
invert_elv (Real)	The elevation measured at bottom of the tank, in feet (English units) or meters (SI units) above some datum. mean sea level.
mat_d (Enumeration16)	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
top_elv (Real)	The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.
tank_lgth (Real)	The length dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
tank_st_d (Enumeration16)	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
tank_use_d (Enumeration16)	The particular kind or use of the tank (e.g., raw water, potable, etc.).
tank_vol (Real)	The tank's storage capacity (e.g., gallons, ft3, etc).

tank_width (Real)	The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
press_low (Real)	The preset low, or minimum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting which activates the pump(s) supplying water to the tank. For an elevated type tank, this is the setting which activates
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
press_norm (Real)	The manufacturer's (as rated by American Society of Mechanical Engineers (ASME) testing procedures) maximum pressure rating of the water tank.
press_u_d (Enumeration16)	The unit of measure for pressure.
serial_no (String15)	The manufacturer's serial, or unique identification number of the subject item.
tank_dia (Real)	The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
vol_u_d (Enumeration16)	The unit of measure of volume.
feat_name (String80)	Indicates the name as given for the water system control facility. [Source: HSIP]
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterTreatmentPlantArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment.
[Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_treatment_plant_area*

meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]

WaterTreatmentUnitArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A water separation pond or other pool designed to allow solid material decomposition. [Source: SDSFIE FGDC Utilities Classification]

Attributes:

SDSFIE Entity *water_treatment_unit_area*

watplnt_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
area_size (Real)	The size of the area, zone, or polygon in square units.
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
bypass_d (Enumeration16)	Indicates whether or not the treatment plant has a bypass line? (yes or no).
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
flow_rated (Real)	The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements.
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
flow_u_d (Enumeration16)	The unit of measure for rate capacity data (e.g., gallons per minute).

flow_act (Real)	The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
name_d (Enumeration16)	The site specific identification name or number assigned to the subject item.
no_pumps (Integer)	The total number of pumps located at the subject item.
perim (Real)	The distance around the boundary of the area, zone, or subject item in linear units.
source_d (Enumeration16)	The point of origin of a water system's water supply.
type_d (Enumeration16)	A field indicating the kind, class, or group of the subject item.
plant_elv (Real)	The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum.
plant_lgth (Real)	The overall length dimension of the treatment plant.
plantwidth (Real)	The overall width dimension of the water treatment plant.
num_cust (Integer)	The number of customers being served by the treatment facility. [Source: HSIP]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterValvePoint

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Secret

A fitting or device used for shutting or throttling flow through a water line. [Source: SDSFIE FGDC Utilities]

Attributes:

SDSFIE Entity water_valve_point

watvly_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.
dispostn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.
branch_sys (String12)	An operator generated identifier that is a unique site specific name or number designation of a branch or isolated area of a water distribution system.
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]
valve_elv (Real)	The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
size_u_d (Enumeration16)	The unit of measure for size.
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.
use_d (Enumeration16)	Discriminator. The site specific use of the valve.
vlv_size_d (Enumeration16)	A code indicating the manufacturer's nominal size designation.
vlv_st_d (Enumeration16)	The particular kind, class, or group of valve (e.g., gate, check, etc.).
depth_u_d (Enumeration16)	The unit of measure for depth. [Source: Center]
coverdepth (Real)	The depth of cover. The depth measured from top of ground's surface (or grade) to top of underground waterline valve. [Source: Air Force]

juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WaterVentPoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

A valve installed in a line to either release air trapped in the line, and/or allow air into a line to relieve a vacuum condition. [Source: FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity</i>	<i>water_vent_point</i>
watvent_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
feat_desc (String60)	Any brief description of the feature.	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
juntionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	

WatPressReducingStatnPoint

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

A station consists of a box/pit containing one or more pressure regulators and appurtenant shutoff valves and fittings. [Source: SDSFIE FGDC Utilities Classification]

Attributes:	<i>SDSFIE Entity</i>	<i>water_pressure_reducing_station_point</i>
red_sta_id (Number*)	Primary Key. A unique, user defined identifier for each record or instance of an entity.	
cond_d (Enumeration16)	Indicates a state of being, or readiness for use of the subject item (e.g., good, fair, poor), from lists or field inspections.	
disposn_d (Enumeration16)	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.	
date_acqrd (Date)	The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
date_const (Date)	The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)	
ground_elv (Real)	The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.	
owner_d (Enumeration16)	A person, organization, or agency with legal control or management responsibility of the utility asset.. [Source: Adopted from SDSFIE]	
user_flag (String20)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters.	
sta_elv (Real)	The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.	
model_no (String12)	The Model, Product, Catalog, or Item Number of subject item.	
press_in (Real)	The design or maximum water system pressure in the waterline on inlet side of the pressure reducing station.	
press_oper (Real)	The normal operating water system pressure in the waterline on inlet side of the pressure reducing station.	
press_u_d (Enumeration16)	The unit of measure for pressure.	
source_d (Enumeration16)	The point of origin of a water system's water supply.	

press_out (Real)	The design or maximum water system pressure in the waterline on outlet side of the pressure reducing station.
junctionType (Enumeration16)	An indicator as to whether the feature serves as a source, sink or neither in the network.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).



AEIS

Maryland Aviation Administration

Office of Engineering and Construction Management

Airport Engineering Information System

**GEOGRAPHIC INFORMATION
SYSTEM
DATA STANDARD**

UTILITIES SUPPLEMENT

**Version 1.1
July 2007**

**Geographic Information System
Data Standard
For the Maryland Aviation Administration
Version 1.1, July 2007**

Table of Contents

1. INTRODUCTION.....	3
1.1. Purpose.....	3
1.2. Scope.....	3
1.3. Audience	3
1.4. Application.....	3
1.5. Background	4
1.6. Related Material.....	4
1.7. Change Control	6
2. FEATURE TYPES	8
2.1. Allowable Geometry Types	8
2.2. Topology Rules.....	10
2.3. Layering of Feature Types	12
2.4. Feature Type Layering in GIS Software.....	13
2.5. Feature Type Layering in CADD Software	13
2.6. Relationship of GIS & CADD Layers	13
3. ATTRIBUTES.....	14
3.1. Domain Values.....	14
3.2. Primary Key Identifiers.....	14
3.3. Foreign Key Identifiers	15
4. METADATA	16
4.1. Temporal Relevance	19
4.2. Accuracy	19
4.3. Security Sensitivity Levels	20
5. COORDINATE SYSTEM.....	21
6. ACCEPTABLE DATA FORMATS.....	22
GLOSSARY OF ACRONYMS AND TERMS.....	24
APPENDIX A - LIST OF FEATURE TYPES AND ATTRIBUTES.....	27
APPENDIX B - DOMAIN VALUES.....	91
APPENDIX C – CADD TO GIS CROSSWALK.....	182
APPENDIX D - METADATA ELEMENTS	203

1. INTRODUCTION

1.1. Purpose

By defining the content and format of geospatial data, related attributes, and metadata (i.e., information about the data), this GIS Data Standard provides guidance for developing geospatially-referenced data to be submitted to, maintained by, or provided by the Maryland Aviation Administration (MAA). This standard is required so providers and receivers of MAA data have an understanding of the information they submit and use.

1.2. Scope

This standard encompasses 353 types of geospatial features, such as runways, taxiways, buildings, and others, that are relevant to MAA. While not all possible data sets are included, the features defined herein collectively provide a common map of the most relevant and therefore the most widely used information about an airport. This common map, or basemap, supports a variety of planning, design, operations, safety, and security applications. Users can also layer information on top of the basemap to support other more specialized applications.

This document defines 135 of the 353 features covered by MAA's GIS Data Standard. The remaining 218 feature classes are covered in the MAA GIS Data Standard – Utilities Supplement.

1.3. Audience

This standard is intended for Computer Automated Drafting & Design (CADD) and Geographic Information Systems (GIS) technicians, data developers, database designers, and other providers and recipients of geospatial data that depict Baltimore-Washington International (BWI) and Martin State (MTN) airports and their surrounds, as well as other facilities owned and operated by MAA. This standard assumes basic familiarity with CADD and GIS concepts and terminology. A glossary is provided in Section 12.

1.4. Application

The U.S. Geological Survey (USGS) defines Geospatial data as information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth. This type of information is increasingly used to convey important infrastructure, terrain, and operations data within divisions of an airport and between an airport and its consultants, safety and security personnel, and other stakeholders. Increasingly, this information is created, used, and maintained in GIS software.

GIS brings together a collection of geospatial data that depict manmade and natural features linked to attribute information for those features. This geospatial and attribute information is typically organized as layers that can be superimposed on one another to form a map. Different collections of layers can be used to provide maps that meet a variety of needs. For example, some GIS layers are grouped together to produce an Airport Layout Plan (ALP) while others are used to produce an interior Space Utilization Drawing.

A key benefit of GIS is improved management of data across organizational lines by linking data sets based on location. This helps departments across an agency such as the MAA share their

data. By creating a shared database, one organization can benefit from the work of another, and data can be collected once and used many times.

1.5. Background

This standard was developed based on input from within MAA and from its consultants. This standard is based largely on and includes portions of the GIS standard developed for the Federal Aviation Administration (FAA) and as such has benefited from input from FAA stakeholders. It has also benefited from a public review process and feedback based on the implementation of earlier drafts at several airports of varying sizes.

The standard was also developed in conjunction with the Federal Geographic Data Committee (FGDC) Framework Data Content Standards. Under this initiative, additional input was provided by airport authority, National Geospatial-Intelligence Agency (NGA), DOD (Department of Defense), Department of Transportation (DOT), data vendor, software supplier, and consultant representatives. As part of the FGDC standards, it is integrated with similar standards being developed for other modes of transportation and other non-transportation themes into a comprehensive geospatial data exchange standard for adoption by American National Standards Institute (ANSI). Also as a result of the FGDC initiative, the standard is compatible with the data exchange resources being developed under the federal Geospatial One-Stop initiative.

The standard is also harmonized with other relevant standards, including RTCA's User Requirements for Aerodrome Mapping Information (DO-272), which defines geospatial data required to support aircraft movement on the ground, and the U.S. CADD/GIS Technology Center's Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE), which is an extensive GIS standard originally developed for military facilities. Harmonization with these similar and widely used standards helps broaden the availability of data, systems, and personnel resources available to users of this standard.

1.6. Related Material

The following documents are related to this GIS Data Standard and are referenced herein. These resources are informative (versus normative) in nature: compliance with the requirements of the following documents is not required in order to be in compliance with this standard. Readers of this standard may wish to review the related reading material listed below for further details on a specific topic. The URL for each is provided. In some cases, the document can be downloaded for free from the Web sites. In other cases, as indicated with an asterisk, instructions on how to obtain a copy are provided.

- MAA CADD Standards Manual, Issue #1.0, 2005
- MAA GIS Data Standard – Utilities Supplement, Version 1.1, July 2007
- FAA, Advisory Circular - Airport Master Plans, AC 150/5070-6B, Draft, <http://www.faa.gov/arp/publications/acs/draftacs.cfm>
- FAA Document 405, Standards for Aeronautical Surveys and Related Products,
- 4th ed., September 1996, <http://www.ngs.noaa.gov/AERO/aerospecs.htm#FAA405>
- FGDC Geospatial Data Content Framework Standards, Federal Geographic Data Committee, 2005, <http://www.fgdc.gov/standards/framework/index.html>

- Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE), Version 2.4, U.S. CADD/GIS Technology Center, 2004, <https://tsc.wes.army.mil/products/tssds-tsdfs/tssds/projects/sds/default.asp>
- User Requirements for Aerodrome Mapping Information (DO-272), RTCA, Inc., 2001, <http://www.rtca.org/doclist.asp> *
- Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy (FGDC-STD-007.3-1998), FGDC, 1998, http://www.fgdc.gov/standards/status/sub1_3.html
- Geospatial Positioning Accuracy Standards, Part 4: Architecture, Engineering, Construction, and Facilities Management (FGDC-STD-007.4-2002), FGDC, 2002, http://www.fgdc.gov/standards/status/sub1_5.html
- Geographic Information – Metadata (ISO 19115), International Organization for Standards, 2003, <http://www.iso.org> *
- Geographic Information – Spatial Schema (ISO 19107), International Organization for Standards, 2001, <http://www.iso.org> *
- Level 0 Profile of GML3 for WFS, Version 0.0.10 (03-003r10), Open GIS Consortium, May 10, 2004, http://portal.opengeospatial.org/files/?artifact_id=4347
- U.S. National CADD Standard (NCS), version 3.0, 2003, <http://www.nationalcadstandard.org/> *
- CAD Layer Guidelines, Second Addition, The American Institute of Architects, <http://www.aia.org/> *
- ICAO Annex 15 – Aeronautical Information Services (AIS), International Civil Aviation Organization, 11th edition 2003, <http://www.aviatechpubs.com/custom4.html> *
- Aeronautical Information Exchange Model (AIXM), Edition 3.3, Eurocontrol, 2003, <http://www.eurocontrol.int/ais/aixm/conceptual.htm>
- 49 CFR 1520, Protection of Sensitive Security Information, Code of Federal Regulations, October 1, 2003, http://www.access.gpo.gov/nara/cfr/waisidx_03/49cfr1520_03.html
- Standard Classification of Building Elements and Related Sitework - UNIFORMAT II, American Society for Testing and Materials (ASTM) E1557-97, <http://www.astm.org> *

** Documents available for purchase from the organization designated*

1.7. Change Control

Following is a chronological list of changes made to this document since it was first released. A version number and the date of release are indicated for each revision.

Version Number	Date of Release	Changes Addressed
1.0	12/22/2005	Original release
1.1	7/9/2007	Section 1.5 added for change control. Section formatting adjusted to be consistent with other AEIS standards. Utility and communications features moved to a supplement to this document.

Readers are encouraged to suggest additional changes to this document. Comments and suggestions should be recorded using the form on the following page and submitted to the AEIS Program Manager for MAA's consideration. Accepted changes will be reflected in a subsequent version of this document.

MAA GIS Data Standard Document Revision Form

Date: _____

To:

Marcus Zadi Rouhani MSc. (Eng.)
Chief, Document Mgmt. /Tech. Support
Division of Facilities Design
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City, State, Zip: _____, _____
E-Mail: _____
Phone: _____

Comments:

#	Reference*	Comment or Suggested Change	MAA Resolution

** Reference must provide a clear indication of where the change is recommended (e.g. section, page, paragraph and sentence or figure number).*

Additional pages can be used if required.

2. FEATURE TYPES

The focus of this standard is on the definition of 353 geographic features required to depict an airport and its surrounding environment. These include features unique to airports, such as runways and taxiways, as well as more generic features, such as roads and buildings. Each of these 353 types of geographic features is referred to as a Feature Type. A specific instance of a Feature Type is referred to as a Feature Instance. For example, Runways is a Feature Type, but Runway 10/28 at BWI is a Feature Instance.

For simplicity in data development and transfer, this standard associates a single geometry with each Feature Type.

2.1. Allowable Geometry Types

There are three basic types of geometry (i.e., points, lines, and polygons). To ease implementation, this standard assigns only one type of geometry to each Feature Type. The following geometry type definitions are used in accordance with ISO 19107 and in compliance with the Open GIS Consortium Level 0 Profile of GML Version 3.

- 1). **Point:** a single location represented by X and Y (and in some cases Z) coordinates on a reference coordinate system, as shown below in Figure 1.

Figure 1
Example of Point Features



- 2). **Line:** straight line connections between two or more discrete locations represented by X and Y coordinates on a reference coordinate system, as shown below in Figure 2. Note that line segments (i.e., a straight line connecting two points) and polylines (i.e., one or more connected line segments) are both included in this definition but that arcs (i.e., a curve joining two points) are not.

Figure 2
Example of Point Features



- 3). **Polygon:** A closed connection between three or more discrete locations represented by X and Y coordinates on a reference coordinate system, as shown below in Figure 3.

Figure 3
Example of Polygon Features



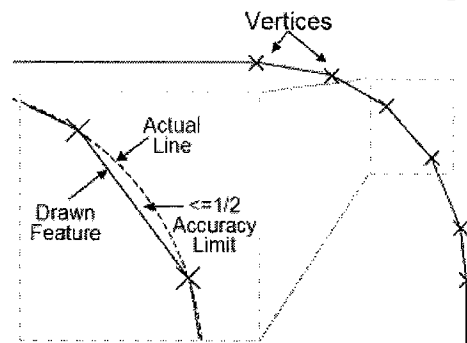
4). Complex Geometry Types: Arcs, circles, and ellipses are not included in this standard. This is intended to facilitate data exchange between software that process these complex data types differently. For example, if arcs are used in a CADD drawing, they must first be broken into a line with vertices placed at intervals that are sufficient to maintain the accuracy requirements described in Section 11b.

2.2. Topology Rules

The placement of geometric elements (i.e., Feature Instances) in juxtaposition to one another (i.e., next to, connected to, or on top of) is referred to as a topology. Topology rules establish requirements for the placement of instances of a Feature Type in relation to one another and in relation to instances of other Feature Types. Unless stated otherwise, this standard requires the following topological rules:

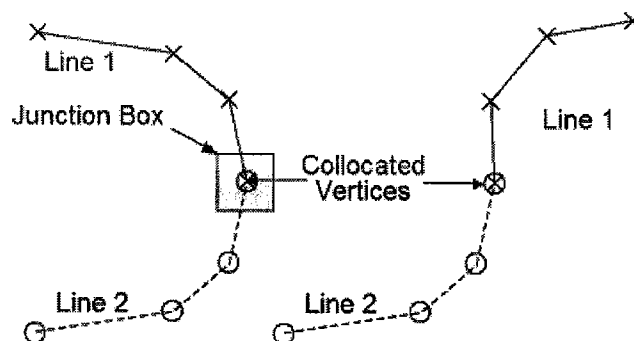
- 1. Line Feature Types:** Lines should contain one or more line segments with vertices placed at required intervals so the line feature does not stray from the actual feature by more than the half accuracy limit defined in Appendix A for the Feature Type, as shown below in Figure 4.

Figure 4
Illustrates the placement of vertices along a curve



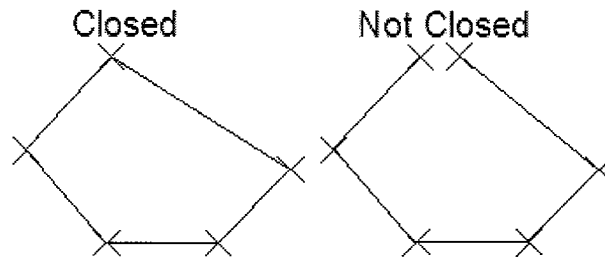
Lines should begin and end at vertices collocated (i.e., exactly at the same coordinate) with features (often point Feature Types) designed to join two or more linear features, as shown in Figure 5. An example is electrical conduit lines that are joined only at junction boxes and other similar point features. For lines not naturally joined by physical features (e.g., marking lines), beginning and ending nodes should be placed where an attribute or other property change occurs.

Figure 5
Collocation of Line End Points



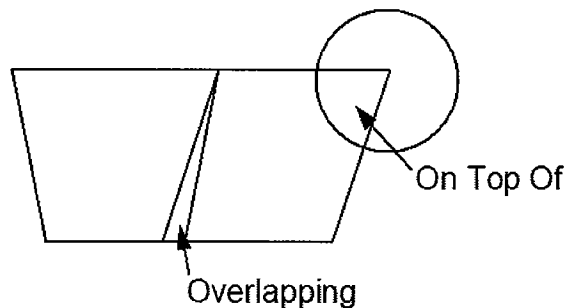
2. Polygon Feature Types: Polygons must always be closed, meaning all vertices must be shared by two adjacent line segments forming the edges of the polygon, as shown in Figure 6.

Figure 6
Examples of Closed and Unclosed Polygons



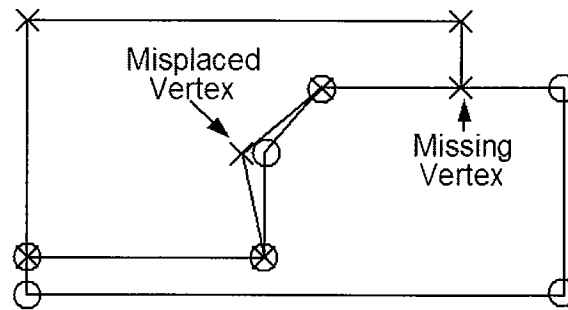
Unless otherwise stated, polygons must not overlap other polygons of the same Feature Type, as shown in Figure 7. This includes polygons placed on top of other polygons, as well as small overlapping splices because one or more vertices of adjacent sides are not matched. Polygons placed within (e.g., a 'doughnut hole') a larger polygon (e.g., the 'doughnut') which do not overlap are acceptable, because they describe a physically different space from the surrounding polygon.

Figure 7
Depicts an examples of overlapping polygons



Polygons must share vertices with adjacent polygons where the real-world features they represent are adjacent, as shown below in Figure 8. This rule applies to polygons in the same Feature Type as well as polygons of different but related Feature Types.

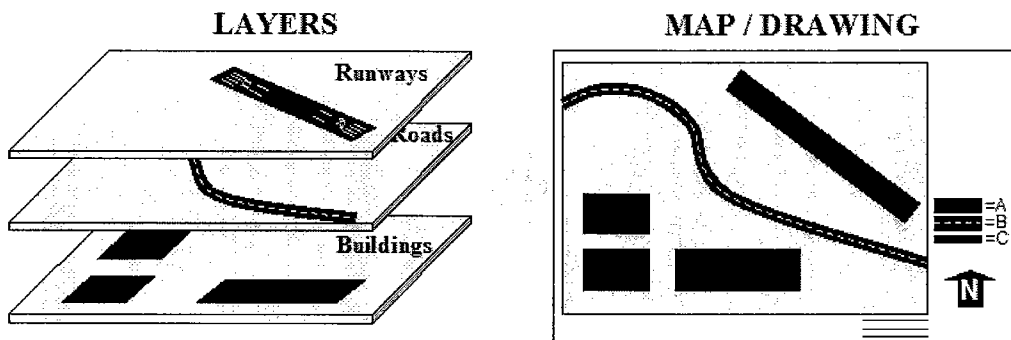
Figure 8
Depicts the placement of vertices of adjacent polygons



2.3. Layering of Feature Types

Each Feature Type corresponds to a single GIS layer and one or more CADD layers in this standard. GIS and CADD software superimpose layers on top of one another to form a map or drawing, as shown in Figure 9 below.

Figure 9
Illustrates the layering of Feature Types to form a map or drawing



Because layers are a fundamental element of GIS and CADD software, layers are often associated with tables that contain attributes (e.g., width, material type, condition, etc.), metadata (e.g., accuracy, source, date of relevance, etc.) and properties (e.g., color, line type, etc.). These are covered, respectively, in more detail in the following sections.

2.4. Feature Type Layering in GIS Software

GIS software provides a great deal of flexibility when distinguishing, rendering, and annotating different types of features (i.e., Feature Instances) within a single layer (i.e., a Feature Type) of a map. Because of this flexibility, features that have the same properties and attributes but have minor differences such as type and status can be grouped onto a single layer but still be displayed differently. The result is that fewer layers can be used to represent real-world situations. In this standard, 353 GIS layers are used to represent all of the features deemed relevant to airport GIS applications.

2.5. Feature Type Layering in CADD Software

In CADD software, layers are typically used not only distinguish between different types of features (as with GIS), but also to color or shade specific features, indicate the status of features and display annotations or dimensions. As a result, more CADD layers are typically used to represent all of the features potentially relevant in airport CADD drawings. MAA's CADD Standards Manual reflects the range of layers relevant to MAA.

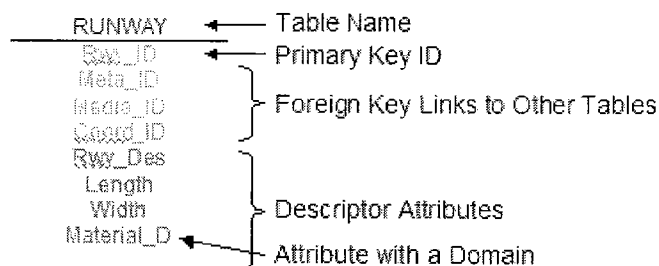
2.6. Relationship of GIS & CADD Layers

Because many more CADD layers can be used to represent the same features represented on far fewer GIS layers, there is a natural many-to-one matching of CADD to GIS layers. The specific relationship of CADD layers that correspond to GIS layers is shown in the CADD-to-GIS crosswalk.

3. ATTRIBUTES

Attributes add alphanumeric descriptors to the geometry of a feature. Attributes can contain information such as the name, type, or condition of a feature. For example, the attributes of a runway include its designator (e.g., 15R/33L), material type (e.g., concrete), and length (e.g., 6,500 feet). Figure 10 below shows a typical list of attributes associated with a Feature Type.

Figure 10
Sample Attribute Table for a Feature Type



3.1. Domain Values

The values assigned to an attribute are sometimes limited. The range of acceptable values is referred to as the domain for that attribute. Domains that limit attribute values to a range of numeric or date values are referred to as range domains. List Domains limit values to a selection of choices. If users can add values to a list of acceptable values and still be compliant with the standard, the list is referred to as a code list. A list that users cannot add to is referred to as an enumeration. In this standard, most of the list domains are enumerations. To distinguish attributes that are limited to a domain, the name of each attribute ends with “_D”. For each such attribute, there is an associated table in Appendix B listing the acceptable values and their definitions.

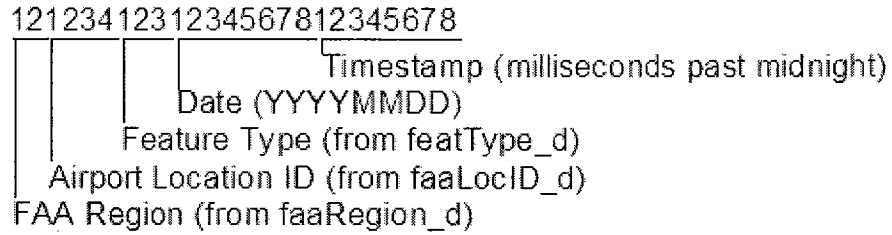
3.2. Primary Key Identifiers

Primary Keys are attributes used by a system to uniquely identify each record (i.e., feature instances). Primary key values must be unique within each attribute table.

When GIS data are submitted to MAA and uploaded into the AEIS Data Repository, each record will also be assigned a globally unique ID (GUID), which means that no other records have the same identifier. AEIS modules will use this GUID to track feature instances as they are modified. If users who download data from AEIS encounter such GUIDs, they are required to retain the GUIDs and submit them, unaltered, with subsequent revisions, to the feature instances they downloaded.

The format of the GUIDs used in AEIS is described in Figure 11 below. A numeric ID is used that contains the FAA region, airport location ID, feature type, date, and a timestamp. Since FAA region, airport location, and feature type are text values, corresponding numeric values have been assigned in the domain tables found in Appendix B.

Figure 11
Format for Globally Unique Primary Keys



3.3. Foreign Key Identifiers

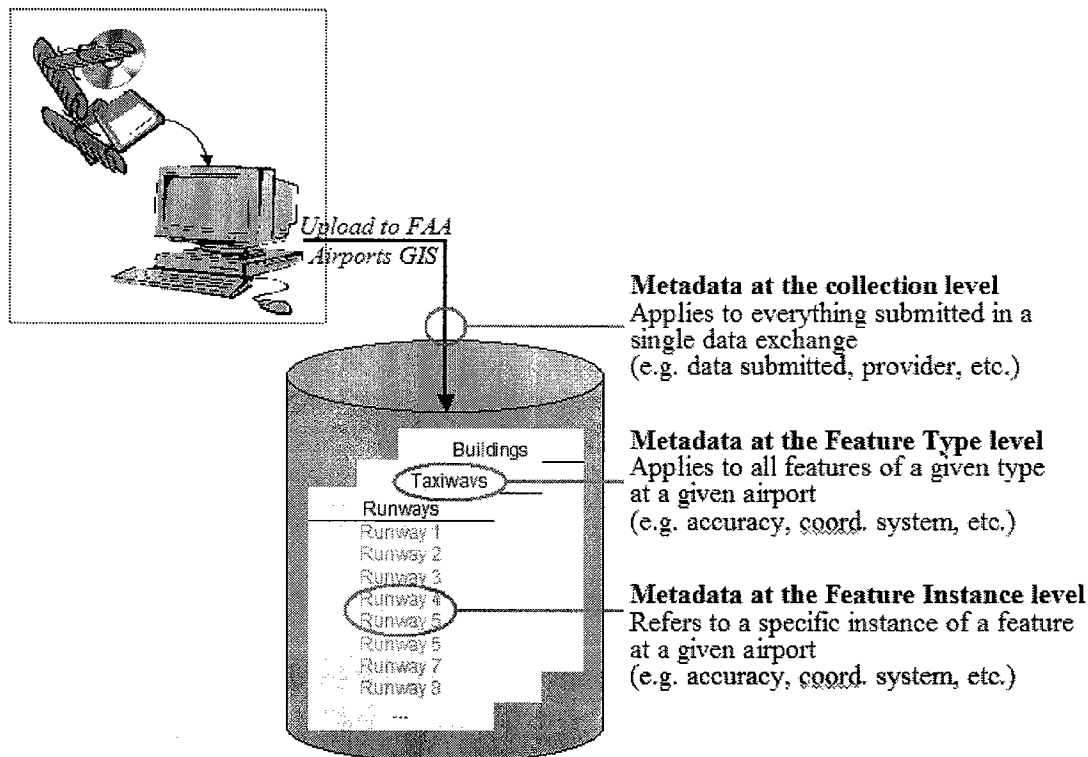
Attributes containing primary key values of related records in other Feature Type tables are called foreign key identifiers. Foreign key identifiers provide a link between different types of features with logical relationships. For example, a the data for a taxiway leading to a runway might contain a foreign key to the runway table that is populated with the primary key value for that runway.

4. METADATA

Metadata is information about the data, such as the data source, accuracy, and the dates during which the data are valid. Metadata values take the form of alphanumeric descriptors of the data and in this way are very similar to attributes. For clarity, and because they are stored separately, metadata descriptors are referred to in this standard as metadata elements (versus attributes).

Metadata elements can be applied at various levels of data aggregation. They can describe a collection of data submitted at one time. A collection may comprise one or more drawings that contain several layers such as those that make up an ALP, several individual Shape files that each represent a layer, a single layer stored in a shape file, or any other combination of allowable data sets. Metadata elements can also describe all geometry and attributes on a given layer or Feature Type. This is the case with traditional FGDC compliant metadata. This level of metadata applies if different layers within a collection have different metadata. Next, metadata elements can describe a given feature instance. This level applies when individual features or groups of features within a layer have different metadata. Finally, they can describe the geometry and each attribute of a given feature instance separately. Figure 12 shows this hierarchical definition of the metadata levels that apply to GIS data.

Figure 12
Metadata Elements are Different Levels of Aggregation



For this standard, metadata is required at the collection level when data are submitted. The standard also accommodates metadata elements at the feature type, feature instance, and attribute levels. More detailed metadata increases the usefulness of the data provided. Accordingly, data providers are encouraged to submit metadata at the most detailed level possible.

This standard uses metadata elements defined by the ISO Geographic Information – Metadata Standard (ISO 19115). Of the 409 elements defined in ISO 19115, only 25 are used by this standard, because many of the elements defined in ISO are classified as optional or conditional and do not apply to this standard. Furthermore, some of the mandatory elements in the ISO standard are redundant with the specifications of this standard and are therefore not necessary for data exchange. For example, the security classification code is a mandatory ISO element, but since this standard sets the classification code based on the Feature Type, it is not necessary to convey the security classification code in metadata. Figure 13 lists each metadata element used in this standard along with the level of applicability. Further details about these metadata elements are provided in Appendix C.

FIGURE 13
List of Metadata Elements

	<u>Collection</u>	<u>Set</u>	<u>Feature</u>
Overview			
abstract	✓	✓	✓
status	✓	✓	✓
geometricObjectCount	✓	✓	
Scope			
dataset	✓		
features	✓	✓	
attributes			✓
Usage			
specificUsage	✓	✓	✓
BegusageDateTime	✓	✓	✓
endUsageDateTime	✓	✓	✓
Source			
statement	✓		
individualName	✓		
organizationName	✓		
positionName	✓		
deliveryPoint	✓		
city	✓		
administrativeArea	✓		
postalCode	✓		
electronicMailAddress	✓		
voicePhoneLine	✓		
Coordinate System			
projection	✓	✓	
horizontalDatum	✓	✓	
verticalDatum	✓	✓	
code	✓	✓	
Data Quality			
horizontalAccuracy	✓	✓	✓
verticalAccuracy	✓	✓	✓
evaluationMethodName	✓	✓	✓
evaluationMethodDescription	✓	✓	✓
pass	✓	✓	✓
groundSampleDistance	✓	✓	✓

4.1. Temporal Relevance

One of the most critical metadata elements to the aviation industry is time. The frequency with which airport infrastructure changes requires spatial data to possess an indication of the time period for which the data are valid. For example, the existence of a runway may be valid from the time it was authorized for use until further notice. This standard defines the beginning and ending date and time for which each feature instance is valid. All features must have a beginning date (i.e., data are valid until further notice), an ending date (i.e., the data expire at a specified time), or both (i.e., the data are valid only during the period specified). These values are held in the `begUsageDateTime` and `endUsageDateTime` metadata elements defined in Appendix C.

4.2. Accuracy

Accuracy is one metadata element that is particularly important to airport GIS applications. Accuracy is broadly defined as *the quality of nearness to the true value*. For the exchange of data as specified in this standard, it is important to be more specific. This standard, therefore, provides limits for the absolute horizontal positional accuracy of each Feature Type. These limits are described as a maximum number of feet between a feature's actual position and the position indicated in the data provided. The actual position is defined as the feature's true location on the specified geoid. Since the earth's surface has many variations, it is approximated by a geoid. Furthermore, the difference between a feature's true and recorded positions is required at a 95% confidence level. This means that statistically, 95% or more of the features provided fall within the required accuracy limit.

For some feature classes, vertical accuracy limits are also provided. These accuracies are expressed as the maximum number of feet a feature's recorded elevation can differ from its actual elevation. Again, the actual elevation is measured from the geoid elevation at that location. Elevations are also to be provided at a 95% confidence level.

Accuracy requirements are driven by the way the data are to be used. The location of an airport on a map used for aircraft navigation must be much more accurate than its location on a national map of airports provided for general information purposes. This standard provides accuracy guidelines for maps that are intended for airport layout plans.

The accuracy guidelines provided in this standard have been derived from several sources, including FAA Document 405, RTCA User Requirements for Aerodrome Mapping Information, FGDC Geospatial Positioning Accuracy Standards-Part 4 (sources are indicated in order of precedence). Further information on accuracy definitions and methods to assess the accuracy of existing data can be found in the FGDC Geospatial Positioning Accuracy Standards-Part 3: National Standard for Spatial Data Accuracy (FGDC-STD-007.3-1998).

4.3. Security Sensitivity Levels

Sensitivity level is another important metadata element. Because spatial data can be used for nefarious purposes, the data must be protected from unauthorized users. The Code of Federal Regulations (49 CFR 1520) defines Sensitive Security Information (SSI) and methods for protecting the information. Based on this definition, many forms of spatial data can be considered SSI. Protecting sensitive spatial data is therefore not just good practice, it is the law. However, overly protecting data limits the information's usefulness, in many cases needlessly. The challenge is to restrict data to users having an *operational need to know* and whose credentials the data provider has qualified. Relative to spatial data, this challenge is particularly complex because of the wide variety of data users and ways in which they need to use the data. An efficient way to restrict access to spatial data is to apply specific restrictions at the Feature Type level. This standard applies one of the following sensitivity levels to each Feature Type. The sensitivity levels are based on the MAA Spatial Data Security Standard and conform to the classifications listed in the MD_ClassificationCode list in ISO 19115.

- **Unclassified** data are available for general disclosure.
- **Restricted** data are not available for general disclosure.
- **Confidential** data are available for users that can be trusted with the information.
- **Secret** data are to be kept or intended to be kept private, unknown, or hidden from all but a select group of people.
- **Top Secret** data are of the highest secrecy.

Since sensitivity levels are established for each Feature Type by this standard (See Appendix A), it is not necessary to include this information (i.e., a classification code in ISO terminology) in the metadata.

5. COORDINATE SYSTEM

Horizontal spatial data shall be submitted to, maintained by, and provided by MAA in the Maryland Coordinate System of 1987, also referred to as Maryland State Plane. Following are the parameters of the Maryland Coordinate System of 1987:

Map Projection:	Lambert conic conformal projection of the geodetic reference system of 1980
Horizontal Datum:	NAD83 (2001)
Latitude of Origin*:	37°40' North latitude
Central Meridian:	77°00' West longitude
Standard Parallel 1:	38°18' North latitude
Standard Parallel 2:	39°27' North latitude
False Easting*:	400,000 meters
False Northing*:	0 meters
Latitude**:	37°34' 38.14264" N
Longitude**:	81°31' 45.07877" W

** at the 77th meridian*

*** at artificial origin (0,0)*

Vertical spatial data shall be submitted to, maintained by, and provided by MAA based on the National Geodetic Vertical Datum of 1988 (NGVD88).

All units for both horizontal and vertical data will be the U.S. Survey Foot (1200/3937 meters).

6. ACCEPTABLE DATA FORMATS

GIS data should be submitted to MAA as ESRI Shape files or in an ESR Geodatabase. Shape files and Geodatabase layers must be named for the Feature Type they represent (e.g., RunwaySegment). They must also contain relevant attributes for the Feature Type they represent. Attributes that are covered in this standard must be named as they are in Appendix A. Attributes defined in this standard that are not used need not be included. Attributes that a data submitter uses but which are not defined in this standard may be included.

Metadata at the collection level should be submitted in the form of a comma delimited ASCII text file which lists each metadata element and its associated value. Element names, as defined in Appendix C, should be listed on the first line and be separated by commas. Their corresponding values should be listed on the second line. The name of this file should be the same as the name assigned to the collection of data submitted, and should include an indication of the data contained in the collection, the company providing the data, and the date (e.g., "ALP Layers from Landrum & Brown 111205.ZIP" for the collection and "ALP Layers from Landrum & Brown 111205.txt" for the associated metadata).

Metadata at the Feature Type level should also be submitted with this type of ASCII file, although there should be a separate file for each Feature Type submitted. The names of these metadata files should be the same as the names of the corresponding Feature Type (i.e., "TaxiwaySegment.txt"). Alternatively, Feature Type level metadata can be submitted in an FGDC compliant XML format (such as the metadata format available in ESRI software).

Metadata at the feature instance level should be submitted with this type of ASCII file. A separate file containing the name of the Feature Type should be provided for each Feature Type submitted. Each line of the file (aside from the first line, which lists the element names) should contain the metadata values for specific feature instances or records in the attribute table. Alternatively, metadata elements can be added as additional attributes to the attribute tables themselves.

Shape files or collections of shape files should be submitted on CD-R or CD-R/W with the session closed to ensure maximum cross platform readability. All electronic deliverables (including CDs) must be virus free. The submitted CD will include a CD cover and label with the following information:

- Contract No MAA-CO-XX-XXX
- Contract/Task Title: _____
- Consultant: XXXXXXXXXXXXXXXX
- Airport: BWI and/or MTN AIRPORT
- Submittal Date: MONTH, DAY, YEAR
- No. of Documents/Sheets: XX
- CD # / Total in Set: X or XX

The root directory of the delivered CD should contain a text file named ReadMe.txt that repeats the information contained on the label as well as the following:

- Contact information for the individual responsible for submitting the document(s);
- Brief explanation of CD directory structure if subdirectories are used;
- Any other comments necessary to convey the contents of the CD.

GLOSSARY OF ACRONYMS AND TERMS

The following acronyms have been used in this standard:

AC	Advisory Circular
ADCAT	Airport Data Collection and Analysis Tool
A/E/C	Architecture Engineering and Construction
AIA	American Institute of Architects
AIS	Aeronautical Information Services
AIXM	Aeronautical Information Exchange Model
ALP	Airport Layout Plan
ANSI	American National Standards Institute
AOC	Airport Obstruction Chart
ASTM	American Society for Testing and Materials
CADD	Computer Automated Drafting & Design
DGN	Microstation Design File
DOD	U.S. Department of Defense
DOT	U.S. Department of Transportation
DWG	Autodesk Drawing File
FAA	Federal Aviation Administration
FGDC	Federal Geographic Data Committee
GIS	Geographic Information System
GML	Geographic Markup Language
ICAO	International Civil Aviation Organization
ISO	International Organization for Standards
NAD	North American Datum
NGA	National Geospatial Intelligence Agency
NGS	National Geodetic Survey
NGVD	National Geodetic Vertical Datum
RTCA	Radio Technical Commission for Aeronautics
SDSFIE	Spatial Data Standards for Facilities, Infrastructure and Environment
SSI	Sensitive Security Information
USGS	U.S. Geological Survey

The key terms and phrases used in this standard are defined below:

Attributes or **Attribute Data** are alphabetical and/or numeric information that describes particular characteristics of a geospatial feature, such as its type, dimensions, usage, occupant, etc.

A **Collection** is any combination of data that are submitted by a provider at a given time.

Geospatial Data or **Geospatially-Referenced Data** are data that depict natural or manmade elements that occupy a specific location on the face of the earth. Examples include a runway, building, river, or underground pipe. Geospatial features of a particular type (i.e., all runways) are often referred to as a feature type, data set, or layer of spatial data.

A **Feature** is a manmade or natural object such as a building, runway, navigational aid, or river that appears in the real world. A **Feature Type** refers to a collection of all features of a given type, such as all runways or all buildings. Feature Types are analogous to layers in many GIS applications and are also referred to as Entity Types and Feature Classes in other standards.

A **Feature Instance** refers to a specific feature such as runway 10/28 at Baltimore Washington International Airport.

Metadata is information about the data, such as source, accuracy, dates for which the data are valid, and security classification. Metadata is essential in helping users determine the extent to which they can rely on a given data item to make decisions.

An **Orthophoto** is an aerial image that has been taken from above (either from an aircraft or a satellite) and has been spatially corrected so that features shown on the photo are displayed in their actual geographic position within a specified range of tolerance.

Photogrammetric refers to the process of creating vector data, such as building outlines and elevation contours, from stereo imagery, or pairs of images taken of the same location but at different angles.

Positional Accuracy refers to the difference between a geospatial feature's displayed position and its actual position. Absolute positional accuracy is the difference between a geospatial feature's displayed position and its actual position on the face of the earth. Relative positional accuracy is the difference between a geospatial feature's displayed position and that of other geospatial features in the same data set.

A **Schema** is a logical diagram that shows the structure and interrelationships among different feature classes of the data standard or model.

Spatial Data are data that depict a real world feature such as a road, building, or runway on a map. The most basic types of spatial data are points, lines, and polygons, but spatial data can also include orthophotos and other more complex forms of locational information.

APPENDIX A - LIST OF FEATURE TYPES AND ATTRIBUTES

This appendix lists each of the 135 GIS Feature Types defined by this document. MAA's GIS Data Standard also includes 218 communication and utility Feature Types, which are defined in the MAA GIS Data Standard – Utilities Supplement.

The Feature Types defined in this document are grouped into categories (i.e., Airfield, Airspace, Environmental, etc.) for ease of use. For each Feature Type, the class name, geometry type, sensitivity level, and a definition are provided. Suggested accuracies are also provided. Accuracies are indicated at a reasonable level that will meet a broad range of end user requirements. Individual project scopes, technical limitations and other factors may require data to be of a higher or lower level of accuracy. Attributes are also provided along with their type and definition. The following figure provides a key to the information provided in Appendix A.

Figure 15
Legend to Appendix A

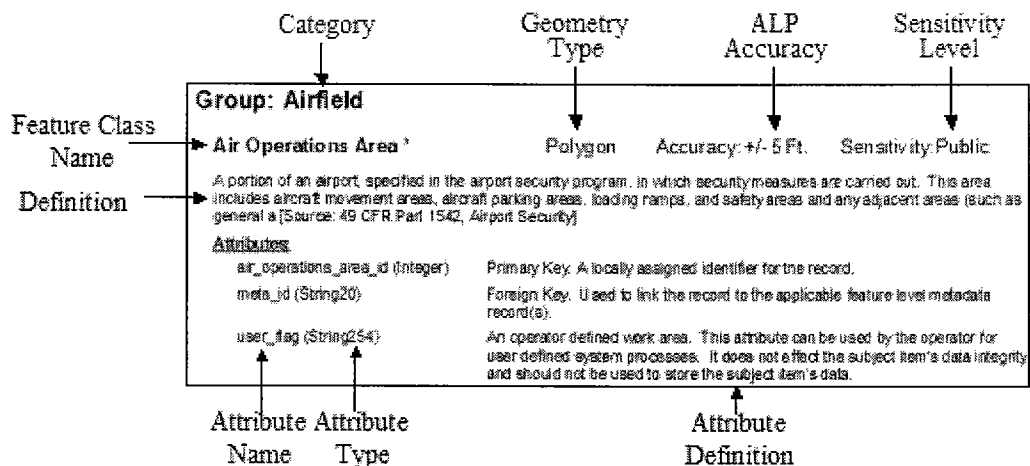


Table of Contents to Appendix A

Following is a table of contents of the feature type definitions in Appendix A. For ease in referencing, the 135 feature types defined are subdivided into 13 categories.

GROUP: AIRFIELD	32
AircraftDeicingArea	32
AircraftGateStand	32
AircraftNonMovementArea	32
AirfieldLight	33
AirOperationsArea	33
AirportBoundary	33
AirportSign	34
Apron	34
ArrestingGear	35
Clearway	35
DesignSurface	35
DisplacedThreshold	36
FrequencyArea	36
Helipad	36
HelipadFATO	37
HelipadThreshold	37
HelipadTLOF	38
Infield	38
MarkingArea	38
MarkingLine	38
PassengerLoadingBridge	39
PavementSection	39
RestrictedAccessBoundar	39
RsaBoundary	39
Runway	40
RunwayArrestingArea	41
RunwayBlastPad	41
RunwayCenterline	42
RunwayEnd	42
RunwayIntersection	43
RunwayLabel	43
RunwayLAHSO	43
RunwaySegment	44
Shoulder	44
Stopway	45
TaxiwayHoldingPosition	45
TaxiwayIntersection	45
TaxiwaySegment	46
GROUP: AIRSPACE	46
AirwayLine	46

FlightTrackLine	47
FlightTrackPoint	47
LandmarkSegment	47
Obstacle.....	48
ObstructionArea.....	48
ObstructionSurface	49
RegulatedAirspaceArea	50
GROUP: CADASTRAL.....	50
AirportParcel.....	50
ArcheologicalSite.....	51
County	51
EasementAndRightofWay	51
FAARegionArea	52
LandUse	52
LeaseZone.....	52
Municipality.....	53
Parcel	53
State	62
Zoning	62
GROUP: ENVIRONMENTAL	62
ContaminationArea	62
FaunaHazardArea	63
FloodZone.....	63
FloraSpeciesSite.....	64
ForestStandArea.....	64
HazMatStorageSite	64
NoiseContour	65
NoiseIncident.....	65
NoiseMonitoringPoint.....	65
SampleCollectionPoint	66
Shoreline	66
ShorelineCriticalArea	66
SoilArea	67
WatershedArea.....	67
Wetland	67
GROUP: GEODETIC	67
AirportControlPoint	68
ColumnGrid	68
CoordinateGridArea.....	69
ElevationContour	69
ImageArea.....	69
GROUP: INTERIOR	69
BaggageCarousel	70
BaggageConveyor.....	70
Chase	70

Column	70
Door	71
Elevator	71
Escalators	71
Floor	72
Flooring Material	72
Furnishing	72
InteriorSign	72
Ladder	73
Locks	73
MovingSidewalk	73
Room	74
Space	74
Stairs	74
Walls	75
Windows	75
GROUP: LIFE SAFETY	75
AutomatedExternalDefibrillator	75
EvacuationArea	76
GROUP: MANMADE STRUCTURES	76
Building	76
ConfinedSpaces	76
ConstructionArea	77
Fence	77
Gate	77
Tower	78
GROUP: NAVIGATIONAL AIDS	78
NAVAIDCriticalArea	78
NAVAIDEquipment	78
NAVAIDSite	79
NAVAIDSystem	80
GROUP: SEAPLANE	80
FloatingDockSite	80
NavigationBuoy	80
SeaplaneLandingArea	81
SeaplaneRampCenterline	81
SeaplaneRampSite	81
GROUP: SECURITY	82
SecurityArea	82
SecurityCheckPoint	82
SecurityPerimeterLine	82
SIDA	82
SterileArea	83
GROUP: SURFACE TRANSPORTATION	83

Bridge	83
DrivewayArea	84
DrivewayCenterline	84
GuardRails	84
JerseyBarriers.....	84
LandsideSign.....	85
ParkingLot.....	85
RailroadCenterline	86
RailroadYard.....	86
RoadCenterline	87
RoadPoint.....	87
RoadSegment	88
Sidewalk.....	88
Tunnel	89
GROUP: OTHER.....	89
OtherLine	89
OtherPoint.....	89
OtherPolygon	90

Group: Airfield

AircraftDeicingArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Unclassified

An area where frost, ice, or snow is removed from aircraft in order to provide clean surfaces and/or clean surfaces of the aircraft receive protection against the formation of frost or ice and accumulation of snow or slush for a limited period of time [Source: AC 150/5300-13*]

Attributes:

	SDSFIE Entity	none
aircraftdeicingarea_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.	
area_desc (String254)	A brief description of the area and any special characteristics.	[Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

AircraftGateStand

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Operational area of gate (parking) stand. If no gate stand area painting is available, a virtual parking stand area should be provided [Source: RTCA DO-272]

Attributes:

	SDSFIE Entity	airfield_surface_site
acpark_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	The name of the feature.	[Source: SDSFIE Feature Table]
feat_desc (String255)	Description of the feature.	
gate_stand_type_d (Enumeration16)	The type of aircraft gate/stand.	
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load.	[Source: AC 150/5335-5]
wingspan (Real)	The quantity representing the maximum wingspan which can be accommodated by the airfield surface.	[Source: SDSFIE Feature Table]
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status	
feat_width (Real)	The overall width of the airfield surface.	[Source: SDSFIE Feature Table]
feat_len (Real)	The overall length of the airfield surface.	[Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

AircraftNonMovementArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

An area where aircraft cannot be seen by a control tower and therefore are restricted to move.

Attributes:

	SDSFIE Entity	none
aircraftnonmovementarea_id	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.	
feat_desc (String254)	Description of the feature.	

user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

AirfieldLight

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

Any lighting located within or near an airport boundary the provides guidance for airborne and ground maneuvering of aircraft [Source: AIM, AC 150/5340-24]

Attributes:

SDSFIE Entity *airfield_light_point*

light_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
lightingType_d (Enumeration16)	A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
color_d (Enumeration16)	The color of the airfield light. [Source: SDSFIE Feature Table]
luminesc (String12)	The luminescence of the airfield light. [Source: SDSFIE Feature Table]
pilotControlFrequency * (Real)	The radio frequency used by pilots to control various airport lighting systems
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

AirOperationsArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Unclassified

Area, specified in the airport security program, where security measures are carried out (aircraft movement, aircraft parking, loading, and safety areas as well as any adjacent areas that are not separated by adequate security systems or procedures) [Source: 49 CFR Part 1542, Airport Security*]

Attributes:

SDSFIE Entity *none*

aioperationsarea_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

AirportBoundary

Geometry Type: Polygon

Accuracy: +/-1Ft.

Sensitivity: Restricted

A polygon, or a set of polygons, that encompasses all property owned or controlled by the airport for aviation purposes [Source: AC 150/5300-13, Appendix 7, Order 5190.6A, Section 5]

Attributes:

SDSFIE Entity *airfield_area*

airfld_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
faaSiteNr (String8)	Number to the airport in ascending order depending on the state and city. Contains a suffix (A = Airport, B = Balloonport, C = Seaplane Base, G = Gliderport, H = Heliport, S = Stolport, and U = Ultralight Flightpark). [Source: FAA AC 150/5200-35]
LndFacTypeCode (String2)	Landing facility type
feat_desc (String254)	Description of the feature.
faaLocID (String4)	The location identifier assigned to the feature by the FAA.
iataCode (String4)	The location identifier assigned to the feature by IATA.

icaoCode (String4)	The location identifier assigned to the feature by the International Civil Aviation Organization.
feat_name (String50)	The name of the airfield. [Source: SDSFIE Feature Table]
airportFacilityType_d (Enumeration16)	The type of airfield
operationsType_d (Enumeration16)	The type of operations permitted on the airfield
owner_d (Enumeration16)	The type of owner of the airfield.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

AirportSign

Geometry Type: Point

Accuracy: +/-10Ft.

Sensitivity: Restricted

Signs at an airport other than surface painted signs [Source: AC 150/5340-18]

Attributes: SDSFIE Entity *general_improvement_feature_point*

feature_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
signTypeCode_d (Enumeration16)	The type of sign
message (String254)	The text message which appears on the sign.
feat_desc (String254)	A description of the improvement feature. [Source: SDSFIE Feature Table]
feat_ht (Real)	The overall height of the feature. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Apron

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A defined area on an airport or heliport, paved or unpaved, intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling, parking, or maintenance [Source: FAA]

Attributes: SDSFIE Entity *airfield_surface_site*

air_sur_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
apronType_d (Enumeration16)	A classification of the typical use for the apron
feat_desc (String254)	Description of the feature.
feat_name (String30)	The name of the feature. [Source: SDSFIE Feature Table]
tiedowns (Integer)	The approximate number of tiedowns in the surface. [Source: SDSFIE Feature Table]
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status
surfaceType_d (Enumeration16)	A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]
surfaceCondition_d (Enumeration16)	A description of the serviceability of the pavement [Source: NFDC]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level

metadata record(s).

ArrestingGear

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Restricted

Location of the arresting gear cable across the runway [Source: RTCA DO-272]

Attributes:

SDSFIE Entity *airfield_linear_safety_feature_line*

safety_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
fac_typ_d (String16)	The type of facility or feature related to airfield operations. [Source: SDSFIE Attribute Table]
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Clearway

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

An area beyond the takeoff runway under control of airport authorities within which terrain or fixed obstacles may not extend above specified limits. [Source: AC 150/53XX-XX (Vol. C)*]

Attributes:

SDSFIE Entity *none*

feat_desc (String255)	Description of the feature.
designSurfaceType_d	A description of the design surface
safety_reg (String20)	An identifier for the safety regulations in effect within the zone. [Source: SDSFIE Feature Table]
zone_use (String50)	A description of the use of the zone. [Source: SDSFIE Feature Table]
determination (String255)	A formal declaration of the runway safety area condition with respect to standards and any requirement improvements [Source: FAA Order 5200.8]

DesignSurface

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A three-dimensional surface that is used in runway design [Source: AC 150/5300-13]

Attributes:

SDSFIE Entity *airfield_imaginary_surface_area*

spc_zon_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
zone_name (String30)	A commonly used name for the zone. [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
designSurfaceType_d	A description of the design surface
safety_reg (String50)	A description of the use of the zone. [Source: SDSFIE Feature Table]
zone_use (String50)	A description of the use of the zone. [Source: SDSFIE Feature Table]
determination (String255)	A formal declaration of the runway safety area condition with respect to standards and any requirement improvements [Source: FAA Order 5200.8]
determinationDate (Date)	The date the RSA determination was approved [Source: FAA Order 5200.8]
zone_inner_width * (Real)	The width of the narrow end of a trapezoidal shaped DesignSurface feature. This is normally the end that is closest to the landing surface [Source: AC 150/5300-13]
zone_outer_width (String20)	An identifier for the safety regulations in effect within the zone. [Source: SDSFIE Feature Table]

zone_length (Real)	The length of a trapezoidal shaped DesignSurface feature.
grad_lo_hi (Real)	The low to high gradient within the airspace. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

DisplacedThreshold

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

The beginning of that portion of the runway available for landing when it is located at a point other than the physical end of the runway [Source: AC 150/5300-13]

Attributes:

	SDSFIE Entity	none
displacedthreshold_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
pointType_d (Enumeration16)	Contains the allowable values of a point type used by the ControlPoint feature. The point types may be supplementally provided as subtypes of ControlPoints for ease of use and clarification.	
elevation (Real)	Elevation of the point relative to the selected vertical datum. [Source: NGS]	
ellipsoidElevation (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question. Also called the geodetic height. [Source: NGS]	
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere	
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

FrequencyArea

Geometry Type: Polygon

Accuracy: +/-20Ft.

Sensitivity: Unclassified

Area specifying the designated part of the surface movement area where a specific frequency is required by ATC or ground control [Source: RTCA DO-272]

Attributes:

	SDSFIE Entity	communications_groundwave_polygon_area
gww_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
feat_name (String30)	any commonly used name for the feature. [Source: SDSFIE Feature Table]	
feat_desc (String254)	A description of the feature. [Source: SDSFIE Feature Table]	
frequency (Real)	Primary frequency used on frequency area (in MHZ). [Source: RTCA DO-272]	
station (String30)	Service or Station assigned to primary frequency (e.g., ATC Tower, Ground Control) [Source: RTCA DO-272]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Helipad

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Unclassified

A small designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp,

or movement area used for takeoff, landing, or parking of helicopters. Also known as the Touchdown and Lift-Off Area (TLOF) [Source: AC 150/5390-2B]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>airfield_surface_site</i>
air_sur_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
elevation (Real)		Elevation of the point relative to the selected vertical datum. [Source: NGS]
status_d (Enumeration16)		A temporal description of the operational status of the feature. This attribute is used to describe real-time status
feat_len (Real)		The overall length of the airfield surface. [Source: SDSFIE Attribute Table]
feat_width (Real)		The overall width of the airfield surface. [Source: SDSFIE Feature Table]
surfaceType_d (Enumeration16)		A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]
surfaceCondition_d (Enumeration16)		A description of the serviceability of the pavement [Source: NFDC]
surfaceMaterial_d (Enumeration16)		A code indicating the composition of the related surface [Source: NFDC]
pavementClassificationNumber		A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]
user_flag (String254)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

HelipadFATO

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Unclassified

A defined area over which the final phase of the approach to a hover, or a landing, is completed and from which the takeoff is initiated. This area was called the "takeoff and landing area" in previous publications [Source: AC

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>none</i>
helipadfato_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
elevation (Real)		The elevation of helipad measured from mean sea level (MSL). [Source: SDSFIE Attribute Table]
user_flag (String254)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

HelipadThreshold

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Unclassified

Based on the predominant wind direction, the helipad threshold position is congruent with the approach/takeoff paths [Source: RTCA DO-272]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>none</i>
helipadthreshold_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
thresholdDesc (String254)		A descriptive of the helipad and direction. See SF21 3.3.3.4.54
latitude (Real)		Latitude in decimal degrees with negative numbers used for Western Hemisphere
longitude (Real)		Longitude in decimal degrees with negative numbers used for Western Hemisphere
user_flag (String254)		An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HelipadTLOF

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Unclassified

A load bearing, generally paved area, normally centered in the FATO, on which the helicopter lands or takes off. The TLOF is frequently called a helipad or helideck. TLOFs shall be photogrammetrically determined [Source: AC

Attributes:

SDSFIE Entity none

helipadtlof_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

surfaceMaterial_d (Enumeration16)

A code indicating the composition of the related surface [Source: NFDC]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Infield

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Area of an airfield where aircraft cannot move.

Attributes:

SDSFIE Entity none

Infield_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDFSIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

MarkingArea

Geometry Type: Polygon

Accuracy: +/-2Ft.

Sensitivity: Unclassified

An element of Marking whose geometry is a polygon [Source: AC 150/5340-1]

Attributes:

SDSFIE Entity airfield_surface_marking_area

mark_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

markingFeatureType_d

The type of the marking

color_d (Enumeration16)

The color of the marking

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

MarkingLine

Geometry Type: Line

Accuracy: +/-2Ft.

Sensitivity: Restricted

An element of Marking whose geometry is a line [Source: AC 150/5340-1, RTCA/DO-272]

Attributes:

SDSFIE Entity airfield_surface_marking_line

mark_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

markingFeatureType_d

The type of the marking

color_d (Enumeration16)

The color of the marking

user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

PassengerLoadingBridge

Geometry Type: Polygon Accuracy: +/-10Ft. Sensitivity: Restricted

A bridge for loading/unloading access to airplanes for passengers and crew

Attributes: SDSFIE Entity none

passengerloadingbridge_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name, code or identifier used to identify the loading bridge.
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

PavementSection

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

A section of paved surface used for pavement condition assessment

Attributes: SDSFIE Entity none

pavementsection_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
pavement_condition_index (Integer)	Pavement Classification Number Code [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RestrictedAccessBoundar

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Confidential

A restricted area boundary defines aircraft movement area that is strictly reserved for use by authorized personnel only. These boundaries, typically found on joint civil/military use airports, are often painted red lines on taxiway or apron surfaces. [Source: NGS*]

Attributes:	SDSFIE Entity military_restricted_access_area
access_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
area_name (String30)	A common name for the restricted area. [Source: SDSFIE Feature Table]
area_desc (String254)	A description of the restricted area. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RsaBoundary

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

The boundary of the Runway Safety Area (RSA) for which the Airport Authority has maintenance responsibility.
[Source: AC 150/53XX-XX (Vol. C)]

Attributes:

SDSFIE Entity *none*

rsalID (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
determination (String255)	A formal declaration of the runway safety area condition with respect to standards and any requirement improvements [Source: FAA Order 5200.8]
feat_desc (String254)	Description of the feature.
zone_use (String50)	A description of the use of the zone. [Source: SDSFIE Feature Table]
designSurfaceType_d	A description of the design surface
safety_reg (String20)	An identifier for the safety regulations in effect within the zone. [Source: SDSFIE Feature Table]

Runway

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A rectangular area on a land airport prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees: e.g., Runway 10/28, Runway 07/25. [Source: AC 150/5300-13*]

Attributes:

SDSFIE Entity *airfield_surface_site*

air_sur_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
runway_num (String7)	Designator of the runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L) [Source: AC 150/5340-1]
feat_desc (String254)	Description of the feature.
feat_len (Real)	The straight line distance between runway end points. This line does not account for surface undulations between points. Official runway lengths are normally computed from runway end coordinates and elevations. [Source: FAA Specification 405]
feat_width (Real)	Perpendicular line to the surface centerline, extending to the edge of the runway pavement on both sides of the runway, through a runway end-point. If less than 100 feet round up to the nearest 5 feet. If more than 100 feet round to the nearest 10 feet. [Source: NGS]
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status
surfaceType_d (Enumeration16)	A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]
surfaceCondition_d (Enumeration16)	A description of the serviceability of the pavement [Source: NFDC]
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]
Approach Visibility Minimums	Approach Visibility Minimums [Source: HJAIA GIS ALP Working Paper -]
Effective Runway Gradient (Real)	Effective Runway Gradient [Source: HJAIA GIS ALP Working Paper -]
Instrument Runway (String2)	Is the runway instrument rated [Source: HJAIA GIS ALP Working Paper -]
Approach Slope (String25)	Approach slope [Source: HJAIA GIS ALP Working Paper -]
Landing Distance Available	Landing Distance Available [Source: HJAIA GIS ALP Working Paper -]
Takeoff Distance Available (String25)	Takeoff Distance Available [Source: HJAIA GIS ALP Working Paper -]
Lighting (String50)	Type of lighting [Source: HJAIA GIS ALP Working Paper -]
Marking (String50)	Type of runway markings [Source: HJAIA GIS ALP Working Paper -]

Navigational Aids (String50)	Type of navigation aids [Source: HJAIA GIS ALP Working Paper -]
Wheel Load (String50)	Number of wheels [Source: HJAIA GIS ALP Working Paper -]
Weight Load (String50)	Wheel weight limit of runway [Source: HJAIA GIS ALP Working Paper -]
Bearing of Centerline Alignment	Bearing of Centerline Alignment [Source: HJAIA GIS ALP Working Paper -]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RunwayArrestingArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

FAA-approved high energy absorbing material of a specific strength that will reliably and predictably bring aircraft to a stop without imposing loads that exceed design limits, cause major structural damage, or impose excessive forces on its occupants. [Source: AC 150/5220-22*]

Attributes:

	<i>SDSFIE Entity</i>	<i>airfield_linear_saftey_feature_line</i>
safety_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
feat_len (Real)	The overall length of the feature. [Source: SDSFIE Feature Table]	
feat_width (Real)	The overall width of the feature.	
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

RunwayBlastPad

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A specially prepared surface placed adjacent to the ends of runways to eliminate the erosive effect of the high wind forces produced by airplanes at the beginning of their takeoff rolls [Source: AC 150/5300-13]

Attributes:

	<i>SDSFIE Entity</i>	<i>airfield_linear_safety_feature_line</i>
safety_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
surfaceType_d (Enumeration16)	A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]	
feat_len (Real)	The overall length of the feature. [Source: SDSFIE Feature Table]	
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status	
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]	
surfaceCondition_d (Enumeration16)	A description of the serviceability of the pavement [Source: NFDC]	
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

RunwayCenterline

Geometry Type: Line

Accuracy: +/-2Ft.

Sensitivity: Restricted

Continuous line along the painted centerline of a runway connecting the middle-points of the two outermost thresholds. Centerline is composed of many centerline points (see RunwayControlPoint). It is used to calculate grade and line-of-sight criteria. [Source: AC 150/5300-13]

Attributes:

	SDSFIE Entity	airfield_surface_centerline
runwaycenterline_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
rwyt_desc (String7)	Designator of the runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L) [Source: AC 150/5340-1]	
isDerived (Boolean)	Indicates whether the centerline is derived or photodetermined.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

RunwayEnd

Geometry Type: Point

Accuracy: +/-1Ft.

Sensitivity: Restricted

End of the runway surface suitable for landing or takeoff of aircraft. They are related to and describe approach and departure procedure characteristics of a runway threshold. It is the same as the runway threshold when the threshold is not displaced. [Source: NGS*]

Attributes:

	SDSFIE Entity	airfield_surface_site
runwayend_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
name (String40)	Name of the feature.	
feat_desc (String254)	Description of the feature.	
status_d (Enumeration16)	The predominant status of the airfield facility surface site. [Source: SDSFIE Feature Table]	
approachCat_d (Enumeration16)	A grouping of aircraft based on 1.3 times their stall speed in the landing configuration at the certificated maximum flap setting and maximum landing weight at standard atmospheric conditions [Source: AC 150/5300-13]	
precisionApproachGuidance_d	Code indicating the type of precision guidance applicable.	
elevation (Real)	Elevation of the point relative to the selected vertical datum. [Source: NGS]	
ellipsoidElevation (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question. Also called the geodetic height. [Source: NGS]	
asDistAvail (Real)	ASDA: The runway plus stopway length declared available and suitable for the acceleration and deceleration of an airplane aborting a takeoff [Source: AC 150/5300-13]	
brngMagnetic (Real)	Magnetic runway bearing corresponding to threshold location valid at the day of data generation [Source: RTCA DO-272]	
brngTrue (Real)	True bearing corresponding to the landing direction [Source: ICAO Annex 14]	
designGroup_d (Enumeration16)	A grouping of airplanes based on wingspan [Source: AC 150/5300-13]	
displacedDist (Integer)	The distance from the runway end to the landing threshold. When the thresholdType is normal, displacedDist = 0	
landingDistAvail (Real)	LDA: The runway length declared available and suitable for a landing airplane [Source: AC 150/5300-13]	
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere	
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere	
RunwayEndDesg (String3)	The designator for the runway end (i.e. 32L)	
rwytSlope (Real)	Runway slope corresponding to landing direction [Source: RTCA DO-272]	
takeOffDistAvail (Real)	TODA: The TORA plus the length of any remaining runway clearway beyond the far end of the TORA [Source: AC 150/5300-13]	
takeOffRunAvail (Real)	TORA: The runway length declared available and suitable for the ground run of an airplane taking off [Source: AC 150/5300-13]	

tdzElevation (Real)	The highest elevation in the Touchdown Zone. The Touchdown Zone is the first 3,000 feet of the runway beginning at the threshold. [Source: FAA Specification 405]
tdzSlope (Real)	The longitudinal slope of the first 3000 feet of the runway beginning at the threshold [Source: FAA Specification 405]
thresholdType_d (Enumeration16)	An description of the landing threshold: either normal or displaced
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RunwayIntersection

Geometry Type: Polygon Accuracy: +/-2Ft. Sensitivity: Restricted

The area of intersection between two or more runways [Source: RTCA DO-272]

Attributes: SDSFIE Entity none

runwayintersection_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
rnw1_desgn (String7)	Designator of the 1st intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L) [Source: SDSFIE Attribute Table]
rnw2_desgn (String7)	Designator of the 2nd intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L) [Source: SDSFIE Attribute Table]
rnw3_desgn (String7)	Designator of the 3rd intersecting runway based on the magnetic bearing and position in relation to parallel runways (e.g. 33R/15L) [Source: SDSFIE Attribute Table]
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RunwayLabel

Geometry Type: Point Accuracy: +/-1Ft. Sensitivity: Secret

The bottom center position of the runway designation marking [Source: NGS]

Attributes: SDSFIE Entity none

runwaylabel_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
rwy_desg (String3)	The designator of the associated runway
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RunwayLAHSO

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Restricted

Runway markings where an aircraft is to stop when the runway is normally used as a taxiway or used for Land and Hold Short Operations per letter of agreement with the ATCT. [Source: Order 7110.118*]

Attributes: SDSFIE Entity none

runwaylahso_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
color_d (Enumeration16)	The color of the marking
protected_rnw_desgn (String7)	Unique runway identifier for the airport of the runway, if any, being protected by the LAHSO (when the LAHSO precedes a runway intersection).
markingFeatureType_d	The type of the marking
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RunwaySegment

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A section of the runway surface. The runway surface can be defined by a set of non-overlapping RunwaySegment polygons. Use RunwaySegment to model the physical runway pavement in terms of surface, material, strength and condition. [Source: AC 150/5335-5, AC 150/5320-12, AC 150/5320-17, AC 150/5320-6*]

Attributes:

	<i>SDSFIE Entity</i> <i>none</i>
runwaysegment_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status
surfaceType_d (Enumeration16)	A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]
surfaceCondition_d (Enumeration16)	A description of the serviceability of the pavement [Source: NFDC]
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Shoulder

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft running off the pavement; enhance drainage; and blast protection [Source: AC 150/5300-13]

Attributes:

	<i>SDSFIE Entity</i> <i>airfield_surface_site</i>
air_sur_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
shl_type_d (String20)	Code for whether this is a runway shoulder or taxiway shoulder [Source: SDSFIE Attribute Table]
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]
feat_width (Real)	The overall width of the airfield surface. [Source: SDSFIE Feature Table]
feat_len (Real)	The overall length of the airfield surface. [Source: SDSFIE Attribute Table]
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status
restricted (Boolean)	An indicator as to whether access to the feature is restricted.
user_flag (String254)	An operator defined work area. This attribute can be used by the

operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Stopway

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A defined rectangular surface beyond the end of a runway prepared or suitable for use in lieu of runway to support an airplane, without causing structural damage to the airplane, during an aborted takeoff [Source: AC

Attributes:

SDSFIE Entity none

stopway_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

feat_len (Real)

The length of the designated stopway from the end of the runway

feat_width (Real)

The overall width of the feature.

surfaceType_d (Enumeration16)

A classification of airfield pavement surfaces for Airport Obstruction Charts [Source: NGS]

status_d (Enumeration16)

A temporal description of the operational status of the feature. This attribute is used to describe real-time status

surfaceMaterial_d (Enumeration16)

A code indicating the composition of the related surface [Source: NFDC]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

TaxiwayHoldingPosition

Geometry Type: Line

Accuracy: +/-2Ft.

Sensitivity: Restricted

A designated position at which taxiing aircraft and vehicles shall stop and hold position, unless otherwise authorized by the aerodrome control tower [Source: RTCA DO-272]

Attributes:

SDSFIE Entity none

taxiwayholdingposition_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

low_visibility_cat_d (Enumeration16)

The low visibility category

rw_design (String7)

The designator for the approaching runway [Source: SDSFIE Attribute Table]

status_d (Enumeration16)

A temporal description of the operational status of the feature. This attribute is used to describe real-time status

taxi_design (String4)

The designator for the taxiway [Source: SDSFIE Attribute Table]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

TaxiwayIntersection

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

A junction of two or more taxiways [Source: ICAO Annex 14 (Aerodromes), Chapter 1, page 5]

Attributes:

SDSFIE Entity none

taxiwayintersection_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

name (String40)

Name of the feature.

feat_desc (String254)

Description of the feature.

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject

meta_id (Integer)	item's data. Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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TaxiwaySegment

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

The taxiway segment features are used to represents taxiway, apron taxiway, rapid exit taxiway, taxiway intersection, and aircraft stand taxilane surface [Source: AC 150-5300-13]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>airfield_surface_site</i>
air_sur_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
taxi_desgn (String75)	Taxiway segment name, which is identical to the corresponding taxiway name. Multiple taxiway segments can have the same name. Intersections of taxiways will be named after the predominant taxiway (if of the same level either name is acceptable).	
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status	
taxiwayType_d (Enumeration16)	The type of taxiway.	
surfaceMaterial_d (Enumeration16)	A code indicating the composition of the related surface [Source: NFDC]	
feat_len (Real)	The overall length of the airfield surface. [Source: SDSFIE Feature Table]	
feat_width (Real)	The overall width of the airfield surface. [Source: SDSFIE Feature Table]	
designGroup_d (Enumeration16)	A grouping of airplanes based on wingspan [Source: AC 150/5300-13]	
wingspan (Real)	The quantity representing the maximum wingspan which can be accommodated by the airfield surface. [Source: SDSFIE Feature Table]	
directionality_d (Enumeration16)	An indicator as to whether operations can be conducted in one or two directions.	
maxSpeed (Real)	The maximum speed permitted.	
pavementClassificationNumber	A number which expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. [Source: AC 150/5335-5]	
surfaceCondition_d (Enumeration16)	A description of the serviceability of the pavement [Source: NFDC]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Group: Airspace

AirwayLine

Geometry Type: Line Accuracy: +/-100Ft. Sensitivity: Restricted

The location of airways between origins and destinations. [Source: SDSFIE]

<u>Attributes:</u>	<i>SDSFIE Entity</i>	<i>airway_line</i>
airway_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
name (String40)	Name of the feature.	
feat_desc (String254)	Description of the feature.	
ops_typ_d (Enumeration16)	The air operations permitted within the airway. [Source: SDSFIE Feature Table]	
route_len (Real)	The length of the air route. [Source: SDSFIE Feature Table]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject	

meta_id (Integer)	item's data. Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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FlightTrackLine

Geometry Type: Line	Accuracy: +/-20Ft.	Sensitivity: Unclassified
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A line indicating the general flight track used in the vicinity of airfields. [Source: SDSFIE]

Attributes:	SDSFIE Entity	flight_track_line
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track_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
flight_no (String8)	The flight number assigned to the Flight Plan
feat_desc (String254)	A brief description of the flight track. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FlightTrackPoint

Geometry Type: Point	Accuracy: +/-20Ft.	Sensitivity: Unclassified
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A point in space that designates aircraft arrival and departure routes [Source: FAA]

Attributes:	SDSFIE Entity	none
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flighttrackpoint_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
flight_no (String8)	The flight number assigned to the Flight Plan
feat_desc (String254)	Description of the feature.
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere
altitude (Real)	The altitude in feet above mean sea level.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

LandmarkSegment

Geometry Type: Line	Accuracy: +/-10Ft.	Sensitivity: Unclassified
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Geographic features located in the vicinity of an airport that aid geographic orientation. The features may or may not have obstruction value. These may include objects such as roads, fences, utility lines, shorelines, levees, quarries and airports, etc [Source: NGS*]

Attributes:	SDSFIE Entity	none
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landmarksegment_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
landmarkType_d (Enumeration16)	Type of landmark feature
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Obstacle

Geometry Type: Point

Accuracy: +/-Ft.

Sensitivity: Restricted

All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that represent a defined Obstruction Identification Surface

Attributes:

SDSFIE Entity none

obstacle_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
obstacle_type_d (Enumeration16)	The type of obstacle
feat_desc (String254)	Description of the feature.
aboveGroundLevel (Real)	The vertical distance from the ground to the top of the obstacle [Source: NGS]
elevation (Real)	Elevation of the point relative to the selected vertical datum.
ellipsoidElevation (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question. Also called the geodetic height.
FromDTHLDDist (Integer)	Distance along extended runway centerline from a Displaced Threshold to point abeam the obstacle. A negative distance indicates that the obstacle is on the touchdown side of the runway approach end. This data is not provided for HCT surveys.
FromRwyCenterlineDist (Integer)	Shortest distance from the runway centerline or centerline extended to the obstacle. "L" (LEFT) or "R" (RIGHT) is relative to an observer facing forward in a landing aircraft. This data is not provided for HCT surveys.
FromRwyEndDist (Integer)	Distance along extended runway centerline from the physical end to point abeam the obstacle. A negative distance indicates that the obstacle is on the touchdown side of the runway approach end. This data is not provided for HCT surveys.
groupCode (String75)	A text code indicating that the obstacle consists of a group of obstacles of the same type. For example, a group of trees, a group of buildings, a group of antennas, etc [Source: AIXM]
heightAboveAirport (Integer)	Height above airport the official airport elevation point [Source: NGS]
heightAboveRunway (Integer)	Height above runway physical end for obstructions located underneath the approach surface [Source: NGS]
heightAboveTdz (Integer)	Height above touchdown zone elevation for obstructions located underneath the approach surface [Source: NGS]
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere
lightCode (Boolean)	A code indicating that the obstacle is lighted [Source: AIXM]
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere
markingFeatureType_d	The type of the marking
penVal_Specified (Integer)	The elevation difference between the height of the obstacle and the specified approach surface. [Source: NGS]
penVal_Supplemental (Integer)	The elevation difference between the height of the obstacle and the supplemental approach surface. [Source: NGS]
Disposition (String254)	What was done to obstruction [Source: HJAIA GIS ALP Standard - 5/29/]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ObstructionArea

Geometry Type: Polygon

Accuracy: +/-20Ft.

Sensitivity: Restricted

Areas penetrating the plane of a specified or supplemental obstruction identification surface (OIS). Penetrating groups of trees, ground, buildings, and mobile cranes are the most common types of area limits found within the surfaces of a FAR-77 survey. [Source: NGS*]

Attributes:

SDSFIE Entity airspace_obstruction_navaid_point

air_obs_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
obs_number (String20)	An obstruction number, as shown on a map, which is assigned to the wavier, deviation, etc. [Source: SDSFIE Feature Table]
name (String40)	Name of the feature.
obs_typ_d (Enumeration16)	Description of Obstruction Area type
feat_desc (String254)	Description of the feature.
oisSurfaceCondition_d	The Obstruction Identification Surface that Obstructing Area represents
dispostn_d (Enumeration16)	The disposition of the airspace obstruction. [Source: SDSFIE Feature Table]
faa_d (Boolean)	A Boolean indicating whether the obstruction has received FAA coordination or review. [Source: SDSFIE Feature Table]
feat_ht (Real)	The overall height of the obstruction from the surface of the earth. [Source: SDSFIE Feature Table]
feat_len (Real)	The overall length of the obstruction. [Source: SDSFIE Feature Table]
feat_width (Real)	The overall width of the obstruction. [Source: SDSFIE Feature Table]
frangibl_d (Boolean)	A Boolean indicating whether the obstruction is easily broken. [Source: SDSFIE Feature Table]
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ObstructionSurface

Geometry Type: Polygon

Accuracy: +/-20Ft.

Sensitivity: Restricted

A derived imaginary Obstruction Identification Surface defined by the FAA. [Source: NGS]

Attributes:

SDSFIE Entity *airfield_imaginary_surface_area*

spc_zon_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
zone_name (String30)	A commonly used name for the zone. [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
oisSurfaceType_d (Enumeration16)	General type of surface used to analyze features. Those of the same type usually are similar in nature with respect to certain aspects of the surface definition or may merely be representative of different programs within the airport charting community
oisZoneType_d (Enumeration16)	Specifies zones within Obstruction Identification Surfaces (OIS)
oisSurfaceCondition_d	The Obstruction Identification Surface that Obstructing Area represents
safety_reg (String20)	An identifier for the safety regulations in effect within the zone. [Source: SDSFIE Feature Table]
zone_use (String50)	A description of the use of the zone. [Source: SDSFIE Feature Table]
approachType_d (Enumeration16)	Specific approach type used to analyze features. The approach types must be an approach of the general surface type specified in the AirportSurfaceType attribute
grad_lo_hi (Real)	The low to high gradient within the airspace. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RegulatedAirspaceArea

Geometry Type: Polygon

Accuracy: +/-40Ft.

Sensitivity: Confidential

3D airspace which must be confined due to the types of operations in that area. Includes any associated underlying surface and subsurface training areas. [Source: SDSFIE*]

Attributes:

	SDSFIE Entity	regulated_airspace_area
airspace_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	The title of the restricted area ie. R-4009.	[Source: SDSFIE Feature Table]
feat_desc (String254)	The name of the restricted area ie. Example: Camp David (P-40-Hagerstown/Thurmont, MD)	[Source: SDSFIE Feature Table]
notice_num (String30)	The Notice to Airman number (ie 3/4223).	[Source: SDSFIE Feature Table]
elevation (Real)	The height of the restriction airspace measured from the a reference point or from sea level.	[Source: SDSFIE Feature Table]
fea_typ_d (Enumeration16)	Type of restriction.	[Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Group: Cadastral

AirportParcel

Geometry Type: Polygon

Accuracy: +/-1Ft.

Sensitivity: Restricted

A tract of land within the airport boundary that was acquired from surplus property, Federal funds, local funds, etc. Easement interests in areas outside the fee property line should also be included as an AirportParcel [Source: AC 150/5300-13, Appendix 7, Order 5190.6A, Section 5]

Attributes:

	SDSFIE Entity	none
airportparcel_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
authority (String75)	The owner of the airport parcel.	
name (String40)	Name of the feature.	
streetAddress (String254)	Physical address of property	[Source: HJAIA GIS ALP Standard - 5/29/]
ownerName (String60)	Owner of property	[Source: HJAIA GIS ALP Standard - 5/29/]
ownerAddress (String254)	Owner's address	[Source: HJAIA GIS ALP Standard - 5/29/]
feat_desc (String254)	Description of the feature.	
acquisitionType (String20)	The type of acquisition used to acquire the parcel	
costToAcquire (Real)	The amount paid to the owner in US dollars for the parcel	
dateAcquired (Date)	The date the parcel was acquired. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).	
grantProjectNumber (String30)	The grant number if federal funds were used to acquire the parcel.	
howAcquired (String50)	The manner in which the parcel was acquired.	
landUse (Enumeration16)	The land use of the parcel when it was acquired.	
marketValue (Real)	The assessed market value of the parcel in US dollars when it was acquired.	
yearAssessed (Date)	The year in which the market value assessment was made	
yearBuilt (Date)	The year in which the most recent structure(s) were built on the parcel.	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

ArcheologicalSite

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

The location of a registered archeological site. [Source: SDSFIE]

Attributes: *SDSFIE Entity none*

site_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
site_name (String30)	Name of the cultural resource site. [Source: SDSFIE Attribute Table]
site_desig (String20)	Primary site designation. [Source: SDSFIE Attribute Table]
site_desc (String254)	Description of the cultural resource site. [Source: SDSFIE Attribute Table]
date_estab (Date)	The date the site was established. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: SDSFIE Attribute Table]
distrib_d (Enumeration16)	The level of disturbance of the site. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

County

Geometry Type: Polygon

Accuracy: +/-50Ft.

Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the county government. [Source:

Attributes: *SDSFIE Entity political_jurisdiction_county_line*

juris_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
polit_name (String30)	The common name associated with the property area. [Source: SDSFIE Feature Table]
feat_desc (String254)	The description of the area. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

EasementAndRightofWay

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

A parcel of land for which formal or informal deed easement rights exist [Source: SDSFIE (modified)]

Attributes: *SDSFIE Entity easement_right_of_way_area*

easementsandrightofways_id	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	A brief description of the feature. [Source: SDSFIE Feature Table]
status_d (Enumeration16)	The status of the parcel. (Active, inactive, terminated) [Source: SDSFIE Feature Table]
purpose (String30)	Project purpose for which the easement was acquired. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FAARegionArea

Geometry Type: Polygon

Accuracy: +/-40Ft.

Sensitivity: Unclassified

This feature depicts the FAA regions. [Source: SDSFIE]

Attributes:

SDSFIE Entity faa_region_area

region_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

reg_name (String60)

Name of the FAA region. [Source: SDSFIE Feature Table]

reg_desc (String254)

Description of the FAA region [Source: SDSFIE Feature Table]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

LandUse

Geometry Type: Polygon

Accuracy: +/-50Ft.

Sensitivity: Confidential

A description of the human use of land and water [Source: SDSFIE]

Attributes:

SDSFIE Entity land_use_area

landuse_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

use_name (String30)

Name of the land use area. [Source: SDSFIE Feature Table]

use_desc (String254)

Description of the land use area. [Source: SDSFIE Feature Table]

use_typ_d (Enumeration16)

The way in which the land is being used. High level (i.e. n000) or detailed (i.e. nnnn) can be used. [Source: SDSFIE]

publicFacilities (Boolean)

Is a public facility present [Source: HJAIA GIS ALP Standard - 5/29/]

publicFacilityName (String50)

Name of public facility, if present and if known [Source: HJAIA GIS ALP Standard - 5/29/]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

LeaseZone

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Unclassified

A parcel of land leased by an individual, agency, or organization for their use. [Source: SDSFIE]

Attributes:

SDSFIE Entity lease_zone_area

leasezone_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

name (String40)

Name of the feature.

feat_desc (String254)

A brief description of the feature. [Source: SDSFIE Feature Table]

ten_name (String75)

The current name of the tenant occupying the leased parcel [Source: SDSFIE Attribute Table]

status_d (Enumeration16)

The status of the parcel. (Active, inactive, terminated) [Source: SDSFIE Feature Table]

permit_use (String20)

Permitted use of the leased parcel [Source: SDSFIE Attribute Table]

lsd_area (Real)

Area accounted for in the lease for a parcel [Source: SDSFIE Attribute Table]

act_area (Real)

Actual measured area of the leased parcel [Source: SDSFIE Attribute

	Table]
date_lsexp (Date)	The date the lease is expected to expire. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: SDSFIE Feature Table]
legl_desc (String240)	The complete legal description of the property as it appears in the deed. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Municipality

Geometry Type: Polygon Accuracy: +/-50Ft. Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the municipal government. [Source:

Attributes: SDSFIE Entity political_jurisdiction_municipal_line

juris_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
polit_name (String30)	The common name associated with the property area. [Source: SDSFIE Feature Table]
feat_desc (String254)	The description of the area. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Parcel

Geometry Type: Polygon Accuracy: +/-1Ft. Sensitivity: Restricted

Individual cadastral unit. These elements have been extracted from the Maryland Department of Planning's MD PropertyView database. Please note that some of the attributes are dependent upon the combination of values of other attributes and are based on the Computer Aided Mass Appraisal (CAMA) data from the Maryland Department of Planning.

Attributes:	SDSFIE Entity parcel_area
acctID (String16)	positions 1-2 are the jurisdiction (county) code which is 02 for Anne Arundel, positions 3-4 are the tax district, positions 5-7 are the subdivision and the remaining 9 positions are the parcel account number.
digXCord (Number)	The parcel x coordinate in the NAD83 meters version of the Maryland State Plane Coordinate System.
digYCord (Number)	The parcel y coordinate in the NAD83 meters version of the Maryland State Plane Coordinate System.
ct2000 (String12)	2000 census tract. Position 1-2 are the State code (024), positions 3-5 are the jurisdiction FIPS code, positions 6-11 are the census tract and position 12 of BG2000 is the census block group.
bg2000 (String12)	2000 census block group. Position 1-2 are the State code (024), positions 3-5 are the jurisdiction FIPS code, positions 6-11 are the census tract and position 12 the census block group.
geogCode (String2)	Geographic code of the assessment cycle area: 80 or 81 or 82
ooi (String1)	Owner occupied indicator: H for occupied by owner, N for not occupied by owner, D for dual use (partly occupied by owner, part of the property is devoted to agricultural, commercial or rental use)
address (string60)	Combined street address. Populated with data from premise address number (PREMSNUM), premise address direction (PREMSDIR), premise address name (PREMSNAM) and premise address street type (PREMSTYP) found in the jurisdiction project files (views). ADDRESS is only populated with premise address data if there are data in both premise address number (PREMSNUM) and premise address name REMSNAM). If combined street address cannot be populated by premise address, ADDRESS is populated with owner address line 1 data (OWNADD1) for parcel accounts with an owner occupied indicator (OOI) of either "H" (occupied by owner) or "D" (dual use, partly occupied by owner, part of the property is devoted to agriculture, commercial or rental use), provided that

STRTNUM (String5)	owner address line 1 contains a valid street address, and not a post office box. The street address number component of combined street address (ADDRESS).
STRTDIR (String2)	The street address prefix directional component of combined street address (ADDRESS).
STRTNAM (String40)	The street address name component of combined street address (ADDRESS).
STRTTYP(String5)	The street address street type component of combined street address (ADDRESS). Street address types are standardized to United States Postal Service (USPS) standard street type abbreviations.
STRTSFX (String2)	The street address suffix directional component of combined street address (ADDRESS).
STRTUNT (String30)	The street address units component of combined street address (ADDRESS).
ADDRTYP (String1)	Street address source indicator: O the ADDRESS field was populated from owner address line 1 (OWNADD1), P the ADDRESS field was populated from premise address (PREMSNUM, PREMSDIR, PREMSNAM and PREMSTYP)
CITY (String30)	Combined street address city. CITY is populated with data from premise city (PREMCITY) if there are data in both premise address number (PREMSNUM) and premise address name (PREMSNAM). CITY is populated with owner city data (OWNCITY) if owner address data have been used to populate ADDRESS as described above.
ZIPCODE (String5)	Combined street address primary (5 digit) ZIP code. Must be numeric. ZIPCODE is populated with data from premise primary (5 digit) ZIP code (PREMZIP) if there are data in both premise address number (PREMSNUM) and premise address name (PREMSNAM). ZIPCODE is populated with owner primary (5 digit) ZIP code data (OWNERZIP) if owner address data have been used to populate ADDRESS as described above.
OWNNAME1 (String34)	Owner's name line 1.
OWNNAME2 (String34)	Owner's name line 2.
OWNADD1 (String30)	Owner's mailing address line 1.
OWNADD2 (String30)	Owner's mailing address line 1.
OWNCITY (String22)	Owner's mailing address city.
OWNSTATE (String2)	Owner's mailing address state post office abbreviations for any of the 50 states or the District of Columbia. The following abbreviations are also used: AA military service CZ canal zone PR Puerto Rico; AE military service FC foreign country VI Virgin Islands; and AP military service GU Guam.
OWNERZIP (String5)	Owner's mailing address primary (5 digit) and secondary (4 digit) zip code. Must be numeric. OWNERZIP2 cannot be filled in unless OWNERZIP contains a ZIP code.
OWNZIP2 (String4)	
PREMSNUM (String5)	Premise address number. Must be numeric.
PREMSDIR (String2)	Premise address direction (may be left blank). N = north; E = east ; NE = northeast; SE = southeast; S = south; W = west; NW = northwest; and SW = southwest.
PREMSNAM (String22)	Premise address name. Must be filled in if there are data in REMSTYP.
PREMSTYP (String 5)	Premise address street type.
PREMCITY (String22)	Premise address city.
PREMZIP (String5)	Premise address primary (5 digit) and secondary (4 digit) zip code. Must be numeric. PREMZIP2 cannot be filled in unless PREMZIP contains a ZIP code.
PREMZIP2 (String4)	
LEGAL1 (String24)	Legal description line 1. Positions 1-4 must contain blanks, or IMPS if there is a structure on the property.
LEGAL2 (String24)	Legal description line 2.
LEGAL3 (String24)	Legal description line 3.
DR1LIBER (String 5)	Deed reference 1 - liber. Must be numeric.
DR1FOLIO (string4)	Deed reference 1 - folio. Must be numeric.
TOWNCODE (String3)	Town code and town code description (town name). Town code must be numeric. 001 ANNE Annapolis, 002 ANNE Highland Beach.
DESCRIPT (String25)	
SUBDIVSN (String4)	Subdivision, plat, section, block and lot.
PLAT (String6)	
SECTION (String3)	
BLOCK (String5)	
LOT (String5)	
MAP (String5)	

GRID (String5)	Parcel map number, grid, and parcel. The first four positions of MAP, GRID and PARCEL must be numeric.
PARCEL (String5)	
ZONING (String5)	
MZI (String1)	
MFI (String1)	
EXSTATUS (String1)	Zoning code and multiple zoning indicator, M for multiple zoning. MZI Cannot be filled in unless there are data in ZONING. multiple family indicator, F for multiple family dwelling. Exempt status: 0 for taxable, 1 for exempt county, 2 for exempt state or 3 for exempt county and state.
EXCLASS (String3)	Exemption class code and code description. Code data must be numeric. Code data must be 000 if EXSTATUS data are 0 (indicating a taxable property) or 999 if EXSTATUS data are unknown. EXCLASS must be filled with a numeric entry ranging from 010 to 994 if EXSTATUS data are 1, 2 or 3. Exemption class codes are grouped as follows: 100-190 PUB Public Owned Real Property or U.S.A. Federal Property 200-390 STA State Owned Real Property 400-590 JUR County or Baltimore City Owned Real Property 600-690 MUN Town or Municipality Owned Real Property 700-795 PVT Privately Owned Real Property 800-994 NPF Non-Profit or Charitable Organizations 010-090 OTH All other classes
DESCEXCL (String60)	
LU (String2)	
DESCLU (String23)	
PFUW (String1)	
PFUS (String1)	Land use code (see codes below)
PFLW (String1)	Land use code description.
PFIH (String1)	A agricultural E exempt NP non-perc land
ACRES (Number)	C commercial EC exempt commercial R residential
LANDAREA (Number)	CA country club I industrial RC residential commercial
LUOM (String1)	CC com. Condo. M apartments TH town house
STRUCODE (String10)	CR com. Resid. MA marsh land U residential condominium
	Property factor utilities, water: 1 for public water; 2 for private water; or 0
	Property factor utilities, sewer: 1 for public sewer; 2 for private sewer; or 0
	Property factor location, waterfront: 1 for waterfront property, or 0
	Property factor influence, historical: 1 for historical influence; or 0
	LANDAREA converted to acres.
	Land area acres or square feet, as indicated by LUOM.
	Land area unit of measure: A for acres or S for square feet. LUOM must be filled in if there are data in LANDAREA.
	Structure code, a coded identifier for type of structure. STRUCODE must be filled in if there are data in YEARBLT or SQFTSTRC. Where there is a corresponding CAMA (Computer Assisted Mass Appraisal) record for the structure, position 1 is always an "M".
	For "M" records:
	Position 2 is the CAMA quality of construction/grade code. Data are extracted to STRUGRAD and DESCGRAD. Equivalent to DWLL_GRADE and DWLL_GDESC in the CAMA Database.
	1 low cost 5 good 8 luxury
	2 economy 6 very good 9 luxury plus
	3 fair 7 excellent 0 no data
	4 average
	Positions 3-4 are the CAMA type of construction code. Data are extracted to STRUCNST and DESCNST. Data are tracked in more detail in CAMA Database dwelling sections 1-5 CONST and CDESC (SEC1_CONST, SEC1_CDSEC, and so on).
	01 siding - aluminum, vinyl 06 block 11 1/2 stone and siding
	02 frame 07 brick 12 1/2 stone and frame
	03 wood shingle 08 stone 13 log
	04 asbestos shingle 09 1/2 brick+siding 14 no data
	05 stucco 10 1/2 brick+frame
	Positions 5-6 are the CAMA number of stories code. Data are extracted to STRUSTRY and DESCSTRY. Data are tracked in more detail in CAMA Database dwelling sections 1-5 STORY and SDESC (SEC1_STORY, SEC1_SDSEC, and so on).
	01 1 story no basement 08 2 1/2 story with basement
	02 1 story with basement 09 3 story no basement

03 1 1/2 story no basement	10 3 story with basement
04 1 1/2 story with basement	11 4 story no basement
05 2 story no basement	12 4 story with basement
06 2 story with basement	13 split foyer
07 2 1/2 story no basement	14 no data

Positions 7-8 are blank.

Positions 9-10 are the CAMA type of dwelling code. Data are extracted to STRUDWEL and DESCDWEL. Equivalent to DWLL_TYPE and DWLL_TDESC in the CAMA Database.

01 standard single family unit 1, 2 or 3 story	08 condominium garden unit
02 townhouse end unit	09 condominium high-rise
03 townhouse center unit	10 condominium penthouse
04 split foyer 2 levels of living area	11 condo studio/efficiency
05 split level 3 or more levels of living area	12 boat slip
06 mobile home	13 rental dwelling
07 condominium townhouse	14 no data

For parcels with no corresponding CAMA record, position 1 of structure code is always an "X". For "X" records:

Position 2 is the old quality of construction/grade code. Data are extracted to STRUGRAD and DESCGRAD.

1 lowest cost dwelling unit	5 individually-designed dwelling
2 next lowest cost dwelling unit	6 architecturally-designed dwelling
3 minimum stock-type dwelling	7 luxury-type dwelling
4 average code dwelling	

Positions 3-4 are the old type of construction code. Data are extracted to STRUCNST and DESCCNST.

1 wood, including stucco
 2 brick
 3 stone, high quality
 4 1/2 wood and 1/2 brick
 5 1/2 wood and 1/2 stone
 6 1/2 brick and 1/2 stone

Position 5 is the old number of stories above ground code. Data are extracted to STRUSTRY and DESCSTRY.

1 1 story
 2 2 stories
 3 3 stories
 4 4 stories

Position 6 is the old half-story code. Data are not extracted.

5 with 1/2 story
 0 without 1/2 story

Positions 7-8 are the old basement code. Data are not extracted.

0-with basement
 5-without basement

Positions 9-10 are the old type of dwelling (unit) code. Data are extracted to STRUDWEL and DESCDWEL.

A standard unit	P split foyer
E end unit	G split level
F center unit	M mobile home

STRUGRAD (String1)

DESCGRAD (String33)

Quality of construction/grade code. Where there is a corresponding CAMA (Computer Assisted Mass Appraisal) record for the structure. See codes below.
 Quality of construction/grade description. Where there is a corresponding CAMA

(Computer Assisted Mass Appraisal) record for the structure:

1 low cost	5 good	8 luxury
2 economy	6 very good	9 luxury plus
3 fair	7 excellent	0 no data
4 average		

For parcels with no corresponding CAMA record:

1 lowest cost dwelling unit	5 individually-designed dwelling
2 next lowest cost dwelling unit	6 architecturally-designed dwelling
3 minimum stock-type dwelling	7 luxury-type dwelling
4 average code dwelling	

STRUCNST (String2)
DESCCNST (String24)

Type of construction code (see below)

Type of construction description. Where there is a corresponding CAMA (Computer Assisted Mass Appraisal) record for the structure:

01 siding - aluminum, vinyl	06 block	11 1/2 stone and siding
02 frame	07 brick	12 1/2 stone and frame
03 wood shingle	08 stone	13 log
04 asbestos shingle	09 1/2 brick+siding	14 no data
05 stucco	10 1/2 brick+frame	

For parcels with no corresponding CAMA record:

1 wood, including stucco	4 1/2 wood and 1/2 brick
2 brick	5 1/2 wood and 1/2 stone
3 stone, high quality	6 1/2 brick and 1/2 stone

STRUSTRY (String2)
DESCSTRY (String25)

Number of stories code (see below)

Number of stories description. Where there is a corresponding CAMA (Computer Assisted Mass Appraisal) record for the structure:

01 1 story no basement	08 2 1/2 story with basement
02 1 story with basement	09 3 story no basement
03 1 1/2 story no basement	10 3 story with basement
04 1 1/2 story with basement	11 4 story no basement
05 2 story no basement	12 4 story with basement
06 2 story with basement	13 split foyer
07 2 1/2 story no basement	14 no data

For parcels with no corresponding CAMA record:

1 1 story
2 2 stories
3 3 stories
4 4 stories

STRUDWEL(String2)
DESCDWEL (String43)

Type of dwelling code (see below)

Type of dwelling description. Type of dwelling codes 09-14 have changed for View 2003 Edition. Where there is a corresponding CAMA (Computer Assisted Mass Appraisal) record for the structure:

01 standard single family unit 1, 2 or 3 story	08 condominium garden unit
02 townhouse end unit	09 condominium high-rise
03 townhouse center unit	10 condominium penthouse
04 split foyer 2 levels of living area	11 condo studio/efficiency
05 split level 3 or more levels of living area	12 boat slip
06 mobile home	13 rental dwelling
07 condominium townhouse	14 no data

For parcels with no corresponding CAMA record:

-A standard unit -P split foyer
-E end unit -G split level
-F center unit -M mobile home

YEARBLT (String4)

Year structure was built. Must be numeric. Format CCYY. Must be filled in if there are data in STRUCODE or SQFTSTRC.

SQFTSTRC (Number)

Foundation square footage of the principal structure. May be zero. Must be filled in if there are data in STRUCODE or YEARBLT.

TRANSNO1 (String6)

Sales transfer number. Must be numeric. Must be a number which has not been used previously.

GRNTNAM1 (String34)

Sales grantor name (the name of the person who last sold the house). If not

	filled in through data entry, the previous owner's name is used to generate a grantor name.
GR1LIBR1 (String5) GR1FOLO1 (String4)	Grantor deed reference 1 (most recent grantor) liber and folio. Must be numeric. If not filled in through data entry, data from the previous owner's deed reference 1 are used.
CONVEY1 (String1)	How conveyed (what kind of sale was it when the house was last sold). If the transfer date (TRADATE) is on or after October 1, 1994, there are four possible values for "how conveyed": 1 arms-length transfer, improved 2 arms-length transfer, vacant at time of sale 3 arms-length transfer, multiple parcel 9 non-arms-length transfer such as a foreclosure, gift or auction If the transfer date (TRADATE) is prior to October 1, 1994, there are ten possible values for "how conveyed": 1 private sale 5 foreclosure 8 confirmatory deed 2 lease 6 straw deed 9 other 3 gift 7 tax sale 0 unknown 4 auction
TOTPART1 (String1) TRADATE (String8) CONSIDR1 (Number) MORTGAG1 (Number)	Total/partial transfer indicator: P for partial transfer or T for total transfer Transfer date. Must be numeric, format YYYYMMDD. Consideration (the amount of money paid for the property) and mortgage. CONSIDR1 may be zero.
NFMLNDVL (Number) NFMIMPVL (Number) NFMTTLVL (Number)	New full market land value (appraised land value), new full market improvement value (appraised improvement value) and new full market total value (land value plus improvement value). May be zero.
CRTARCOD (String2)	Critical area code: C for conservation area, L for limited development area or I for intensely developed area
PLTLIBER (String4) PLTFOLIO (String4) CIUSE (String5) DESCCIUSE (String40)	Plat liber and folio, used for subdivisions. Must be numeric. Commercial and industrial property use code, used to identify the specific uses of improved commercial/industrial properties. The code is also used to identify properties owned by public utilities and railroads (both vacant and improved) and indicate their status as to operating or non-operating. Must be numeric.
PTYPE (Number)	Type of digitized parcel: 0 no x,y assigned for the parcel 2 located by MAP, GRID, PARCEL, SECTION, BLOCK and LOT on the property map 3 State Highway Administration located parcel, located on the wrong side of the road 20 "stacked" non-condominium parcel Non-condominium located parcels which were assigned the same x,y coordinate by the Computerized Property Mapping Section based on the MAP, GRID, PARCEL, SECTION, BLOCK and LOT data available for the parcels. "Stacked" non-condominium parcels may be found in any or all 2003 Edition databases. 21 "stacked" condominium parcel Condominium located parcels which were assigned the same x,y coordinate by the Computerized Property Mapping Section based on the MAP, GRID, PARCEL, SECTION, BLOCK and LOT data available for the parcels. "Stacked" condominium parcels may be found in any or all 2003 Edition databases.
DWLL_TOTAL (Number)	Number of dwellings on the property. Obtained from the Computer Assisted Mass Appraisal (CAMA) database for residential properties only.
APT_UNITS (Number)	Number of dwelling units on the property. Obtained as a special Computer Assisted Mass Appraisal (CAMA) extract for commercial properties with residential uses only. Available for properties where the commercial and industrial property use code (CIUSE) is one of the following: 01000 HOUSING Apartment

	01500 HOUSING Apartment Garden 01550 HOUSING Apartment High Rise 01600 HOUSING Apartment Townhouse 01650 HOUSING Apartment mixed 03500 HOUSING Trailer Park 01800 HOUSING Apartment subsidized 44000 CARE Nursing Home 44050 CARE Nursing Home Converted Building 44100 CARE Life Care Facility 44200 CARE Assisted Living Ambulatory 44300 CARE Retirement Center 53000 WAREHOUSE Mini Storage 65500 BOAT Marina 54000 INDUSTRY Truck Terminal						
TTL_ROOMS (Number)	<p>Total number of rooms on the property. Obtained as a special Computer Assisted Mass Appraisal (CAMA) extract for commercial properties with residential uses only. Available for properties where the commercial and industrial property use code (CIUSE) is one of the following:</p> <p>44000 CARE Nursing Home 44050 CARE Nursing Home Converted Building 44200 CARE Assisted Living Ambulatory 44300 CARE Retirement Center 44100 CARE Life Care Facility 04000 TRAVEL Hotel 05200 TRAVEL Bed And Breakfast 04200 TRAVEL Hotel Extended Stay 05600 TRAVEL Motel Old Style 05000 TRAVEL Motel</p>						
YRBLT_CAMA (String4)	The year in which the dwelling was constructed. Obtained from the Computer Assisted Mass Appraisal (CAMA) database for residential properties only.						
COMBINED (Boolean)	Indicates whether ADDRESS, CITY and ZIPCODE contain combined street address data.						
RESIDENT (Boolean)	<p>Indicates whether a property is residential, based on the following criteria: Land use code (LU) is one of the following:</p> <table> <tr> <td>A agricultural</td><td>RC residential commercial</td></tr> <tr> <td>CR commercial residential</td><td>TH town house</td></tr> <tr> <td>R residential</td><td>U residential condominium</td></tr> </table> <p>AND</p> <p>New full market improvement value (NFMIMPVL) is equal to or greater than \$1000. If both of these conditions are true, the value of RESIDENT is:</p> <p>T True, the property is residential</p> <p>RESIUTHS - Logical Field - Width 1</p> <p>Indicates whether a property is residential improved with a value less than \$1000, based on the following criteria:</p> <p>Land use code (LU) is one of the following:</p> <p>A agricultural CR commercial residential R residential RC residential commercial TH town house U residential condominium</p> <p>AND</p> <p>New full market improvement value (NFMIMPVL) is less than \$1000. If both of these conditions are true, the value of RESIUTHS is:</p> <p>T True, the property is residential improved with a value less than \$1000</p>	A agricultural	RC residential commercial	CR commercial residential	TH town house	R residential	U residential condominium
A agricultural	RC residential commercial						
CR commercial residential	TH town house						
R residential	U residential condominium						
RESI1990 (Boolean)	Indicates whether a property is residential improved with a value equal to or greater than \$1000 and built in or after 1990, based on the following criteria:						

	<p>Land use code (LU) is one of the following:</p> <p>A agricultural CR commercial residential R residential RC residential commercial TH town house U residential condominium</p> <p>AND</p> <p>New full market improvement value (NFMIMPVL) is equal to or greater than \$1000.</p> <p>AND</p> <p>CAMA year built (YRBLT_CAMA) is equal to or greater than 1990 and equal to or less than 1999.</p> <p>OR</p> <p>Year built (YEARBLT) is equal to or greater than 1990 and equal to or less than 1999 and CAMA year built (YRBLT_CAMA) is blank.</p> <p>OR</p> <p>Year built (YEARBLT) is equal to or greater than 1990 and equal to or less than 1999 and CAMA year built (YRBLT_CAMA) is equal to "0000".</p> <p>If all of these conditions are true, the value of RESI1990 is: T = True, the property is residential improved with a value equal to or greater than \$1000 and built in or after 1990</p>
RESI2000 (Boolean)	<p>Indicates whether a property is residential improved with a value equal to or greater than \$1000 and built in or after 2000, based on the following criteria:</p> <p>Land use code (LU) is one of the following:</p> <p>A agricultural CR commercial residential R residential RC residential commercial TH town house U residential condominium</p> <p>AND</p> <p>New full market improvement value (NFMIMPVL) is equal to or greater than \$1000.</p> <p>AND</p> <p>CAMA year built (YRBLT_CAMA) is equal to or greater than 2000 and equal to or less than 2009.</p> <p>OR</p> <p>Year built (YEARBLT) is equal to or greater than 2000 and equal to or less than 2009 and CAMA year built (YRBLT_CAMA) is blank.</p> <p>OR</p> <p>Year built (YEARBLT) is equal to or greater than 2000 and equal to or less than 2009 and CAMA year built (YRBLT_CAMA) is equal to "0000".</p> <p>If all of these conditions are true, the value of RESI2000 is: T = True, the property is residential improved with a value equal to or greater than \$1000 and built in or after 2000</p>
APRTMENT (Boolean)	<p>Indicates whether a parcel is an apartment with a value equal to or greater than \$1000, based on the following criteria:</p>

Commercial and industrial property use code (CIUSE) is one of the following:
01000 HOUSING Apartment
01500 HOUSING Apartment Garden
01550 HOUSING Apartment High Rise
01600 HOUSING Apartment Townhouse
01650 HOUSING Apartment Mixed
01800 HOUSING Apartments Subsidized
30600 STORE Retail with Apartment Upstairs

OR

Land use code (LU) is equal to "M" (apartment)

AND

New full market improvement value (NFMIMPVL) is equal to or greater than \$1000. If either of these sets of conditions are true, the value of APRTMENT is: T True, the property is an apartment with a value equal to or greater than \$1000

TRAILER (Boolean) Indicates whether a property is a trailer park, based on the following criteria:
Commercial and industrial property use code (CIUSE) is:
03000 HOUSING Trailer Park

If this condition is true, the value of TRAILER is:
T true, the property is a trailer park

SPECIAL (Boolean) Indicates whether a property may house special populations, based on the following criteria:
Commercial and industrial property use code (CIUSE) is one of the following:

43000 CARE Hospital
44000 CARE Nursing Home
44050 CARE Nursing Home Converted Building
44100 CARE Life Care Facility
44200 CARE Ambulatory Assisted Living Facility
44300 CARE Retirement Center
60020 REC Camp Ground
65500 BOAT Marina
65710 BOAT Marina Condo
80020 SAFETY Jail
80040 COMMUNITY Fraternity

OR

Exempt class code (EXCLASS) is one of the following:

110 PUB Hospital (public/USA Federal)
130 PUB Military Installation (public/USA Federal)
140 PUB School (public/USA Federal)

210 STA Hospital/Health Related Facility (State)
250 STA College (State)
280 STA Detention Center (State)

410 JUR Hospital/Health Related Facility (county/Baltimore City)
470 JUR Detention Center (county/Baltimore City)

720 PVT Church College (private)
740 PVT Church Hospital/Health Related Facility (private)
760 PVT Other such as Salvation Army or Mission (private)
780 PVT Church Aged/Rehabilitation Home (private)

810 NPF Private College (non-profit or charitable organization)
820 NPF Hospital/Health Related Facility (non-profit or charitable organization)
840 NPF Non-Profit Housing for the Elderly (non-profit or charitable org.)
880 NPF YMCA Camp/YWCA Camp (non-profit or charitable organization)
970 NPF Goodwill/Disabled Veterans Rehabilitation Center/Red Cross (non-profit or charitable organization)

If either of these conditions are true, the value of SPECIAL is:
T = True, the property may house special populations

OTHER (Boolean)	Indicates whether a property falls outside of any of the categories described above. If a property fails to meet any of the above conditions, the value of OTHER is: T = True, the property is not RESIDENT, RESIUTHS, RESI1990, RESI2000, APRTMENT, TRAILER or SPECIAL
SEQNUMB (Number)	Contains the 2003 Database record number for each property. The 2003 Database is sorted in street address order. Properties lacking a valid street address, which are properties with no data in ADDRESS, fall to the end of the 2003 Database in account number (ACCTID) order. Record numbers are loaded into SEQNUMB so that they appear sequentially in street address order followed by account number order.

State

Geometry Type: Polygon Accuracy: +/-50Ft. Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the state government. [Source: SDSFIE]

Attributes: SDSFIE Entity *political_jurisdiction_state_line*

juris_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
polit_name (String30)	The common name associated with the property area. [Source: SDSFIE Feature Table]
feat_desc (String254)	The description of the area. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Zoning

Geometry Type: Polygon Accuracy: +/-50Ft. Sensitivity: Restricted

A parcel of land zoned specifically for real estate and land management purposes; more specifically for commercial, residential, or industrial use. [Source: SDSFIE]

Attributes: SDSFIE Entity *zoning_area*

zoning_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	A brief description of the feature. [Source: SDSFIE Feature Table]
zng_cls_d (Enumeration16)	The zoning classification of the parcel. [Source: SDSFIE Feature Table]
restrict_d (Enumeration16)	Codes determining the land owner restriction for the parcel. [Source: SDSFIE Feature Table]
status_d (Enumeration16)	The status of the parcel. (Active, inactive, terminated) [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Environmental

ContaminationArea

Geometry Type: Polygon Accuracy: +/-10Ft. Sensitivity: Restricted

A facility or other locational entity, (as designated by the Environmental Protection Agency) that is regulated or monitored because of environmental concerns. [Source: SDSFIE]

Attributes: SDSFIE Entity *environmental_regulated_facility_site*

sitaoc_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a
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site_name (String50)	feature type. [Source: FAA Airports GIS]
ehazcat_d (Enumeration16)	The name of a specific facility. [Source: SDSFIE Feature Table]
	Indicates the broad category or type of the most prevalent or serious environmental hazard present at the site. [Source: SDSFIE Feature Table]
src_desc (String254)	A description of the source of the pollution. [Source: SDSFIE Feature Table]
rel_typ_d (Enumeration16)	A descriptor for the type of pollutant release experienced. [Source: SDSFIE Feature Table]
severity_d (Enumeration16)	A descriptor for the severity of the pollution. [Source: SDSFIE Feature Table]
rem_urg_d (Enumeration16)	A code indicating the urgency for accomplishing a site remediation project. [Source: SDSFIE Feature Table]
tox_stt_d (Enumeration16)	A descriptor for the toxic status of the pollution. [Source: SDSFIE Feature Table]
pstatus_d (Enumeration16)	The code indicating whether the facility status is Active or Inactive. [Source: SDSFIE Feature Table]
date_found (Date)	The date the pollution was discovered. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) [Source: SDSFIE Feature Table]
cause_d (Enumeration16)	A code indicating the cause of the pollution. [Source: SDSFIE Feature Table]
pol_src_d (Enumeration16)	The actual or suspected source of the pollutant. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FaunaHazardArea

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Restricted

An area where there are hazards due to wildlife activities. This includes bird aircraft strike hazard (BASH) areas, and deer strike areas. [Source: SDSFIE]

Attributes:

	<i>SDSFIE Entity</i>	<i>fauna_hazard_area</i>
hazard_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
haz_typ_d (Enumeration16)	A descriptor of the type of the hazard. [Source: SDSFIE Feature Table]	
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

FloodZone

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Unclassified

Areas subject to 100-year, 500-year and minimal flooding [Source: SDSFIE]

Attributes:

	<i>SDSFIE Entity</i>	<i>flood_zone_area</i>
fld_zon_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
zone_type_d (Enumeration16)	The zoning classification of the area	
feat_desc (String254)	Description of the feature.	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the	

meta_id (Integer) subject item's data integrity and should not be used to store the subject item's data.
Foreign Key. Used to link the record to the applicable feature level metadata record(s).

FloraSpeciesSite

Geometry Type: Point Accuracy: +/-20Ft. Sensitivity: Unclassified

The specific location where an individual flora species or an aggregate of flora species has been identified

Attributes: SDSFIE Entity flora_species_site

species_id (Number*) Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
plnt_typ_d (Enumeration16) A descriptor of the type of flora. [Source: SDSFIE Feature Table]
feat_desc (String254) Any brief description of the feature. [Source: SDSFIE Feature Table]
plant_ht (Real) The average height of the flora species. [Source: SDSFIE Feature Table]
hab_stt (String1) Defines if the habitat has been designated as a critical habitat under (C) the Endangered species Act or has not been so designated (N). [Source: SDSFIE Feature Table]
user_flag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer) Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ForestStandArea

Geometry Type: Polygon Accuracy: +/-10Ft. Sensitivity: Confidential

A forest flora community with similar characteristics. [Source: SDSFIE]

Attributes: SDSFIE Entity flora_species_management_area

flmspc_id (Number*) Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
habcat_d (Enumeration16) Discriminator - The designation or type of the special wildlife habitat. [Source: SDSFIE Feature Table]
feat_desc (String254) A description of the flora species. [Source: SDSFIE Feature Table]
user_flag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer) Foreign Key. Used to link the record to the applicable feature level metadata record(s).

HazMatStorageSite

Geometry Type: Point Accuracy: +/-10Ft. Sensitivity: Unclassified

A defined or bounded geographical area designated and used for the storage of contained hazardous materials. [Source: SDSFIE]

Attributes: SDSFIE Entity contained_hazwaste_storage_site

hwarea_id (Number*) Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
hsb_cat_d (Enumeration16) The general type or category of contained hazardous material stored. [Source: SDSFIE Feature Table]
narrative (String254) A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]
user_flag (String254) An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NoiseContour

Geometry Type: Polygon

Accuracy: +/-1Ft.

Sensitivity: Confidential

An area that describes the noise attributed to operations. For aircraft operations, the Day/Night average sound level (Ldn) descriptor is typically used to categorize noise levels [Source: 14 CFR Part 150]

Attributes:

SDSFIE Entity noise_contour_line

noi_zon_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

contourValue (Real)

The decibel level of the contour line.

zone_desc (String254)

A description for the noise zone. [Source: SDSFIE Feature Table]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NoiseIncident

Geometry Type: Point

Accuracy: +/-10Ft.

Sensitivity: Restricted

A formal complaint by an individual or group regarding excessive noise resulting from airport operations

Attributes:

SDSFIE Entity noise_incident_point

inc_sit_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

reporter (String50)

The name of the individual or organization reporting the incident. [Source: SDSFIE Feature Table]

incid_desc (String254)

A general description of the complete incident, including any reference material. [Source: SDSFIE Feature Table]

latitude (Real)

Latitude in decimal degrees with negative numbers used for Western Hemisphere

longitude (Real)

Longitude in decimal degrees with negative numbers used for Western Hemisphere

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NoiseMonitoringPoint

Geometry Type: Point

Accuracy: +/-10Ft.

Sensitivity: Restricted

The location of noise sensing equipment or where a noise sample is taken. [Source: SDSFIE]

Attributes:

SDSFIE Entity noise_monitoring_point

noisemonitoringpoint_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

name (String40)

Name of the feature.

feat_desc (String254)

Description of the feature.

status_d (Enumeration16)

A temporal description of the operational status of the feature. This attribute is used to describe real-time status

latitude (Real)

Latitude in decimal degrees with negative numbers used for Western Hemisphere

longitude (Real)

Longitude in decimal degrees with negative numbers used for Western Hemisphere

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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SampleCollectionPoint

Geometry Type: Point	Accuracy: +/-10Ft.	Sensitivity: Confidential
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The physical location at which one or more environmental hazards field samples are collected. [Source: SDSFIE]

Attributes:	SDSFIE Entity	field_sample_collection_location_point
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sam_pt_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
ltccode_d (Enumeration16)	Code describing the type of location which is undergoing sampling (e.g., bh= borehole, wl=well). IRPIMS. [Source: SDSFIE Feature Table]
locdesc (String254)	Descriptor providing any additional information to describe the sampling location in text format (e.g., monitoring well located 10 feet northeast of building 624 within spill area). IRPIMS. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Shoreline

Geometry Type: Line	Accuracy: +/-10Ft.	Sensitivity: Restricted
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The boundary of a body of water including oceans, seas, lakes, rivers, streams, ponds, etc.

Attributes:	SDSFIE Entity	shoreline
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indfshl_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
shore_name (String30)	A commonly used name for the shoreline. [Source: SDSFIE Feature Table]
shr_typ_d (Enumeration16)	Discriminator - A value indicating the type or kind of shoreline [Source: SDSFIE Feature Table]
shore_desc (String254)	A local description for the shoreline. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ShorelineCriticalArea

Geometry Type: Polygon	Accuracy: +/-40Ft.	Sensitivity: Restricted
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An area of land extending from the shoreline where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat. [Source: SDSFIE*]

Attributes:	SDSFIE Entity	none
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buffer_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
buffr_name (String20)	A commonly used name for the shoreline buffer. [Source: SDSFIE Attribute Table]
buf_typ_d (Enumeration16)	The type of the shoreline buffer. [Source: SDSFIE Attribute Table]
buffr_desc (String254)	A description of the shoreline buffer. [Source: SDSFIE Attribute Table]
buffr_dist (Integer)	The linear distance that the buffer extends from the shoreline [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the

	subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SoilArea

Geometry Type: Polygon Accuracy: +/-40Ft. Sensitivity: Restricted

An overall soil survey area which consists of one to many soil map unit areas. The projected uses of the survey and the complexity of the soil patterns largely determine the scale of the soil map. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity none</i>
stssa_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
feat_name (String30)	The name given to the survey [Source: SDSFIE Attribute Table]
remarks (String254)	Remarks used to clarify or document information for a soil survey area. A list of sources, and other information for the survey area. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

WatershedArea

Geometry Type: Polygon Accuracy: +/-40Ft. Sensitivity: Restricted

The region or area drained by, or to, a particular body of water. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity none</i>
watshed_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
wat_name (String16)	The name associated with the watershed. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Wetland

Geometry Type: Polygon Accuracy: +/-10Ft. Sensitivity: Restricted

Transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. [Source: SDSFIE*]

Attributes:	<i>SDSFIE Entity wetland_area</i>
wetland_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
wetln_name (String30)	Any commonly used name for the wetland. [Source: SDSFIE Feature Table]
wetln_desc (String254)	A description of the wetland. [Source: SDSFIE Feature Table]
feat_tpy_d (Enumeration16)	A descriptor of how the wetland is depicted graphically. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Geodetic

AirportControlPoint

Geometry Type: Point

Accuracy: +/-0.07Ft.

Sensitivity: Restricted

A control station established in the vicinity of, and usually on, an airport and tied to the National Spatial Reference System (NSRS) [Source: NGS]

Attributes:

SDSFIE Entity *control_point*

monumnt_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
permanentId (String6)	Permanent point identifier assigned by NGS to PACS and SACS [Source: NGS]
mon_desc (String254)	The monument description. [Source: SDSFIE Feature Table]
pointType_d (Enumeration16)	Contains the allowable values of a point type used by the ControlPoint feature. The point types may be supplementally provided as subtypes of ControlPoints for ease of use and clarification.
feat_name (String50)	Any commonly used name for the control point. [Source: SDSFIE Feature Table]
mon_typ_d (Enumeration16)	The type of monument as defined by the Corps of Engineers EM 1110-1-1002. [Source: SDSFIE Feature Table]
elevation (Real)	Elevation of the point relative to the selected vertical datum. [Source: NGS]
ellipsoidElevation (Real)	The height above the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question. Also called the geodetic height. [Source: NGS]
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere
yearOfSurvey (Integer)	The year of the most recent runway end survey used to compute the ARP
date_recov (Date)	The date the monument was last field recovered. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915). [Source: SDSFIE Feature Table]
recov_cond (String30)	The condition and type of the marker (witness post) used to identify the location of the monument. [Source: SDSFIE Feature Table]
fld_book (String254)	The field book. [Source: SDSFIE Feature Table]
gps_suit_d (Boolean)	A Boolean indicating GPS suitability. [Source: SDSFIE Feature Table]
spszone_d (Enumeration16)	The State Plane Coordinate System Code. [Source: SDSFIE Feature Table]
stmpd_desg (String50)	The designation stamped into the bottom of the monument. [Source: SDSFIE Feature Table]
epoch (String10)	Survey epoch used to establish the control point. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ColumnGrid

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Restricted

Reference grid lines defined by the location of structural columns within a building.

Attributes:

SDSFIE Entity *none*

ColumnGrid_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject

meta_id (Integer)	item's data. [Source: SDSFIE] Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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CoordinateGridArea

Geometry Type: Line	Accuracy: +/-1Ft.	Sensitivity: Restricted
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A regular pattern of horizontal and vertical lines used to represent regular coordinate intervals along the x and y axis. This grid line can be used to generate an arbitrary grid system which is common on locator maps. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i>	<i>coordinate_grid_area</i>
cmgrd_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
name (String40)	The name, code or identifier used to refer to an individual grid cell.	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

ElevationContour

Geometry Type: Line	Accuracy: +/-1Ft.	Sensitivity: Restricted
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Connecting points on the surface of the earth of equal vertical elevation representing some fixed elevation interval. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i>	<i>elevation_contour_line</i>
contour_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
elevation (Real)	The elevation of the contour line. [Source: SDSFIE Feature Table]	
feat_len (Real)	The overall length of the feature. [Source: SDSFIE Feature Table]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

ImageArea

Geometry Type: Polygon	Accuracy: +/-20Ft.	Sensitivity: Confidential
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The image foot print or coverage area. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i>	<i>image_area</i>
gdimage_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
frame_no (String20)	Frame number of the image. [Source: SDSFIE Feature Table]	
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]	
photo_date (Date)	Date the aerial photography was flown. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915) [Source: SDSFIE Feature Table]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Group: Interior

BaggageCarousel

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Baggage system carousels

Attributes:

SDSFIE Entity none

BaggageCarousel_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

userOrganization (String60)

The organization(s) which is currently using the baggage carousel.

BaggageConveyor

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Restricted

Baggage system conveyors

Attributes:

SDSFIE Entity none

BaggageConveyor_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

userOrganization (String60)

The organization(s) which is currently using the baggage carousel.

direction (Enumeration16)

The direction of flow of baggage on the conveyor.

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Chase

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Area of a building used for passing utilities from one floor to another.

Attributes:

SDSFIE Entity none

Chase_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Column

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Structural columns of a building

Attributes:

SDSFIE Entity none

Column_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the

meta_id (Integer)

operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Door

Geometry Type: Line

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Line where door is located within a wall

Attributes:

SDSFIE Entity none

door_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

name (String40)

Name of the feature.

feat_desc (String255)

Description of the feature.

door_desgn (String10)

Alphanumeric text indicating the designator of the door [Source: SDSFIE Attribute Table]

eqp_typ_d (String60)

Type of equipment installed to restrict access [Source: SDSFIE Attribute Table]

fire_b (Boolean)

Boolean to indicate whether door is a fire door or not [Source: SDSFIE Attribute Table]

fire_time (Integer)

Time in hours for which a fire door is rated [Source: SDSFIE Attribute Table]

secure_b (Boolean)

Boolean for whether door provides access to a secure area [Source: SDSFIE Attribute Table]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Elevator

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Area of a floor where an elevator shaft is located

Attributes:

SDSFIE Entity none

elevator_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]

name (String40)

Name of the feature.

feat_desc (String255)

Description of the feature.

elev_typ_d (String20)

Code for the type of elevator [Source: SDSFIE Attribute Table]

eqp_typ_d (String60)

Type of equipment installed to restrict access [Source: SDSFIE Attribute Table]

no_floors (Integer)

Number of floors served by the elevator [Source: SDSFIE Attribute Table]

secure_b (Boolean)

Boolean for whether elevator provides access to a secure area [Source: SDSFIE Attribute Table]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Escalators

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Area of a floor occupied by escalators

Attributes:

SDSFIE Entity none

Escalators_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
Name (String60)	Common name associated with the feature. [Source: HJAIA]
name (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Floor

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Floor outline of a building

Attributes:

SDSFIE Entity *building_space_floor*

floor_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
floorname (String50)	Name of the building floor. [Source: SDSFIE Feature Table]
floor_ua (Real)	Usable or net area of the building floor. The sum of usable areas on the building floor (i.e., business and common) which can vary over the life of a building as corridors expand and contract as floors are remodeled. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Flooring Material

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Are of floor with a common material type.

Attributes:

SDSFIE Entity *none*

Flooring Material_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Furnishing

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

The location of various interior furnishings

Attributes:

SDSFIE Entity *none*

Furnishing_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

InteriorSign

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

Signs located inside of a building.

Attributes:

SDSFIE Entity none

InteriorSign_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Ladder**Geometry Type: Polygon**

Accuracy: +/-5Ft.

Sensitivity: Restricted

The location of a ladder for accessing another floor or roof of a building.

Attributes:

SDSFIE Entity none

Ladder_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Locks**Geometry Type: Point**

Accuracy: +/-5Ft.

Sensitivity: Restricted

The location of door or gate locking devices.

Attributes:

SDSFIE Entity none

Locks_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

MovingSidewalk**Geometry Type: Polygon**

Accuracy: +/-5Ft.

Sensitivity: Restricted

Area of a floor occupied by a moving sidewalk

Attributes:

SDSFIE Entity none

MovingSidewalk_id (Number*)

Primary Key. A globally unique identifier assigned to the instance of a feature type.

name (String60)

Common name associated with the feature. [Source: HJAIA]

user_flag (String254)

An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Room

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Room outline within a building

Attributes:

SDSFIE Entity building_space_room

room_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
roomname (String50)	Name of the building room. [Source: SDSFIE Feature Table]
room_ht (Real)	Height dimension of the building room, measured from floor to ceiling. [Source: SDSFIE Feature Table]
room_len (Real)	Length dimension of a building room, measured from inside of wall to inside of wall. [Source: SDSFIE Feature Table]
room_width (Real)	Width dimension of a building room, measured from inside of wall to inside of wall. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Space

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

A space not elsewhere classified within a building

Attributes:

SDSFIE Entity building_space_space

bspace_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
spacename (String50)	Name of the building space. [Source: SDSFIE Feature Table]
feat_desc (String255)	Description of the feature.
area_size (Real)	The size of the area, zone, or polygon in square units. [Source: SDSFIE Feature Table]
space_cuse (String240)	Narrative text describing or provided information concerning the current use of the building space. [Source: SDSFIE Feature Table]
space_ht (Real)	Height of building space, or distance from floor to ceiling. [Source: SDSFIE Feature Table]
space_len (Real)	Length dimension of building space, from inside of wall or partition to inside of wall or partition. [Source: SDSFIE Feature Table]
space_wid (Real)	Width dimension of building space, from inside wall or partition to inside of wall or partition. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Stairs

Geometry Type: Polygon

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Area of a floor where stairs are located

Attributes:

SDSFIE Entity none

stairs_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String255)	Description of the feature.
Escape_b (Boolean)	Boolean indicator for whether stairs are a part of an approved escape route [Source: SDSFIE Attribute Table]
floor_low (Integer)	Designator for the lowest floor served by the stairs [Source: SDSFIE

floor_high (Integer)	Attribute Table] Designator for the highest floor served by the stairs [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Walls

Geometry Type: Line

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Wall within a floor

Attributes:

SDSFIE Entity none

walls_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_desc (String255)	Description of the feature.
fire_b (String20)	An indicator as to whether the feature is design to restrain fire [Source: SDSFIE Attribute Table]
struct_b (Boolean)	Indicator for whether the wall is a structural wall or not [Source: SDSFIE Attribute Table]
thickness (Real)	Thickness in inches of the wall [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Windows

Geometry Type: Line

Accuracy: +/-0.5Ft.

Sensitivity: Confidential

Line where window is located on an exterior wall

Attributes:

SDSFIE Entity none

windows_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
glis_typ_d (String20)	Code for the type of glass installed in the window [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Life Safety

AutomatedExternalDefibrillator

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Restricted

Location of Automated External Defibrillators (AEDs).

Attributes:

SDSFIE Entity none

AutomatedExternalDefibrillator_id	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]

meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
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EvacuationArea

Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted
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Area in which people are to gather in the event of an emergency.

Attributes:	SDSFIE Entity	none
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EvacuationArea_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Manmade Structures

Building

Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted
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A three dimensional permanent structure modeled with a bounding polygon. This feature includes all on-airport buildings within an Airport Parcel and any building in the vicinity of the airport that affects air navigation or airport design requirements [Source: FAA]

Attributes:	SDSFIE Entity	structure_existing_site
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building_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
building_no (String16)	The code indicating the number of the building. [Source: SDSFIE Feature Table]
name (String40)	Name of the feature.
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]
str_type_d (Enumeration16)	The type of structure. [Source: SDSFIE Feature Table]
str_stat_d (Enumeration16)	Discriminator. This value differentiates structure entities by operational status. [Source: SDSFIE Feature Table]
no_occup (Real)	Number of persons currently occupying the structure [Source: SDSFIE Feature Table]
areaInside (Real)	Total inside area of structure [Source: SDSFIE Feature Table]
structHght (Real)	Maximum height of structure [Source: SDSFIE Feature Table]
areaFloor (Real)	Total inside floor area [Source: SDSFIE Feature Table]
area Total (Real)	Total inside square footage [Source: HJAIA GIS ALP Standard - 5/29/]
lightingType_d (Enumeration16)	A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
markingFeatureType_d	The type of the marking
color_d (Enumeration16)	The color of the marking
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ConfinedSpaces

Geometry Type: Polygon	Accuracy: +/-5Ft.	Sensitivity: Restricted
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Area or structure designated as a confined space.

Attributes:	SDSFIE Entity	none
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ConfinedSpaces_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ConstructionArea

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Restricted

A defined area that is under construction, not intended for active use until authorized by the concerned authority. The area defines a boundary for personnel, material, and equipment engaged in the construction activity [Source: SDSFIE]

Attributes:

SDSFIE Entity *construction_site*

conproj_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
const_name (String30)	Name of the construction area. [Source: SDSFIE Feature Table]
const_desc (String254)	Description of the construction area. [Source: SDSFIE Feature Table]
projectName (String60)	The name of the construction project
projectStatus_d (Enumeration16)	The status of the construction project
CoordinationContact (String75)	Airport, emergency, airline, tenant, and contractor personnel who are responsible for coordinating on-airport construction work
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Fence

Geometry Type: Line

Accuracy: +/-10Ft.

Sensitivity: Restricted

Any fencing (chain-link, razor wire, PVC, etc. [Source: FAA]

Attributes:

SDSFIE Entity *fence_line*

fence_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
fenc_typ_d (Enumeration16)	A code indicating the fencing material used. [Source: SDSFIE Feature Table]
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]
fence_ht (Real)	The overall distance from the surface of the ground to the top of the fence. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Gate

Geometry Type: Line

Accuracy: +/-10Ft.

Sensitivity: Restricted

The location of an entry or exit point. These entry or exit points could be security checkpoints or open access points. [Source: SDSFIE]

Attributes:

SDSFIE Entity *gate_line*

gate_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name, code or identifier used to identify the gate.

gate_typ_d (Enumeration16)	The gate material and method of construction. [Source: SDSFIE Feature Table]
gate_len (Real)	The overall distance from one end of the gate to the other. [Source: SDSFIE Feature Table]
gate_ht (Real)	The overall distance from the surface of the ground to the top of the gate. [Source: SDSFIE Feature Table]
attended_d (Boolean)	A Boolean indicating whether the gate is tended by a guard or other individual. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Tower

Geometry Type: Point Accuracy: +/-5Ft. Sensitivity: Restricted

An existing structure that was created, by man, to facilitate an activity at an elevated level above the ground.

Attributes: SDSFIE Entity tower_site

tower_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
lightCode (Boolean)	A code indicating that the obstacle is lighted [Source: AIXM]
lightingType_d (Enumeration16)	A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
color_d (Enumeration16)	The color of the marking
markingFeatureType_d	The type of the marking
verticalStructureMaterial_d	Classifies the predominant material of the vertical object
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Navigational Aids

NAVAIDCriticalArea

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

A zone encompassing a specific ground area in the vicinity of a radiating antenna array which must be protected from parking and unlimited movement of surface and air traffic [Source: FAA Order 6750.16C]

Attributes: SDSFIE Entity airfield_buffer_zone_area

afl_buf_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
buffr_dist (Real)	The linear distance of the limit of the buffer for the airfield. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NAVAIDEquipment

Geometry Type: Point Accuracy: +/-5Ft. Sensitivity: Unclassified

Any ground-based visual or electronic device that provides point to point guidance information or position to

aircraft in flight. The location is specified by FAA Specification 405 [Source: FAA Specification 405]

Attributes:	<i>SDSFIE Entity</i>	<i>navigational_aid_point</i>
navaid_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
faaLocID (String4)	ID of the associated Facility. Note that the Facility ID for NAVAIDS associated with an ILS/MLS references the associated ILS/MLS system identifier [Source: NGS]	
name (String40)	Name of the feature.	
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Feature Table]	
navaidEquipTypeCode_d	Specifies the type of NAVAID [Source: NGS]	
use_code_d (Enumeration16)	The code that represents the airspace structure in which the aeronautical-navigational-aid is utilized. [Source: SDSFIE Feature Table]	
antToThreshDist (Integer)	The distance in feet that the antenna is from the runway threshold.	
centerlineDist (Integer)	Navaid along centerline distances (distance between the navaid perpendicular point (PP) and the runway approach or stop-end, depending on the navaid type).	
offsetDist (Integer)	The distance in feet that the feature is offset from the runway centerline.	
lightingConfigType (Enumeration16)	The configuration type of visual navigational aid systems (use only when NavaidEquipTypeCode_d is set to 'Visual').	
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere	
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere	
status_d (Enumeration16)	A temporal description of the operational status of the feature. This attribute is used to describe real-time status	
owner_d (Enumeration16)	The owner of the facility [Source: AirMAT]	
refElevation (Real)	The Base Elevation for most NAVAIDS. For ILS DME the elevation is the center of the antenna cover. For MLSAZ, MLSEL and End Fire Type Glide Slope Antennas the elevation is the phase center of the reference point. [Source: NGS]	
refEllipsoidHeight (Real)	The Base Ellipsoid Height for most NAVAIDS. For ILS DME the elevation is the center of the antenna cover. For MLSAZ, MLSEL and End Fire Type Glide Slope Antennas the elevation is the phase center of the reference point. [Source: NGS]	
rwyEndID (Enumeration16)	The runway end associated with the NAVAID equipment (if any). This is the same as the runway identification number painted on the runway at the time of the survey	
downWindBarElev (Real)		
downWindBarThreshold (Real)		
refPointThreshold (Real)	Distance from the VGSI runway reference point to the threshold [Source: FAA AAS-100]	
thresholdCrossHeight (Real)		
highAngle (Real)	Maximum approach light vertical angle [Source: FAA AAS-100]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

NAVAIDSite

Geometry Type: Polygon

Accuracy: +/-20Ft.

Sensitivity: Unclassified

The parcel, lease, or right-of-way boundary for a navaid facility that is located off airport property.

Attributes:	<i>SDSFIE Entity</i>	<i>airfield_facility_surface_site</i>
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navaidsite_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
faaLocID (String4)	The location identifier assigned to the feature by the FAA.

fac_typ_d (Enumeration16)	The type of facility or feature related to airfield operations. [Source: SDSFIE Feature Table]
facil_desc (String254)	A brief description of the facility and any special characteristics. [Source: SDSFIE Feature Table]
PropertyCustodian (String50)	The regional property management office responsible for ownership of the site
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NAVAIDSystem

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Unclassified

A reference point to a grouping of NAVAIDS that together perform a common function.

Attributes: SDSFIE Entity none

navaidssystem_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
faaLocID (String4)	The location identifier assigned to the feature by the FAA.
navaidSysTypeCode_d	The type of NAVAID system
feat_desc (String254)	Description of the feature.
latitude (Real)	Latitude in decimal degrees with negative numbers used for Western Hemisphere
longitude (Real)	Longitude in decimal degrees with negative numbers used for Western Hemisphere
feat_len (Real)	The overall length of the airfield surface. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: SeaPlane

FloatingDockSite

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Unclassified

A floating facility which can serve as a mooring place for vessels or as a floating dry dock. [Source: SDSFIE]

Attributes: SDSFIE Entity floating_dock_site

floatingdocksite_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

NavigationBuoy

Geometry Type: Point

Accuracy: +/-5Ft.

Sensitivity: Unclassified

A floating marker which is moored to the bottom at a specific known location, which is used as an aid to navigation or for other special purpose. [Source: SDSFIE]

Attributes: SDSFIE Entity marine_navigation_buoy_point

buoy_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a
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buoy_num (String20)	feature type. [Source: FAA Airports GIS]
feat_name (String120)	The official number of the buoy. [Source: SDSFIE Feature Table]
narrative (String254)	Any commonly used name associated with the buoy. [Source: SDSFIE Feature Table]
buoy_typ_d (Enumeration16)	A description or other unique information concerning the buoy limited to 240 characters. [Source: SDSFIE Feature Table]
color_d (Enumeration16)	Discriminator - The type of the buoy. [Source: SDSFIE Feature Table]
user_flag (String254)	The color of the buoy. [Source: SDSFIE Feature Table]
	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SeaplaneLandingArea

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

An area specifically designated for take-offs and landings of sea planes. [Source: SDSFIE]

Attributes: SDSFIE Entity sea_plane_landing_area

sealand_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	Any commonly used name associated with the sea plane landing area. [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
restrictn (String240)	Any restrictions or cautions associated with the sea plane landing area. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SeaplaneRampCenterline

Geometry Type: Line Accuracy: +/-5Ft. Sensitivity: Restricted

The centerline of ramps specifically designed to transit seaplanes from land to water and vice versa. [Source: SDSFIE]

Attributes: SDSFIE Entity sea_plane_ramp_centerline

seaplnr_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SeaplaneRampSite

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

Ramps specifically designed to transit seaplanes from land to water and vice versa. [Source: SDSFIE]

Attributes: SDSFIE Entity sea_plane_ramp_site

seaplnr_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.

user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Security

SecurityArea

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Secret

An area of the airport in which security measures required by 49CFR1542.201 must be carried out [Source:

Attributes: SDSFIE Entity none

securityarea_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SecurityCheckPoint

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Top Secret

Location where security screening procedures are in effect.

Attributes: SDSFIE Entity none

SecurityCheckPoint_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SecurityPerimeterLine

Geometry Type: Polygon Accuracy: +/-10Ft. Sensitivity: Confidential

Any type of perimeter, such as barbed wire, high fences, motion detectors and armed guards at gates, that ensure no unauthorized visitors can gain entry. [Source: SDSFIE]

Attributes: SDSFIE Entity security_perimeter_line

secper_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.
narrative (String254)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

SIDA

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Secret

Portions of an airport, specified in the airport security program, in which security measures required by regulation must be carried out. This area includes the security area and may include other areas of the airport. [Source: DHS]

Attributes:	<i>SDSFIE Entity</i>	<i>none</i>
sida_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.	
feat_desc (String254)	Description of the feature.	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

SterileArea

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Secret

Portions of an airport defined in the airport security program that provide passengers access to boarding aircraft and to which the access is generally controlled by TSA, an aircraft operator, or a foreign air carrier. [Source: DHS]

Attributes:	<i>SDSFIE Entity</i>	<i>none</i>
sterilearea_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
name (String40)	Name of the feature.	
feat_desc (String254)	Description of the feature.	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key.	Used to link the record to the applicable feature level metadata record(s).

Group: Surface Transportation

Bridge

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

A structure used by vehicles that allows passage over or under an obstacle such as a river, chasm, mountain, road or railroad. [Source: SDSFIE]

Attributes:	<i>SDSFIE Entity</i>	<i>road_bridge_area</i>
bridge_id (Number*)	Primary Key.	A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	Any commonly used name for the bridge.	[Source: SDSFIE Feature Table]
road_name (String50)	Name of road bridge connects	[Source: HJAIA GIS ALP Standard - 5/29/]
road_name (String50)	Name of cross road under bridge, if any	[Source: HJAIA GIS ALP Standard - 5/29/]
narrative (String254)	This attribute field is used to identify the datum from which the vertical clearance information is referenced and to calculate actual vertical clearance.	[Source: SDSFIE Feature Table]
brdg_typ_d (Enumeration16)	The fundamental structure type of the bridge.	[Source: SDSFIE Feature Table]
elevation (Real)	Finished elevation of highest point of bridge	[Source: HJAIA GIS ALP Standard - 5/29/]
class (String50)	Classification of bridge	[Source: HJAIA GIS ALP Standard - 5/29/]
vert_clr (Real)	The clearance in feet between the lowest point under the bridge opening and the water's surface at Mean High Water (MHW).	[Source: SDSFIE Feature Table]
brdg_ht (Real)	The clearance of the bridge structure; i.e. the height beneath the structure of the bridge.	[Source: SDSFIE Feature Table]
brdg_len (Real)	The total length of the span of the bridge.	[Source: SDSFIE Feature Table]

lightingType_d (Enumeration16)	Table] A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
markingFeatureType_d	The type of the marking
color_d (Enumeration16)	The color of the marking
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

DrivewayArea

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Restricted

An access to a residence or other vehicle parking lot or storage area. [Source: SDSFIE]

Attributes: SDSFIE Entity driveway_area

drvway_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
surf_mat_d (Enumeration16)	The material used as a surface for the driveway. [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

DrivewayCenterline

Geometry Type: Line

Accuracy: +/-10Ft.

Sensitivity: Restricted

The center of the driveway as measured from the edge of the paved surface. The segments of a driveway centerline will coincide with the road segments in order to provide network connectivity. [Source: SDSFIE]

Attributes: SDSFIE Entity none

drivewaycenterline_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_desc (String254)	Description of the feature.
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

GuardRails

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Restricted

Location of a road guard rail.

Attributes: SDSFIE Entity none

GuardRails_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

JerseyBarriers

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

Location of jersey barriers along a road.

Attributes: SDSFIE Entity none

JerseyBarriers_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

LandsideSign

Geometry Type: Point Accuracy: +/-5Ft. Sensitivity: Restricted

Signs outside of a building and not on the airfield.

Attributes: SDSFIE Entity none

haulRoute_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
island_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
LandsideSign_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
stagingArea_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type.
name (String60)	Common name associated with the feature. [Source: HJAIA]
name (String60)	Common name associated with the feature. [Source: HJAIA]
name (String60)	Common name associated with the feature. [Source: HJAIA]
name (String60)	Common name associated with the feature. [Source: HJAIA]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not affect the subject item's data integrity and should not be used to store the subject item's data. [Source: SDSFIE]
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

ParkingLot

Geometry Type: Polygon Accuracy: +/-5Ft. Sensitivity: Restricted

An area of an airport used for parking of automobiles, buses, etc. [Source: SDSFIE]

Attributes: SDSFIE Entity vehicle_parking_area

parking_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	Any commonly used name for the parking area. [Source: SDSFIE Feature Table]
feat_desc (String254)	A description of the parking lot. [Source: SDSFIE Feature Table]
park_use_d (Enumeration16)	The primary use of the parking area. [Source: SDSFIE Feature Table]
srf_typ_d (Enumeration16)	Type of different materials used to construct the surface. [Source: SDSFIE Feature Table]
tot_spaces (Integer)	The total parking spaces available in the area including handicapped or reserved spaces. [Source: SDSFIE Feature Table]
num_hndcp (Real)	The total number of spaces marked as being handicapped parking. [Source: SDSFIE Feature Table]
owner_d (Enumeration16)	The owner of the parking lot [Source: AirMAT]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RailroadCenterline

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Confidential

Represents the centerline of each pair of rails [Source: ANSI: Data Content Standards For Transportation Networks:

Attributes:

SDSFIE Entity railroad_centerline

railrd_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String30)	Any commonly used name for the railroad [Source: SDSFIE Feature Table]
type (String50)	Type of rail (heavy, light, commuter, etc) [Source: HJAIA GIS ALP Standard - 5/29/]
remarks (String254)	Any narrative remarks concerning the railroad. [Source: SDSFIE Feature Table]
use_d (Enumeration16)	The current status as to whether the railroad segment is being used. [Source: SDSFIE Feature Table]
numTracks (Integer)	The number of tracks present
owner_d (Enumeration16)	The owner of the rail track [Source: AirMAT]
bridge_d (Boolean)	Indicates given road segment is bridge (Y- a is bridge, N-is not a bridge). [Source: SDSFIE Feature Table]
tunnel_d (Boolean)	Indicates given road segment is tunnel (Y- is a tunnel, N-is not a tunnel). [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RailroadYard

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

Represents a railroad yard [Source: ANSI: Data Content Standards For Transportation Networks: Roads]

Attributes:

SDSFIE Entity railroad_yard_area

ryard_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
yard_name (String60)	A name that represent the railroad yard. [Source: SDSFIE Feature Table]
feat_desc (String254)	Any brief description of the feature. [Source: SDSFIE Feature Table]

owner_d (Enumeration16)	The owner of the rail yard [Source: AirMAT]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RoadCenterline

Geometry Type: Line

Accuracy: +/-5Ft.

Sensitivity: Confidential

The center of the roadway as measured from the edge of the paved surface. The segments of a road centerline will coincide with the road segments in order to have similar characteristics. [Source: SDSFIE]

Attributes:

SDSFIE Entity road_centerline

cline_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
feat_name (String40)	Any commonly used name for the road centerline. [Source: SDSFIE Feature Table]
alt_name (String35)	The alternate name or second name for the road. [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
rou1_name (String30)	The route number or other identifier that is affiliated with the first route type [Source: SDSFIE Feature Table]
rou1_typ_d (Enumeration16)	The first route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]
rou2_name (String30)	The route number or other identifier that is affiliated with the second route type [Source: SDSFIE Feature Table]
rou2_typ_d (Enumeration16)	The second route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]
rou3_name (String30)	The number or other identifier that is affiliated with the third route type [Source: SDSFIE Feature Table]
rou3_typ_d (Enumeration16)	The third route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]
use_typ_d (Enumeration16)	The current usage status of the road [Source: SDSFIE Feature Table]
feat_len (Real)	The overall length of the road centerline. [Source: SDSFIE Feature Table]
num_lanes (Real)	The number of normal traffic lanes throughout the length of the centerline. [Source: SDSFIE Feature Table]
bridge_d (Boolean)	Indicates given road segment is bridge ("Y"- a is bridge, "N"-is not a bridge). [Source: SDSFIE Feature Table]
tunnel_d (Boolean)	Indicates given road segment is tunnel ("Y"- is a tunnel, "N"-is not a tunnel). [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RoadPoint

Geometry Type: Point

Accuracy: +/-10Ft.

Sensitivity: Confidential

A point along the roadway which has some special significance either for starting or ending a road segment or for representing a significant position along the roadway system such as the start or center of a bridge or the center of an intersection [Source: ANSI: Data Content Standards For Transportation Networks: Roads*]

Attributes:

SDSFIE Entity none

roadpoint_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.

meta_id (Integer)

Foreign Key. Used to link the record to the applicable feature level metadata record(s).

RoadSegment

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Confidential

A section of the road system designed for, or the result of, human or vehicular movement; must be continuous (no gaps) and cannot branch; no mandates are provided on how to segment the road system except that data providers adopt a consistent method [Source: ANSI: Data Content Standards For Transportation Networks: Roads*]

Attributes:

	<i>SDSFIE Entity</i>	<i>road_site</i>
rd_seg_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
road_name (String30)	A common name or street name used to refer to the stretch of road. [Source: SDSFIE Feature Table]	
alt_name (String30)	The alternate name or second name for the road. [Source: SDSFIE Feature Table]	
feat_desc (String254)	A general description of the road. [Source: SDSFIE Feature Table]	
srf_typ_d (Enumeration16)	Type of material used to construct the surface. [Source: SDSFIE Feature Table]	
rou1_name (String30)	The route number or other identifier that is affiliated with the first route type [Source: SDSFIE Feature Table]	
rou1_typ_d (Enumeration16)	The first route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]	
rou2_name (String30)	The route number or other identifier that is affiliated with the second route type [Source: SDSFIE Feature Table]	
rou2_typ_d (Enumeration16)	The second route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]	
rou3_name (String30)	The number or other identifier that is affiliated with the third route type [Source: SDSFIE Feature Table]	
rou3_typ_d (Enumeration16)	The third route type for the road (Interstate, US, State, etc.) [Source: SDSFIE Feature Table]	
seg_len (Real)	The length of the road segment measured at the centerline. [Source: SDSFIE Feature Table]	
seg_width (Real)	The average width of the road segment. [Source: SDSFIE Feature Table]	
num_lanes (Real)	The total number of lanes of traffic, counting both directions, not including turning lanes. [Source: SDSFIE Feature Table]	
bridge_d (Boolean)	Indicates given road segment is bridge (Y- a is bridge, N-is not a bridge). [Source: SDSFIE Feature Table]	
tunnel_d (Boolean)	Indicates given road segment is tunnel (Y- is a tunnel, N-is not a tunnel). [Source: SDSFIE Feature Table]	
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.	
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).	

Sidewalk

Geometry Type: Line

Accuracy: +/-10Ft.

Sensitivity: Restricted

A paved or concrete pad used as a pedestrian walkway. Usually is composed of one or more SideWalkSegments. [Source: SDSFIE]

Attributes:

	<i>SDSFIE Entity</i>	<i>pedestrian_sidewalk_area</i>
walk_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]	
walk_use (String26)	A short description of the primary use of the sidewalk. [Source: SDSFIE Feature Table]	
walk_desc (String254)	A brief description of any special characteristics of the sidewalk. [Source: SDSFIE Feature Table]	
pri_matl_d (Enumeration16)	Primary material used in the sidewalk and/or trail. [Source: SDSFIE Feature Table]	

sec_len (Real)	The overall length of the sidewalk section. [Source: SDSFIE Feature Table]
sec_width (Real)	The mean width of the sidewalk section. [Source: SDSFIE Feature Table]
ada_acc_d (Boolean)	Boolean indicating whether or not the walkway is in compliance with the American Disabilities Act. [Source: SDSFIE Feature Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Tunnel

Geometry Type: Polygon

Accuracy: +/-5Ft.

Sensitivity: Restricted

The area of a transportation passage, open at both ends, used to provide access through or under a natural obstacle [Source: SDSFIE]

Attributes:

SDSFIE Entity tunnel_area

tunnel_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
tun_typ_d (Enumeration16)	The code that represents the type of tunnel [Source: SDSFIE Feature Table]
vert_clr (Real)	Indicates the actual vertical clearance to the top of the tunnel imposed by any restrictions (measured in meters). [Source: SDSFIE Feature Table]
feat_desc (String254)	Description of the feature.
avg_ht (Real)	The average height of the tunnel. [Source: SDSFIE Feature Table]
avg_wd (Real)	The average width of the tunnel. [Source: SDSFIE Feature Table]
tunnel_len (Real)	The length of the tunnel. [Source: SDSFIE Feature Table]
lightingType_d (Enumeration16)	A description of the lighting system. Lighting system classifications are Approach; Airport; Runway; Taxiway; and Obstruction
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

Group: Other

OtherLine

Geometry Type: Line

Accuracy: +/-10Ft.

Sensitivity: Restricted

Other polygon features not elsewhere classified

Attributes:

SDSFIE Entity none

otherline_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
featureType (String40)	The type of feature
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

OtherPoint

Geometry Type: Point

Accuracy: +/-10Ft.

Sensitivity: Restricted

Other line features not elsewhere classified

Attributes:

SDSFIE Entity none

otherpoint_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
featureType (String40)	The type of feature
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

OtherPolygon

Geometry Type: Polygon

Accuracy: +/-10Ft.

Sensitivity: Restricted

Other point features not elsewhere classified

Attributes:

SDSFIE Entity none

otherpolygon_id (Number*)	Primary Key. A globally unique identifier assigned to the instance of a feature type. [Source: FAA Airports GIS]
featureType (String40)	The type of feature
narrative (String240)	A description or other unique information concerning the subject item, limited to 240 characters. [Source: SDSFIE Attribute Table]
user_flag (String254)	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
meta_id (Integer)	Foreign Key. Used to link the record to the applicable feature level metadata record(s).

APPENDIX B - DOMAIN VALUES

This appendix lists the acceptable domain values for each of the attributes bound by list domains in Appendix A. Each list of acceptable values is an enumeration, which means that one of the values must be selected in order to be compliant with the standard. For each value, a definition along with any applicable source information is provided.

agl_u_d, cbldia_u_d, depth_u_d,

Value	Definition (Notes) [Source]
ANGSTROM	A unit of length equal to 0.1 nanometer. [SDSFIE V2.5 SI]
CABL N	Cable lengths - 720 feet. [SDSFIE V2.5]
CH	Chains - 66 feet or 100 links (Gunter). [SDSFIE V2.5]
CM	Centimeters. [SDSFIE V2.5 ISO10001-3.1]
DM	A unit of distance in the metric system equal to 1/10 of a meter. [SDSFIE
EM	EMS - 0.166667 inches. [SDSFIE V2.5]
EN	ENS - 0.083333 inches. [SDSFIE V2.5]
FATHOM	Fathoms - 6 feet. [SDSFIE V2.5]
FT	Feet - 0.3048006 meters. [SDSFIE V2.5 ANSI3.50-1986]
FURLONG	Furlongs - 0.125 miles or 40 rods (Gunter). [SDSFIE V2.5]
HAND	Hands - 4 inches, 10.160 centimeters. [SDSFIE V2.5]
HM	Hectometer. [SDSFIE V2.5]
IN	Inches - 0.126263 links (Gunter) or 2.54 centimeters. [SDSFIE V2.5
INTERNATIONAL_FT	ANSIX3.50-1986]
KM	1 meter = 3.280839895 International Feet. [SDSFIE V2.5 NGS]
KNOT	Kilometers - 0.53961 miles or 3280.8 feet. [SDSFIE V2.5 ISO10001-3.1]
LEAGUE	A single nautical mile or 1.1516 statute miles. [SDSFIE V2.5]
LINK	League - 3 statute miles or 4.8280 kilometers. [SDSFIE V2.5]
M	Links - 7.92 inches or 0.04 rods (Gunter). [SDSFIE V2.5]
MI	Meters - 1.093614 yards or 39.3701 inches. [SDSFIE V2.5
MIL	Miles - 80 chains (Gunter) or 320 rods. [SDSFIE V2.5 ANSI3.50-1986]
MM	MILS - 0.001 inches. [SDSFIE V2.5]
MYM	Millimeters - 0.03937 inches. [SDSFIE V2.5 ISO10001-3.1]
NLEAGUE	Myriameters - 6.21372 miles. [SDSFIE V2.5]
NM	Nautical leagues - 3 nautical miles or 5.5597 kilometers. [SDSFIE V2.5]
NMI	A distance of one billionth of a meter. [SDSFIE V2.5 SI]
PICA	Nautical miles - 1.1516 statute miles. [SDSFIE V2.5 ANSI3.50-1986]
POINT	Picas - 0.166666 inches or 12 points. [SDSFIE V2.5]
ROD	point - 0.1384 inches [SDSFIE V2.5]
UM	Rods - 0.25 chains (Gunter) or 5.5 yards. [SDSFIE V2.5 ANSI3.50-1986]
US_SURVEY_FT	Micrometers - 0.00003937 inches. [SDSFIE V2.5]
YD	1 meter = 3.28083333 US survey feet. [SDSFIE V2.5 NGS]
	A unit of distance equal to 3 feet or 0.9144 meter. [SDSFIE V2.5 SI ANSI]

airp_typ_d

Value	Definition (Notes) [Source]
A	Transducer [SDSFIE V2 Austin and Pitts]
AIRFLOW_B	Meter Panel Component [SDSFIE V2 Austin and Pitts]
ALARM_PIPE	Meter Panel Component [SDSFIE V2 Austin and Pitts]
AV	Automatic Shut-Off Valve [SDSFIE V2 Austin and Pitts]
B	By-Pass [SDSFIE V2 Austin and Pitts]
BV	By-Pass Valve [SDSFIE V2 Austin and Pitts]
C	Pressure Contactor [SDSFIE V2 Austin and Pitts]
CA_3131	Gas Feeder Pipe [SDSFIE V2 Austin and Pitts]
CD	Compressed Dry Air Source [SDSFIE V2 Austin and Pitts]
CO	Central Office [SDSFIE V2 Austin and Pitts]
CT	Pressure Contactor Terminal [SDSFIE V2 Austin and Pitts]
DBV	Dual (Shutoff) Valve. [SDSFIE V2.5 AIR FORCE]
E	Pressure Contactor [SDSFIE V2 Austin and Pitts]
GT	Gas-Tight Cable Terminal [SDSFIE V2 Austin and Pitts]
GT_500CFD	Air Dryer (>500 Cfd) [SDSFIE V2 Austin and Pitts]
LT_500CFD	Air Dryer (<500 Cfd) [SDSFIE V2 Austin and Pitts]
M	Flow Meter [SDSFIE V2 Austin and Pitts]
M_262	Manifold [SDSFIE V2 Austin and Pitts]

MF	Pipe Manifold [SDSFIE V2 Austin and Pitts]
MODEL_3000	Compressor Dehydrator [SDSFIE V2 Austin and Pitts]
MP	Meter Panel [SDSFIE V2 Austin and Pitts]
P	Pressure Plug [SDSFIE V2 Austin and Pitts]
PRESS_C	Transducer [SDSFIE V2 Austin and Pitts]
R	Pressure Regulator [SDSFIE V2 Austin and Pitts]
RV	Excessive Pressure Relief Valve [SDSFIE V2 Austin and Pitts]
T	Gas-Tight Cable Terminal [SDSFIE V2 Austin and Pitts]
TD	Pressure Transducer [SDSFIE V2 Austin and Pitts]
V	Pressure Testing Valve [SDSFIE V2 Austin and Pitts]
VALVE_750	Transducer [SDSFIE V2 Austin and Pitts]
VALVE_BLK	Pressure [SDSFIE V2 Austin and Pitts]
VALVE_C	Pressure [SDSFIE V2 Austin and Pitts]
VT	Cable Vent [SDSFIE V2 Austin and Pitts]
amp_typ_d, attn_typ_d, imp_typ_d	
Value	Definition (Notes) [Source]
CATV	Cable Television Amplifier [SDSFIE V2 Tinker Air Force Base]
OTHER	Other [SDSFIE V2]
PHONE_LINE_AMP	Telephone Line Amplifier [SDSFIE V2 Tinker Air Force Base]
RADIO	Radio [SDSFIE V2 Tinker Air Force Base]
TBD	To Be Determined [SDSFIE V2 Tinker Air Force Base]
UNKNOWN	Unknown [SDSFIE V2]
VIDEO	Video Amplifier [SDSFIE V2 Tinker Air Force Base]
anch_typ_d	
Value	Definition (Notes) [Source]
GUIDE_ANCHOR	guide anchor [SDSFIE V2.1 FGDC Utilities Classification]
RIGID_ANCHOR	rigid anchor [SDSFIE V2.1 FGDC Utilities Classification]
ant_rad_d	
Value	Definition (Notes) [Source]
DIRECTIONAL	Directional Antenna. [SDSFIE V2.5 AIR FORCE]
LOS	Line of Sight. [SDSFIE V2.5 AIR FORCE]
OMNI	Omnidirectional Antenna. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
ant_ty_d	
Value	Definition (Notes) [Source]
DIPOLE	dipole antenna [SDSFIE V2 Tinker Air Force Base]
FIELD	field antenna [SDSFIE V2 Tinker Air Force Base]
PARABOLIC	parabolic antenna [SDSFIE V2 Tinker Air Force Base]
PATCH	Directional Patch Antenna. [SDSFIE V2.5 AIR FORCE]
YAGI	Directional Yagi Antenna. [SDSFIE V2.5 AIR FORCE]
ant_use_d	
Value	Definition (Notes) [Source]
14_DF	14 element dual frequency. [SDSFIE V2.31 Air Force]
14_SF	14 element single frequency. [SDSFIE V2.31 Air Force]
8_DF	8 element dual frequency. [SDSFIE V2.31 Air Force]
8_SF	8 element single frequency. [SDSFIE V2.31 Air Force]
CAPTURE	Capture. [SDSFIE V2.31 Air Force]
NULL	Null. [SDSFIE V2.31 Air Force]
RANTEC	Rantec. [SDSFIE V2.31 Air Force]
ROTATING	Rotating. [SDSFIE V2.31 Air Force]
SIDEBAND	Sideband. [SDSFIE V2.31 Air Force]
aplace_d	
Value	Definition (Notes) [Source]
EXTENDED	Extended and not in or on cable sheath. [SDSFIE V2.5 AIR FORCE]
ON_BYPASS	On the bypass. [SDSFIE V2.5 AIR FORCE]
ON_CASE	On the case. [SDSFIE V2.5 AIR FORCE]
ON_SHEATH	On or in sheath. [SDSFIE V2.5 AIR FORCE]
ON_SLEEVE	On the lead sleeve. [SDSFIE V2.5 AIR FORCE]
ON_STUB	Located on a stub and not in or on the cable sheath. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
armor_ty_d, bank_arm_d	

Value	Definition (Notes) [Source]
ASPHALT	asphalt [SDSFIE V1.4]
CEMENTD_STONE	cemented stones [SDSFIE V1.4]
CONCRETE_LINED	concrete lined [SDSFIE V1.4]
DUMP_BRICK_CONC	dumped brick and concrete [SDSFIE V1.4]
DUMPED_ROCK	dumped rocks [SDSFIE V1.4]
FORMEDLINING	formed channel lining [SDSFIE V1.4]
GABIONS	gabions [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PILEDIKE	pile dike [SDSFIE V1.4]
PLACED_STONE	placed stone [SDSFIE V1.4]
SAND_CEMNBGR	sand cement/bag riprap [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WILLOW_MAT	willow mat [SDSFIE V1.4]

asph_u_d, cap_c_u_d, cap_h_u_d,

Value	Definition (Notes) [Source]
BBL_D	A rate equal to one barrel per day. [SDSFIE V2.5 SI ANSI]
BBL_HR	A rate equal to one barrel per hour. [SDSFIE V2.5 SI ANSI]
BBL_MO	A rate equal to one barrel per month. [SDSFIE V2.5 SI ANSI]
BTU_D	The quantity of heat generated in a day that raises the temperature of one pound of water by one degree Fahrenheit. [SDSFIE V2.5 SI ANSI]
BTU_HR	The quantity of heat generated in an hour that raises the temperature of one pound of water by one degree Fahrenheit. [SDSFIE V2.5]
BTU_MIN	The quantity of heat generated in a minute that raises the temperature of one pound of water by one degree Fahrenheit. [SDSFIE V2.5]
BTU_SEC	The quantity of heat generated in a second that raises the temperature of one pound of water by one degree Fahrenheit. [SDSFIE V2.5]
C_HR	Degrees Celsius per hour. [SDSFIE V2.5]
C_MIN	Degrees Celsius per minute. [SDSFIE V2.5]
C_SEC	Degrees Celsius per second. [SDSFIE V2.5]
CC_HR	Cubic centimeters per hour. [SDSFIE V2.5]
CC_MIN	Cubic centimeters per minute. [SDSFIE V2.5]
CC_SEC	Cubic centimeters per second. [SDSFIE V2.5]
CF_HR	Cubic feet per hour. [SDSFIE V2.5]
CF_MIN	Cubic feet per minute. [SDSFIE V2.5]
CF_SEC	Cubic feet per second. [SDSFIE V2.5]
CI_HR	Cubic inches per hour. [SDSFIE V2.5]
CI_MIN	Cubic inches per minute. [SDSFIE V2.5]
CI_SEC	Cubic inches per second. [SDSFIE V2.5]
CM_DA	Centimeters per day. [SDSFIE V2.5]
CM_HR	Centimeters per hour. [SDSFIE V2.5]
CM_SEC	A unit of speed equal to one centimeter covered in one second. [SDSFIE V2.5 SI ANSI]
CM_YR	Centimeters per year. [SDSFIE V2.5]
CM3_HR	One cubic centimeter per hour. [SDSFIE V2.5 SI ANSI]
CM3_MIN	One cubic centimeter per minute. [SDSFIE V2.5 SI ANSI]
CM3_SEC	One cubic centimeter per second. [SDSFIE V2.5 SI ANSI]
D_MO	A rate equal to one day per month. [SDSFIE V2.5 SI ANSI]
D_WK	A rate equal to one day per week. [SDSFIE V2.5 SI ANSI]
DALB_YR	A rate equal to ten pounds per year. [SDSFIE V2.5 SI ANSI]
DEG_C_HR	The rate at which temperature is changing in degrees Celsius in an hour. [SDSFIE V2.5 SI ANSI]
DEG_F_HR	The rate at which temperature is changing in degrees Fahrenheit in an hour. [SDSFIE V2.5 SI ANSI]
F_HR	Degrees Fahrenheit per hour. [SDSFIE V2.5]
F_MIN	Degrees Fahrenheit per minute. [SDSFIE V2.5]
F_SEC	Degrees Fahrenheit per second. [SDSFIE V2.5]
FT_D	A unit of speed equal to one foot covered in one day. [SDSFIE V2.5 SI]
FT_DAY	Feet per day. [SDSFIE V2.5]
FT_HR	Feet per hour. [SDSFIE V2.5]
FT_MIN	Feet per minute. [SDSFIE V2.5]
FT_MO	Feet per month. [SDSFIE V2.5]
FT_SEC	A unit of speed equal to one foot covered in one second. [SDSFIE V2.5 SI]
FT_WK	Feet per week. [SDSFIE V2.5]
FT_YR	Feet per year. [SDSFIE V2.5]
FT3_D	A flow rate equal to one cubic foot in one day. [SDSFIE V2.5 SI ANSI]
FT3_MIN	A flow rate equal to one cubic foot in one minute. [SDSFIE V2.5 SI ANSI]
FT3_SEC	A flow rate equal to one cubic foot in one second. [SDSFIE V2.5 SI ANSI]

G_D	A rate equal to a gram per day. [SDSFIE V2.5 SI ANSI]
G_HR	Grams per hour. [SDSFIE V2.5]
G_M2_D	A production rate equal to one gram in a square meter in a day. [SDSFIE
G_M2_HR	A production rate equal to one gram in a square meter in an hour. [SDSFIE V2.5 SI]
G_M3_D	A production rate equal to one gram in a cubic meter in a day. [SDSFIE
G_M3_HR	A production rate equal to one gram in a cubic meter in an hour. [SDSFIE
G_MIN	Grams per minute. [SDSFIE V2.5]
G_SEC	Grams per second. [SDSFIE V2.5]
G_YR	A rate equal to one gram per year. [SDSFIE V2.5 SI ANSI]
GAL_D	A rate equal to one gallon per day. [SDSFIE V2.5 SI ANSI]
GAL_HR	A rate equal to one gallon per hour. [SDSFIE V2.5 SI ANSI]
GAL_MIN	A rate equal to one gallon per minute. [SDSFIE V2.5 SI ANSI]
GAL_MO	A rate equal to one gallon per month. [SDSFIE V2.5 SI ANSI]
GAL_SEC	A rate equal to one gallon per second. [SDSFIE V2.5 SI ANSI]
GAL_WK	A rate equal to one gallon per week. [SDSFIE V2.5 SI ANSI]
GAL_YR	A rate equal to one gallon per year. [SDSFIE V2.5 SI ANSI]
GBTU	The quantity of heat generated equal to a billion British thermal Units. [SDSFIE V2.5 SI]
GBTU_D	The quantity of heat generated in a day equal to a billion British Thermal Units. [SDSFIE V2.5 SI ANSI]
GBTU_HR	The quantity of heat generated in an hour equal to a billion British Thermal Units. [SDSFIE V2.5 SI ANSI]
GPD	Gallons per day. [SDSFIE V2.5]
GPH	Gallons per hour. [SDSFIE V2.5]
GPM	Gallons per minute. [SDSFIE V2.5]
GPS	Gallons per second. [SDSFIE V2.5]
HR_D	Hours per day. [SDSFIE V2.5 SI ANSI]
HR_MO	Hours per month. [SDSFIE V2.5 SI ANSI]
HR_WK	Hours per week. [SDSFIE V2.5 SI ANSI]
HR_YR	Hours per year. [SDSFIE V2.5 SI ANSI]
IN_D	A unit of speed equal to one inch covered in one day. [SDSFIE V2.5 SI
IN_DAY	Inches per day. [SDSFIE V2.5]
IN_HG	Inches of mercury. [SDSFIE V2.5]
IN_HR	A unit of speed equal to one inch covered in one hour. [SDSFIE V2.5]
IN_MIN	Inches per minute. [SDSFIE V2.5]
IN_MO	Inches per month. [SDSFIE V2.5]
IN_SEC	Inches per second. [SDSFIE V2.5]
IN_WK	Inches per week. [SDSFIE V2.5]
IN_YR	Inches per year. [SDSFIE V2.5]
K_HR	Degrees Kelvin per hour. [SDSFIE V2.5]
K_MIN	Degrees Kelvin per minute. [SDSFIE V2.5]
K_SEC	Degrees Kelvin per second. [SDSFIE V2.5]
KG_D	A rate equal to one thousand grams per day. [SDSFIE V2.5 SI ANSI]
KG_FT3_SEC	A production rate equal to one kilogram per cubic foot in a second. [SDSFIE V2.5 SI ANSI]
KG_HR	A rate equal to one thousand grams per hour. [SDSFIE V2.5]
KG_MIN	Kilograms per minute. [SDSFIE V2.5]
KG_MO	A rate equal to one thousand grams per month. [SDSFIE V2.5 SI ANSI]
KG_SEC	Kilograms per second. [SDSFIE V2.5]
KG_YR	A rate equal to one thousand grams per year. [SDSFIE V2.5 SI ANSI]
KGAL_D	A rate equal to one thousand gallons per day. [SDSFIE V2.5 SI ANSI]
KLB_HR	A rate equal to one thousand pounds per hour. [SDSFIE V2.5 SI ANSI]
KM_HR	A unit of speed equal to one thousand meters covered in one hour. [SDSFIE V2.5 SI ANSI]
KM_SEC	A unit of speed equal to one thousand meters covered in one second. [SDSFIE V2.5 SI ANSI]
L_D	A rate equal to one liter per day. [SDSFIE V2.5 SI ANSI]
L_HR	A rate equal to one liter per hour. [SDSFIE V2.5]
L_MIN	A rate equal to one liter per minute. [SDSFIE V2.5]
L_SEC	A rate equal to one liter per second. [SDSFIE V2.5]
LB_ARC_YR	A rate equal to one pound in an acre in a year. [SDSFIE V2.5 SI ANSI]
LB_D	A rate equal to one pound per day. [SDSFIE V2.5 SI ANSI]
LB_DAY	Pounds per day. [SDSFIE V2.5]
LB_FT3_SEC	A rate equal to one pound per cubic foot in a second. [SDSFIE V2.5 SI
LB_HR	A rate equal to one pound per hour. [SDSFIE V2.5]
LB_MGAL_D	A rate equal to one pound per million gallons per day. [SDSFIE V2.5 SI
LB_MIN	A rate equal to one pound per minute. [SDSFIE V2.5]
LB_MO	A rate equal to one pound per month. [SDSFIE V2.5 ANSI]
LB_MONTH	Pounds per month. [SDSFIE V2.5]

LB_SEC	Pounds per second. [SDSFIE V2.5]
LB_WK	A rate equal to one pound per week. [SDSFIE V2.5]
LB_YR	A rate equal to one pound per year. [SDSFIE V2.5]
M_HR	Meters per hour. [SDSFIE V2.5]
M_MIN	Meters per minute. [SDSFIE V2.5]
M_SEC	A unit of speed equal to one meter covered in one second. [SDSFIE V2.5]
M3_D	A flow rate equal to one cubic meter in one day. [SDSFIE V2.5 SI ANSI]
M3_HR	A flow rate equal to one cubic meter in one hour. [SDSFIE V2.5 SI ANSI]
M3_MIN	A flow rate equal to one cubic meter in one minute. [SDSFIE V2.5 SI]
M3_MO	A flow rate equal to one cubic meter in one month. [SDSFIE V2.5 SI]
M3_SEC	A flow rate equal to one cubic meter in one second. [SDSFIE V2.5 SI]
M3_WK	A flow rate equal to one cubic meter in one week. [SDSFIE V2.5 SI ANSI]
M3_YR	A flow rate equal to one cubic meter in one year. [SDSFIE V2.5 SI ANSI]
MACH	Mach (speed of sound). [SDSFIE V2.5]
MBTU_D	The quantity of heat generated in one day equal to a million British Thermal Units. [SDSFIE V2.5 SI ANSI]
MBTU_HR	The quantity of heat generated in an hour equal to a million British Thermal Units. [SDSFIE V2.5 SI ANSI]
MG_D	A rate equal to one thousandth of a gram per day. [SDSFIE V2.5 SI ANSI]
MG_M2_D	A production rate equal to one thousand grams in a square meter in a day. [SDSFIE V2.5 SI]
MG_M2_HR	A production rate equal to one thousand grams in a square meter in an hour. [SDSFIE V2.5 SI]
MG_M3_D	A production rate equal to one thousand grams in a cubic meter in a day. [SDSFIE V2.5 SI]
MG_M3_HR	A production rate equal to one thousand grams in a cubic meter in an hour. [SDSFIE V2.5 SI]
MGAL_D	A rate equal to one million gallons per day. [SDSFIE V2.5 SI ANSI]
MGAL_D_FT3_SEC	A rate equal to one million gallons per day per cubic foot per second. [SDSFIE V2.5 SI ANSI]
MGAL_D_M3_SEC	A rate equal to one million gallons per day per cubic meter per second. [SDSFIE V2.5 SI ANSI]
MGAL_DAY	Million gallons per day. [SDSFIE V2.5]
MGAL_MO	A rate equal to one million gallons per month. [SDSFIE V2.5 SI ANSI]
MGAL_YR	A rate equal to one million gallons per year. [SDSFIE V2.5 SI ANSI]
MI_H	A unit of speed equal to one mile covered in one hour. [SDSFIE V2.5 SI]
MIN_D	Minutes per day. [SDSFIE V2.5 SI ANSI]
ML_L_HR	A rate equal to one thousandth of a liter in one liter in one hour. [SDSFIE V2.5 SI]
MLB_D	A rate equal to one thousandth of a pound per day. [SDSFIE V2.5 SI]
MLB_YR	A rate equal to one million pounds per year. [SDSFIE V2.5 SI ANSI]
MPH	Miles per hour. [SDSFIE V2.5]
OZPM3	Ounces per cubic meter. [SDSFIE V2.5]
OZPYD3	Ounces per cubic yard. [SDSFIE V2.5]
RN_IN_DAY	Rainfall in inches per day. [SDSFIE V2.5]
RN_IN_HR	Rainfall in inches per hour. [SDSFIE V2.5]
RN_IN_YEAR	Rainfall in inches per year. [SDSFIE V2.5]
SN_IN_DAY	Snowfall in inches per day. [SDSFIE V2.5]
SN_IN_HR	Snowfall in inches per hour. [SDSFIE V2.5]
SN_IN_YEAR	Snowfall in inches per year. [SDSFIE V2.5]
T_D	A rate equal to one metric ton per day. [SDSFIE V2.5 SI ANSI]
T_KM2_YR	A production rate equal to one metric ton in a square kilometer in a year. [SDSFIE V2.5 SI]
T_YR	A rate equal to one metric ton per year. [SDSFIE V2.5 SI ANSI]
TIMES_DAY	Times per day. [SDSFIE V2.5]
TIMES_HR	Times per hour. [SDSFIE V2.5]
TIMES_MIN	Times per minute. [SDSFIE V2.5]
TIMES_MO	Times per month. [SDSFIE V2.5]
TIMES_SEC	Times per second. [SDSFIE V2.5]
TIMES_WK	Times per week. [SDSFIE V2.5]
TIMES_YR	Times per year. [SDSFIE V2.5]
TNSH_DAY	Tons (short) per day. [SDSFIE V2.5]
TNSH_HR	Tons (short) per hour. [SDSFIE V2.5]
TNSH_MIN	Tons (short) per minute. [SDSFIE V2.5]
TNSH_MO	Tons (short) per month. [SDSFIE V2.5]
TNSH_SEC	Tons (short) per second. [SDSFIE V2.5]
TNSH_WK	Tons (short) per week. [SDSFIE V2.5]
TNSH_YEAR	Tons (short) per year. [SDSFIE V2.5]
TON_D	A rate equal to one short ton per day. [SDSFIE V2.5 SI ANSI]
TON_HR	A rate equal to one short ton per hour. [SDSFIE V2.5 SI ANSI]
TON_MO	A rate equal to one short ton per month. [SDSFIE V2.5 SI ANSI]

TON_WK	A rate equal to one short ton per week. [SDSFIE V2.5 SI ANSI]
TON_YR	A rate equal to one short ton per year. [SDSFIE V2.5 SI ANSI]
UG_D	A rate equal to one millionth of a gram per day. [SDSFIE V2.5 SI ANSI]
UNITPFT3	Units per cubic foot. [SDSFIE V2.5]
UNITPM3	Units per cubic meter. [SDSFIE V2.5]
UNITPYD3	Units per cubic yard. [SDSFIE V2.5]

avgpwr_u_d, hp_u_d, pekpwr_u_d,

Value	Definition (Notes) [Source]
BOILER_HP	Boiler horsepower, 33,520 BTU per hour, measure of heating ability. [SDSFIE V2.5]
BTU	British thermal unit - energy. [SDSFIE V2.5]
ERG	Erg - energy. [SDSFIE V2.5]
EV	Electronvolt - energy. [SDSFIE V2.5]
FTLBF	A unit of work equal to the work done by a force of one pound acting through a distance of one foot in the direction of the force. [SDSFIE V2.5]
HP	Horsepower - power. [SDSFIE V2.5]
HP_HR	Horsepower hour - energy. [SDSFIE V2.5]
J	Joule - energy. [SDSFIE V2.5 ISO10003-26.1]
KJ	Kilojoule - energy. [SDSFIE V2.5 ISO10003-26.1]
KWH	Kilowatt hour - energy. [SDSFIE V2.5]
MBTU	The quantity of heat equal to one million British Thermal Units. [SDSFIE V2.5]
MW	A unit of power equal to one million watts. [SDSFIE V2.5 SI]
TONS	12,000 BTU per hour, measure of cooling ability. [SDSFIE V2.5]
W	Watt - power. [SDSFIE V2.5 ISO10005-49]
W_CM2	Watts per square centimeter - power per Area. [SDSFIE V2.5]

azimu_u_d, grade_u_d, mbrd_u_d,

Value	Definition (Notes) [Source]
ARCSEC	Arc seconds. [SDSFIE V2.5]
DDMMSS	Degrees:minutes:seconds. [SDSFIE V2.5]
DEG	Degrees. [SDSFIE V2.5 ANSI3.50-1986]
EW	East to West [SDSFIE V2.5]
GON	Grades. [SDSFIE V2.5 ISO10001-1]
MICRORAD	Microradians. [SDSFIE V2.5]
MILLIRAD	Milliradians. [SDSFIE V2.5]
MIN_ANGLE	A unit of angular measure equal to one sixtieth of a degree or 60 seconds. [SDSFIE V2.5 SI]
NESW	Northeast to Southwest. [SDSFIE V2.5]
NTOS	North to South. [SDSFIE V2.5]
NWSE	Northwest to Southeast. [SDSFIE V2.5]
QUAD	Quadrant. [SDSFIE V2.5 Air Force]
R	Rotation. [SDSFIE V2.5 SI]
RAD	Radians. [SDSFIE V2.5 ISO10001-1]
SEC_ANGLE	A unit of angular measure equal to one sixtieth of a minute of an arc. [SDSFIE V2.5 SI]
SENW	Southeast to Northwest. [SDSFIE V2.5]
SN	South to North. [SDSFIE V2.5]
SR	Steradians. [SDSFIE V2.5 ISO10001-2]
SWNE	Southwest to Northeast. [SDSFIE V2.5]
WE	West to East [SDSFIE V2.5]

band_u_d, freq_u_d, gain_u_d,

Value	Definition (Notes) [Source]
1	<1% [SDSFIE V1.75]
10	0.09 [SDSFIE V1.75]
11	0.1 [SDSFIE V1.75]
12	11-15% [SDSFIE V1.75]
13	16-20% [SDSFIE V1.75]
14	21-30% [SDSFIE V1.75]
15	>31% [SDSFIE V1.75]
2	0.01 [SDSFIE V1.75]
3	0.02 [SDSFIE V1.75]
4	0.03 [SDSFIE V1.75]
5	0.04 [SDSFIE V1.75]
6	0.05 [SDSFIE V1.75]
7	0.06 [SDSFIE V1.75]
8	0.07 [SDSFIE V1.75]
9	0.08 [SDSFIE V1.75]
AQLFPFT3	aquatic life per cubic foot [SDSFIE V1.75]
AQLFPIN3	aquatic life per cubic inch [SDSFIE V1.75]

AQLFPM3	aquatic life per cubic meter [SDSFIE V1.75]
AQLFPMI3	aquatic life per cubic mile [SDSFIE V1.75]
AQLFPYD3	aquatic life per cubic yard [SDSFIE V1.75]
ARTF_M2	artifacts per square meter [SDSFIE V1.75]
ARTF_YD2	artifacts per square yard [SDSFIE V1.75]
ARTIFACTPM3	artifacts per cubic meter [SDSFIE V1.75]
ARTIFACTPYD3	artifacts per cubic yard [SDSFIE V1.75]
BIOM_FT2	biomes per square foot [SDSFIE V1.75]
BIOM_M2	biomes per square meter [SDSFIE V1.75]
BIOM_YD2	biomes per square yard [SDSFIE V1.75]
CD	candela - luminous intensity [SDSFIE V1.75 ISO10006-29]
CI	curie - radioactivity [SDSFIE V1.75]
CI_D	A radioactivity emission rate equal to one curie in one day. [SDSFIE V1.8]
CI_ML	A radioactivity concentration equal to one curie in a milliliter. [SDSFIE]
DOLLARS	dollars [SDSFIE V1.75]
DPAS	A unit of viscosity equal to one tenth of a pascal second or one poise. [SDSFIE V1.8 SI ANSI]
DYN	dyne - force [SDSFIE V1.75]
EACH	each [SDSFIE V1.75]
F_CC	fibers per cubic centimeter (air - asbestos) [SDSFIE V1.75]
FAMILIES	families [SDSFIE V1.75]
FEETBERTH	feet of berthing [SDSFIE V1.75]
FIREPOINT	firing points [SDSFIE V1.75]
FRACTURESFPFT	fractures per foot [SDSFIE V1.75]
FREQUENCY	frequency [SDSFIE V1.75]
HALFLIFE	half life [SDSFIE V1.75]
HEADS	heads [SDSFIE V1.75]
JOINTS	joints [SDSFIE V1.75]
JTUS	Jackson Turbidity Units [SDSFIE V1.75]
KW	kilowatt - power [SDSFIE V1.75 ISO10005-9]
LANES	lanes [SDSFIE V1.75]
LB_HR_TON	A rate equal to one pound per hour per ton. [SDSFIE V1.8 SI ANSI]
LB_MWHR	A rate equal to one pound per megawatt-hour. [SDSFIE V1.8 SI ANSI]
LBF	A unit of force equal to a force of one pound acting between two bodies. [SDSFIE V1.8 SI ANSI]
LM	The unit of luminous flux equal to luminous flux emitted in a solid angle of one steradian by a uniform point source having an intensity of one candle. [SDSFIE V1.8 SI ANSI]
LM_FT2	The illumination of a surface one foot distant from a source of one candela, equal to one foot-candle. [SDSFIE V1.8 SI ANSI]
MDSTATIONS	physician stations [SDSFIE V1.75]
MINLAT	minutes of latitude [SDSFIE V1.75]
MOL	mole - amount of substance [SDSFIE V1.75 ISO10008-3]
N	Newton [SDSFIE V1.8 ANSI X3.50-1986 SI]
NOOPERATIONS	number of operations [SDSFIE V1.75]
OPERATEUNITS	operating units [SDSFIE V1.75]
OTHER	other [SDSFIE V1.75]
P_F_	power factor [SDSFIE V1.75]
PCI	A unit of radioactivity equal to one trillionth of a curie. [SDSFIE V1.8 SI]
PCI_D	A radioactivity emission rate equal to one trillionth of a curie in one day. [SDSFIE V1.8 SI ANSI]
PCI_L	A radioactive concentration equal to one trillionth of a curie in a liter. [SDSFIE V1.8]
PCI_MG	A radioactive concentration equal to one trillionth of a curie in a milligram. [SDSFIE V1.8 SI]
PCI_MIN	A radioactivity emission rate equal to one trillionth of a curie in one minute. [SDSFIE V1.8 SI ANSI]
PCI_ML	A radioactive concentration equal to one trillionth of a curie in a milliliter. [SDSFIE V1.8 SI]
PCT	percent [SDSFIE V1.75]
PERCENT	percent [SDSFIE V1.75]
PH	pH = - log ₁₀ [H ⁺] [SDSFIE V1.75]
PPB	parts per billion [SDSFIE V1.75]
PPL_FT2	people per square foot [SDSFIE V1.75]
PPL_MI2	people per square mile [SDSFIE V1.75]
PPM	parts per million [SDSFIE V1.75]
PPT	parts per trillion [SDSFIE V1.75]
PPTH	parts per thousand [SDSFIE V1.75]
RAIL_TRACKS	railroad tracks [SDSFIE V1.75]
RATIO	ratio [SDSFIE V1.75]

RELHUMIDITY
ROOMS
ROUNDS
SEATS
SPACES
STALLS
STRUCTURES
TBD
TREES_A
UCI
UCI_ML

UNITS
UNKNOWN
VEHICLES
VEHICLSPACES
WILD_A2
WILD_FT2
WILD_IN2
WILD_M2
WILD_MI2
WILD_YD2
XRAYROOMS

relative humidity [SDSFIE V1.75]
rooms [SDSFIE V1.75]
rounds [SDSFIE V1.75]
seats [SDSFIE V1.75]
spaces [SDSFIE V1.75]
stalls [SDSFIE V1.75]
structures [SDSFIE V1.75]
to be determined [SDSFIE V1.75]
trees per acre [SDSFIE V1.75]
A unit of radioactivity equal to one millionth of a curie. [SDSFIE V1.8 SI]
A radioactive concentration equal to one millionth of a curie in a milliliter.
[SDSFIE V1.8 SI]
units [SDSFIE V1.75]
unknown [SDSFIE V1.75]
vehicles [SDSFIE V1.75]
vehicle parking spaces [SDSFIE V1.75]
wildlife per acre [SDSFIE V1.75]
wildlife per square foot [SDSFIE V1.75]
wildlife per square inch [SDSFIE V1.75]
wildlife per square meter [SDSFIE V1.75]
wildlife per square mile [SDSFIE V1.75]
wildlife per square yard [SDSFIE V1.75]
x-ray rooms [SDSFIE V1.75]

bank_d

Value

L_DESCENDING
LEFT
NON_RIVERINE
R_DESCENDING
RIGHT

Definition (Notes) [Source]

Left descending bank [SDSFIE V1.8 REEGIS]
left [SDSFIE V1.8 REEGIS]
non riverine [SDSFIE V2.6 LEVEE DATABASE]
Right descending bank [SDSFIE V1.8 REEGIS]
right [SDSFIE V1.8 REEGIS]

bed_mat_d

Value

AQUATCWEED
CEMENTED_STONE
CLAY
CONCRETE_LINED
CRSAND_GRAVEL
EXPOSED_ROCK
FINE_SAND
GRASSED
GRAVEL_STONE
ORGANIC_MUD
OTHER
PLACED_STONE
SAND
SILT_SAND
TBD
UNDERBRUSH
UNKNOWN

Definition (Notes) [Source]

aquatic weed [SDSFIE V1.4]
cemented stones [SDSFIE V1.4]
clay [SDSFIE V1.4]
concrete lined [SDSFIE V1.4]
coarse sand and gravel [SDSFIE V1.4]
exposed rock [SDSFIE V1.4]
fine sand [SDSFIE V1.4]
grassed [SDSFIE V1.4]
gravel to larger stone [SDSFIE V1.4]
organic mud [SDSFIE V1.4]
other [SDSFIE V1.4]
placed stone [SDSFIE V1.4]
Sand. [SDSFIE V2.5 USACE]
Silty sand. [SDSFIE V2.5 USACE]
to be determined [SDSFIE V1.4]
underbrush [SDSFIE V1.4]
unknown [SDSFIE V1.4]

bil_rat_d

Value

15KV
25KV
5KV
OTHER
TBD

Definition (Notes) [Source]

15kv basic insulation level [SDSFIE V1.4]
25kv basic insulation level [SDSFIE V1.4]
5kv basic insulation level [SDSFIE V1.4]
other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]

brdg_typ_d

Value

BXBM_GRDRS_MULTI
BXBM_GRDRS_SINGL
COVERED
DRAW

FRAME_EXCPT_CULV
GIRDER_FLOORBEAM
ORTHOTROPIC
OTHER

Definition (Notes) [Source]

Box Beam or Girders (Multiple) [SDSFIE V2.1 U.S. D.O.T.]
Box Beam or Girders (Single or Spread) [SDSFIE V2.1 U.S. D.O.T.]
covered [SDSFIE V2.1]
The main portion of the span can be raised or rotated to permit vessels through. [SDSFIE V1.4]
Frame (Except Culverts) [SDSFIE V2.1 U.S. D.O.T.]
girder and floorbeam system [SDSFIE V2.1 U.S. D.O.T.]
orthotropic [SDSFIE V2.1 U.S. D.O.T.]
other [SDSFIE V2.1]

SLAB	slab [SDSFIE V2.1 U.S. D.O.T.]
STRNGR_MULTIBM	Stringer /Multi-Beam or Girder [SDSFIE V2.1 U.S. D.O.T.]
SUSPENSION	The main portion of the span is suspended from cables or wires [SDSFIE
TBD	to be determined [SDSFIE V1.4]
TEE_BEAM	tee beam [SDSFIE V2.1 U.S. D.O.T.]
TRUSS	The main portion of the span is supported by trusses [SDSFIE V1.4]
TRUSS_DECK	truss deck [SDSFIE V2.1 U.S. D.O.T.]
TRUSS_THRU	truss thru [SDSFIE V2.1 U.S. D.O.T.]
UNCLASSIFIED	unclassified [SDSFIE V2.1]
UNKNOWN	unknown [SDSFIE V1.4]
buf_typ_d	
Value	
CRITICAL_AREA	Definition (Notes) [Source] The area that is 1000 feet landward of the mean high tide coastline and any tidal waterways. [SDSFIE V1.75]
LOOSE_TUBE	Loose tube. [SDSFIE V2.3 Tinker Air Force Base]
MATERIAL_TYPE	The material type. [SDSFIE V2.3 Tinker Air Force Base]
NO_BUILD_ZONE	The area that is 100 feet landward of the mean high tide coastline and any tidal waterways. [SDSFIE V1.75]
TIGHT_TUBE	Tight tube. [SDSFIE V2.3 Tinker Air Force Base]
buoy_typ_d	
Value	
GREEN_LIGHTED	Definition (Notes) [Source] A green buoy, lighted, marking the left side of the channel. [SDSFIE V1.6]
GREEN_NOLITE	A green buoy, unlighted, marking the left side of the channel. [SDSFIE
LATERAL	Standard buoy for marking channel for navigation [SDSFIE V2.3 IENC]
OTHER	Some other type of buoy. [SDSFIE V2.3 IENC]
RED_LIGHTED	A red buoy, lighted, marking the right side of the channel. [SDSFIE V1.6]
RED_NOLITE	An unlighted red buoy marking the right side of the channel. [SDSFIE
SPECIAL	Buoys placed to identify special areas requiring attention. [SDSFIE V1.6]
WRECK	Buoy that marks a wreck location [SDSFIE V2.3 IENC]
bus_mat_d	
Value	
ALUMINUM	Definition (Notes) [Source] aluminum metal [SDSFIE V1.4]
COPPER	copper metal [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
cab_elev_d	
Value	
MAIN_BURIED	Definition (Notes) [Source] Underground main communications cables [SDSFIE V1.6]
MAIN_OHEAD	Overhead communications cables, normally suspended from or between poles. [SDSFIE V1.6]
MAIN_SUBMERGE	Submerged communications cables, either on the bottom or buried in the bottom of a water body or water course. [SDSFIE V1.6]
SERV_BURIED	The cable is a secondary service line which has been buried below ground. [SDSFIE V1.6]
SERV_OHEAD	A secondary service line which is suspended overhead, normally between poles. [SDSFIE V1.6]
SERV_SUBMERGE	A secondary service line which lies on the bottom of a watercourse or water body or which has been buried in the bottom. [SDSFIE V1.6]
cab_typ_d, cbl_ty_d, cbltyp1_d,	
Value	
FIBER_OPTICS	Definition (Notes) [Source] Fiber Optics Cable. [SDSFIE V2.3 Tinker Air Force Base]
PORTAL	Portal. [SDSFIE V2.31 Air Force]
RECEIVE	Receive. [SDSFIE V2.31 Air Force]
REMOTE	Remote. [SDSFIE V2.31 Air Force]
SENSOR	Sensor. [SDSFIE V2.31 Air Force]
TRANSMIT	Transmit. [SDSFIE V2.31 Air Force]
TWINAX	Twin Coaxial Cable [SDSFIE V2.31]
TWISTED_PAIR	Twisted Pair Cable. [SDSFIE V2.3 Tinker Air Force Base]
UNKNOWN	Unknown [SDSFIE V2.31 ATT]
WAVEGUIDE	Waveguide [SDSFIE V2.31 ATT]
cab_use_d	
Value	
OTHER	Definition (Notes) [Source] other cable [SDSFIE V2]
TBD	to be determined [SDSFIE V2]

TELEGRAPH
TELEPHONE
TELEVISION
UNKNOWN

Telegraph [SDSFIE V2.2]
telephone cable [SDSFIE V2]
television cable [SDSFIE V2]
unknown use [SDSFIE V2]

cabins_d, ins_typ_d

Value

ABANDONED
ABOVEGROUND
AER
BORE
BURY
DB
INSIDE
JSC
OUTSIDE
OVERHEAD
TR
TUNNEL
UNDERGROUND

Definition (Notes) [Source]

abandoned [SDSFIE V1.6]
above ground [SDSFIE V1.6]
aerial attachment [SDSFIE V2 Austin and Pitts]
jack and bore, pull cable [SDSFIE V2 Austin and Pitts]
direct bury cable [SDSFIE V2 Austin and Pitts]
directional bore conduit, pull cable [SDSFIE V2 Austin and Pitts]
inside [SDSFIE V1.6]
jet submarine cable [SDSFIE V2 Austin and Pitts]
outside [SDSFIE V1.6]
overhead [SDSFIE V1.6]
trench and place conduit, pull cable [SDSFIE V2 Austin and Pitts]
tunnel [SDSFIE V1.6]
underground [SDSFIE V1.6]

cam_typ_d

Value

CCD
CLOSED_CIRCUIT
INFRARED
OTHER

Definition (Notes) [Source]

Charge Coupled Device [SDSFIE V2 Tinker Air Force Base]
closed circuit camera [SDSFIE V2]
Infrared. [SDSFIE V2.5 AIR FORCE]
other type of camera [SDSFIE V2 Tinker Air Force Base]

camfil_d

Value

CLEAR
CYAN
ORANGE
OTHER
RED
TBD
UNKNOWN
YELLOW

Definition (Notes) [Source]

clear filter [SDSFIE V1.4]
cyan (blue-green) filter [SDSFIE V1.4]
orange filter [SDSFIE V1.4]
other [SDSFIE V1.4]
red filter [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]
yellow filter [SDSFIE V1.4]

cap_u_d, cpctr_u_d, currnt_u_d,

Value

A
AMPLITUDE
ATTEN_LOSS
BD
BW
C
DB
G
GB
H
HZ
KA
KEV
KHZ
KOHM
KV
KVA
KVAR
MCF

MF

MH

MHZ
MV

OE
OHM
RELS

Definition (Notes) [Source]

Ampere - current. [SDSFIE V2.5 ISO10005-1 ANSI]
Amplitude. [SDSFIE V2.5]
Attenuation loss. [SDSFIE V2.5]
Baud - signaling rate. [SDSFIE V2.5]
Bandwidth. [SDSFIE V2.5]
COULOMB - electric charge. [SDSFIE V2.5 ISO10004-2 ANSI3.5-1986]
Decibels. [SDSFIE V2.5 ISO10007-21]
Gauss (1.0E-4 tesla(T)). [SDSFIE V2.5 ISO10003-1 ANSI3.50-1986]
Gilbert - magnetomotive force. [SDSFIE V2.5]
Henry. [SDSFIE V2.5 Air Force]
Cycles per second. [SDSFIE V2.5 ISO10007-2]
Kiloampere - current. [SDSFIE V2.5 ISO10005-1]
Kiloelectronvolt - energy. [SDSFIE V2.5]
Thousands of cycles per second. [SDSFIE V2.5 ISO10007-2]
Kilohm - resistance. [SDSFIE V2.5 ISO10005-33]
Kilovolt - potential. [SDSFIE V2.5 ISO10005-6.1]
Kilovolt ampere - power (absolute). [SDSFIE V2.5]
Kilovolt ampere reactive. [SDSFIE V2.5]
MICROFARAD - A unit of capacitance equal to one millionth of a Farad.
[SDSFIE V2.5 Air Force]
MILLIFARAD - A unit of capacitance equal to one thousandth of a Farad.
[SDSFIE V2.5 Air Force]
MILLIHENRY - A unit of inductance equal to one thousandth of a Henry.
[SDSFIE V2.5 Air Force]
Millions of cycles per second. [SDSFIE V2.5 ISO10007-2]
The unit of electric potential and electromotive force equal to one
thousandth of a volt. [SDSFIE V2.5 SI]
Oerstad - magnet field strength. [SDSFIE V2.5]
Ohm - resistance, impedance, reactance. [SDSFIE V2.5 ANSI3.50-1986]
Reluctance - opposition to magnetic flux flow. [SDSFIE V2.5]

S	Siemens - conductance, mho. [SDSFIE V2.5 ISO10005-34/10001-7]
T	TESLA - Magnetic flux density. [SDSFIE V2.5 ISO10003-1]
THD	Total harmonic distortion. [SDSFIE V2.5]
US	A unit of conductance equal to one millionth of a siemens (ampere per volt). [SDSFIE V2.5 SI]
US_CM	A conductivity ratio equal to one millionth of a siemens (equal to a mho)per centimeter. [SDSFIE V2.5 SI]
V	Volt - potential. [SDSFIE V2.5 ISO10005-6.1]
WB	Weber - magnetic flux. [SDSFIE V2.5 ISO10005-20]
cap_u_d, cpcty_u_d, disc_u_d,	
Value	Definition (Notes) [Source]
ACR_FT	The volume of water, 43,560 cubic feet, that will cover an area of one acre to a depth of one foot. [SDSFIE V2.5 SI]
AFT	Acre feet. [SDSFIE V2.5]
BBL	A unit of capacity or volume equal to 31.50 gallons, 119.24 liters or 4.21 cubic feet. [SDSFIE V2.5 SI ANSI]
BF	Board feet. [SDSFIE V2.5 ANSI3.50-1986]
CC	Cubic centimeters. [SDSFIE V2.5]
CDFT	Cord-Foot. [SDSFIE V2.5]
CFT	Cubic feet. [SDSFIE V2.5 ANSI3.50-1986]
CIN	Cubic inches. [SDSFIE V2.5 ANSI3.50-1986]
CM3	A volume equal to a cube whose edge is one centimeter. [SDSFIE V2.5 Cords. [SDSFIE V2.5 ANSI3.50-1986]
CR	Cords. [SDSFIE V2.5 ANSI3.50-1986]
CYD	Cubic yards. [SDSFIE V2.5 ANSI3.50-1986]
DL	A volume equal to one tenth of a liter. [SDSFIE V2.5 SI]
FOZ	A unit of capacity or volume used in liquid measure equal to 1.804 cubic inches, 1/16 of a pint or 29.574 milliliters. [SDSFIE V2.5 SI ANSI]
FT3	A volume equal to a cube whose edge is one foot. [SDSFIE V2.5 SI ANSI]
GAL_UK	A unit of volume in the British Imperial System, used in liquid and dry measure, equal to 4.546 liters. [SDSFIE V2.5 SI]
GAL_US	A unit of capacity or volume used in liquid measure equal to 4 quarts or 3.785 liters. [SDSFIE V2.5 SI ANSI]
GIL	Gills (U.S. liquid). [SDSFIE V2.5 ANSI3.50-1986]
HL	Hectoliters. [SDSFIE V2.5 ISO10001-5]
IN3	A volume equal to a cube whose edge is one inch. [SDSFIE V2.5 SI ANSI]
KGAL	A unit of capacity or volume equal to 1000 gallons. [SDSFIE V2.5 SI]
KL	Kiloliters. [SDSFIE V2.5]
KM3	Cubic kilometers. [SDSFIE V2.5]
L	Liters. [SDSFIE V2.5 ISO10001-5]
M3	Cubic meters - stere. [SDSFIE V2.5 ISO10001-5]
MGAL	A unit of capacity or volume equal to one million gallons. [SDSFIE V2.5]
MI3	Cubic miles. [SDSFIE V2.5]
MILLION_GALLONS	Million gallons. [SDSFIE V2.5 AWWA]
ML	Milliliters. [SDSFIE V2.5 ISO10001-5]
MM3	Cubic millimeters. [SDSFIE V2.5 ISO10001-5]
PT	A unit of capacity or volume used in liquid measure equal to 16 fluid ounces or 0.473 liter. [SDSFIE V2.5 SI ANSI]
QT	A unit of capacity or volume used in liquid measure equal to 2 pints or 0.946 liter. [SDSFIE V2.5 SI ANSI]
TUN	A volume of liquid equal to approximately 254 gallons (954 liters).
UKBBL	Dry barrels (U.K. dry). [SDSFIE V2.5]
UKBUDRY	Bushels (U.K. dry). [SDSFIE V2.5]
UKGAL	Gallons (U.K. liquid). [SDSFIE V2.5]
UKGI	Gills (U.K. liquid). [SDSFIE V2.5]
UKHHD	Hogsheads (U.K. liquid). [SDSFIE V2.5]
UKPK	Peck (U.K. dry). [SDSFIE V2.5]
UKPT	Liquid pints (U.K. liquid). [SDSFIE V2.5]
UKQT	Liquid quarts (U.K. liquid). [SDSFIE V2.5]
USBBL_DRY	Dry barrels (U.S. dry). [SDSFIE V2.5]
USBBL_LIQ	Liquid barrels (U.S. liquid). [SDSFIE V2.5]
USBUDRY	Bushels (U.S. dry). [SDSFIE V2.5 ANSI3.50-1986]
USGAL	Gallons (U.S. liquid). [SDSFIE V2.5 ANSI3.50-1986]
USHHD	Hogsheads (U.S. liquid). [SDSFIE V2.5]
USPK	Peck (U.S. dry). [SDSFIE V2.5 ANSI3.50-1986]
USPT_DRY	Dry pints (U.S. dry). [SDSFIE V2.5 ANSI3.50-1986]
USPT_LIQ	Liquid pints (U.S. liquid). [SDSFIE V2.5]
USQT_DRY	Dry quarts (U.S. dry). [SDSFIE V2.5 ANSI3.50-1986]
USQT_LIQ	Liquid quarts (U.S. liquid). [SDSFIE V2.5]
YD3	A volume equal to a cube whose edge is one yard. [SDSFIE V2.5 SI ANSI]

cas_mat_d**Value**

AL
EVA
FIBER
IRON
LEAD
OTHER
PE
PP
PVC
SS
TBD
UNKNOWN

Definition (Notes) [Source]

Aluminum [SDSFIE V2 Austin and Pitts]
Ethylene Vinyl Acetate (Heat Shrinkable Tubing). [SDSFIE V2.5 AIR
Fiberglass [SDSFIE V2 Austin and Pitts]
Cast Iron [SDSFIE V2 Austin and Pitts]
Lead [SDSFIE V2 Austin and Pitts]
Other [SDSFIE V2]
Polyethylene. [SDSFIE V2.5 AIR FORCE]
Polypropylene. [SDSFIE V2.5 AIR FORCE]
Polyvinyl Chloride [SDSFIE V2 Austin and Pitts]
Stainless Steel [SDSFIE V2 Austin and Pitts]
To Be Determined [SDSFIE V2 Austin and Pitts]
Unknown [SDSFIE V2]

cas_typ_d**Value**

12_5SS
2_TYPE
3BB
3RS
3SS
4BB
4RS
4SS
6_5BB
6_5RE
6_5SS
9_5BB
9_5RS
9_5SS
FOSC_100_B_H
HS
KBV
LEAD
OTHER
READY_ACCESS
TBD
UC_6_9
UCN_7_10
UNKNOWN

Definition (Notes) [Source]

12.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
3 Type. [SDSFIE V2.5 AIR FORCE]
4 Inch Better Buried. [SDSFIE V2.5 AIR FORCE]
4 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE]
4 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE]
5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE]
5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
6.5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE]
6.5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE]
6.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
9.5 Inch Better Buried. [SDSFIE V2.5 AIR FORCE]
9.5 Inch ReddiSeal. [SDSFIE V2.5 AIR FORCE]
9.5 Inch Stainless Steel. [SDSFIE V2.5 AIR FORCE]
Raychem FOSC-100 B/H [SDSFIE V2 Austin and Pitts]
Heat Shrinkable. [SDSFIE V2.5 AIR FORCE]
K and B Vault. [SDSFIE V2.5 AIR FORCE]
Lead Tube. [SDSFIE V2.5 AIR FORCE]
Other [SDSFIE V2]
Ready Access Aerial Terminal. [SDSFIE V2.5 AIR FORCE]
To Be Determined [SDSFIE V2]
Siemens UC 6-9 [SDSFIE V2 Austin and Pitts]
Siemens UCN 7-10 [SDSFIE V2 Austin and Pitts]
Unknown [SDSFIE V2]

case_typ_d**Value**

OTHER
PED12
PED4
PED6
PED8
TBD
TRANS
UNKNOWN

Definition (Notes) [Source]

Other [SDSFIE V2]
12 Inch Pedestal [SDSFIE V2 Austin and Pitts]
4 Inch Pedestal [SDSFIE V2 Austin and Pitts]
6 Inch Pedestal [SDSFIE V2 Austin and Pitts]
8 Inch Pedestal [SDSFIE V2 Austin and Pitts]
To Be Determined [SDSFIE V2]
Transducer [SDSFIE V2 Austin and Pitts]
Unknown [SDSFIE V2]

catnav_d**Value**

CLEARING_LINE
LD_LN_BEAR_A_TRA
TRANSIT_LINE

Definition (Notes) [Source]

Clearing Line [SDSFIE V2.2 S-57]
Leading Line Bearing A Recommended Track [SDSFIE V2.2 S-57]
Transit Line [SDSFIE V2.2 S-57]

catpip_d**Value**

BUBBLER_SYSTEM
INTAKE_PIPE
OUTFALL_PIPE
SEWER
SUPPLY_PIPE

Definition (Notes) [Source]

Bubbler System [SDSFIE V2.2 S-57]
Intake Pipe [SDSFIE V2.2 S-57]
Outfall Pipe [SDSFIE V2.2 S-57]
Sewer [SDSFIE V2.2 S-57]
Supply Pipe [SDSFIE V2.2 S-57]

cause_d**Value**

DISCHARGE_GW

Definition (Notes) [Source]

Direct discharge from a pipe or outfall to the groundwater. [SDSFIE V2]

DISCHARGE_SOIL	Direct discharge from a pipe or outfall to the soil. [SDSFIE V2]
DISCHARGE_SW	Direct discharge from a pipe or outfall to a surface water body (e.g., river, stream, lake, or ocean). [SDSFIE V2]
IMP_DISPOSAL	Improper disposal. [SDSFIE V2]
INDUSTRIAL_ACT	Industrial activity or process. [SDSFIE V2]
LEAKING_ADRUM	Leaking above ground drum or container. [SDSFIE V2]
LEAKING_AST	Leaking above ground storage tank. [SDSFIE V2]
LEAKING_BDRUM	Leaking buried drum or container. [SDSFIE V2]
LEAKING_PIPE	Leaking plant or process piping. [SDSFIE V2]
LEAKING_UST	Leaking underground storage tank. [SDSFIE V2]
SPILL	Uncontrolled release or accidental spill of a chemical or waste. [SDSFIE
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

caw_typ_d

Value	Definition (Notes) [Source]
BRIDGE	Cable Bridge [SDSFIE V2 Tinker Air Force Base]
RACK	Cable Rack [SDSFIE V2]
TRAY	Cable Tray [SDSFIE V2 Tinker Air Force Base]

cbl_dim_d, cbl_size_d, condsize_d,

Value	Definition (Notes) [Source]
#1/0	#1/0 [SDSFIE V2.1 FGDC Utilities Classification]
#10	#10 [SDSFIE V2.1 FGDC Utilities Classification]
#14	#14 [SDSFIE V2.1 FGDC Utilities Classification]
#16	#16 [SDSFIE V2.1 FGDC Utilities Classification]
#18	#18 [SDSFIE V2.1 FGDC Utilities Classification]
#19	#19 [SDSFIE V2.1 FGDC Utilities Classification]
#2/0	#2/0 [SDSFIE V2.1 FGDC Utilities Classification]
#20	#20 [SDSFIE V2.1 FGDC Utilities Classification]
#22	#22 [SDSFIE V2.1 FGDC Utilities Classification]
#24	#24 [SDSFIE V2.1 FGDC Utilities Classification]
#26	#26 [SDSFIE V2.1 FGDC Utilities Classification]
#28	#28 [SDSFIE V2.1 FGDC Utilities Classification]
#3/0	#3/0 [SDSFIE V2.1 FGDC Utilities Classification]
#30	#30 [SDSFIE V2.1 FGDC Utilities Classification]
#32	#32 [SDSFIE V2.1 FGDC Utilities Classification]
#34	#34 [SDSFIE V2.1 FGDC Utilities Classification]
#36	#36 [SDSFIE V2.1 FGDC Utilities Classification]
#4/0	#4/0 [SDSFIE V2.1 FGDC Utilities Classification]
0.375	3/8 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.5	0.5 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.75	0.75 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.375	3/8 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.5	0.5 inch [SDSFIE V2.1 FGDC Utilities Classification]
0.75	0.75 inch [SDSFIE V2.1 FGDC Utilities Classification]
1	1 inch [SDSFIE V2.1 FGDC Utilities Classification]
1.25	1.25 inches [SDSFIE V2.1 FGDC Utilities Classification]
1.5	1.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
1.25	1.25 inches [SDSFIE V2.1 FGDC Utilities Classification]
1.5	1.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
1000_MCM	1000 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
1033.5_MCM	1033.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1113_MCM	1113 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
12	12 inches [SDSFIE V2.1 FGDC Utilities Classification]
1272_MCM	1272 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1431_MCM	1431 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
1590_MCM	1590 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
2	2 inches [SDSFIE V2.1 FGDC Utilities Classification]
2.5	2.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
2.5	2.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
2156_MCM	2156 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
250_MCM	250 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
266.8_MCM	266.8 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
3	3 inches [SDSFIE V2.1 FGDC Utilities Classification]
3.5	3.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
3.5	3.5 inches [SDSFIE V2.1 FGDC Utilities Classification]
300_MCM	300 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
336.4_MCM	336.4 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
336_MCM	336 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]

350_MCM	350 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
397.5_MCM	397.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
4	4 inches [SDSFIE V2.1 FGDC Utilities Classification]
400_MCM	400 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
477_MCM	477 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
477_MCM_A	477 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
5	5 inches [SDSFIE V2.1 FGDC Utilities Classification]
500_MCM	500 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
556.5_MCM	556.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
556.5_MCM_A	556.5 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
6	6 inches [SDSFIE V2.1 FGDC Utilities Classification]
600_MCM	600 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
636_MCM	636 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
636_MCM_A	636 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
7	7 inches [SDSFIE V2.1 FGDC Utilities Classification]
700_MCM	700 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
750_MCM	750 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
795_MCM_A	795 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
8	8 inches [SDSFIE V2.1 FGDC Utilities Classification]
800_MCM	800 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
9	9 inches [SDSFIE V2.1 FGDC Utilities Classification]
900_MCM	900 K circular mils [SDSFIE V2.1 FGDC Utilities Classification]
954_MCM_A	954 K circular mils, ACSR [SDSFIE V2.1 FGDC Utilities Classification]
BITTERN	1272 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities
BLUEBIRD	2156 K circular mils, ACSR,84/19 [SDSFIE V2.1 FGDC Utilities
BLUEJAY	1113 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities
BOBOLINK	1431 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities
CARDINAL	954 K circular mils, ACSR,54/7 [SDSFIE V2.1 FGDC Utilities
CHICKADEE	397.5 K circular mils, ACSR,18/1 [SDSFIE V2.1 FGDC Utilities
DOVE	556.5 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities
DRAKE	795 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities
FALCON	1590 K circular mils, ACSR,54/19 [SDSFIE V2.1 FGDC Utilities
FINCH	1113 K circular mils, ACSR,54/19 [SDSFIE V2.1 FGDC Utilities
FLICKER	477 K circular mils, ACSR,24/7 [SDSFIE V2.1 FGDC Utilities
GROSBEEK	636 K circular mils, ACSR,24/7 [SDSFIE V2.1 FGDC Utilities
HAWK	477 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities
HEN	477 K circular mils, ACSR,30/7 [SDSFIE V2.1 FGDC Utilities
IBIS	397.5 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities
LAPWING	1590 K circular mils, ACSR,45/7 [SDSFIE V2.1 FGDC Utilities
LINNET	336.4 K circular mils, ACSR,26/7 [SDSFIE V2.1 FGDC Utilities
MERLIN	336.4 K circular mils, ACSR,18/1 [SDSFIE V2.1 FGDC Utilities
N1	#1 [SDSFIE V2.1 FGDC Utilities Classification]
N1_0	#1/0 [SDSFIE V1.4]
N10	#10 [SDSFIE V1.4]
N12	#12 [SDSFIE V1.4]
N14	#14 [SDSFIE V1.4]
N16	#16 [SDSFIE V1.4]
N18	#18 [SDSFIE V1.4]
N19	#19 [SDSFIE V1.4]
N2	#2 [SDSFIE V1.4]
N2_0	#2/0 [SDSFIE V1.4]
N20	#20 [SDSFIE V1.4]
N22	#22 [SDSFIE V1.4]
N24	#24 [SDSFIE V1.4]
N26	#26 [SDSFIE V1.4]
N28	#28 [SDSFIE V1.4]
N3	#3 [SDSFIE V1.4]
N3_0	#3/0 [SDSFIE V1.4]
N30	#30 [SDSFIE V1.4]
N32	#32 [SDSFIE V1.4]
N34	#34 [SDSFIE V1.4]
N36	#36 [SDSFIE V1.4]
N4	#4 [SDSFIE V1.4]
N4_0	#4/0 [SDSFIE V1.4]
N5	#5 [SDSFIE V1.4]
N6	#6 [SDSFIE V1.4]
N8	#8 [SDSFIE V1.4]
ORIOLE	336.4 K circular mils, ACSR,30/7 [SDSFIE V1.7]
ORTOLAN	1033.5 K circular mils,45/7 [SDSFIE V1.7]
OSPREY	556.5 K circular mils, ACSR,18/1 [SDSFIE V1.7]

OSTRICH	300 K circular mils, ACSR,26/7 [SDSFIE V1.7]
OTHER	other [SDSFIE V1.4]
PARAKEET	556.5 K circular mils, ACSR,24/7 [SDSFIE V1.7]
PARTRIDGE	556.5 K circular mils, ACSR,26/7 [SDSFIE V1.7]
PELICAN	266.8 K circular mils, ACSR,18/1 [SDSFIE V1.7]
PHEASANT	477 K circular mils, ACSR,54/19 [SDSFIE V1.7]
PLOVER	1272 K circular mils, ACSR,54/19 [SDSFIE V1.7]
RAIL	1431 K circular mils, ACSR,45/7 [SDSFIE V1.7]
ROOK	954 K circular mils, ACSR,24/7 [SDSFIE V1.7]
TBD	to be determined [SDSFIE V1.4]
TERN	795 K circular mils, ACSR,45/7 [SDSFIE V1.7]
UNKNOWN	unknown [SDSFIE V1.4]
WAXWING	266.8 K circular mils, ACSR,18/1 [SDSFIE V1.7]

cbl_mat_d

Value	Definition (Notes) [Source]
AL	Al [SDSFIE V1.6]
ALUM_ALLOY	Al, alloy [SDSFIE V1.6]
ALUM_ANOD	Al, anodized [SDSFIE V1.6]
ALUM_COPPER	Al, Cu coated [SDSFIE V1.6]
ALUM_STEEL	Al, steel reinforced [SDSFIE V1.6]
COPPER	Cu [SDSFIE V1.6]
COPPER_ALLOY	Cu, alloy [SDSFIE V1.6]
COPPER_ALUM	Cu, Al coated [SDSFIE V1.6]
COPPER_LEAD	Cu, Pb coated [SDSFIE V1.6]
COPPER_NICKEL	Cu, Ni coated [SDSFIE V1.6]
COPPER_STEEL	Cu, steel coated [SDSFIE V1.6]
COPPER_TIN	Cu, tinned [SDSFIE V1.6]
FIBER_OPT	fiber optical [SDSFIE V1.4]
IRON	Fe [SDSFIE V1.6]
IRON_ALLOY	Fe, alloy [SDSFIE V1.6]
IRON_GALV	Fe, galvanized [SDSFIE V1.6]
LEAD	Pb [SDSFIE V1.6]
LEAD_COPPER	Pb, Cu [SDSFIE V1.6]
LEAD_IRON	Pb, Fe [SDSFIE V1.6]
LEAD_STEEL	Pb, steel [SDSFIE V1.6]
OTHER	other [SDSFIE V1.4]
STEEL	steel [SDSFIE V1.6]
STEEL_AL_CLAD	steel, Al clad [SDSFIE V1.6]
STEEL_CU_CLAD	steel, Cu clad [SDSFIE V1.6]
STEEL_GALV	steel, galvanized [SDSFIE V1.6]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

cbl_sht_d, chl_sht_d, insl_typ_d,

Value	Definition (Notes) [Source]
ALPETH	Aluminum Polyethylene [SDSFIE V2 Austin and Pitts]
ARP	Aluminum Rodent Protected Polyethylene [SDSFIE V2 Austin and Pitts]
ASBEST_SIL	asbestos-silicone bond [SDSFIE V1.4]
ASBESTOS	asbestos [SDSFIE V1.4]
AT	Aerial Tape Armor [SDSFIE V2 Austin and Pitts]
BT	Buried Tape Armor [SDSFIE V2 Austin and Pitts]
CAMBRIC_PB_COV	varnished cambric, Pb covered [SDSFIE V1.4]
CELLULOSE	cellulose-acetate fiber [SDSFIE V1.4]
COTTON_YARN	cotton yarn [SDSFIE V1.4]
CP	Corrosion Protection [SDSFIE V2 Austin and Pitts]
CPNM	Cross Ply Non Metallic [SDSFIE V2 Austin and Pitts]
DA	Double Wire Armor [SDSFIE V2 Austin and Pitts]
DJ	Jacketed Double Wire Armor [SDSFIE V2 Austin and Pitts]
DOUBLE_TAPE	double tape armored [SDSFIE V1.4]
F_FILLED	Foam Filled, [SDSFIE V2.5 AIR FORCE]
FIBER_PAPER	polyimide fiber paper [SDSFIE V1.4]
GLASS_FIBER	glass fiber-organic bond [SDSFIE V1.4]
GLASS_ORGANIC	glass/polyesterfib-organic bond [SDSFIE V1.4]
GLASS_SILICONE	glass/polyesterfib-silicone bond [SDSFIE V1.4]
GT	Gopher Tape Armor [SDSFIE V2 Austin and Pitts]
JP	Jute Protection [SDSFIE V2 Austin and Pitts]
JUTE	jute protected [SDSFIE V1.4]
KP	Kevlar Polyethylene [SDSFIE V2 Austin and Pitts]
KPSP	Kevlar Polyethylene Corrugated Steel [SDSFIE V2 Austin and Pitts]

LA	Light Armor [SDSFIE V2 Austin and Pitts]
LJ	Jacketed Light Wire Armor [SDSFIE V2 Austin and Pitts]
MG	Modified Gopher Tape Armor [SDSFIE V2 Austin and Pitts]
MP	Mechanical Protection [SDSFIE V2 Austin and Pitts]
NEOPRENE	neoprene [SDSFIE V1.4]
NONE	No outer sheath protection [SDSFIE V2 Austin and Pitts]
OPEN_WIRE	open wire [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PAP	Polyethylene Fused Aluminum [SDSFIE V2 Austin and Pitts]
PAPER	paper [SDSFIE V1.4]
PAPER_PB_COV	paper insulated Pb covered [SDSFIE V1.4]
PB_ARMOR	Pb armored [SDSFIE V1.4]
PB_COVER	Pb covered [SDSFIE V1.4]
PLASTIC_CLAD	plastic clad [SDSFIE V1.4]
PLASTIC_FOAM	Plastic, Foam Filled. [SDSFIE V2.5 AIR FORCE]
PLASTIC_GEL	plastic, gel-filled [SDSFIE V1.4]
POLY_CROSS	polyethylene (XLPE), cross-linked [SDSFIE V1.4]
POLY_FOAM	polyethylene (PE), foamed [SDSFIE V1.4]
PPP	polypropylene (PPP) [SDSFIE V1.4]
PVC	polyvinyl chloride [SDSFIE V1.4]
QUAD_TAPE	quad tape, armored [SDSFIE V1.4]
RPS	Rodent Protection Shield Polyethylene [SDSFIE V2 Austin and Pitts]
RUBBER_BUT	rubber-butyl [SDSFIE V1.4]
RUBBER_EPT	rubber-EPT [SDSFIE V1.4]
RUBBER_NBR	rubber-NBR [SDSFIE V1.4]
SA	Single Wire Armor [SDSFIE V2 Austin and Pitts]
SHIELDED	shielded [SDSFIE V1.4]
SJ	Jacketed Single Wire Armor [SDSFIE V2 Austin and Pitts]
SUBDA	Submarine Double Wire Armor [SDSFIE V2 Austin and Pitts]
SUBDJ	Submarine Jacketed Double Wire Armor [SDSFIE V2 Austin and Pitts]
TAPE_ARMOR	tape armored [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TFE	polytetrafluoroethylene (TFE) [SDSFIE V1.4]
UM	Unsoldered Mechanical Protection [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
WEATHERPROOF	weatherproofed [SDSFIE V1.4]
WIRE_ARMOR	single wire, armored [SDSFIE V1.4]

cbl_ty_d

Value	Definition (Notes) [Source]
18_7_FC	18x7 FC [SDSFIE V1.4]
19_7	19x7 [SDSFIE V1.4]
3_19_FLUSHER	3x19 slusher [SDSFIE V1.4]
3_7_GRD_RAIL	3x7 guard rail [SDSFIE V1.4]
5_19_CLAD	5x19 marlin clad FC [SDSFIE V1.4]
6_12_FILLER_FC	6x12 filler wire FC [SDSFIE V1.4]
6_12_GALV_FC	6x12 galvanized running rope FC [SDSFIE V1.4]
6_19_CLAD	6x19 marlin clad [SDSFIE V1.4]
6_19_SEALE_IWRC	6x19 Seale IWRC [SDSFIE V1.4]
6_24_HAWSER	6x24 hawser [SDSFIE V1.4]
6_25_FILL_IWRC	6x25 filler wire IWRC [SDSFIE V1.4]
6_25B_FLAT_FC	6x25B flattened strand FC [SDSFIE V1.4]
6_26_WARR_IWRC	6x26 Warrington Seale IWRC [SDSFIE V1.4]
6_27H_FLAT_FC	6x27H flattened strand FC [SDSFIE V1.4]
6_3_19_SPRING	6x3x19 spring lay [SDSFIE V1.4]
6_30_HAWSER	6x30 hawser [SDSFIE V1.4]
6_30G_FLAG_FC	6x30G flattened strand FC [SDSFIE V1.4]
6_31_FILL_IWRC	6x31 filler wire IWRC [SDSFIE V1.4]
6_31_WARR_IWRC	6x31 Warrington Seale IWRC [SDSFIE V1.4]
6_36_SEALE_IWRC	6x36 Seale filler wire IWRC [SDSFIE V1.4]
6_36_WARR_IWRC	6x36 Warrington Seale IWRC [SDSFIE V1.4]
6_41_SEALE_IWRC	6x41 Seale filler wire IWRC [SDSFIE V1.4]
6_41_WARR_IWRC	6x41 Warrington Seale IWRC [SDSFIE V1.4]
6_42_TILLER_FC	6x42 tiller rope FC [SDSFIE V1.4]
6_46_SEALE_IWRC	6x46 Seale filler wire IWRC [SDSFIE V1.4]
6_49_FILL_FC	6x49 filler wire Seale FC [SDSFIE V1.4]
6_6_7_TILLER	6x6x7 tiller rope [SDSFIE V1.4]
6_7_FC	6x7 FC [SDSFIE V1.4]
8_19_SEALE_FC	8x19 Seale FC [SDSFIE V1.4]
8_25_FILLER_IWR	8x25 filler wire IWRC [SDSFIE V1.4]

8_9_SEALE_IWRC
BARE
DUPLEX
EHS
EIP
FC
FE
HSS
IPS
IWRC
MPS
OTHER
PRIMARY
PS
SECONDARY
TBD
TRIPLEX
TS
UNKNOWN
WEATHRPROFCU
WSC

8x9 Seale IWRC [SDSFIE V1.4]
bare [SDSFIE V1.4]
duplex [SDSFIE V1.4]
Extra High Strength Steel [SDSFIE V1.4]
Extra Improved Plow Steel [SDSFIE V1.4]
FiberCore [SDSFIE V1.4]
Iron [SDSFIE V1.4]
High Strength Steel [SDSFIE V1.4]
Improved Plow Steel [SDSFIE V1.4]
Independent Wire Rope Core [SDSFIE V1.4]
Mild Plow Steel [SDSFIE V1.4]
other [SDSFIE V1.4]
primary [SDSFIE V1.4]
Plow Steel [SDSFIE V1.4]
secondary [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
triplex [SDSFIE V1.4]
Traction Steel [SDSFIE V1.4]
unknown [SDSFIE V1.4]
weatherproofed-Copper [SDSFIE V1.4]
Wire-Strand Core [SDSFIE V1.4]

cbl_ty_d, wire_ty_d

Value

1_WIRE
3_WIRE_PRKWAY
3_WIRE_ROUND
3_WIRE_SGMNT
4_WIRE_ROUND
COAX
DUPLEX
OTHER
SOLIDCORE
SOLIDCORETB
SOLIDCORETS
SOLIDIELEC
TBD
TS
TSCORE
UNKNOWN

Definition (Notes) [Source]

1-wire, single conductor [SDSFIE V1.4]
3-wire parkway [SDSFIE V1.4]
3-wire, round [SDSFIE V1.4]
3-wire, segmental [SDSFIE V1.4]
4-wire, quad conductor [SDSFIE V1.4]
coaxial [SDSFIE V1.4]
2-wire, dual conductor [SDSFIE V1.4]
other [SDSFIE V1.4]
solid core [SDSFIE V1.4]
solid core-twisted bundle around [SDSFIE V1.4]
solid core-twisted strand around [SDSFIE V1.4]
solid dielectric [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
twisted strands [SDSFIE V1.4]
twisted strands core [SDSFIE V1.4]
unknown [SDSFIE V1.4]

cbl_typ_d, instl_ty_d

Value

ABANDONED
AIRFIELD_UG
PRIMARY_OH
PRIMARY_UG
PRIMARY_UG_DB

PRIMARY_UG_ENC

SECONDARY_OH
SECONDARY_UG
SECONDARY_UG_DB

SECONDARY_UG_ENC

SENSOR
SERVICE_OH
SERVICE_UG
SERVICE_UG_DB

SERVICE_UG_ENC

Definition (Notes) [Source]

abandoned/inactive [SDSFIE V2.1 FGDC Utilities Classification]
Underground Airfield Cable. [SDSFIE V2.4 Cherry Point]
primary overhead [SDSFIE V2.1 FGDC Utilities Classification]
primary underground [SDSFIE V2.1 FGDC Utilities Classification]
Underground primary electrical cable installed direct burial (i.e., without conduit). [SDSFIE V2.2 Air Force Academy]
Underground primary electrical cable installed in conduit. [SDSFIE V2.2 Air Force Academy]
secondary overhead [SDSFIE V2.1 FGDC Utilities Classification]
secondary underground [SDSFIE V2.1 FGDC Utilities Classification]
Underground secondary electrical cable installed direct burial (i.e., without conduit). [SDSFIE V2.2]
Underground secondary electrical cable installed in conduit. [SDSFIE V2.2 Air Force Academy]
Sensor Type Cable. [SDSFIE V2.3 Tinker Air Force Base]
service overhead [SDSFIE V2.1 FGDC Utilities Classification]
service underground [SDSFIE V2.1 FGDC Utilities Classification]
Underground service electrical cable installed direct burial (i.e., without conduit). [SDSFIE V2.2 Air Force Academy]
Underground service electrical cable installed in conduit. [SDSFIE V2.2 Air Force Academy]

cbl_use_d

Value

ABANDONED
OTHER
PRIMARY_OH
PRIMARY_UG

Definition (Notes) [Source]

abandoned/inactive cable [SDSFIE V1.4]
other [SDSFIE V1.4]
primary overhead cable [SDSFIE V1.4]
primary underground cable [SDSFIE V1.4]

SECONDARY_OH	secondary overhead cable [SDSFIE V1.4]
SECONDARY_UG	secondary underground cable [SDSFIE V1.4]
SERVICE_OH	service, overhead cable [SDSFIE V1.4]
SERVICE_UG	service, underground cable [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
cbldim3_d	
Value	Definition (Notes) [Source]
100_UM	101 micron core (obsolete). [SDSFIE V2.5 AIR FORCE]
1000_UM	2 mm (Plastic Optical Fiber). [SDSFIE V2.5 AIR FORCE]
125_UM	126 micron cladding. [SDSFIE V2.5 AIR FORCE]
140_UM	141 micron cladding (obsolete). [SDSFIE V2.5 AIR FORCE]
200_UM	201 micron core. [SDSFIE V2.5 AIR FORCE]
240_UM	241 micron cladding. [SDSFIE V2.5 AIR FORCE]
50_UM	51 micron core. [SDSFIE V2.5 AIR FORCE]
62_5_UM	62.5 micron core. [SDSFIE V2.5 AIR FORCE]
8_3_UM	8.3 micron core. [SDSFIE V2.5 AIR FORCE]
N14	#14 or 14 Gage. [SDSFIE V2.5 AIR FORCE]
N16	#16 or 16 Gage. [SDSFIE V2.5 AIR FORCE]
N18	#18 or 18 Gage. [SDSFIE V2.5 AIR FORCE]
N19	#19 or 19 Gage. [SDSFIE V2.5 AIR FORCE]
N20	#20 or 20 Gage. [SDSFIE V2.5 AIR FORCE]
N22	#22 or 22 Gage. [SDSFIE V2.5 AIR FORCE]
N24	#24 or 24 Gage. [SDSFIE V2.5 AIR FORCE]
N26	#26 or 26 Gage. [SDSFIE V2.5 AIR FORCE]
N28	#28 or 28 Gage. [SDSFIE V2.5 AIR FORCE]
N30	#30 or 30 Gage. [SDSFIE V2.5 AIR FORCE]
N32	#32 or 33 Gage. [SDSFIE V2.5 AIR FORCE]
N34	#34 or 34 Gage. [SDSFIE V2.5 AIR FORCE]
N36	#36 or 36 Gage. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
cfg_ty_d	
Value	Definition (Notes) [Source]
ARMLESS	The cable group is mounted in a cluster at the top of the pole. [SDSFIE
CROSSARM_EQL	The individual line mounts in a cable group are equally spaced on a standard length crossarm. [SDSFIE V1.4]
CROSSARM_UNEQL	The individual line mounts in a cable group are not equally spaced on a standard crossarm. [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
SHORTARM	The individual line in a cable group are mounted on a cross arm less than 24-inches long. [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERTICAL	The individual line mounts in a cable group are vertically spaced down the pole. [SDSFIE V1.4]
chan_st_d	
Value	Definition (Notes) [Source]
CANALCMLSEC	canal complex section [SDSFIE V1.4]
CANALTRPZSEC	canal trapezoidal section [SDSFIE V1.4]
LAKE	lake [SDSFIE V1.4]
OPENDRAINAGE	open drainage [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PAVEDDITCH	paved ditch [SDSFIE V1.4]
PAVEDINVRTDR	paved invert drain [SDSFIE V1.4]
POND	pond [SDSFIE V1.4]
RIVER	river [SDSFIE V1.4]
STORMWATER	storm water retention reservoir [SDSFIE V1.4]
SWALE	swale [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNPAVEDITCH	unpaved ditch [SDSFIE V1.4]
cntr_ty_d	
Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.4]
PRIMARY	Primary. [SDSFIE V2.31 Air Force]

REMOTE
TBD
UNKNOWN

Remote. [SDSFIE V2.31 Air Force]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

CodeActivity

Value

accident
acrobat
airgun
airshow
antihail
artillery
ascent
ats
balloon
bird
bird-mgr
blast
drop
dusting
equipment
equipment-833
equipment-rnav
equipment-rvsm
exercise
fauna
fire
firework
gaz
glider
hangglider
hi-light
hi-radio
ind-chem
ind-nuclear
ind-oil
jetclimb
laser
milops
missiles
nature
naval
no-noise
oil
other
parachute
paraglider
population
procedure
refuel
shoot
spaceflight
sport
technical
tfc-ad
tfc-heli
towing
trg
uav
ulm
vip
vip-pres
vip-vice
waterblast
work

Definition (Notes) [Source]

Accident investigation area
Acrobatic flights, aerobatics
Aerial gunnery
Air show
Anti-hail rocket firing
Artillery firing
Ascent of radio probe, radiosonde, meteorological balloons
Air traffic services
Hot air balloons
Bird hazard
Bird migration
Blasting operations
Droppings
Seasonal crop dusting
Special equipment
8.33 channel equipment required
Air navigation device equipment required
Reduced vertical separation minimum equipment required
Air combat and exercises
Sensitive fauna
Heavy fire suppression work
Fireworks
Gas field or gasoline vaporization
Glider
Hang gliding
High intensity lights
High intensity radio transmission (HIRTA)
Chemical plant
Nuclear energy plant/activity
Oil refinery
Climb-out sector for jet aircraft
Laser light activity
Military operations
Flight of guided missiles
Natural reserve
Ship exercises
Noise abatement
Oil field
other activities/reasons
Parachute jumping
Paragliding
Highly populated area
Special procedure
Refueling
Shooting from ground
Space flight operations
Aerial sporting
Technical activity
Airport/aerodrome traffic
Helicopter/gyrocopter traffic
Target towing
Training
Unmanned (or uninhabited) aeronautical (or aerial) vehicle
Ultra light flights
Very important person
Very important person - president
Very important person - vice president
Underwater explosions
Aerial work

CodeAirportFacilityType

Value

AD
AH

Definition (Notes) [Source]

Airport/aerodrome only
Airport with helicopter landing area

HP	Helipoint only
LS	Landing site
CodeApproachCategory	
Value	Definition (Notes) [Source]
A	Speed less than 91 knots
B	Speed 91 knots or more but less than 121 knots
C	Speed 121 knots or more but less than 141 knots
D	Speed 141 knots or more but less than 166 knots
E	Speed 166 knots or more
CodeApproachType	
Value	Definition (Notes) [Source]
AP1	ANA PC CAT 1 REVISION DATE: 1/28/2004
AP2	ANA PC CAT 2/3 REVISION DATE: 1/28/2004
CA	
NUL	NUL
other	
PC1	ANA PC CAT 1
PC2	ANA PC CAT 2/3
STA	
STA1	
STA2	
STA3A	
STA3B	
STA3C	
CodeApronType	
Value	Definition (Notes) [Source]
accessRamp	Access pavement between maintenance hangars opening to the apron and the apron edge
apron	Apron
cargoLoading	Cargo loading area used for the loading/unloading of cargo
de-icing	Area used for the de-icing of aircraft
fuelingArea	Area used for aircraft fueling
hardstand	Area for parking a single aircraft; more temporary than a PARKING_AREA [U.S. CADD]
maintenance	Area used for aircraft maintenance
military	Area used by the military
other	Other
parkingArea	Area used to park aircraft
passengerLoading	Passenger loading area used for the loading/unloading of passengers
taxilane	Taxi lane area
turnaround	Area for aircraft to turn around [U.S. CADD]
CodeArrestingGearMaterial	
Value	Definition (Notes) [Source]
EMAS	Engineering material arresting system
other	
CodeBuoyType	
Value	Definition (Notes) [Source]
blackRed(FL2)	Danger - Black and red alternating horizontal stripes indicates position of isolated danger [SailingIssues]
green	Lateral buoy - Marks port side of the channel when sailing toward the sea [SailingIssues]
greenRed(GFL)	Lateral buoy - Preferred channel is to port when a red horizontal stripe is sandwiched between two green horizontal stripes [SailingIssues]
Q(3)/VQ(3)	Cardinal buoy - Yellow stripe sandwiched between two black stripes and/or two triangles, apex on one pointing up and apex of other pointing down indicates safe water is to the east [SailingIssues]
Q(6)/VQ(6)	Cardinal buoy - Yellow stripe is atop a black stripe and/or two triangles, apex of both pointing down indicates safe water is to the south
Q(9)/QV(9)	Cardinal buoy - Black stripe sandwiched between two yellow stripes and/or two triangles apex of both point toward each other indicates safe water is to the west [SailingIssues]
Q/VQ	Cardinal buoy - Black stripe atop a yellow stripe and/or two triangles apex of both point up indicates safe water is to the north [SailingIssues]
red	Lateral buoy - Marks port side of the channel when returning from the sea [SailingIssues]
redGreen(RFL)	Lateral buoy - Preferred channel to starboard when a green horizontal

redWhite	strips is sandwiched between two red horizontal stripes [SailingIssues] Safe water buoy - Alternating red and white vertical stripes indicates safe water [SailingIssues]
white	No color is stated on the chart [SailingIssues]
yellow	Special buoy - Area used by navies, pipelines, surfing [SailingIssues]

CodeCategoryOfAircraft

Value	Definition (Notes) [Source]
A	Category A
A20	Category A with 2% climb gradient ability
A30	Category A with 3 climb gradient ability
A35	Category A with 3.5 climb gradient ability
AB	Categories A and B
ABC	Categories A, B, and C
ABCD	Categories A, B, C, and D
B	Category B
BCD	Categories B, D, and D
C	Category C
CD	Category C and D
CDE	Category C, D, and E
D	Category D
DE	Categories D and E
E	Category E
H	Category H - helicopter
other	Other

CodeClassAirspace

Value	Definition (Notes) [Source]
A	Class of Airspace per ICAO Annex 11, Appendix 4
B	Class of Airspace per ICAO Annex 11, Appendix 4
C	Class of Airspace per ICAO Annex 11, Appendix 4
D	Class of Airspace per ICAO Annex 11, Appendix 4
E	Class of Airspace per ICAO Annex 11, Appendix 4
F	Class of Airspace per ICAO Annex 11, Appendix 4
G	Class of Airspace per ICAO Annex 11, Appendix 4
other	Other

CodeClassHelicopter

Value	Definition (Notes) [Source]
1	Helicopter class 1
2	
3	
other	

CodeClassNonDirectionalRadioBea

Value	Definition (Notes) [Source]
B	
L	
M	
other	

CodeColor

Value	Definition (Notes) [Source]
amber	
black	
blue	
brown	
green	
grey	
lightGrey	
magenta	
orange	
other	
pink	
purple	
red	
tbd	
violet	
white	
yellow	

CodeDesignGroup

Value	Definition (Notes) [Source]
I	Up to but not including 49 ft (15 m)
II	49 ft (15 m) up to but not including 79 ft (24 m)
III	79 ft (24 m) up to but not including 118 ft (36 m)
IV	118 ft (36 m) up to but not including 171 ft (52 m)
other	Other
V	171 ft (52 m) up to but not including 214 ft (65 m)
VI	214 ft (65 m) up to but not including 262 ft (80 m)
CodeDesignSurfaceType	
Value	Definition (Notes) [Source]
BRL	Building restriction line (not a standard)
OFZ	Obstacle free zone (See FAA AC 150/5070-6B, paragraph 306)
other	Other
POFA	Precision object free area (See FAA AC 150/5070-6B, paragraph 307)
PRSFVR	Parallel runway separation simultaneous IFR operations
PRSVFR	Parallel runway separation simultaneous VFR operations
ROFA	Runway object free area (See FAA AC 150/5070-6B, paragraph 307)
RPZ	Runway protection zone (See FAA AC 150/5070-6B, paragraph 212)
RSA	Runway safety area
RSZ	Runway safety zone
RWYPTX	Runway to parallel taxiway and taxilane separation
TOFA	Taxiway and taxilane object free area (See FAA AC 150/5070-6B, paragraph 307)
TSA	Threshold sighting area
TSS	Threshold siting surface (See FAA AC 150/5070-6B, Appendix 2)
TXSA	Taxiway safety area (See FAA AC 150/5070-6B, paragraph 403)
CodeDirection	
Value	Definition (Notes) [Source]
Inbound	Baggage flow is from non-secure areas to secure areas of the airport.
Outbound	Baggage flow is from secure areas to non-secure areas of the airport.
Unknown	Baggage flow direction is unknown
CodeDirectionality	
Value	Definition (Notes) [Source]
bi	Bidirectional
es	One way from end-to-startpoint
se	One way from start-to-endpoint
CodeDistanceVertical	
Value	Definition (Notes) [Source]
ALT	Altitude - The distance measured from mean sea level
HEI	Height - The distance measured from ground
other	Other
QFE	A reading of 0 on the altimeter setting which occurs on the ground
QNH	Altimeter setting gives field elevation on ground (approximately equal to 0 at mean sea level)
STD	The altimeter setting is set to standard atmosphere
W84	The distance measured from WGS84 ellipsoid
CodeElementType	
Value	Definition (Notes) [Source]
displaced	
intersection	
normal	
shoulder	
CodeEmissionRadio	
Value	Definition (Notes) [Source]
A2	Telegraphy, no voice
A3A	Single side-band, reduced carrier
A3B	Two independent side bands
A3E	AM double side-band telephony
A3H	Single side-band, full carrier
A3J	Single side-band telephony
A3L	Lower single side-band, carrier unknown
A3U	Upper single side-band, carrier unknown
A8W	AM unkeyed plus ON/OFF keying of ident tone
A9W	Composite AM/FM unkeyed plus ON/OFF keying of ident tone
GID	DPSK data transmission
J3E	AM double side-band suppressed carrier telephony

NONA1A
NONA2A
NOX
other
PON

Unmodulated transmission, morse ident., carrier emission interrupted
Unmodulated transmission, morse ident., carrier emission continuous
Unmodulated carrier
Other

CodeFaaRegion

Value

AAL
ACE
AEA
AGL
ANE
ANM
ASO
ASW
AWP

Definition (Notes) [Source]

Alaska
Central
Eastern
Great Lakes
New England
Northwest Mountain
Southern
Southwest
Western Pacific

CodeFloodZoneType

Value

100Year
10Year
15Year
25Year
500Year
50Year
5Year
general
projected

Definition (Notes) [Source]

Area subject to flooding approximately once every 100 years
Area subject to flooding approximately once every 10 years
Area subject to flooding approximately once every 15 years
Area subject to flooding approximately once every 25 years
Area subject to flooding approximately once every 500 years
Area subject to flooding approximately once every 50 years
Area subject to flooding approximately once every 5 years
Area subject to general flooding
Area subject to projected flooding

CodeGateStandType

Value

ang-ni
hs
iso
jb
nag-no
ni
other
parkingArea
pr
rmt
sr
tm
unk

Definition (Notes) [Source]

Hard stand

Jet bridge

Portable ramp

Stairs
Temporary
unknown

CodeGridType

Value

ed50
gaussKruger
georef
ing
lcc
ll
mil
other
rt90
spcs
ups
usng
utm

Definition (Notes) [Source]

European Datum 1950
Gauss Kruger
World Geographic Reference System
Irish National Grid Reference Survey
Lambert Conformal Conic
Latitude, longitude
Military
Other
Swedish Coordinate System
State Plane Coordinate System
Universal Polar Stereographic
United States National Grid for Spatial Addressing
Universal Transverse Mercator

CodeHazardType

Value

bash
deerStrike
tbd
tortoisePitfall
unknown

Definition (Notes) [Source]

[U.S. CADD]
Deer strike area [U.S. CADD]
To be determined [U.S. CADD]
[U.S. CADD]
Unknown hazard [U.S. CADD]

CodeLandmarkType

Value	Definition (Notes) [Source]
airport	Noticeable landmark is an airport
fence	Noticeable landmark is a fence
levee	Noticeable landmark is a levee
other	Other noticeable landmark
quarry	Noticeable landmark is a quarry
railroad	Noticeable landmark is a railroad
road	Noticeable landmark is a road
shoreline	Noticeable landmark is a shoreline
shorelineFeatureBoundary	Noticeable landmark is a shoreline feature boundary
utilityLine	Noticeable landmark is an utility line

CodeLandUse	Value	Definition (Notes) [Source]
	1000	Residential activities [APA LBCS]
	1100	Household activities [APA LBCS]
	1200	Transient living [APA LBCS]
	1300	Institutional living [APA LBCS]
	2000	Shopping, business, or trade activities [APA LBCS]
	2100	Shopping [APA LBCS]
	2110	Goods-oriented shopping [APA LBCS]
	2120	Service-oriented shopping [APA LBCS]
	2200	Restaurant-type activity [APA LBCS]
	2210	Restaurant-type activity with drive-through [APA LBCS]
	2300	Office activities [APA LBCS]
	2310	Office activities with high turnover of people [APA LBCS]
	2320	Office activities with high turnover of automobiles [APA LBCS]
	3000	Industrial, manufacturing, and waste-related activities [APA LBCS]
	3100	Plant, factory, or heavy goods storage or handling activities [APA LBCS]
	3110	Primarily plant or factory-type activities [APA LBCS]
	3120	Primarily goods storage or handling activities [APA LBCS]
	3200	Solid waste management activities [APA LBCS]
	3210	Solid waste collection and storage [APA LBCS]
	3220	Landfilling or dumping [APA LBCS]
	3230	Waste processing or recycling [APA LBCS]
	3300	Construction activities (grading, digging, and so on) [APA LBCS]
	4000	Social, institutional, or infrastructure-related activities [APA LBCS]
	4100	School or library activities [APA LBCS]
	4110	Classroom-type activities [APA LBCS]
	4120	Training or instructional activities outside classrooms [APA LBCS]
	4130	Other instructional activities including those that occur in libraries [APA LBCS]
	4200	Emergency response or public-safety-related activities [APA LBCS]
	4210	Fire and rescue-related activities [APA LBCS]
	4220	Police, security, and protection-related activities [APA LBCS]
	4230	Emergency or disaster-response-related activities [APA LBCS]
	4300	Activities associated with utilities (water, sewer, power, and so on) [APA LBCS]
	4310	Water-supply-related activities [APA LBCS]
	4311	Water storing, pumping, or piping [APA LBCS]
	4312	Water purification and filtration activities [APA LBCS]
	4313	Irrigation water storage and distribution activities [APA LBCS]
	4314	Flood control, dams, and other large irrigation activities [APA LBCS]
	4320	Sewer-related control, monitor, or distribution activities [APA LBCS]
	4321	Sewage storing, pumping, or piping [APA LBCS]
	4322	Sewer treatment and processing [APA LBCS]
	4330	Power generation, control, monitor, or distribution activities [APA LBCS]
	4331	Power transmission lines or control activities [APA LBCS]
	4332	Power generation, storage, or processing activities [APA LBCS]
	4340	Telecommunications-related control, monitor, or distribution activities
	4350	Natural gas or fuels-related control, monitor, or distribution activities [APA LBCS]
	4400	Mass storage, inactive [APA LBCS]
	4410	Water storage [APA LBCS]
	4420	Storage of natural gas, fuels, and so on [APA LBCS]
	4430	Storage of chemical, nuclear, or other materials [APA LBCS]
	4500	Health care, medical, or treatment activities [APA LBCS]
	4600	Interment, cremation, or grave digging activities [APA LBCS]
	4700	Military base activities [APA LBCS]
	4710	Ordnance storage [APA LBCS]
	4720	Range and test activities [APA LBCS]
	5000	Travel or movement activities [APA LBCS]
	5100	Pedestrian movement [APA LBCS]

5200	Vehicular movement [APA LBCS]
5210	Vehicular parking, storage, and so on [APA LBCS]
5220	Drive-in, drive through, stop-n-go, and so on [APA LBCS]
5400	Trains or other rail movement [APA LBCS]
5410	Rail maintenance, storage, or related activities [APA LBCS]
5500	Sailing, boating, and other port, marine and water-based activities [APA LBCS]
5510	Boat mooring, docking, or servicing [APA LBCS]
5520	Port, ship-building, and related activities [APA LBCS]
5600	Aircraft takeoff, landing, taxiing, and parking [APA LBCS]
5700	Spacecraft launching and related activities [APA LBCS]
6000	Mass assembly of people [APA LBCS]
6100	Passenger assembly [APA LBCS]
6200	Spectator sports assembly [APA LBCS]
6300	Movies, concerts, or entertainment shows [APA LBCS]
6400	Gatherings at fairs and exhibitions [APA LBCS]
6500	Mass training, drills, and so on [APA LBCS]
6600	Social, cultural, or religious assembly [APA LBCS]
6700	Gatherings at galleries, museums, aquariums, zoological parks, and so on [APA LBCS]
6800	Historical or cultural celebrations, parades, reenactments, and so on [APA LBCS]
7000	Leisure activities [APA LBCS]
7100	Active leisure sports and related activities [APA LBCS]
7110	Running, jogging, bicycling, aerobics, exercising, and so on [APA LBCS]
7120	Equestrian sporting activities [APA LBCS]
7130	Hockey, ice skating, and so on [APA LBCS]
7140	Skiing, snowboarding, and so on [APA LBCS]
7150	Automobile and motorbike racing [APA LBCS]
7160	Golf [APA LBCS]
7180	Tennis [APA LBCS]
7190	Track and field, team sports (baseball, basketball, and so on), or other sports [APA LBCS]
7200	Passive leisure activity [APA LBCS]
7210	Camping [APA LBCS]
7220	Gambling [APA LBCS]
7230	Hunting [APA LBCS]
7240	Promenading and other activities in parks [APA LBCS]
7250	Shooting [APA LBCS]
7260	Trapping [APA LBCS]
7300	Flying or air-related sports [APA LBCS]
7400	Water sports and related leisure activities [APA LBCS]
7410	Boating, sailing, and so on [APA LBCS]
7420	Canoeing, kayaking, and so on [APA LBCS]
7430	Swimming, diving, and so on [APA LBCS]
7440	Fishing, angling, and so on [APA LBCS]
7450	Scuba diving, snorkeling, and so on [APA LBCS]
7460	Water-skiing [APA LBCS]
8000	Natural resources-related activities [APA LBCS]
8100	Farming, tilling, plowing, harvesting, or related activities [APA LBCS]
8200	Livestock related activities [APA LBCS]
8300	Pasturing, grazing, and so on [APA LBCS]
8400	Logging [APA LBCS]
8500	Quarrying or stone cutting [APA LBCS]
8600	Mining including surface and subsurface strip mining [APA LBCS]
8700	Drilling, dredging, and so on [APA LBCS]
9000	No human activity or unclassifiable activity [APA LBCS]
9100	Not applicable to this dimension [APA LBCS]
9200	Unclassifiable activity [APA LBCS]
9300	Subsurface activity [APA LBCS]
9900	To be determined [APA LBCS]
9990	To be determined [APA LBCS]
9999	To be determined [APA LBCS]

CodeLightingCategory

Value

ABN
beacon
flood
HBNC
IBN
marine

Definition (Notes) [Source]

other
RSP
signal
strobe

Other

CodeLightingSystemType

Value

airport
approach
obstruction
other
runway
taxiway

Definition (Notes) [Source]

Other

CodeLightingType

Value

ALSF-1
ALSF-2
APAP
APTBCN
CLRBAR
CODEBCN
COURSE
HIRL
LAHSO
LIH
LIL
LIM
LIRL
LITL
MALSF
MALSR

Definition (Notes) [Source]

High intensity approach lighting system - configuration 1
High intensity approach lighting system - configuration 2
Alignment of elements systems
Airport or heliport beacon
Taxiway clearance bar lights
Code beacon
Course lights
High intensity runway edge light system
Land and hold short lights
High intensity light
Low intensity light
Medium intensity light
Low intensity runway edge light system
Low intensity taxiway edge lights
Medium intensity approach lighting systems with with sequenced flashing
Medium intensity approach lighting systems with runway alignment
indicator lights (RAIL)
Medium intensity runway edge light system
Medium intensity taxiway edge lights
Catenary lighting
A combination of OBSRED and OBSDUAL
Aviation red obstruction lights
Flashing white obstruction lights
Omni directional approach lighting system
Other type of light
Precision approach path indicator with 2 lights
Precision approach path indicator with 4 lights
Pulsating visual approach slope indicators
Runway centerline lighting system
Runway end identifier lights
Runway guard lights
Simplified short approach lighting system
Stop bar lights
Taxiway centerline lights
Touchdown zone lighting
Taxiway lead-off lights
Tri-color visual approach slope indicator
Visual approach slope indicator with 2 bars and 12 boxes
Visual approach slope indicator with 3 bars and 16 boxes
Visual approach slope indicator with 2 bars
Visual approach slope indicator with 2 bars and 2 boxes
Visual approach slope indicator with 3 bars

MIRL
MITL
OBSCAT
OBSDUAL
OBSRED
OBSWHT
ODALS
other
PAPI-2
PAPI-4
PVASI
RCLS
REIL
RWYGRD
SSALR
STPBAR
TCTL
TDZL
TLOF
TRCV
VASI-12
VASI-16
VASI-2
VASI-2-2
VASI-3

CodeLowVisibilityCategory

Value

0
1
2

Definition (Notes) [Source]

No low visibility operation supported
Supports ILS CAT I low visibility operations
Supports ILS CAT II III low visibility operations

CodeMarkingFeatureType

Value

aimingPoint
apronSign
arrow

Definition (Notes) [Source]

Runway aiming point [FAA AC 150/5340-1J]
Surface painted apron position/entrance sign [FAA AC 150/5340-1J]
Arrows identify the displaced threshold area to provide centerline
guidance for takeoffs and rollouts

arrowhead	Arrow heads are used in conjunction with a threshold bar to further highlight the beginning of a runway
chevron	A marking used to designate blast pads and other areas that are not suitable for aircraft [FAA AC 150]
demarcation	Demarcation bar [FAA AC 150/5340-1J]
dirSign	Surface painted taxiway direction signs [FAA AC 150/5340-1J]
gateLine	All painted taxilines covering a parking stand area are regarded as stand guidance lines and will be individual objects in the database. There may be several stand guidance taxilines leading to an aircraft stand to accommodate different aircraft types [FAA AC 150/5340-1J]
gateSign	Surface painted gate position signs [FAA AC 150/5340-1J]
holdSign	Surface painted holding position signs [FAA AC 150/5340-1J]
intersectionHold	Holding position markings for instrument landing systems [FAA AC 150/5340-1J]
islSign	Holding position marking for taxiway/taxiway intersections [FAA AC 150/5340-1J]
LAHSO	Marking associated with a land and hold short operations (LAHSO)
locationSign	Surface painted taxiway location signs [FAA AC 150/5340-1J]
nonMoveArea	Non-movement area marking [FAA AC 150/5340-1J]
other	Other type of sign
otherLine	Other markings suitable for representation as a line
otherPoly	Other markings suitable for representation as a polygon
permClosed	Markings for permanently closed runways and taxiways [FAA AC 150/5340-1J]
posSign	Geographic position markings [FAA AC 150/5340-1J]
rwylCtl	Runway centerline [FAA AC 150/5340-1J]
rwylHold	Runway holding position markings on runways [FAA AC 150/5340-1J]
rwylld	Runway designation marking [FAA AC 150/5340-1J]
rwylShd	Runway shoulder markings [FAA AC 150/5340-1J]
rwylThrs	Runway threshold marking [FAA AC 150/5340-1J]
sideStrp	Runway side stripe marking [FAA AC 150/5340-1J]
tdzMark	Runway touchdown zone marking [FAA AC 150/5340-1J]
tempClosed	Markings for temporarily closed runways and taxiways [FAA AC 150/5340-1J]
thrsBar	Runway threshold bar [FAA AC 150/5340-1J]
twylCtl	Taxiway centerline [FAA AC 150/5340-1J]
twylEdge	Taxiway edge marking [FAA AC 150/5340-1J]
twylHold	Runway hold position markings on taxiways [FAA AC 150/5340-1J]
twylShd	Taxiway shoulder marking [FAA AC 150/5340-1J]
vehicle	Vehicle roadway markings [FAA AC 150/5340-1J]

CodeMonumentType

Value	Definition (Notes) [Source]
1stOrderClassI	Othometric elevation of the point is certified to have an elevation difference accuracy of 0.5 mm/(Km) [NGS]
1stOrderClassII	Othometric elevation of the point is certified to have an elevation difference accuracy of 0.7mm/(Km) [NGS]
2ndOrderClassI	Othometric elevation of the point is certified to have an elevation difference accuracy of 1.0/(Km) [NGS]
2nOrderClassII	Othometric elevation of the point is certified to have an elevation difference accuracy of 1.3/(Km) [NGS]
3rdOrderNoTablet	Othometric elevation of the point is certified to have an elevation difference accuracy of 2.0/(Km). [NGS] No tablet is necessary to mark the
3rdOrderWithTablet	Othometric elevation of the point is certified to have an elevation difference accuracy of 2.0/(Km). [NGS] A tablet is similar to a benchmark in that it is placed to permanently mark an elevation and horizontal position that has been surveyed as accurat
BM	Benchmark is a location whose elevation and horizontal position has been surveyed as accurately as possible. Benchmarks are designed for use as reference points, and are usually marked by small brass plates
foundClosingCorner	A found corner is a corner whose original or restored monument or mark is recovered, or whose position is definitely established by one or more witness corners or monuments
foundSectionCorner	A found corner is a corner whose original or restored monument or mark is recovered, or whose position is definitely established by one or more witness corners or monuments
meanderCorner	A corner established where a township line, section line, or other survey intersects the bank of a navigable stream or other meanderable body of water [USGS, 1996, Part 5: Public Land Survey System]
spot	A point with a measured vertical position of less than third order accuracy, measured relative to a reference datum [USGS, 2001, Part 7:
unmonumented	Indicates that no permanent marker has been placed
weakCorner	Corners established by the USDA Forest Service that have been found but their location has not been tied to their true ground position [USGS, 2003]

witnessCorner

A monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner [USGS, 1996, Part 5: Public Land Survey

CodeNavaidEquipmentType

Value

ARSR - ARSR

ASR - ASR

DF - DF

DME - DME

FAN - FAN

ILS - GS

ILS - LOC

LOC - LOC

MLS - AZ

MLS - DME

MLS - ELEV

MSBLS - AZ

MSBLS - DME

MSBLS - ELEV

NDB/C - NDB

NDB/H - NDB

NDB/M - NDB

NDB/U - NDB

other

PAR - PAR

SDF - SDF

SECRA - SECRA

TACAN - TACAN

TLS - APGS

TLS - APLOC

VDME - DME

VDME - VOR

VOR - VOR

VORTAC - TACAN

VORTAC - VOR

VOT - VOT

CodeNavaidSystemType

Value

ARSR

ASR

DF

DME

FAN

ILS

LOC

MLS

MSBLS

NDB/C

NDB/H

NDB/M

NDB/U

other

PAR

SDF

SECRA

TACAN

TLS

VDME

visual

VOR

Definition (Notes) [Source]

Required. Air route surveillance radar. Air Route Traffic Control Center (ARTCC) radar used primarily to detect and display an aircraft's position while en route between terminal areas. The ARSR enables controllers to provide radar air traffic control

Required. Airport surveillance radar

Required. Direction finder

Required. Distance measuring equipment

Required. FAN marker beacon

Required. Instrument landing system - ground stop

Required. Instrument landing system - localizer

Required. Localizer system

Required. Microwave landing system - azimuth

Required. Microwave landing system - distance measuring equipment

Required. Microwave landing system - elevation

Required. Microwave scan beam landing system - azimuth

Required. Microwave scan beam landing system - distance measuring

Required. Microwave scan beam landing system - elevation

Required. Nondirectional radio beacon -- compass locator

Required. Nondirectional radio beacon -- high frequency

Required. Nondirectional radio beacons/medium HF

Required. Nondirectional radio beacons/ultra HF

Other type of navigational equipment

Required. Precision approach radar - PAR

Required. Simplified direction facility

Required. Secondary radar

Required. Tactical air navigation aid. An ultra-high frequency electronic rho-theta air navigation aid which provides suitably equipped aircraft with a continuous indication of bearing and distance to the TACAN station

Required. Transponder landing system - APGS

Required. Transponder landing system - APLOC

Required. Vertical distance measuring equipment - distance measuring equipment

Required. Vertical distance measuring equipment - VOR

Required. Very high frequency omni range - VOR

Required. A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site

Required. A navigation aid providing VOR azimuth, TACAN azimuth, and VOR at one site

Required. VOR test

Definition (Notes) [Source]

Air route surveillance radar

Airport surveillance radar

Direction finder

Distance measuring equipment

FAN marker beacon

Instrument landing system

Localizer system

Microwave landing system

Microwave scan beam landing system

Nondirectional radio beacon -- compass locator

Nondirectional radio beacon -- high frequency

Nondirectional radio beacons/medium HF

Nondirectional radio beacons/ultra HF

Other type of navigational aid system

Precision approach radar

Simplified direction facility

Secondary radar

Tactical air navigation

Transponder landing system

VHF omnirange w/distance measuring equipment

Visual navigational aid system

VHF omnirange

VORTAC	VHF omnirange w/tactical air navigation
VOT	VOR test

CodeObstacleType

Value	Definition (Notes) [Source]
AN	ANA area navigation approach [FAA AC 150/5300-18]
AR	Army [FAA AC 150/5300-18]
FI	FIFO [FAA AC 150/5300-18]
OC	Obstacle chart [FAA AC 150/5300-18]
OP	OEP [FAA AC 150/5300-18]
OR	Other [FAA AC 150/5300-18]
SE	Spot elevations [FAA AC 150/5300-18]
ST	State-coded [FAA AC 150/5300-18]
WW	Worldwide DOD [FAA AC 150/5300-18]

CodeObstructionAreaType

Value	Definition (Notes) [Source]
agEquip	Agricultural equipment
building	Buildings
ground	Ground
mobileCrane	Mobile crane
other	Other type of obstruction area
tree	Trees
urban	Urban area

CodeObstructionIdentificationSurfa

Value	Definition (Notes) [Source]
ANA	Area navigational approach
CGR	Congressional
F77	FAR part 77
OEP	Operational evolution plan
other	Other
RBI	Ron Brown airport initiative

CodeObstructionIdentificationSurfa

Value	Definition (Notes) [Source]
approach	
conical	
horizontal	
other	
primary	
transition	

CodeObstructionIdentificationSurfa

Value	Definition (Notes) [Source]
Name	Definition
primary	
supplementary	

CodeOperationsType

Value	Definition (Notes) [Source]
civil	Civil operations only
joint	Joint military and civil operations
mil	Military operations only
milEst	Military operations + civil operations allowed
other	Other

CodeOwner

Value	Definition (Notes) [Source]
AA	Ann Arundel County
BGE	Baltimore Gas & Electric
FAA	FAA
MAA	Maryland Aviation Administration
Other	Other
TransCon	Transcontinental Gas Pipeline Corp.

CodePassengerLoadingBridgeTyp

Value	Definition (Notes) [Source]
arm	
movableArm	
other	
portableRamp	

portableStairs

CodePavementClassificationNumb

Value	Definition (Notes) [Source]
T	Technical evaluation
U	

CodePavementClassificationNumb

Value	Definition (Notes) [Source]
W	High: no pressure limit
X	Medium: pressure limited to 1.50 MPa (217 psi)
Y	Low: pressure limited to 1.00 MPa (145 psi)
Z	Very low: pressure limited to 0.50 MPa (73 psi)

CodePavementClassificationNumb

Value	Definition (Notes) [Source]
F	Flexible pavement
R	Rigid pavement

CodePavementClassificationPavem

Value	Definition (Notes) [Source]
A	High strength subgrade
B	Medium strength subgrade
C	Low strength subgrade
D	Ultra-low strength subgrade

CodePointType

Value	Definition (Notes) [Source]
0	Airport reference point (ARP)
1	Primary airport control station (PAC)
2	Secondary airport control station (SAC)
3	RunwayControlPoint
4	CenterlinePoint
5	ElevationPoint
6	NavaidControlPoint
7	HelipadReferencePoint
8	VerticalPointObject
9	Spot elevation point
airportElev	Airport elevation
centerlineElev	This may be the same as CenterlinePoint
displacedThreshold	Displaced threshold
runwayEnd	This item should be deleted, see RunwayEnd feature
stopwayEnd	Stopway end
TACS	Traffic and alert collision avoidance system
undefined/Other	

CodePositionInstrumentLandingSy

Value	Definition (Notes) [Source]
C	Backcourse
I	Inner
M	Middle
O	Outer
other	Other

CodePositionOfAxisRelativeToCen

Value	Definition (Notes) [Source]
both	Either side of the centerline
left	To the left of the centerline
other	Other or unknown position
right	To the right of the centerline

CodePrecisionApproachGuidance

Value	Definition (Notes) [Source]
0	Non-precision approach runway
1	ILS precision approach runway, category I
2	ILS precision approach runway, category II
3	ILS precision approach runway category III A
4	ILS precision approach runway category III B
5	ILS precision approach runway category III C
6	ILS precision approach runway category III D
7	Microwave landing system precision approach

CodeProjectStatus

Value

inProgress
planned
proposed

Definition (Notes) [Source]

In progress
Approved and planned
Not yet approved

CodeReferenceObstacleClearance

Value

ARP
other
THR

Definition (Notes) [Source]

Airport
Other
Threshold

CodeRouteType

Value

alley

autobahn
county

fifthClass

firstClass

fourthClass

interstate
jeepTrail
motorway
other
secondClass

state
thirdClass

trail

Definition (Notes) [Source]

Hard-surface or loose-surface narrow street or passageway primarily found between or behind buildings
Controlled access hard-surface superhighways
Hard-surface roads not included in a higher class and improved, loose-surface roads passable in all kinds of weather. These roads are adjuncts to the primary and secondary highway systems. These roads are under the jurisdiction and maintained by county
Unimproved roads passable only with 4-wheel-drive vehicles [USGS, 2001, Part 3: Transportation]
Hard-surface highways including Interstate and U.S. numbered highways (including alternates), primary State routes, and all controlled access highways [USGS, 2001, Part 3: Transportation]
Unimproved roads which are generally passable only in fair weather and used mostly for local traffic. Also included are driveways, regardless of construction [USGS, 2001, Part 3: Transportation]
Hard-surface controlled access highways
Unimproved roads passable only with 4-wheel-drive vehicles
Hard-surface controlled access highways
Other class of road
Hard-surface highways including secondary State routes, primary county routes, and other highways that connect principal cities and towns, and link these places with primary highway system [USGS, 2001, Part 3: Transportation]
Hard-surface State routes under the control and jurisdiction of State
Hard-surface roads not included in a higher class and improved, loose-surface roads passable in all kinds of weather. These roads are adjuncts to the primary and secondary highway systems. Also included are important private roads such as main logging o
Unimproved roads passable only with 4-wheel-drive vehicles, snowmobiles, motocross bikes, and so forth

CodeRunwayType

Value

FATO
RWY

Definition (Notes) [Source]

Final approach and take off
Runway

CodeSamplePointLocation

Value

as
bh
bio
gws
other
seds
soil
solm
surf
was
wl

Definition (Notes) [Source]

Air sample
Borehole
Biological sample
Ground water sample
Other
Sediment sample
Soil sample
Solid material sample
Surface water sample
Waste water sample
Well

CodeShorelineType

Value

apparent

indefinite

Definition (Notes) [Source]

Apparent edge of vegetation. Representation of the vegetative border is considered approximate because this line cannot be accurately identified on the ground, due to intricate growth patterns and change over time
Conditions prevent the feature from being confidently positioned.
Horizontal data are confidently positioned within 0.02", at map scale, of

meanHighWater	the true ground position. Vertical data are confidently positioned within one-half contour interval of true ground
meanLowWater	The average limit of dry land during periods of highest water level (for example, high tide)
meanSeaLevel	The average limit of dry land during periods of lowest water level (for example, low tide)
	The arithmetic mean of hourly heights observed over some specified time [American Geological Institute]

CodeSignType

Value	Definition (Notes) [Source]
apron	Inbound destination sign - general parking, servicing, and loading areas
cargo	Inbound destination sign - areas set aside for cargo handling
civil	Inbound destination sign - areas set aside for civil aircraft
FBO	Inbound destination sign - fixed base operator
fuel	Inbound destination sign - areas where aircraft are fueled or serviced
holdInstrumentLandingSystem	Holding position sign for ILS critical areas
holdRunwayApproach	Holding position sign for runway approach areas
holdRunwayIntersection	Holding position sign for runway/runway intersections
holdTaxiwayRunway	Holding position sign for taxiway/runway
info	Signs installed on the airside of an airport, other than taxiway guidance signs or runway distance remaining signs
instrumentLandingSystemCritical	Instrument landing system critical area boundary sign
intl	Inbound destination sign - areas set aside for handling international flights
mil	Inbound destination sign - areas set aside for military aircraft
noEntry	No entry sign
other	Other types of sign
outboundDestination	Outbound destination sign
PAX	Inbound destination sign - areas set aside for passenger handling
roadStop	Stop sign in areas where vehicle roadways intersect runways or taxiways
roadYield	Yield sign in areas where vehicle roadways intersect runways or taxiways
rsaRwyAppr	Runway safety area/OFZ and runway approach boundary sign
runwayExit	Runway exit sign
runwayLocation	Runway location sign
rwYDistRem	Sign that designates the remaining runway distance to pilots during takeoff and landing operations
taxiwayDirection	Taxiway direction sign
taxiwayEnd	Taxiway ending marker
taxiwayLocation	Taxiway location sign
terminal	Inbound destination sign - gate positions at which aircraft are loaded and

CodeStatus

Value	Definition (Notes) [Source]
abandoned	Abandoned [U.S. CADD]
active	Active surface [U.S. CADD]
broken	Broken or rough surface
closed	Closed surface [U.S. CADD]
failAide	Failure or irregular operation of visual aides
inactive	Inactive
limited	Limited operations [U.S. CADD]
nonOperational	Non operational [U.S. CADD]
operational	Operational (fully) [U.S. CADD]
parked	Parked or disabled aircraft
sPower	Secondary power supply in operation
tbd	To be determined [U.S. CADD]
terminated	Project terminated
underConstruction	Planned or under construction [U.S. CADD]
workInProgress	Construction or work in progress

CodeSurfaceComposition

Value	Definition (Notes) [Source]
ags	Asphalt and turf
asph	Asphalt
be	Bare earth
bitum	Bitumen
brick	Brick
ca	Concrete and asphalt
cg	Concrete grooved
cgs	Concrete and turf
clay	Clay
conc	Concrete

coral
ds
grade
gravel
gs
ice
laterite
macadam
mats
membrane
metal
other
psp
sand
si
snow
stone
water
wood

Coral
Desert/Sand
Graded surface
Gravel
Turf
ice
Laterite
Macadam

Other type of surface composition

Snow/Ice
Snow
Stone
Water
Wood

CodeSurfaceCondition

Value

fair
good
other
poor

Definition (Notes) [Source]

Fair condition
Good condition
Other condition
Poor condition

CodeSurfacePreparation

Value

afsc
graded
grooved
natural
oiled
other
paved
pfc
rfsc
rolled
ungrooved
unpaved

Definition (Notes) [Source]

Graded surface
Grooved surface

Other type of surface preparation
Paved (specially prepared hard surface)

Ungrooved surface
Unpaved (specially prepared hard surface)

CodeTaxiwayType

Value

airTLane
airTwy
apron
bypass
exit
fastExit
gateStandTLane
groundStandTLane
leadInTLane
leadOutTLane
other
parallelTwy
stub
turnAround

Definition (Notes) [Source]

Air taxilane
Air taxiway
Apron taxiway
Bypass holding bay
Exit/turnoff taxiway
Rapid exit/turnoff taxiway
Gate/stand taxilane
Ground taxiway
Lead-in taxilane
Lead-out taxilane
Other
Parallel taxiway
Stub taxiway
Turn around taxiway

CodeThresholdType

Value

displaced

normal

Definition (Notes) [Source]

An indication that the landing threshold is located at a point other than the runway end
An indication that the landing threshold corresponds to the end of the

CodeTurnDirection

Value

either
left
right

Definition (Notes) [Source]

Turn may be either direction
Turn is to the left
Turn is to the right

CodeTypeAirspace

Value	Definition (Notes) [Source]
A	Alert area
ADIZ	Air defense identification zone
AMA	Minimum altitude area
ASR	Altimeter setting region
ATZ	Aerodrome traffic zone
ATZ-P	Part of an aerodrome traffic zone
AWY	Airway (corridor)
BIRD	Bird migration area
CBA	Cross border area (FUA)
CDA	Client defined airspace
CFMU	CFMU area
CLASS	Airspace having a specified class
CTA	Control area
CTA-P	Part of a control area
CTR	Control zone
CTR-P	Part of a control zone
D	Danger area
D-AMC	AMC manageable danger area
D-OTHER	Activities of dangerous nature (other than a danger area)
ECAC	ECAC region
FIR	Flight information region
FIR-P	Part of a flight information region
HTZ	Helicopter traffic zone
ICAO	International civil aviation organization region (for example, EUR, NAT, and so forth)
IFPS	IFPS area
LMA	Limited airspace
MIL	Military training/exercise area
MINPSA-P	Minimum navigation performance specifications area
MNPSA	Part of minimum navigation performance specifications area
NAS	National airspace system
NAS-P	A part of a national airspace system
NO-FIR	Airspace for which not even and FIR is defined
OCA	Oceanic control area
OCA-P	Part of an oceanic control area
OIL	Oil field
OTA	Oceanic transition area
P	Prohibited area
PART	Part of an airspace (used in airspace aggregations)
POLITICAL	Political/administrative area
PROTECT	Protected
R	Restricted area
R-AMC	AMC manageable restricted area
RAS	Regulated airspace (not otherwise covered)
RCA	Reduced coordination area
RTECL	Route centerline
SECTOR	Control sector
SECTOR-C	Temporarily consolidated (collapsed) sector
SPORT	Aerial sporting/recreational area
TACT	Tactical area
TMA	Terminal control area
TMA-P	Part of a terminal control area
TRA	Temporary reserved area
TSA	Temporary segregated area (FUA)
UIR	Upper flight information region
UIR-P	Part of an upper flight information region
UTA	Upper control area
UTA-P	Part of upper control area
W	Warning area

CodeTypeAirspaceSignificantPoint

Value	Definition (Notes) [Source]
B	Situated on the border of the airspace
EE	Entry/exit point
EN	Entry point
EX	Exit point
IN	Situated within the airspace
other	Other

CodeTypeNavigationalAidCheckPoi

Value	Definition (Notes) [Source]
DME	Distance measuring equipment
GNSS	Global navigation satellite system
INS	Inertial navigation system
NDB	Non-directional radio beacon
other	Other
TACAN	Tactical air navigation
VOR	VHF omnidirectional radio range

CodeTypeOfProtectionArea

Value	Definition (Notes) [Source]
cwy	Clearway
ils	Instrument landing system
ofs	
ofz	Obstacle free zone
other	Other protect area
safe	Safe area

CodeTypeSegmentPath

Value	Definition (Notes) [Source]
GDS	Great circle
GRC	Other
other	
RHL	Rhumb line

CodeTypeVisualApproachSlopeIndi

Value	Definition (Notes) [Source]
3B-ATVASIS	3-bar abbreviated "T-shaped" visual approach slope indicator system
3B-AVASIS	3-bar abbreviated visual approach slope indicator system
3B-VASIS	3-bar visual approach slope indicator system
APAPI	Abbreviated precision approach path indicator
AVASIS	Abbreviated visual approach slope indicator system
HAPI	Heliport precision approach path indicator
ILU	Number of identical light units
LCVASI	Low cost visual approach slope indicator "r"; 3 sets of "r" white lights on 3 mounts usually on only one side of the runway
OLS	Optical landing system for ship decks and aircraft carriers (sometimes available on ground air bases for training purposes)
other	Other type of visual approach slope indicator
PAPI	Precision approach path indicator
PNI	Precision navigation instrument
PVASI	Pulsating visual approach slope indicator
TRCV	Tri-colored visual approach slope indicator, normally a single light unit projecting three colors
TVASIS	T-shaped visual approach slope indicator
VASIS	Visual approach slope indicator system

CodeUtilitySystemType

Value	Definition (Notes) [Source]
compressedAirSystem	The components of a compressed air system
controlMonitoringSystem	The components of an electronic monitoring and control system (EMCS) including cables, devices, and so on
electricalExitLight	The components of an electrical exterior lighting system including cables, switches, devices, transformers, and so on. Does not include field, navaid, or approach lighting
electricalSystem	The components of an electrical distribution system including cables, switches, devices, motors, transformers, and so on
fuelSystem	The components of a fuel distribution system consisting of pipes, fittings, fixtures, pumps, tanks, and so on
general	The components of utility system which are universal in use and purpose and do not belong to a specific utility
heatCoolSystem	The components of a heating and cooling distribution system consisting of pipes, fittings, fixtures, and so on
industrialSystem	The components of an industrial waste collection system including pipes, fittings, fixtures, tanks, lagoons, and so on
naturalGasSystem	The components of a natural gas distribution system consisting of pipes, fittings, fixtures, and so on
nuclear	The components of a nuclear system such as nuclear fuel, nuclear research, nuclear waste, and nuclear weapons

other	The components of another utility system. Specify what the component is
saltwaterSystem	The components of a salt water collection system
stormSystem	The components of a storm drainage collection system including pipes, fittings, fixtures, and so on
transmissionSystem	Objects related to the long distance transmission of gas, oil, or hazardous
wastewaterSystem	The components of a wastewater collection system including pipes, fittings, fixtures, treatment plants, collection locations, and so forth
waterSystem	The components of a water system including pipes, fittings, fixtures, treatment plants, and so on

CodeUtilityType

Value	Definition (Notes) [Source]
line	A utility line such as an electrical transmission or pipeline
other	Other type of utility
point	A utility point such as a tower
polygon	A utility polygon such as a tank site

CodeVerticalStructureMaterial

Value	Definition (Notes) [Source]
1	Concrete
2	Metal
3	Stone/brick
4	Composition
5	Rock
6	Wood
7	Other

CodeZoningClass

Value	Definition (Notes) [Source]
commercial	Areas which are zoned for merchandising, shopping, or other commercial development [U.S. CADD]
industrial	Areas which are zoned for factory, manufacturing, or other industrial development [U.S. CADD]
other	Other zoning class
quasiPublic	Areas which are zoned public although under private ownership or control [U.S. CADD]
residential	Areas which are zoned for housing or residential development [U.S.

commodity1_d, commodity2_d,

Value	Definition (Notes) [Source]
AA	Anhydrous Ammonia [SDSFIE V2.1 DOT - NPMS]
CHEMICALS	Chemicals - type unspecified [SDSFIE V2.2 S-57]
CO2	Carbon Dioxide [SDSFIE V2.1 DOT - NPMS]
CRD	Crude or unprocessed oil. [SDSFIE V2.3 DOT - NPMS]
EMP	empty [SDSFIE V2.1 DOT - NPMS]
GAS	Gas - type not specified [SDSFIE V2.2 S-57]
HG	Hydrogen Gas [SDSFIE V2.1 DOT - NPMS]
HVL	Highly Volatile Liquid [SDSFIE V2.1 DOT - NPMS]
LPG	Liquefied Petroleum Gas [SDSFIE V2.1 DOT - NPMS]
NG	Natural Gas [SDSFIE V2.1 DOT - NPMS]
NGL	Natural Gas Liquids [SDSFIE V2.1 DOT - NPMS]
PRD	Product is not known. [SDSFIE V2.1 DOT - NPMS]
WATER	Water - potable or otherwise. [SDSFIE V2.2 S-57]

con_type_d

Value	Definition (Notes) [Source]
FIRE_CONNECT	fire department connection [SDSFIE V2.1 FGDC Utilities Classification]
FIRE_HYDRANT	fire hydrant [SDSFIE V2.1 FGDC Utilities Classification]

cond_d

Value	Definition (Notes) [Source]
BOARDEDUP	boarded up [SDSFIE V1.4]
BROKENNOUSE	broken and unusable [SDSFIE V1.4]
BURNTNOUSE	burnt and not useable [SDSFIE V1.4]
BURNTUSEABLE	burnt but useable [SDSFIE V1.4]
CONDEMNED	condemned [SDSFIE V1.4]
CRACKED	cracked [SDSFIE V1.4]
CRACKED	cracked but useable [SDSFIE V2.1 FGDC Utilities Classification]
DAMAGED	damaged [SDSFIE V1.4]
DAMAGEHEVUSE	heavily damage, but useable [SDSFIE V1.4]
DAMAGELITUSE	light damage, but useable [SDSFIE V1.4]

DAMAGEMODUSE	moderate damage, but useable [SDSFIE V1.4]
DAMAGHEVNO	heavy damage, and unusable [SDSFIE V1.4]
DAMAGLITNO	light damage, and unusable [SDSFIE V1.4]
DAMAGMODNO	moderate damage, and unusable [SDSFIE V1.4]
DANGEROUS	dangerous to use [SDSFIE V1.4]
FAIR	fair condition [SDSFIE V2.1 FGDC Utilities Classification]
FAIR	fair or medium condition [SDSFIE V1.4]
FAIR	Fair or medium condition. [SDSFIE V2.31 Air Force]
FAIRESTIMATED	Estimated in fair condition. [SDSFIE V2.31 Air Force]
GOOD	good condition [SDSFIE V2.1 FGDC Utilities Classification]
GOOD	good condition [SDSFIE V1.4]
GOOD	Good condition. [SDSFIE V2.31 Air Force]
GOODESTIMATED	Estimated in good condition. [SDSFIE V2.31 Air Force]
GOODNOTNEW	good, but not new [SDSFIE V1.4]
HABITABLE	habitable [SDSFIE V1.4]
HABITABLENO	not habitable [SDSFIE V1.4]
MINORUSE	minor use [SDSFIE V1.4]
NEWLYBUILT	newly built [SDSFIE V1.4]
NEWUNFINISH	newly built, but not yet finished [SDSFIE V1.4]
NOTRESPASSNG	no trespassing [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V2.1 FGDC Utilities Classification]
POOR	poor or unsuitable condition [SDSFIE V1.4]
POOR	poor [SDSFIE V1.4]
POORESTIMATED	Estimated in poor condition. [SDSFIE V2.31 Air Force]
QUARANTINED	quarantined [SDSFIE V1.4]
RADIOACTIVE	radioactive [SDSFIE V1.4]
SPLINTER	splintered but useable [SDSFIE V2.1 FGDC Utilities Classification]
TBD	to be determined [SDSFIE V2.1 FGDC Utilities Classification]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNDERCONSTRUCT	Planned or under construction. [SDSFIE V2.31 Air Force]
UNKNOWN	unknown [SDSFIE V1.4]
UNSERVICEABLE	Unserviceable or not a weight bearing surface. [SDSFIE V2.31 Air Force]
UNUSEABLE	unusable [SDSFIE V2.1 FGDC Utilities Classification]
USEABLE	useable [SDSFIE V1.4]
USEABLENO	not useable [SDSFIE V1.4]

conn_typ_d, connt_d, connt1_d,

Value	Definition (Notes) [Source]
1_0_2_3_F	1.0/2.3, Female. [SDSFIE V2.5 AIR FORCE]
1_0_2_3_M	1.0/2.3, Male. [SDSFIE V2.5 AIR FORCE]
1_6_5_6_F	1.6/5.6, Female. [SDSFIE V2.5 AIR FORCE]
1_6_5_6_M	1.6/5.6, Male. [SDSFIE V2.5 AIR FORCE]
7_16_DIN_F	7-16 Deutsh Industries Norm (DIN), Female. [SDSFIE V2.5 AIR FORCE]
7_16_DIN_M	7-16 Deutsh Industries Norm (DIN), Male. [SDSFIE V2.5 AIR FORCE]
AMC_F	Amphenol Micro Coaxial (AMC), Male. [SDSFIE V2.5 AIR FORCE]
AMC_M	Amphenol Micro Coaxial (AMC), Female. [SDSFIE V2.5 AIR FORCE]
BI_F	Bionic, Female. [SDSFIE V2.5 AIR FORCE]
BI_M	Bionic, Male. [SDSFIE V2.5 AIR FORCE]
BNC_F	Bayonet Neill Concelman (BMC), Female. [SDSFIE V2.5 AIR FORCE]
BNC_M	Bayonet Neill Concelman (BMC), Male. [SDSFIE V2.5 AIR FORCE]
C_F	C Connector, Female. [SDSFIE V2.5 AIR FORCE]
C_M	C Connector, Male. [SDSFIE V2.5 AIR FORCE]
D4_F	D4, Female. [SDSFIE V2.5 AIR FORCE]
D4_M	D4, Male. [SDSFIE V2.5 AIR FORCE]
DB_25_F	25-pin D-type connector, Female. [SDSFIE V2.5 AIR FORCE]
DB_25_M	25-pin D-type connector, Male. [SDSFIE V2.5 AIR FORCE]
DB_9_F	9-pin D-type connector, Female. [SDSFIE V2.5 AIR FORCE]
DB_9_M	9-pin D-type connector, Male. [SDSFIE V2.5 AIR FORCE]
DE_9_F	9-pin D-type connector, Female AKA DB-10. [SDSFIE V2.5 AIR FORCE]
DE_9_M	9-pin D-type connector, Male AKA DB-10. [SDSFIE V2.5 AIR FORCE]
F_TYPE_F	F TYPE, Female. [SDSFIE V2.5 AIR FORCE]
F_TYPE_M	F-M - F TYPE, Male. [SDSFIE V2.5 AIR FORCE]
FC_F	MIL-C-39012 category D type, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FC_M	MIL-C-39012 category D type, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
FDDI_F	Fiber Distributed Data Interface, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FDDI_M	Fiber Distributed Data Interface, FO connector, Male. [SDSFIE V2.5 AIR FORCE]

FIREWIRE_4F	IEEE 1394 Fire wire connector, 4-pin, Female. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_4M	IEEE 1394 Fire wire connector, 4-pin, Male. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_6F	IEEE 1394 Fire wire connector, 6-pin, Female. [SDSFIE V2.5 AIR FORCE]
FIREWIRE_6M	IEEE 1394 Fire wire connector, 6-pin, Male. [SDSFIE V2.5 AIR FORCE]
FME_F	FME, Female. [SDSFIE V2.5 AIR FORCE]
FME_M	FME, Male. [SDSFIE V2.5 AIR FORCE]
G_TYPE_F	G-F - Type G, Female. [SDSFIE V2.5 AIR FORCE]
G_TYPE_M	G-M - Type G, Male. [SDSFIE V2.5 AIR FORCE]
HM_F	HN, weatherproof, RF connector, Female. [SDSFIE V2.5 AIR FORCE]
HN_M	HN, weatherproof, RF connector, Male. [SDSFIE V2.5 AIR FORCE]
LC_F	Limited Co-ordination Specification (LC Spec.), Female. [SDSFIE V2.5 AIR FORCE]
LC_M	Limited Co-ordination Specification (LC Spec.), Male. [SDSFIE V2.5 AIR FORCE]
MINI_UHF_F	MINI UHF, Female. [SDSFIE V2.5 AIR FORCE]
MINI_UHF_M	MINI UHF, Male. [SDSFIE V2.5 AIR FORCE]
MT_RJ_F	MT-RJ, FO, RJ45 footprint connector, Female. [SDSFIE V2.5 AIR FORCE]
MT_RJ_M	MT-RJ, FO, RJ45 footprint connector, Male. [SDSFIE V2.5 AIR FORCE]
N_TYPE_F	N TYPE, Female. [SDSFIE V2.5 AIR FORCE]
N_TYPE_M	N TYPE, Male. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RJ21_F	RJ21, RJ21 AKA Telco 50-pin connector, Female. [SDSFIE V2.5 AIR FORCE]
RJ21_M	RJ21 AKA Telco 50-pin connector, Male. [SDSFIE V2.5 AIR FORCE]
RJ45_F	RJ45, Female. [SDSFIE V2.5 AIR FORCE]
RJ45_M	RJ45, Male. [SDSFIE V2.5 AIR FORCE]
SC_F	Plug and socket, push-pull latch, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
SC_M	Plug and socket, push-pull latch, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
SMA_F	SubMiniature Version A, Female. [SDSFIE V2.5 AIR FORCE]
SMA_M	Subminiature Version A, Male. [SDSFIE V2.5 AIR FORCE]
SMC_F	Subminiature Version C, Female. [SDSFIE V2.5 AIR FORCE]
SMC_M	Subminiature Version C, Male. [SDSFIE V2.5 AIR FORCE]
ST_F	ST, Female. [SDSFIE V2.5 AIR FORCE]
ST_M	ST, Male. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TNC_F	TNC Female. [SDSFIE V2.5 AIR FORCE]
TNC_M	TNC Male. [SDSFIE V2.5 AIR FORCE]
UHF_F	UHF, Female. [SDSFIE V2.5 AIR FORCE]
UHF_M	UHF, Male. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
USB_F	Universal Serial Bus, Female. [SDSFIE V2.5 AIR FORCE]
USB_M	Universal Serial Bus, Male. [SDSFIE V2.5 AIR FORCE]

cool_mth_d, cool_ty_d

Value	Definition (Notes) [Source]
AIR	air [SDSFIE V1.4]
FAN	fan [SDSFIE V1.4]
OIL	oil [SDSFIE V1.4]
OILAIR	oil and air (OA) [SDSFIE V1.4]
OILAIRFAN	oil, air, and fan (FA) [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
REFRIGERATE	refrigeration units [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]

core_typ_d

Value	Definition (Notes) [Source]
AIR_CORE	Air core [SDSFIE V2 Tinker Air Force Base]
FILLED	Filled Core by unknown substance. [SDSFIE V2.5 AIR FORCE]
INSULATION	Insulation core [SDSFIE V2 Tinker Air Force Base]
PAPER	Paper Core [SDSFIE V2 Tinker Air Force Base]
PRESSURIZED	Pressurized core [SDSFIE V2 Tinker Air Force Base]

costrm_d, mat_d, mh_mat_d,

Value	Definition (Notes) [Source]
AL	Aluminum. [SDSFIE V2.5 AIR FORCE]
CIS	Concrete Cast inSitu/Cast in Place. [SDSFIE V2.5 AIR FORCE]
COMBINATION	Combination of materials. [SDSFIE V2.5 AIR FORCE]
FIBERGLASS	Fiberglass. [SDSFIE V2.5 AIR FORCE]
IRON	Iron (Cast or Forged). [SDSFIE V2.5 AIR FORCE]
MASONRY	Masonry (Brick or Block). [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]

PLASTIC	Plastic. [SDSFIE V2.5 AIR FORCE]
PRECAST	Pre-Cast Concrete. [SDSFIE V2.5 AIR FORCE]
STEEL	Steel. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtbk_d	
Value	Definition (Notes) [Source]
303	303. [SDSFIE V2.5 AIR FORCE]
305	305. [SDSFIE V2.5 AIR FORCE]
355	355. [SDSFIE V2.5 AIR FORCE]
399	399. [SDSFIE V2.5 AIR FORCE]
700	700. [SDSFIE V2.5 AIR FORCE]
713	713. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtht_d	
Value	Definition (Notes) [Source]
11_FT_6_IN	11 Foot 6 Inch. [SDSFIE V2.5 AIR FORCE]
7_FT	7 Foot. [SDSFIE V2.5 AIR FORCE]
8_FT	8 Foot. [SDSFIE V2.5 AIR FORCE]
9_FT	9 Foot. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtma_d	
Value	Definition (Notes) [Source]
126_IN	126 Inch. [SDSFIE V2.5 AIR FORCE]
76_IN	76 Inch. [SDSFIE V2.5 AIR FORCE]
84_IN	84 Inch. [SDSFIE V2.5 AIR FORCE]
92_IN	92 Inch. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtmb_d	
Value	Definition (Notes) [Source]
8_IN	8 Inch. [SDSFIE V2.5 AIR FORCE]
NONE	None. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To be determined. [SDSFIE V2.5 AIR FORCE]
UNIVERSAL	Universal. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtsw_d	
Value	Definition (Notes) [Source]
14_IN	14 Inch. [SDSFIE V2.5 AIR FORCE]
20_5_IN	20.5 Inch. [SDSFIE V2.5 AIR FORCE]
26_5_IN	26.5 Inch. [SDSFIE V2.5 AIR FORCE]
32_5_IN	32.5 Inch. [SDSFIE V2.5 AIR FORCE]
5_5_IN	5.5 Inch. [SDSFIE V2.5 AIR FORCE]
8_5_IN	8.5 Inch. [SDSFIE V2.5 AIR FORCE]
9_IN	9 Inch. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
covtty_d	
Value	Definition (Notes) [Source]
DOUBLE_SIDED	Double sided. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
SINGLE_SIDED	Single sided. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
WALL_MOUNT	Wall Mount. [SDSFIE V2.5 AIR FORCE]
cpctr_kv_d, kva_1_d, kva_2_d	
Value	Definition (Notes) [Source]
10	10 kvar [SDSFIE V1.4]

100	100 kvar [SDSFIE V1.4]
1000	1000 kvar [SDSFIE V1.4]
10000	10000 kvar [SDSFIE V1.4]
112.5	112.5 kvar [SDSFIE V1.7]
112_5	112.5 kvar [SDSFIE V1.4]
1250	1250 kvar [SDSFIE V1.4]
14K20K	14000 20000 kvar [SDSFIE V1.4]
15	15 kvar [SDSFIE V1.4]
150	150 kvar [SDSFIE V1.4]
1500	1500 kvar [SDSFIE V1.4]
167	167 kvar [SDSFIE V1.4]
16K22K	16000 22000 kvar [SDSFIE V1.4]
225	225 kvar [SDSFIE V1.4]
25	25 kvar [SDSFIE V1.4]
250	250 kvar [SDSFIE V1.4]
300	300 kvar [SDSFIE V1.4]
333	333 kvar [SDSFIE V1.4]
37.5	37.5 kvar [SDSFIE V1.7]
37_5	37.5 kvar [SDSFIE V1.4]
3750	3750 kvar [SDSFIE V1.4]
45	45 kvar [SDSFIE V1.4]
50	50 kvar [SDSFIE V1.4]
500	500 kvar [SDSFIE V1.4]
5000	5000 kvar [SDSFIE V1.4]
55	55 kvar [SDSFIE V1.4]
7.5	7.5 kvar [SDSFIE V1.7]
7_5	7.5 kvar [SDSFIE V1.4]
75	75 kvar [SDSFIE V1.4]
750	750 kvar [SDSFIE V1.4]
775	775 kvar [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
dbk_size_d	
Value	Definition (Notes) [Source]
NA	not applicable [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNK	unknown [SDSFIE V1.4]
design_d	
Value	Definition (Notes) [Source]
DOUBLE_POLE	double pole [SDSFIE V2.1 FGDC Utilities Classification]
DOWN_GUY	A wire guy running from the top of a pole to an anchor in the ground. [SDSFIE V2.1 FGDC Utilities Classification]
EJECTOR	ejector system [SDSFIE V1.6]
FAUCET	faucet [SDSFIE V2.1 FGDC Utilities Classification]
HYDRANT	hydrant [SDSFIE V2.1 FGDC Utilities Classification]
METER	meter [SDSFIE V1.4]
OPEN_DRAINAGE	The channel is part of an unaltered drainage system [SDSFIE V2.1 FGDC Utilities Classification]
PARSHALL_FLUME	parshall flume meter [SDSFIE V1.4]
PAVED_DITCH	The channel has a concrete or other paved surface [SDSFIE V2.1 FGDC Utilities Classification]
POLE	pole [SDSFIE V2.1 FGDC Utilities Classification]
PUMP	pump station [SDSFIE V1.6]
RISER_POLE	riser pole [SDSFIE V2.1 FGDC Utilities Classification]
SPAN_GUY	A wire guy running from the top of a pole to the top of the adjacent pole [SDSFIE V2.1 FGDC Utilities Classification]
SPRINKLER	sprinkler head [SDSFIE V2.1 FGDC Utilities Classification]
TBD	To Be Determined [SDSFIE V2.1]
TOWER	tower [SDSFIE V2.1 FGDC Utilities Classification]
UNKNOWN	Unknown [SDSFIE V2.1]
UNPAVED_DITCH	The channel has no constructed or prepared surface [SDSFIE V2.1 FGDC Utilities Classification]
design_d, instl_ty_d, sta_ty_d	
Value	Definition (Notes) [Source]
BOOSTER	booster station [SDSFIE V2.1 FGDC Utilities Classification]
PUMP	pump station [SDSFIE V2.1 FGDC Utilities Classification]

dev_st_d, vlv_st_d**Value**

ANGLE
BALL
BUTTERFLY
CHECK
DRYPIPE
GATE
GLOBE
NEEDLE
OTHER
OTHERPOSTIND
PLUG
PRESSREDUCNG
PRESSRELIEF
QUAD
REGULATING
STOP_WASTE
SWINGCHECK
TBD
TRIPLEDUTY
UNKNOWN

Definition (Notes) [Source]

angle [SDSFIE V1.4]
ball [SDSFIE V1.4]
butterfly [SDSFIE V1.4]
check [SDSFIE V1.4]
dry pipe [SDSFIE V1.4]
gate [SDSFIE V1.4]
globe [SDSFIE V1.4]
needle [SDSFIE V1.4]
other [SDSFIE V1.4]
other post indicator [SDSFIE V1.4]
plug [SDSFIE V1.4]
pressure reducing [SDSFIE V1.4]
pressure relief [SDSFIE V1.4]
quad [SDSFIE V1.4]
regulating [SDSFIE V1.4]
stop and waste [SDSFIE V1.4]
swing check [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
triple duty [SDSFIE V1.4]
unknown [SDSFIE V1.4]

dev_ty_d**Value**

FIELD_INTERFC
MULTIPLEX

Definition (Notes) [Source]

field interface [SDSFIE V1.8]
multiplexer [SDSFIE V1.8]

dispostn_d, status_d**Value**

ABANDONED
BURIED
IN_SERVICE
INCOMPLETE
NATURAL
OTHER
PERMANENT
PROPOSED
RETIRED
TBD
TEMPORARY
UNKNOWN

Definition (Notes) [Source]

abandoned in place (not in use) [SDSFIE V1.4]
buried [SDSFIE V1.75]
In service and being used. [SDSFIE V2.1 DOT - NPMS]
incomplete or unfinished [SDSFIE V1.4]
Natural. [SDSFIE V2.31 Air Force]
other [SDSFIE V1.4]
permanent [SDSFIE V1.4]
proposed [SDSFIE V1.4]
Permanently retired, or taken out of service. [SDSFIE V2.1 DOT - NPMS]
to be determined [SDSFIE V1.4]
temporary [SDSFIE V1.4]
unknown [SDSFIE V1.4]

dist_typ_d**Value**

ASPHALT
CO2
DISTALLATES
H2
HE
S

Definition (Notes) [Source]

Asphalt Production. [SDSFIE V2.3 HSIP]
CO2 Production. [SDSFIE V2.3 HSIP]
Distallates Production. [SDSFIE V2.3 HSIP]
H2 Production. [SDSFIE V2.3 HSIP]
He Production. [SDSFIE V2.3 HSIP]
S Production. [SDSFIE V2.3 HSIP]

distrib_d**Value**

DESTROYED
MAJORIMPACT
MINORIMPACT
MODERIMPACT
NONE
TBD
UNKNOWN

Definition (Notes) [Source]

destroyed [SDSFIE V1.4]
major impact (51-99%) disturbed [SDSFIE V1.4]
minor impact (1-25%) disturbed [SDSFIE V1.4]
moderate impact (26-50%) disturbed [SDSFIE V1.4]
none [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

drain_ty_d**Value**

FAN
NETWORK
OTHER
SEALED
SEEPAGEPIT
STORMCONNECT

Definition (Notes) [Source]

fan [SDSFIE V1.4]
network [SDSFIE V1.4]
other [SDSFIE V1.4]
sealed [SDSFIE V1.4]
seepage pit [SDSFIE V1.4]
connected to storm system [SDSFIE V1.4]

SUBDRAIN	sub drain (French drain) [SDSFIE V1.4]
SUMPPUMP	sump pump [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TILEFIELD	tile field [SDSFIE V1.4]
drgvesty_d	
Value	Definition (Notes) [Source]
BACKHOE	A dredge with a single bucket on an arm which moves towards the vessel as the bucket excavates the soil. [SDSFIE V2.2 COE Dredging]
CLAMSHELL	Type of mechanical cable excavator dredge that uses a single bucket attached to the dredge crane with cables. [SDSFIE V2.2 COE Dredging]
CUTTERHEAD	A hydraulic dredge that uses a cutterhead at the suction entrance to dislodge bottom material. [SDSFIE V2.2 COE Dredging]
DIPPER	A power shovel operated from a barge. [SDSFIE V2.2 COE Dredging]
DRAGLINE	An excavating machine with a bucket that is dropped by a boom and then dragged toward the machine by a cable. [SDSFIE V2.2 COE Dredging]
HOPPER	A self-propelled floating plant capable of dredging material, storing it, transporting it to the disposal area, and placing the material at a designated site. [SDSFIE V2.2 COE Dredging]
OTHER	Dredges using non-conventional means or a combination of hydraulic and mechanical processes, e.g., pneumatic, agitation, etc. [SDSFIE V2.2 COE Dredging]
PLAIN_SUCTION	Hydraulic dredge with no mechanical device at suction mouth, a cutter for dislodging bottom material [SDSFIE V2.2 COE Dredging]
TUGBOAT	Used for agitation dredging [SDSFIE V2.2 COE Dredging]
WATER_INJECTION	A type of dredge that injects water at high velocity and/or volume, into the shoaled material to move it to deeper area. [SDSFIE V2.2 COE Dredging]
drnfl_st_d	
Value	Definition (Notes) [Source]
FAN	fan drain field [SDSFIE V1.4]
NETWORK	network drain field [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
SEEP_PIT	seepage pit [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TILE	tile field [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
drng_pat_d	
Value	Definition (Notes) [Source]
ANGULATE	Angulate. [SDSFIE V1.4]
ANNULAR	Annular. [SDSFIE V1.4]
ARTIFICIAL	Artificial. [SDSFIE V1.4]
BARBED	Barbed. [SDSFIE V1.4]
BRAIDED	Braided. [SDSFIE V1.4]
CENTRIPETAL	Centripetal. [SDSFIE V1.4]
COMPLEX	Complex. [SDSFIE V1.4]
COMPOUND	Compound. [SDSFIE V1.4]
CONTORTED	Contorted. [SDSFIE V1.4]
DENDRITANAST	Dendritic Anastomotic. [SDSFIE V1.4]
DENDRITDISTR	Dendritic Distributary (dichotomic). [SDSFIE V1.4]
DENDRITPINNT	Dendritic Pinnate. [SDSFIE V1.4]
DENDRITSUBDN	Dendritic Subdendritic. [SDSFIE V1.4]
DERANGED	Deranged. [SDSFIE V1.4]
INTERNAL	Internal. [SDSFIE V1.4]
MULTIBSKARST	Multibasinal Karst. [SDSFIE V1.4]
MULTIBSTHERM	Multibasinal Thermokarst. [SDSFIE V1.4]
MULTIELNGBAY	Multibasinal Elongate Bay. [SDSFIE V1.4]
MULTIGLACLDS	Multibasinal Glacially Disturbed. [SDSFIE V1.4]
NODEVLSYSTEM	No developed system. [SDSFIE V1.4]
OTHER	Other. [SDSFIE V1.4]
PALIMPSEST	Palimpsest. [SDSFIE V1.4]
PARLLCOLINER	Parallel Collinear. [SDSFIE V1.4]
PARLLSUBPARL	Parallel Subparallel. [SDSFIE V1.4]
PINNATE	Pinnate. [SDSFIE V1.4]
RADILCENTRIP	Radial Centripetal. [SDSFIE V1.4]
RECTANGLARAN	Rectangular Angulate. [SDSFIE V1.4]
TBD	To be determined. [SDSFIE V1.4]
TRELISUBTRELL	Trellis Subtrellis. [SDSFIE V1.4]
TRELSDIRECTN	Trellis Directional. [SDSFIE V1.4]
TRELSFAULT	Trellis Fault. [SDSFIE V1.4]

TRELSJOINT
TRELSRECURVE
UNKNOWN

drng_tex_d, mat_tex_d

Value

COARSE
FINE
MEDIUM
OTHER
TBD
UNKNOWN

Trellis Joint. [SDSFIE V1.4]
Trellis Recurved. [SDSFIE V1.4]
Unknown. [SDSFIE V1.4]

Definition (Notes) [Source]

coarse [SDSFIE V1.4]
fine [SDSFIE V1.4]
medium [SDSFIE V1.4]
other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

drng_zon_d, fld_zon_d

Value

MERLIN
OTHER
TBD
UNKNOWN
ZONE_1

Definition (Notes) [Source]

Merlin Drainage District [SDSFIE V1.4]
other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]
zone 1 [SDSFIE V1.4]

duct_mat_d, mat_d

Value

ABS
AC
AL
ARMORED_GLASS
ASBESTCEMENT
BI
BLACK_FE
BRICK
C
CASTIRON
CEMENT
CI
CIS
CM
COATWRAPSTEL
COMPOSOLITE
CONCRETE
CORR_METAL
CORR_STEEL
CORRALBITMEN
CORRALPAVINV
CORRMETLBITM
CORRMETPAVIN
CORRSTELBITM
CORRSTELPAVI
CORRUGATEDAL
CRESTOTEDWOOD
CU
DI
DUCTILEFE
FEPT_STEEL
FIBER
FIBERGLASS
FRP
FRV
GALVANIZEDFE
GALVNIZSTEEL
GI
GLASS
GLASS_LINED
GS
HASTELLOY
HDPE
HELIWOUND
INCONEL
INSULATCONCR
KYN_STEEL
METAL

Definition (Notes) [Source]

acrylonitrile butadiene styrene [SDSFIE V1.4]
asbestos cement [SDSFIE V1.4]
Aluminum [SDSFIE V1.4]
Armored-glass. [SDSFIE V2]
asbestos cement [SDSFIE V1.4]
black iron [SDSFIE V1.4]
black iron [SDSFIE V1.4]
brick [SDSFIE V1.4]
concrete [SDSFIE V1.4]
cast iron [SDSFIE V1.4]
cement [SDSFIE V1.4]
cast iron [SDSFIE V1.4]
Concrete Cast inSitu/Cast in Place [SDSFIE V2 Tinker Air Force Base]
corrugated metal [SDSFIE V1.4]
coated and wrapped steel [SDSFIE V1.4]
Composolite [SDSFIE V2 Tinker Air Force Base]
concrete [SDSFIE V1.4]
corrugated metal [SDSFIE V1.4]
corrugated steel [SDSFIE V1.4]
corrugated Aluminum with bituminous coating [SDSFIE V1.4]
corrugated Aluminum with paved invert [SDSFIE V1.4]
corrugated metal with bituminous coating [SDSFIE V1.4]
corrugated metal with paved invert [SDSFIE V1.4]
corrugated steel with bituminous coating [SDSFIE V1.4]
corrugated steel with paved invert [SDSFIE V1.4]
corrugated Aluminum [SDSFIE V1.4]
creosoted wood [SDSFIE V1.4]
Copper [SDSFIE V1.4]
ductile iron [SDSFIE V1.4]
ductile iron [SDSFIE V1.4]
FEP Teflon-lined steel. [SDSFIE V2]
fiber [SDSFIE V1.4]
fiberglass [SDSFIE V1.4]
Fiberglass reinforced polyester. [SDSFIE V2]
Fiberglass Reinforced Vinylester. [SDSFIE V2]
galvanized iron [SDSFIE V1.4]
galvanized steel [SDSFIE V1.4]
galvanized iron [SDSFIE V1.4]
glass [SDSFIE V1.4]
Glass-lined [SDSFIE V2]
galvanized steel [SDSFIE V1.4]
Hastelloy [SDSFIE V2]
High Density Polyethylene (HDPE) [SDSFIE V2]
helicly wound [SDSFIE V1.4]
Inconel [SDSFIE V2]
insulating concrete [SDSFIE V1.4]
Kynar-lined steel. [SDSFIE V2]
metal conduit [SDSFIE V1.4]

MONEL	Monel [SDSFIE V2]
MULTIPLECLAY	multiple clay [SDSFIE V1.4]
MULTIPLETILE	multiple tile [SDSFIE V1.4]
NICKEL	Nickel [SDSFIE V2]
OTHER	other [SDSFIE V1.4]
OTHERMASONRY	other [SDSFIE V1.4]
PFA	PFA Teflon-lined. [SDSFIE V2]
PLASTIC	plastic [SDSFIE V1.4]
POLYETHYLENE	polyethylene [SDSFIE V1.4]
POLYSTYRENE	polystyrene [SDSFIE V1.4]
PPE_STEEL	Polypropylene-lined steel. [SDSFIE V2]
PRECAST	precast [SDSFIE V1.4]
PRESTRESSED	prestressed [SDSFIE V1.4]
PTFE	PTFE Teflon-lined. [SDSFIE V2]
PVC	polyvinyl chloride [SDSFIE V1.4]
RC	reinforced concrete [SDSFIE V1.4]
REINFORCONCR	reinforced concrete [SDSFIE V1.4]
REINFPLASMOR	reinforced plastic mortar [SDSFIE V1.4]
RUB_STEEL	Rubber-lined steel. [SDSFIE V2]
S	steel [SDSFIE V1.4]
SARAN_LINED	Saran lined [SDSFIE V2]
SINGLE_CLAY	single clay [SDSFIE V1.4]
SINGLE_TILE	single tile [SDSFIE V1.4]
STAINLESS_STEEL	Stainless steel [SDSFIE V2]
STEEL	steel [SDSFIE V1.4]
STEEL_WRAPED	steel wrapped [SDSFIE V1.4]
STONE	stone [SDSFIE V1.4]
TAN_STEEL	Tantalum-lined steel [SDSFIE V2]
TBD	to be determined [SDSFIE V1.4]
TERRACOTTA	terra cotta [SDSFIE V1.4]
TILE_RESIN	tile resin [SDSFIE V1.4]
TITANIUM	Titanium [SDSFIE V2]
UNEARTHEN	Unearthen. [SDSFIE V2.4 USGS]
UNKNOWN	unknown [SDSFIE V1.4]
VC	vitrified clay [SDSFIE V1.4]
VITRIFIDCLAY	vitrified clay [SDSFIE V1.4]
WI	wrought iron [SDSFIE V1.4]
WROUGHT_FE	wrought iron [SDSFIE V1.4]
ZIRCONIUM	Zirconium [SDSFIE V2]

dwslocty_d

Value

DISTRIBUTION_SYS
PLANT_TREATED

SOURCE_RAW

WELL

ecs_typ_d

Value

OTHER
RE
TBD
UNKNOWN

efpa_u_d, plarea_u_d

Value

AC
ACR
ARE
CM2
DARE
DM2
FT2
HA
IN2
KM2
M2
MI2
MM2

Definition (Notes) [Source]

Distribution System [SDSFIE V2 Mississippi Dept. of Health]
Finished water from a water treatment plant. [SDSFIE V2 Mississippi Dept. of Health]
Raw water from the water source (i.e., well or surface water) prior to treatment. [SDSFIE V2 Mississippi Dept. of Health]
Chlorinated well water. [SDSFIE V2 Mississippi Dept. of Health]

Definition (Notes) [Source]

Other. [SDSFIE V2.5 AIR FORCE]
Reenterable compound. [SDSFIE V2.5 AIR FORCE]
To Be Determined. [SDSFIE V2.5 AIR FORCE]
Unknown. [SDSFIE V2.5 AIR FORCE]

Definition (Notes) [Source]

Acre - 43,560 Square Feet [SDSFIE V2.6 RPI Core Data]
Acres - 43,560 sq. feet. [SDSFIE V2.5 ANSI3.50-1986]
Ares - 1 sq. decameter. [SDSFIE V2.5 ANSI3.50-1986]
Square centimeters - 0.115 sq. inches. [SDSFIE V2.5 ISO10001-4]
Deciares - 11.96 sq. yards. [SDSFIE V2.5]
Square decimeters - 15.5 sq. inches. [SDSFIE V2.5 ISO10001-4]
An area equal to a square whose edge is one foot. [SDSFIE V2.5 SI ANSI]
Hectares - 2.471044 acres. [SDSFIE V2.5]
An area equal to a square whose edge is one inch. [SDSFIE V2.5 SI ANSI]
Square kilometers - .3861006 sq. miles. [SDSFIE V2.5 ISO10001-4]
Square meters - 10.76387 sq. feet - 1 centare. [SDSFIE V2.5 ISO10001-4]
An area equal to a square whose edge is one mile. [SDSFIE V2.5 SI]
Square millimeters - 0.00155 sq. inches. [SDSFIE V2.5 ISO10001-4]

SFT	Square feet - 144 sq. inches. [SDSFIE V2.5 ANSI X3.50-1986]
SIN	Square inches - 6.4516258 sq. cm. [SDSFIE V2.5 ANSI X3.50-1986]
SMI	Square miles - 640 acres. [SDSFIE V2.5 ANSI X3.50-1986]
SQCH	Square chains (Surveyor) - 4356 sq. feet - 16 sq. rods. [SDSFIE V2.5]
SRD	Square rods - 30.25 sq. yards. [SDSFIE V2.5 ANSI X3.50-1986]
SYD	Square yard - 0.83613 sq. meters. [SDSFIE V2.5 ANSI X3.50-1986]
YD2	An area equal to a square whose edge is one yard. [SDSFIE V2.5 SI ANSI]

ehazcat_d

Value

BIO_WARFARE

BLDG_ENV_HAZARD

CHEM_POLLUTION

CHEM_WARFARE

MED_POLLUTION

MIXED_POLLUTION

NONE

OEW

PETRO_POLLUTION

RAD_POLLUTION

RAD_WARFARE

SOLID_WASTE

UNKNOWN

Definition (Notes) [Source]

Residues of biological warfare items, materials, or waste are present. [SDSFIE V1.4]

Building environmental hazards are present. [SDSFIE V1.4]

Polluted by the residues of one or more chemical (nonpetroleum) products or wastes. [SDSFIE V1.4]

Residues of chemical warfare items, materials, or waste are present. [SDSFIE V1.4]

Polluted by the residues of one or more medical or infectious products or wastes. [SDSFIE V1.4]

Polluted by the residues of one or more chemical, petroleum, and radioactive products or wastes. [SDSFIE V1.4]

Investigation and/or further study has revealed that there are no environmental hazards present at the site. [SDSFIE V1.4]

Residues of ordnance and explosive waste items, materials, or waste are present. [SDSFIE V1.4]

Polluted by the residues of one or more petroleum products or wastes. [SDSFIE V1.4]

Polluted by the residues of one or more radioactive products or wastes. [SDSFIE V1.4]

Residues of radioactive warfare items, materials, or waste are present. [SDSFIE V1.4]

Solid waste. [SDSFIE V1.6]

The category of environmental hazard has not yet been determined. [SDSFIE V1.4]

elmpur_d

Value

BUILDING_ENTER

OTHER

ROAD_CROSSING

ROUTE

ROUTE_CHANGE

SPLICE

STUBOUT

TBD

UNKNOWN

Definition (Notes) [Source]

Conduit Entrance to Building. [SDSFIE V2.5 AIR FORCE]

Other. [SDSFIE V2.5 AIR FORCE]

Road Crossing. [SDSFIE V2.5 AIR FORCE]

Cable or Duct Route. [SDSFIE V2.5 AIR FORCE]

Change in Direction of Cable or Duct Route. [SDSFIE V2.5 AIR FORCE]

Cable Splice Location. [SDSFIE V2.5 AIR FORCE]

Manhole Stubout. [SDSFIE V2.5 AIR FORCE]

To Be Determined. [SDSFIE V2.5 AIR FORCE]

Unknown. [SDSFIE V2.5 AIR FORCE]

enc_max_d

Value

I

II

III

IV

V

Definition (Notes) [Source]

First [SDSFIE V2.3 Tinker Air Force Base]

Second [SDSFIE V2.3 Tinker Air Force Base]

Third [SDSFIE V2.3 Tinker Air Force Base]

Fourth [SDSFIE V2.3 Tinker Air Force Base]

Fifth [SDSFIE V2.3 Tinker Air Force Base]

enc_prot_d

Value

3DES

A_NEEDH_SCHR_SK

AES

AS_RPC

BAN_CON_AS_RPC

BAN_MOD_AS_RPC

BAN_MOD_CCITT_3

BAN_YAHALOM

CAM

CCITT_X_509_1

CCITT_X_509_1C

CCITT_X_509_3

Definition (Notes) [Source]

Triple DES encryption (will be replaced by AES). [SDSFIE V2.3 Tinker Air Force Base]

Amended Needham Schroeder Symmetric Key. [SDSFIE V2.5 AIR FORCE]

Advanced Encryption Standard, a Type I capable encryption module. [SDSFIE V2.3 Tinker Air Force Base]

Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]

BAN concrete Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]

BAN modified Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]

BAN modified version of CCITT X.509 (3). [SDSFIE V2.5 AIR FORCE]

BAN simplified version of Yahalom. [SDSFIE V2.5 AIR FORCE]

CAM. [SDSFIE V2.5 AIR FORCE]

CCITT X.509 (1). [SDSFIE V2.5 AIR FORCE]

CCITT X.509 (1c). [SDSFIE V2.5 AIR FORCE]

CCITT X.509 (3). [SDSFIE V2.5 AIR FORCE]

CJ_HC_SPLICE_AS	Clark and Jacob modified Hwang and Chen modified Splice/As. [SDSFIE V2.5 AIR FORCE]
DENNING_SACCO_SK	Denning-Sacco shared key. [SDSFIE V2.5 AIR FORCE]
DES	Digital Encryption Standard [SDSFIE V2.3 Tinker Air Force Base]
DES-OFB	Digital Encryption Standard - Output Feedback [SDSFIE V2.3 Tinker Air Force Base]
DIFFIE_HELMAN	Diffie Helman. [SDSFIE V2.5 AIR FORCE]
DNSSEC	Domain Name Server Security. [SDSFIE V2.5 AIR FORCE]
DSS	DSS. [SDSFIE V2.5 AIR FORCE]
FASCINATOR	Fascinator is a series of Type I capable encryption module. [SDSFIE V2.31 Tinker Air Force Base]
GJM	GJM. [SDSFIE V2.5 AIR FORCE]
GNUPG_PGP	GnuPG/PGP. [SDSFIE V2.5 AIR FORCE]
GONG	Gong. [SDSFIE V2.5 AIR FORCE]
GSSAPI	Generic Security Services API. [SDSFIE V2.5 AIR FORCE]
HC_SPLICE_AS	Hwang and Chen modified Splice/As. [SDSFIE V2.5 AIR FORCE]
HWANG_NEUM_STUB	Hwang modified version of Neumann Stubblebine. [SDSFIE V2.5 AIR FORCE]
IDEA	IDEA. [SDSFIE V2.5 AIR FORCE]
IEEE_P1363	IEEE P1364. [SDSFIE V2.5 AIR FORCE]
IPSEC	IP Secure Protocol. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_1	Kao Chow Authentication v.1. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_2	Kao Chow Authentication v.2. [SDSFIE V2.5 AIR FORCE]
KAO_CHOW_AUTH_3	Kao Chow Authentication v.3. [SDSFIE V2.5 AIR FORCE]
KERBEROS_V5	Kerberos V6. [SDSFIE V2.5 AIR FORCE]
KSL	KSL. [SDSFIE V2.5 AIR FORCE]
L_BAN_CON_AS_RPC	Lowe modified BAN concrete Andrew Secure RPC. [SDSFIE V2.5 AIR FORCE]
L_DENNING_SAC_SK	Lowe modified Denning-Sacco shared key. [SDSFIE V2.5 AIR FORCE]
L_NEEDH_SCHR_PK	Lowes fixed version of Needham-Schroder Public Key. [SDSFIE V2.5 AIR FORCE]
LOWE_MOD_KSL	Lowe modified KSL. [SDSFIE V2.5 AIR FORCE]
LOWE_WMF	Lowe modified Wide Mouthed Frog. [SDSFIE V2.5 AIR FORCE]
LOWES_YAHALOM	Lowes modified version of Yahalom. [SDSFIE V2.5 AIR FORCE]
MARS	MARS. [SDSFIE V2.5 AIR FORCE]
NEEDHAM_SCHR_PK	Needham-Schroeder Public Key. [SDSFIE V2.5 AIR FORCE]
NEEDHAM_SCHR_SK	Needham Schroeder Symmetric Key. [SDSFIE V2.5 AIR FORCE]
NEUMANN_STUBBLE	Neumann Stubblebine. [SDSFIE V2.5 AIR FORCE]
OPENPGP	OpenPGP. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
OTWAY_REES	Otway Rees. [SDSFIE V2.5 AIR FORCE]
PAULSONS_YAHALOM	Paulsons strengthened version of Yahalom. [SDSFIE V2.5 AIR FORCE]
PKCS	Public Key Encryption Standards. [SDSFIE V2.5 AIR FORCE]
RC4	RC5. [SDSFIE V2.5 AIR FORCE]
ROT	ROT. [SDSFIE V2.5 AIR FORCE]
RSA	RSA. [SDSFIE V2.5 AIR FORCE]
SEAL	SEAL. [SDSFIE V2.5 AIR FORCE]
SERPENT	Serpent. [SDSFIE V2.5 AIR FORCE]
SHTTP	Secure Hypertext Transfer Protocol. [SDSFIE V2.5 AIR FORCE]
SK3	SK3. [SDSFIE V2.5 AIR FORCE]
SMARTRIGHT_VO	SmartRight view-only. [SDSFIE V2.5 AIR FORCE]
SOBER	SOBER. [SDSFIE V2.5 AIR FORCE]
SPLICE_AS	SPLICE/AS. [SDSFIE V2.5 AIR FORCE]
SSH1	Secure Shell v2. [SDSFIE V2.5 AIR FORCE]
SSH2	Secure Shell v3. [SDSFIE V2.5 AIR FORCE]
SSL	Secure Socket Layer. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TLS	TLS. [SDSFIE V2.5 AIR FORCE]
TMN	TMN. [SDSFIE V2.5 AIR FORCE]
TWOFISH	Twofish. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
WAKE	WAKE. [SDSFIE V2.5 AIR FORCE]
WEP	Wired Equivalent Privacy. [SDSFIE V2.5 AIR FORCE]
WMF	Wide Mouthed Frog. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_P_3	Woo and Lam Pi 3. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI	Woo and Lam Pi. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI_1	Woo and Lam Pi 1. [SDSFIE V2.5 AIR FORCE]
WOO_AND_LAM_PI_2	Woo and Lam Pi 2. [SDSFIE V2.5 AIR FORCE]
WOO_LAM_MA	Woo and Lam Mutual Authentication. [SDSFIE V2.5 AIR FORCE]

WOO_LAM_PI_F
WPA
XOR
YAHALOM

Woo and Lam Pi f. [SDSFIE V2.5 AIR FORCE]
Wi-Fi Protected Access. [SDSFIE V2.5 AIR FORCE]
XOR. [SDSFIE V2.5 AIR FORCE]
Yahalom. [SDSFIE V2.5 AIR FORCE]

encl_typ_d, enclty_d

Value

AIR/AIR
AIR_OVER
DUST_PROOF
ENCL_FAN
ENCL_FANG
ENCL_NON
ENCL_WAC
ENCL_WATER
EXPL_PROOF
OPEN
OPEN_DGUARD
OPEN_DP
OPEN_EV
OPEN_GUARD
OPEN_PVENT
OPEN_SG
OPEN_SP
OPEN_WEATI
OPEN_WEATII
OTHER
PIPE_VENT
TBD
UNKNOWN
WATER_PROOF

Definition (Notes) [Source]

totally enclosed, air-to-air cooled [SDSFIE V1.4]
totally enclosed, air-over [SDSFIE V1.4]
totally enclosed, dust-ignition proof [SDSFIE V1.4]
totally enclosed, fan cooled [SDSFIE V1.4]
totally enclosed, fan cooled, guarded [SDSFIE V1.4]
totally enclosed, nonventilated [SDSFIE V1.4]
totally enclosed, water/air cooled [SDSFIE V1.4]
totally enclosed, water cooled [SDSFIE V1.4]
totally enclosed, explosion proof [SDSFIE V1.4]
open [SDSFIE V1.4]
open, drip-proof guarded [SDSFIE V1.4]
open, drip-proof [SDSFIE V1.4]
open, externally ventilated [SDSFIE V1.4]
open, guarded [SDSFIE V1.4]
open, pipe ventilated [SDSFIE V1.4]
open, semiguarded [SDSFIE V1.4]
open, splash-proof [SDSFIE V1.4]
open, weather protected - Type I [SDSFIE V1.4]
open, weather protected - Type II [SDSFIE V1.4]
other [SDSFIE V1.4]
totally enclosed, pipe ventilated [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]
totally enclosed, water-proof [SDSFIE V1.4]

equiptyp_d

Value

AN/FPN-62
AN/GPN-11
AN/GPN-12
AN/GPN-20
AN/GPN-22
ARSR-4
ASR-11
ASR-5
ASR-7
ASR-8
ASR-9
MACS
WSR-88D

Definition (Notes) [Source]

AN/FPN-62. [SDSFIE V2.31 Air Force]
AN/GPN-11. [SDSFIE V2.31 Air Force]
AN/GPN-12. [SDSFIE V2.31 Air Force]
AN/GPN-20. [SDSFIE V2.31 Air Force]
AN/GPN-22. [SDSFIE V2.31 Air Force]
ARSR-4. [SDSFIE V2.31 Air Force]
ASR-11. [SDSFIE V2.31 Air Force]
ASR-5. [SDSFIE V2.31 Air Force]
ASR-7. [SDSFIE V2.31 Air Force]
ASR-8. [SDSFIE V2.31 Air Force]
ASR-9. [SDSFIE V2.31 Air Force]
MACS. [SDSFIE V2.31 Air Force]
WSR-88D. [SDSFIE V2.31 Air Force]

fac_typ_d

Value

ADMIN
ARM_DE_ARM_PAD

ARREST_GEAR
CATAPULT

COMPASS_ROSE

LANDING_AID
OTHER
PWR_CHK_PAD_W_SS

PWR_CHK_PAD_WO_SS

RADAR_ANTENNA
RADAR_REFLECTOR
RINSE_FACILITY

STUDIO

Definition (Notes) [Source]

Administration. [SDSFIE V2.31 HSIP]
Provides a paved area for activating or deactivating weapons systems on board aircraft. [SDSFIE V1.8]
Wires and other facilities for arresting aircraft [SDSFIE V1.4]
A steam driven slingshot device that propels aircraft off a short runway. [SDSFIE V1.8]
A paved area in a magnetically quiet zone where the compass in the aircraft is calibrated. [SDSFIE V1.8]
Landing aids and instruments [SDSFIE V1.4]
Other. [SDSFIE V2.31 HSIP]
Used to test and adjust engines mounted in aircraft, concrete airfield pavement with secure fitting and where required protection walls and blast deflectors. [SDSFIE V1.8]
Used to test and adjust engines mounted in aircraft, concrete airfield pavement with secure fittings and where required protection walls and blast deflectors. [SDSFIE V1.8]
Radar transmitting devices [SDSFIE V1.4]
Radar Reflector [SDSFIE V2]
Provides an unattended taxi-through, treadle operated, freshwater deluge system to rinse aircraft. [SDSFIE V1.8]
Studio. [SDSFIE V2.31 HSIP]

TBD	to be determined [SDSFIE V1.4]
TIE_DOWN	A device, normally imbedded in the airfield surface, which can be used to secure an aircraft in place. [SDSFIE V1.6]
TOW_WAY	A paved roadway used for towing fixed or rotary wing aircraft. It differs from a taxiway in that aircraft do not move on it under their own power.
TRANSMITTER	Transmitter. [SDSFIE V2.31 HSIP]
UNKNOWN	unknown [SDSFIE V1.4]
WASHRACK	Aircraft washracks are provided at all air installations for cleaning of aircraft in conjunction with periodic maintenance. [SDSFIE V1.8]
WIND SOCK	Any device which is intended to provide a visual presentation of wind direction and velocity. [SDSFIE V1.6]
fc_typ_d	
Value	Definition (Notes) [Source]
MRND25	Round (25 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
MRND40	Round (40 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
MRND45	Round (45 centimeter diameter). [SDSFIE V2.5 AIR FORCE]
REC	Rectangular (24 inch by 36 inch) [SDSFIE V2 Austin and Pitts]
RND24	Round (24 inch diameter) [SDSFIE V2 Austin and Pitts]
RND27	Round (27 inch diameter) [SDSFIE V2 Austin and Pitts]
RND28	Round (28 inch diameter) [SDSFIE V2 Austin and Pitts]
RND30	Round (30 inch diameter) [SDSFIE V2 Austin and Pitts]
RND36	Round (36 inch diameter) [SDSFIE V2 Austin and Pitts]
RND38	Round (38 inch diameter) [SDSFIE V2 Austin and Pitts]
RND42	Round (42 inch diameter) [SDSFIE V2 Austin and Pitts]
RND48	Round (48 inch diameter) [SDSFIE V2 Austin and Pitts]
fea_typ_d	
Value	Definition (Notes) [Source]
CONSERVATION	The reservoir is used primarily for water conservation and storage. [SDSFIE V1.6]
FLOOD_CONTROL	The reservoir is used primarily for control of excessive rain fall to temporarily store excessive water. [SDSFIE V1.6]
RECREATION	Recreation [SDSFIE V1.9 REEGIS]
feat_typ_d	
Value	Definition (Notes) [Source]
BOG_HEATH	temperate/cold scrub [SDSFIE V1.4]
HANDHOLE	Handhole [SDSFIE V2.2 Aerial Data Service]
MANGROVSWAMP	mangrove swamp [SDSFIE V1.4]
MANHOLE	Manhole [SDSFIE V2.2 Aerial Data Service]
MARSHBRACKWT	marsh - brackwater [SDSFIE V1.4]
MARSHFRESHWT	marsh - freshwater [SDSFIE V1.4]
MARSHSALTYWT	marsh - saltwater [SDSFIE V1.4]
SWAMPBRACKWT	Swamp - Brackwater. [SDSFIE V2.31]
SWAMPFRESHWT	swamp - freshwater [SDSFIE V1.4]
SWAMPSTALTYWT	swamp - saltwater [SDSFIE V1.4]
TIDALEMUDFLT	tidal mud flats [SDSFIE V1.4]
TIDALSLTMRSH	tidal saltwater marsh [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VALVE	Valve [SDSFIE V2.2 Aerial Data Service]
fenc_typ_d, gate_typ_d	
Value	Definition (Notes) [Source]
BARB_WIRE	barbed wire [SDSFIE V1.4]
CHAIN	Metal chain. [SDSFIE V2.22 Cherry Point]
CHAIN_LINK	chain link [SDSFIE V1.4]
CROSSBAR	Metal bars that lock. [SDSFIE V2.31 Air Force]
EARTHEN_BERM	Piled up earth or other debris. [Applies to Acc_typ_d = Barrier only] [SDSFIE V2.3 ITAM]
GUARD_RAIL	Guard rail. [SDSFIE V2.22 Cherry Point]
METAL_RAIL	Metal rail or pipe. [SDSFIE V2.22 Cherry Point]
PCB	PCB. [SDSFIE V2.31 Navy]
PLASTIC	Plastic. [SDSFIE V2.31 Navy]
POST_AND_CABLE	Posts with metal cable between them. [SDSFIE V2.3 ITAM]
POST_AND_FRAME	Posts with swinging metal frame, usually a cattle gate. [SDSFIE V2.3]
POST_AND_RAIL	wooden post and rails [SDSFIE V1.4]
SMOOTH_WIRE	smooth wire [SDSFIE V1.9 REEGIS]

STEEL
TBD
UNKNOWN
WIRE_MESH

WOODEN_SLATS
WROUGHT_IRON

YELLOW_STEEL

Steel. [SDSFIE V2.4 Navy]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]
Wire mesh.
[SDSFIE V2.22 Cherry Point]
vertical wooden boards [SDSFIE V1.4]
Posts with swinging wrought iron (heavy duty and decorative) frame.
[SDSFIE V2.3 ITAM]
Posts with swinging steel frame, painted yellow. Reserved for some
security or force protection . [SDSFIE V2.3 ITAM]

fitloc_d

Value

CHILLWATER_TANK
CLEANING_BOOTH
CONDENSATE_TANK
COOKER
COOLING_TOWER
COOLING_WATER
CORROSION_REMOVE
DESCALER
DISHWASHER
DRINK_FOUNTAIN
EYEWASH_STATION
HOT_WATER_RINSE
HUMIDIFIER
ICE_DISPENSER
PAINT_BOOTH
PARTS_WASHER
PHOTO_TRAY
PIT
RESPIRATOR_WASH
SINK
STACK
STEAM_CONDEN
STRIPPER_VAT
TEST_TEE
TOILET
URINAL
VENT_PIPE
WASTE_OIL_DISC

Definition (Notes) [Source]

chilled water tank [SDSFIE V2.3 Cherry Point]
Cleaning Booth. [SDSFIE V2.3 Cherry Point]
condensate tank [SDSFIE V2.3 Cherry Point]
cooker [SDSFIE V2.3 Cherry Point]
cooling tower [SDSFIE V2.3 Cherry Point]
cooling water [SDSFIE V2.3 Cherry Point]
corrosion remover [SDSFIE V2.3 Cherry Point]
descaler [SDSFIE V2.3 Cherry Point]
dishwasher [SDSFIE V2.3 Cherry Point]
drinking fountain [SDSFIE V2.3 Cherry Point]
eyewash station [SDSFIE V2.3 Cherry Point]
hot water rinse [SDSFIE V2.3 Cherry Point]
humidifier [SDSFIE V2.3 Cherry Point]
ice dispenser [SDSFIE V2.3 Cherry Point]
paint booth [SDSFIE V2.3 Cherry Point]
parts washer [SDSFIE V2.3 Cherry Point]
photo tray [SDSFIE V2.3 Cherry Point]
pit [SDSFIE V2.3 Cherry Point]
respirator washer [SDSFIE V2.3 Cherry Point]
sink [SDSFIE V2.3 Cherry Point]
stack [SDSFIE V2.3 Cherry Point]
steam condensate [SDSFIE V2.3 Cherry Point]
stripper vat [SDSFIE V2.3 Cherry Point]
test tee [SDSFIE V2.3 Cherry Point]
toilet [SDSFIE V2.3 Cherry Point]
urinal [SDSFIE V2.3 Cherry Point]
vent pipe [SDSFIE V2.3 Cherry Point]
waste oil discharge [SDSFIE V2.3 Cherry Point]

fittp_d

Value

CAP
CROSS
FLANGE
TEE

Definition (Notes) [Source]

Pipe Cap [SDSFIE V1.75]
Pipe Cross [SDSFIE V1.75]
Pipe Flange [SDSFIE V1.75]
Pipe Tee [SDSFIE V1.75]

fix_ty_d

Value

OTHER
TBD
UNKNOWN

Definition (Notes) [Source]

other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

fix_use_d

Value

EX_LIGHT
IN_LIGHT
OTHER
SEC_LIGHT
ST_LIGHT
TBD
UNKNOWN

Definition (Notes) [Source]

exterior light [SDSFIE V1.4]
interior light [SDSFIE V1.4]
other [SDSFIE V1.4]
security light [SDSFIE V1.4]
street light [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

frame_ty_d

Value

OTHER
TBD
UNKNOWN

Definition (Notes) [Source]

other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

fuel_del_d

Value	Definition (Notes) [Source]
CONVEYOR	Conveyor. [SDSFIE V2.31 HSIP]
OTHER	Other. [SDSFIE V2.31 HSIP]
PIPELINE	Pipeline. [SDSFIE V2.31 HSIP]
RAIL	Railroad. [SDSFIE V2.31 HSIP]
SHIP_BARGE	Ship or Fuel Barge. [SDSFIE V2.31 HSIP]
TRUCK	Truck/Vehicle. [SDSFIE V2.31 HSIP]

fuel_src_d, source_d	Value	Definition (Notes) [Source]
	OTHER	other [SDSFIE V1.4]
	TBD	to be determined [SDSFIE V1.4]
	UNKNOWN	unknown [SDSFIE V1.4]

fuel_ty_d, gas_ty_d, type_d	Value	Definition (Notes) [Source]
	ANTIFREEZE	antifreeze [SDSFIE V1.4]
	AVGAS	aviation gas [SDSFIE V1.4]
	BUTANEGAS	butane gas [SDSFIE V1.4]
	COALGAS	coal gas [SDSFIE V1.4]
	DIESELFUEL	diesel fuel [SDSFIE V1.4]
	EMPTY	empty [SDSFIE V1.4]
	ETHANEGAS	ethane gas [SDSFIE V1.4]
	ETHANOL	ethyl alcohol [SDSFIE V1.4]
	FUELOIL4	fuel oil - no. 4 [SDSFIE V1.4]
	FUELOIL6	fuel oil - no. 6 [SDSFIE V1.4]
	GASOLINE	gasoline [SDSFIE V1.4]
	HYDRAULICFLD	hydraulic fluid [SDSFIE V1.4]
	JET_A	Jet A, Kerosene fuel, without icing inhibitor. [SDSFIE V2.31 Air Force]
	JET_A_1	Jet A-1. Type A-1 (Jet A-1), without icing inhibitor. [SDSFIE V2.31 Air Force]
	JET_A_1_PLUS	Jet A-1+. Jet A-1 with icing inhibitor. [SDSFIE V2.31 Air Force]
	JET_A_PLUS	Jet A+. Kerosene fuel, Type A, Jet A or JP-1, with icing inhibitor. [SDSFIE V2.31 Air Force]
	JET_B	Jet B. Wide Cut turbine fuel, Type B, without icing inhibitor. [SDSFIE V2.31 Air Force]
	JET_B_PLUS	Jet B+. Jet B wide cut turbine fuel with icing inhibitor. [SDSFIE V2.31 Air Force]
	JETFUEL_UNKNOWN	Jet fuel available but type is unknown. [SDSFIE V2.31 Air Force]
	JP4FUEL	jet fuel 4 [SDSFIE V1.4]
	JP5FUEL	jet fuel 5 [SDSFIE V1.4]
	JP7	Jet Fuel 7 [SDSFIE V2.2 Chevron: Av Fuels Technical Review]
	JP8_100	JP8+100: U.S. Air Force fuel containing an additive that provides improved thermal stability [SDSFIE V2.2 Chevron: Av Fuels Technical Review]
	JP8FUEL	jet fuel 8 [SDSFIE V1.4]
	JPTS	JPTS Jet Fuel (higher thermal stability [SDSFIE V2.2 Chevron: Av Fuels Technical Review])
	KEROSENE	kerosene [SDSFIE V1.4]
	LEADGAS_80_87OCT	80/87 octane gasoline, leaded, MIL-L-5572F (red). [SDSFIE V2.31 Air Force]
	LEADGAS_91_96OCT	91/96 octane gasoline, leaded, no MIL Specification. [SDSFIE V2.31 Air Force]
	LEDGAS100_130OCT	100/130 octane gasoline, leaded, MIL-L-5572F (green). [SDSFIE V2.31 Air Force]
	LEDGAS108_135OCT	108/135 octane gasoline, leaded, no MIL Specification. [SDSFIE V2.31 Air Force]
	LEDGAS115_145OCT	115/145 octane gasoline, leaded, MIL-L-5572F (purple). [SDSFIE V2.31 Air Force]
	LQNATURALGAS	liquefied natural gas [SDSFIE V1.4]
	LQPETROGAS	liquefied petroleum gas [SDSFIE V1.4]
	LQPROPANEGAS	liquefied propane gas [SDSFIE V1.4]
	METHANEGAS	methane gas [SDSFIE V1.4]
	METHANOL	methyl alcohol [SDSFIE V1.4]
	MILSPEC100_130	100/130 Mil Spec, low lead, aviation gasoline (blue). [SDSFIE V2.31 Air Force]
	MINERALOIL	mineral oil [SDSFIE V1.4]
	MOGAS	mogas [SDSFIE V1.4]
	MOTOROIL	motor oil [SDSFIE V1.4]
	NATGAS	natural gas [SDSFIE V1.4]
	OTHER	other [SDSFIE V1.4]
	PROPANEGAS	propane gas [SDSFIE V1.4]
	TBD	to be determined [SDSFIE V1.4]
	TRANSMISFLD	transmission fluid [SDSFIE V1.4]
	UNKNOWN	unknown [SDSFIE V1.4]
	UNLEADGAS_73OCT	73 octane gasoline, unleaded, no MIL Specification. [SDSFIE V2.31 Air Force]
	UNLEADGAS_80OCT	80 octane gasoline, unleaded, no MIL Specification. [SDSFIE V2.31 Air Force]
	WASTEOL	waste oil [SDSFIE V1.4]

WASTEPOLLUTE	waste pollutants [SDSFIE V1.4]
function_d	
Value	Definition (Notes) [Source]
COIL	slack - coil [SDSFIE V2 Austin and Pitts]
OTHER	Other [SDSFIE V2 Austin and Pitts]
SPL	Splice [SDSFIE V2 Austin and Pitts]
T_SPL	T-splice [SDSFIE V2 Austin and Pitts]
TBD	To Be Determined [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2 Austin and Pitts]
fuse_ty_d, swt_ty_d	
Value	Definition (Notes) [Source]
DISCONNECT	disconnect [SDSFIE V1.4]
ISO	ISO switch [SDSFIE V1.4]
OIL	oil switch [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
RAC6WOIL	RAC 6way oil switch [SDSFIE V1.4]
RACOIL	RAC oil switch [SDSFIE V1.4]
RAMOIL	RAM oil switch [SDSFIE V1.4]
SOLIDBLADISC	solid blade disconnect [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VACUUM	vacuum [SDSFIE V1.4]
gat_type_d	
Value	Definition (Notes) [Source]
GATED	The culvert is equipped with gates to block or divert water flow. [SDSFIE V1.8 REEGIS]
NONGATED	The culvert contains no provision to block or divert water flow. [SDSFIE V1.8 REEGIS]
gate_st_d	
Value	Definition (Notes) [Source]
FLAP	flap gate [SDSFIE V1.4]
LIFT	lift gate [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
gen_ty_d	
Value	Definition (Notes) [Source]
BACKUP	Backup generator. [SDSFIE V2 Cherry Point]
EMERGENCY	Emergency generator. [SDSFIE V2 Cherry Point]
OTHER	other [SDSFIE V1.4]
PRIMARY	Primary generator. [SDSFIE V2 Cherry Point]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
GovernmentalUnitType	
Value	Definition (Notes) [Source]
alaskaNativeRegionalCorporation	A corporate entity established to conduct both business and nonprofit affairs of Alaska Natives, pursuant to the Alaska Native Claims Settlement Act of 1972 (Public Law 92-203, as amended by Public Law 94-204). Twelve ANRCs are legally bounded geographic
alaskaNativeVillage (ANV)	A local governmental unit in Alaska that constitutes an association, band, clan, community, group, tribe, or village, recognized pursuant to the Alaska Native Claims Settlement Act of 1972 (Public Law 92-203, as amended Public Law 94-204). ANVs do not ha
americanIndianReservation	A Federal American Indian reservation is an area that has been set aside by the United States for the use of one or more federally recognized American Indian tribes. Together with off-reservation trust land, a reservation covers territory over which one
americanIndianTribalSubdivision	A legal subdivision of a federally recognized American Indian reservation, off-reservation trust land, or Oklahoma Tribal statistical area. These entities are internal units of self-government or administration that serve social, cultural, and/or economi
borough	A legally established geographic entity in Alaska, which the Census Bureau treats as statistically equivalent to a county in other States; a minor civil division in each of the five counties that comprise New York city; a type of incorporated place in Con

city	A type of incorporated place in all States and the District of Columbia. In agreement with Hawaii, the U.S. Census Bureau does not recognize the city of Honolulu for presentation of census data. In Virginia, all cities are not part of any county, and so
cityAndBorough	A legally established geographic entity in Alaska, which the U.S. Census Bureau treats as the statistical equivalent of a county in other States; also, a type of incorporated place in Alaska
consolidatedCity	The U.S. Census Bureau refers to a governmental unit for which the functions of an incorporated place and its county or minor civil division have merged as a consolidated government. If one or more other incorporated places continue to function as separa
country	An independent, self-governing, political entity
county	The primary legal division of every State except Alaska and Louisiana
elementarySchoolDistrict	A school district inclusive of kindergarten through either the eighth or ninth grade or the first through either the eighth or ninth grade
minorCivilDivision (MCD)	A type of governmental unit that is the primary governmental or administrative division of a county or statistically equivalent entity in many States. MCDs are identified by a variety of terms, such as township, town (in eight States), or district. The
mosquitoControlDistrictMosquitoAb	A geographic area defined for purposes of administering mosquito abatement or mosquito surveillance programs
municipality	A governmental unit that is a primary legal division in Alaska and the Northern Mariana Islands
municipio	A governmental unit that is the primary legal division of Puerto Rico
parish	A governmental unit that is the primary legal division of Louisiana
schoolDistrict	A geographic entity within which State, county, or local officials or the U.S. Department of Defense provides public educational services for an area's residents
secondarySchoolDistrict	A school district inclusive of only high school (either the ninth through the twelfth grades or the tenth through the twelfth grades)
specialTaxationDistrict	An area defined for purposes of raising revenue to fund specific projects or programs, or to meet specific ongoing needs, such as security, trash collection, or infrastructure maintenance. Also known as business improvement districts (BID), downtown impr
state	A primary governmental division of the United States
town	A governmental unit that is a functioning minor civil division found in the New England States, New York, and Wisconsin; and a type of incorporated place in 30 States and the U.S. Virgin Islands
township	A governmental unit that is a functioning minor civil division in 12 States (townships are administrative units in Arkansas, New Hampshire, and North Carolina). Townships in Missouri can be either functioning governmental units or nonfunctioning administ
unifiedSchoolDistrict	A school district inclusive of kindergarten through twelfth grade
village	A type of incorporated place in 20 States and American Samoa

guy_ty_d

Value

ANCHOR_GUY
BUILDING_GUY
COMPRESS_GUY
DOWN_GUY

OTHER
SPAN_GUY

STUB_GUY
TBD
UNKNOWN

Definition (Notes) [Source]

anchor guy [SDSFIE V1.4]
building guy [SDSFIE V1.4]
compressive guy [SDSFIE V1.4]
A wire guy running from the top of a pole to an anchor in the ground. [SDSFIE V1.75]
other [SDSFIE V1.4]
A wire guy running from the top of a pole to the top of the adjacent pole [SDSFIE V1.75]
stub guy [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

habcat_d

Value

AD
AE

AT

C
D3A
D3B

Definition (Notes) [Source]

Proposed Delisting. [SDSFIE V2.2 Endangered Species Act]
Proposed Reclassification to Endangered. [SDSFIE V2.2 Endangered Species Act]
Proposed Reclassification to Threatened. [SDSFIE V2.2 Endangered Species Act]
Candidate Taxon, Ready for Proposal. [SDSFIE V2.2 Endangered Species Act]
Delisted Taxon, Evidently Extinct. [SDSFIE V2.2 Endangered Species Act]
Delisted Taxon, Invalid Name in Current Scientific Opinion. [SDSFIE V2.2 Endangered Species Act]

D3C	Delisted Taxon, Recovered. [SDSFIE V2.2 Endangered Species Act]
DA	Delisted Taxon, Amendment of the Act. [SDSFIE V2.2 Endangered Species Act]
DM	Delisted Taxon, Recovered, Being Monitored First Five Years. [SDSFIE V2.31 Center]
DO	Delisted Taxon, Original Commercial Data erroneous. [SDSFIE V2.2 Endangered Species Act]
DP	Delisted Taxon, Discovered Previously Unknown Additional Populations and/or Habitats. [SDSFIE V2.2 Endangered Species Act]
DR	Delisted Taxon, original Commercial Data. [SDSFIE V2.2 Endangered Species Act]
EME	Emergency Listing, Endangered. [SDSFIE V2.2 Endangered Species Act]
EMT	Emergency Listing, Threatened. [SDSFIE V2.2 Endangered Species Act]
ENDANGERED	Endangered. [SDSFIE V1.6]
EXPE	Experimental Population, Essential. [SDSFIE V2.2 Endangered Species Act]
EXPN	Experimental Population, Non-Essential. [SDSFIE V2.2 Endangered Species Act]
NONE	None. [SDSFIE V2 Yokosuka Naval Station GIS]
PE	Proposed Endangered. [SDSFIE V2.2 Endangered Species Act]
PEXPE	Proposed Experimental Population, Essential. [SDSFIE V2.2 Endangered Species Act]
PEXPN	Proposed Experimental Population, Non-essential. [SDSFIE V2.2 Endangered Species Act]
PSAE	Proposed Similarity of Appearance to an Endangered Taxon. [SDSFIE V2.2 Endangered Species Act]
PSAT	Proposed Similarity of Appearance to a Threatened Taxon. [SDSFIE V2.31 Endangered Species Act]
PT	Proposed Threatened. [SDSFIE V2.2 Endangered Species Act]
RARE	Rare. [SDSFIE V2 Yokosuka Naval Station GIS]
SAE	Similarity of Appearance to an Endangered Taxon. [SDSFIE V2.2 Endangered Species Act]
SAT	Similarity of Appearance to a Threatened Taxon. [SDSFIE V2.2 Endangered Species Act]
SENSITIVE	Sensitive. [SDSFIE V1.6]
THREATENED	Threatened. [SDSFIE V1.6]
UNK	Unknown. [SDSFIE V2.2]

haz_typ_d

Value

BASH
DEER_STRIKE
TBD
TORTOISE_PITFALL
UNKNOWN

Definition (Notes) [Source]

Bash. [SDSFIE V2.22 Endangered Species Act]
Deer_strike. [SDSFIE V2.22 Endangered Species Act]
To Be Determined. [SDSFIE V2.22 Endangered Species Act]
Tortoise Pitfalls. [SDSFIE V2.22 Endangered Species Act]
Unknown. [SDSFIE V2.22 Endangered Species Act]

head_u_d, press_u_d

Value

ATM
BAR
BARYEA
BARYEG
CMHG
DPA
INH2O

Definition (Notes) [Source]

Atmosphere (101325 kg per m²sec²(PA)). [SDSFIE V2.5 Air Force]
Bar (1.0E+5 kg per m²sec²(PA)). [SDSFIE V2.5 Air Force]
Barye - dynes/cm² (absolute). [SDSFIE V2.5]
Barye - dynes/cm² (gauge). [SDSFIE V2.5]
Centimeter mercury (atmosphere/76). [SDSFIE V2.5 AIR FORCE]
A unit of pressure equal to one tenth of a Pascal. [SDSFIE V2.5 SI]
A unit or degree of atmospheric pressure measured by a barometer or manometer equal to the pressure balanced by a 1 in column of water. [SDSFIE V2.5 SI ANSI]
Inches of water at 4°C. (absolute). [SDSFIE V2.5]
Inches of water at 4°C. (gauge). [SDSFIE V2.5]
A unit or degree of atmospheric pressure measured by a barometer or manometer equal to the pressure balanced by a 1 in column of mercury. [SDSFIE V2.5 SI ANSI]
Inches of mercury at 0°C. (absolute). [SDSFIE V2.5]
Inches of mercury at 0°C. (gauge). [SDSFIE V2.5]
The amount of absolute pressure generated by a weight of a one-pound mass applied over a surface area of one square inch. [SDSFIE V2.5 SI]
The amount of absolute pressure generated by a weight of a one-pound mass applied over a surface area of one square inch per foot. [SDSFIE V2.5 SI]
Megabarye (absolute). [SDSFIE V2.5]
Megabarye (gauge). [SDSFIE V2.5]
Millimeters of Hg at 0°C. (absolute). [SDSFIE V2.5]
Millimeters of Hg at 0°C. (gauge). [SDSFIE V2.5]
A unit or degree of atmospheric pressure measured by a barometer or

	manometer equal to the pressure balanced by a 1 mm column of water. [SDSFIE V2.5 SI]
MMHG	Millimeters of Hg (torr). [SDSFIE V2.5]
MPA	A unit of pressure equal to one thousandth of a pascal. [SDSFIE V2.5 SI]
MPAS	A unit of viscosity equal to one thousandth of a pascal second or one centipoise. [SDSFIE V2.5 SI ANSI]
PA	A unit of pressure equal to one newton per square meter. [SDSFIE V2.5]
PAS	A centimeter-gram-second unit of dynamic viscosity equal to one dyne-second per square centimeter. [SDSFIE V2.5 SI ANSI]
PSFT	Pounds/ft2. [SDSFIE V2.5]
PSI	Pounds per square inch. [SDSFIE V2.5]
PSIA	Pounds/in2 (absolute). [SDSFIE V2.5]
PSIG	Pounds/in2 (gauge). [SDSFIE V2.5]
hertz_d	
Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
hsb_cat_d	
Value	Definition (Notes) [Source]
HAZMAT	hazardous material [SDSFIE V1.8]
HAZMAT_HAZWASTE	hazardous material and hazardous waste. [SDSFIE V1.8]
HAZWASTE	hazardous waste [SDSFIE V1.8]
hyd_ty_d	
Value	Definition (Notes) [Source]
AIRPORT	airport hydrant [SDSFIE V1.4]
BUILDING	building hydrant [SDSFIE V1.4]
DRINKFOUNT	drinking fountain [SDSFIE V1.4]
DRYBARREL	dry barrel [SDSFIE V1.4]
FREEZEPROOF	freeze proof [SDSFIE V1.4]
FUEL	fuel hydrant [SDSFIE V1.4]
NATGAS	natural gas hydrant [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
STREETWASH	street washer [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WASHRACK	wash rack hydrant [SDSFIE V1.4]
WATER	water hydrant [SDSFIE V1.4]
WETBARREL	wet barrel [SDSFIE V1.4]
YARD	yard hydrant [SDSFIE V1.4]
hydclass_d	
Value	Definition (Notes) [Source]
GREEN	green - Class A - rated capacity of 1000-1499 gpm (3785-5675 L/min). [SDSFIE V1.8]
LT_BLUE	light blue - Class AA - rated capacity of 1500 gpm or greater (5680 L/min). [SDSFIE V1.8]
ORANGE	orange - Class B - rated capacity of 500-999 gpm (1900-3780 L/min). [SDSFIE V1.8]
RED	red - Class C - rated capacity less than 500 gpm (1900 L/min). [SDSFIE V1.8]
inlet_st_d	
Value	Definition (Notes) [Source]
AC_CONDENSATE	air conditioner condensate [SDSFIE V2.3 Cherry Point]
BWV_DRAIN	backwater valve drain [SDSFIE V2.3 Cherry Point]
BWV_DRAIN	backwater valve drain [SDSFIE V2.3 Cherry Point]
CATCH_BASIN	catch basin [SDSFIE V2.3 Cherry Point]
CATCHBASIN	catch basin [SDSFIE V1.4]
CONDENSATE_DRAIN	condensate drain [SDSFIE V2.3 Cherry Point]
CURB_INLET	curb opening inlet [SDSFIE V2.1 FGDC Utilities Classification]
DRAIN	drain [SDSFIE V2.3 Cherry Point]
DROP_INLET	drop inlet [SDSFIE V2.1 FGDC Utilities Classification]
GRATECRBOPEN	combined grate and curb opening inlet [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
ROOF_DRAIN	roof drain [SDSFIE V2.3 Cherry Point]
STANDARDA	inlet standard type A inlet [SDSFIE V1.4]
STANDARDB	inlet standard type B inlet [SDSFIE V1.4]
STANDARDC	inlet standard type C inlet [SDSFIE V1.4]

STANDARD	inlet standard type D inlet [SDSFIE V1.4]
SURFACE_LINEAR	surface linear [SDSFIE V2.1 FGDC Utilities Classification]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WASTE_DRAIN	waste drain [SDSFIE V2.3 Cherry Point]
WEIRINLET	weir inlet [SDSFIE V1.4]
instl_ty_d	
Value	Definition (Notes) [Source]
ABANDONED	abandoned [SDSFIE V1.4]
CIRCUIT_BRKR	circuit breaker [SDSFIE V2.1 FGDC Utilities Classification]
CUBICLE	installed in a cubicle. [SDSFIE V2.1 FGDC Utilities Classification]
FUSE_CUTOUT	fuse cutout [SDSFIE V2.1 FGDC Utilities Classification]
GANG_DISC	gang operated disconnect [SDSFIE V2.1 FGDC Utilities Classification]
OVERHEAD	overhead [SDSFIE V1.4]
PAD_MOUNTED	mounted on a pad [SDSFIE V2.1 FGDC Utilities Classification]
POLE_MOUNTED	mounted on pole or tower [SDSFIE V2.1 FGDC Utilities Classification]
RECLOSER	reclosure [SDSFIE V2.1 FGDC Utilities Classification]
UNDERGROUND	underground [SDSFIE V1.4]
insul_cl_d	
Value	Definition (Notes) [Source]
A	IEEE Std 1, 60- 70 deg C. [SDSFIE V1.4]
B	IEEE Std 1, 80- 90 deg C. [SDSFIE V1.4]
F	IEEE Std 1, 105- 115 deg C. [SDSFIE V1.4]
H	IEEE Std 1, 125- 135 deg C. [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
junctionType	
Value	Definition (Notes) [Source]
Neither	A junction feature that neither pushes or pulls flow away or towards itself.
Sink	A junction feature that pulls flow toward itself through the edges of a geometric network [ESRI]
Source	A junction feature that pushes flow away from itself through the edges of a geometric network [ESRI]
kingdom_d	
Value	Definition (Notes) [Source]
ANIMAL	Animalia (animals). Comprising all living or extinct animals . [SDSFIE V2.5 NAVFAC]
FUNGI	Fungus. An organism in the Fungi Kingdom. Fungi are similar to plants, but they cannot make their own food like plants do. [SDSFIE V2.5]
MONERAN	The Monerans are the most numerous and widespread organisms on earth. They comprise the only kingdom of prokaryotic organisms. [SDSFIE V2.5]
PLANT	Plants do not have the ability to move like animals, but they are able to make their own food by pulling water and nutrients from the soil, and by using light. [SDSFIE V2.5 NAVFAC]
PROTIST	Protozoa. A group of organisms in the Protist Kingdom. [SDSFIE V2.5]
lab_name_d	
Value	Definition (Notes) [Source]
LAW_ENG	Law Engineering [SDSFIE V1.4]
LAW_ENV	Law Environmental [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WES	Waterways Experiment Station [SDSFIE V1.4]
lab_ty_d	
Value	Definition (Notes) [Source]
CHEMICAL	chemical testing laboratory [SDSFIE V1.4]
ENVIRONMENTAL	environmental testing laboratory [SDSFIE V1.4]
GEOTECHNICAL	geotechnical (soils and rock) testing laboratory [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
STRUCTURAL	structural testing laboratory [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
ldccas_d	
Value	Definition (Notes) [Source]

124C	124C Case. [SDSFIE V2.5 AIR FORCE]
235A	235A Case. [SDSFIE V2.5 AIR FORCE]
236C	236C Case. [SDSFIE V2.5 AIR FORCE]
723	723 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]
724	724 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]
772	772 Aerial Load Coil Case. [SDSFIE V2.5 AIR FORCE]
NREC	Non-reenterable factory sealed case designed to be placed within an enclosure. [SDSFIE V2.5 AIR FORCE]
NREX	Non-reenterable factory sealed case designed to be direct buried or exposed to weather. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
REC	Coils are assembled in a case that can be opened for maintenance, designed to be placed in an enclosure. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
Idcnum_d	
Value	Definition (Notes) [Source]
0001	1. [SDSFIE V2.5 AIR FORCE]
0002	2. [SDSFIE V2.5 AIR FORCE]
0003	3. [SDSFIE V2.5 AIR FORCE]
0004	4. [SDSFIE V2.5 AIR FORCE]
0005	5. [SDSFIE V2.5 AIR FORCE]
0006	6. [SDSFIE V2.5 AIR FORCE]
0010	10. [SDSFIE V2.5 AIR FORCE]
0011	11. [SDSFIE V2.5 AIR FORCE]
0012	12. [SDSFIE V2.5 AIR FORCE]
0015	15. [SDSFIE V2.5 AIR FORCE]
0016	16. [SDSFIE V2.5 AIR FORCE]
0018	18. [SDSFIE V2.5 AIR FORCE]
0020	20. [SDSFIE V2.5 AIR FORCE]
0024	24. [SDSFIE V2.5 AIR FORCE]
0025	25. [SDSFIE V2.5 AIR FORCE]
0050	50. [SDSFIE V2.5 AIR FORCE]
0100	100. [SDSFIE V2.5 AIR FORCE]
0200	200. [SDSFIE V2.5 AIR FORCE]
0300	300. [SDSFIE V2.5 AIR FORCE]
0400	400. [SDSFIE V2.5 AIR FORCE]
0600	600. [SDSFIE V2.5 AIR FORCE]
0900	900. [SDSFIE V2.5 AIR FORCE]
1200	1200. [SDSFIE V2.5 AIR FORCE]
1500	1500. [SDSFIE V2.5 AIR FORCE]
1800	1800. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
Idcsym_d	
Value	Definition (Notes) [Source]
B88	B88 - 88 Mh Coil Spaced Every 3,000 Feet. [SDSFIE V2.5 AIR FORCE]
D66	D66 - 66 Mh Coil Spaced Every 4,500 Feet. [SDSFIE V2.5 AIR FORCE]
D66DSL	D66DSL - 66 Mh Coil Spaced Every 4,500 Feet. Permits ADSL Services. [SDSFIE V2.5 AIR FORCE]
D88	D88 - 88 Mh Coil Spaced Every 4,500 Feet. [SDSFIE V2.5 AIR FORCE]
H88	H88 - 88 Mh Coil Spaced Every 6,000 Feet. [SDSFIE V2.5 AIR FORCE]
H88DSL	H88DSL - 88 Mh Coil Spaced Every 6,000 Feet. Permits ADSL Services. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
Idctyp_d	
Value	Definition (Notes) [Source]
632	633 Type 88 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
656	657 Type 66 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
662	663 Type 88 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
666	667 Type 66 Mh Load Coil. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]

liner_ty_d**Value**

GLASS
OTHER
PLASTIC
TBD
UNKNOWN

Definition (Notes) [Source]

glass liner [SDSFIE V1.4]
other [SDSFIE V1.4]
plastic liner [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

lit_typ_d**Value**

FLOOD_LIGHT

POLE_MOUNT
SECURITY_LIGHT
STREET_LIGHT
WALK_LIGHT

Definition (Notes) [Source]

Lights designed to flood an area with light, as in the case of an athletic field. [SDSFIE V2.1 FGDC Utilities Classification]
Lights mounted on poles [SDSFIE V2.1 FGDC Utilities Classification]
Security Light [SDSFIE V1.9 REEGIS]
Lights specifically designed to illuminate the street below. [SDSFIE V1.6]
Normally a low mounted light designed to illuminate a walkway or beside a driveway. [SDSFIE V2.1 FGDC Utilities Classification]

ltccode_d**Value**

AA
AS
AV
BF
BH
BL
BR
BT
CH
CONC
CP
CSA
CY
DH
EP
FB
FW
G
GACT
GT
HA
HP
IP
IWVS
LH
LK
MS
NQ
OC
ON
OTHER
PH
PR
PZ
RE
RV
S
SE
SG
SL
SP
SPG
SPV
SPW
SR
SS
SSP
SSS
STW
SV

Definition (Notes) [Source]

Ambient Air [SDSFIE V2.3 Edwards Air Force Base]
Pump and Treat (Air Stripping) [SDSFIE V1.4]
Sparge and Vent Groundwater Treatment System. [SDSFIE V1.95
Backfilled Location. [SDSFIE V1.95 ERPIMS]
Borehole [SDSFIE V1.4]
Manmade Building materials from Roof, Walls, Basement [SDSFIE V1.4]
Non-Fixed Locations Receptacle Including Barrels and [SDSFIE V1.4]
Baker Tank [SDSFIE V2.2]
Channel/Ditch [SDSFIE V1.4]
Concrete [SDSFIE V2.2 Edwards Air Force Base]
Cone penetrometer or hydropunch [SDSFIE V2.2 Edwards Air Force Base]
Composite Surface Air Sample [SDSFIE V2.2 Edwards Air Force Base]
Cryopile [SDSFIE V1.95 ERPIMS]
Dig and Haul [SDSFIE V2.2 Edwards Air Force Base]
Treatability Unit Effluent Monitoring Point. [SDSFIE V1.95 ERPIMS]
Filter Bag [SDSFIE V2.2 Edwards Air Force Base]
Faucet/Tap [SDSFIE V1.4]
Grab [SDSFIE V2.2]
Granular Activated Carbon Tank [SDSFIE V2.2 Edwards Air Force Base]
Grease Trap [SDSFIE V2.2 Edwards Air Force Base]
Hand Auger [SDSFIE V2.2]
Holding Pond/Lagoon [SDSFIE V1.4]
Treatability Unit Influent Monitoring Point [SDSFIE V1.95 ERPIMS]
In Well Vapor Stripping [SDSFIE V2.2 Edwards Air Force Base]
Leachate From Landfill [SDSFIE V1.4]
Lake/Pond [SDSFIE V1.4]
Marine Sediment [SDSFIE V1.4]
Location Type Not Applicable, QC Sample. [SDSFIE V1.95 ERPIMS]
Outcrop [SDSFIE V1.4]
Ocean [SDSFIE V1.4]
Other [SDSFIE V2.2]
Cone Pentrometer/Hydropunch [SDSFIE V1.4]
Soil Gas Probe [SDSFIE V1.4]
Piezometer [SDSFIE V1.4]
Residence [SDSFIE V1.4]
River/Stream [SDSFIE V1.4]
Sediment [SDSFIE V2.3 Edwards Air Force Base]
Seep [SDSFIE V1.4]
Soil gas [SDSFIE V2.3 Edwards Air Force Base]
Surface Location [SDSFIE V1.4]
Spring [SDSFIE V1.4]
Sampling Point - General [SDSFIE V2.2 Edwards Air Force Base]
Sampling Point - Vapor [SDSFIE V2.2 Edwards Air Force Base]
Sampling Point - Water [SDSFIE V2.2 Edwards Air Force Base]
Sewer System [SDSFIE V1.4]
Surface Survey [SDSFIE V1.4]
Split spoon [SDSFIE V2.2 Edwards Air Force Base]
Surface Soil Sample [SDSFIE V2.2]
Standing water [SDSFIE V2.2 Edwards Air Force Base]
Soil Vapor Extraction System. [SDSFIE V1.95 ERPIMS]

SW	Storm Water [SDSFIE V1.4]
SWS	Surface Water Sample [SDSFIE V2.2]
SWSS	Surface Water/Surface Soil [SDSFIE V2.2 Edwards Air Force Base]
SWWP	Swab or Wipe [SDSFIE V2.2 Edwards Air Force Base]
T	Trenching [SDSFIE V2.2]
TE	Tank/Pipe removal excavation [SDSFIE V1.4]
TK	Fix Loc Receptacle Including Tanks, Containers and Vats. [SDSFIE V1.95 ERPIMS]
TP	Test Pit or Exploratory Pit [SDSFIE V2.2]
VF	Emission isolation flux chamber, utilizing stainless [SDSFIE V1.4]
WF	Waste Water Treatment Facility. [SDSFIE V1.95 ERPIMS]
WL	Well [SDSFIE V1.4]
WLB	Bioventing Well [SDSFIE V2.2 Edwards Air Force Base]
WLBW	Bioventing Monitoring Well [SDSFIE V2.2 Edwards Air Force Base]
WLBW	Bio-Treatment Well [SDSFIE V2.2 Edwards Air Force Base]
WLD	Dry Well [SDSFIE V2.2]
WLDE	Dual Extraction Well [SDSFIE V2.2 Edwards Air Force Base]
WLE	Extraction Well [SDSFIE V2.2 Edwards Air Force Base]
WLH	Historic Well [SDSFIE V2.2 Edwards Air Force Base]
WLI	Injection Well [SDSFIE V2.2]
WLM	Monitoring Well [SDSFIE V2.2 Edwards Air Force Base]
WLO	Observation Well [SDSFIE V2.2]
WLP	Pumping Well [SDSFIE V2.2 Edwards Air Force Base]
WLPZ	Piezometer Well [SDSFIE V2.2 Edwards Air Force Base]
WLR	Recovery Well [SDSFIE V2.2 Edwards Air Force Base]
WLRI	Reinfiltration Well [SDSFIE V2.2 Edwards Air Force Base]
WLS	Sparge Well [SDSFIE V2.2 Edwards Air Force Base]
WLSG	Soil Gas Well [SDSFIE V2.2 Edwards Air Force Base]
WLVE	Vapor Extraction Well [SDSFIE V2.2 Edwards Air Force Base]
WLVM	Vapor Monitoring Well [SDSFIE V2.2 Edwards Air Force Base]
WP	Pumping Well [SDSFIE V2.2 Edwards Air Force Base]
WT	Wetlands/Swamp [SDSFIE V1.95 ERPIMS]
WW	Waste Water [SDSFIE V1.4]

mat_d, pole_mat_d, sign_mat_d

Value	Definition (Notes) [Source]
AL	Aluminum [SDSFIE V1.4]
CEMENT	cement [SDSFIE V1.4]
COMBINATION	combination of materials [SDSFIE V1.4]
CONCRETE	concrete [SDSFIE V1.4]
FIBERGLASS	fiberglass [SDSFIE V1.4]
GLASS	glass [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PLASTIC	plastic [SDSFIE V1.4]
REINFORCONCR	reinforced concrete, metal rods [SDSFIE V1.4]
STEEL	steel [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WOOD	wood [SDSFIE V1.4]

mat_d, pri_matl_d

Value	Definition (Notes) [Source]
AL	Aluminum [SDSFIE V1.4]
BRICK	brick [SDSFIE V1.4]
BUILTUP	builtup [SDSFIE V1.4]
CANVAS	canvas [SDSFIE V1.4]
CARDBOARD	cardboard [SDSFIE V1.4]
CEMENT	cement [SDSFIE V1.4]
CEMENTBLOCK	cement block [SDSFIE V1.4]
CINDERBLOCK	cinder block [SDSFIE V1.4]
CIS	Concrete Cast inSitu/Cast in Place [SDSFIE V2 Tinker Air Force Base]
COMBINATION	combination of materials [SDSFIE V1.4]
COMPO	Composolite [SDSFIE V2 Tinker Air Force Base]
CONCRETBLOCK	concrete block [SDSFIE V1.4]
CONCRETE	concrete [SDSFIE V1.4]
CONCRETEPILE	concrete pile [SDSFIE V1.4]
CONCRT_AND_STEEL	Concrete and Steel. [SDSFIE V2.31 Air Force]
CONCRT_AND_WOOD	Concrete and Wood. [SDSFIE V2.31 Air Force]
EARTHEN	earthen, dirt [SDSFIE V1.4]
FIBERGLASS	fiberglass [SDSFIE V1.4]

GLASS
GLASS_REIN_PLAS
GLASSBLOCK
GRASS
HARD_SURFACED
HIDES
LOGS
LOOSE_BOULDERS
MASNRY_AND_STEEL
MASONRY
MASONRY_AND_WOOD
METAL
OTHER
PAINTED
PLASTIC
PRECAST
SHEETMETAL
SNOW
STEEL
STEEL_AND_WOOD
STEELPILE
STONE
STYROFOAM
TBD
TILE
UNKNOWN
UNSURFACED
WOOD
WOODENPILE

glass [SDSFIE V1.4]
Glass Reinforced Plastic [SDSFIE V2.2 S-57]
glass block [SDSFIE V1.4]
grass [SDSFIE V1.4]
Hard Surfaced [SDSFIE V2.2 S-57]
hides [SDSFIE V1.4]
logs [SDSFIE V1.4]
Loose Boulders [SDSFIE V2.2 S-57]
Masonry and Steel. [SDSFIE V2.31 Air Force]
MASONRY [SDSFIE V2.2 S-57]
Masonry and Wood. [SDSFIE V2.31 Air Force]
metal [SDSFIE V1.4]
other [SDSFIE V1.4]
Painted [SDSFIE V2.2 S-57]
plastic [SDSFIE V1.4]
Pre-Cast Concrete [SDSFIE V2 Tinker Air Force Base]
sheet metal [SDSFIE V1.4]
snow [SDSFIE V1.4]
steel [SDSFIE V1.4]
Steel and Wood. [SDSFIE V2.31 Air Force]
steel pile [SDSFIE V1.4]
stone [SDSFIE V1.4]
Styrofoam [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
tile [SDSFIE V1.4]
Unknown. [SDSFIE V2.31 Air Force]
Unsurfaced [SDSFIE V2.2 S-57]
wood [SDSFIE V1.4]
wooden pile [SDSFIE V1.4]

material_d

Value

AL
CI
GR
MG
OTHER
TBD
UNKNOWN
ZN

Definition (Notes) [Source]

aluminum [SDSFIE V1.4]
cast iron [SDSFIE V1.4]
graphite [SDSFIE V1.4]
magnesium [SDSFIE V1.4]
other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]
zinc [SDSFIE V1.4]

maxcellt_d

Value

MXC_1_25_1

MXC_2_2
MXC_2_3
MXC_3_3

MXC_4_3
MXD_1_25_1

MXD_2_2
MXD_2_3
MXD_3_3

MXD_4_3
MXP_1_25_1

MXP_2_2
MXP_2_3
MXP_3_3

OTHER
TBD
UNKNOWN

Definition (Notes) [Source]

Standard 1.25" 1 Cell (White - Teardrop) - 1.25" Cable OD Max. [SDSFIE V2.5 AIR FORCE]
Standard 2" 2 Cell (Purple) - 1" Cable OD Max. [SDSFIE V2.5 AIR
Standard 2" 3 Cell (Yellow) - 1" Cable OD Max. [SDSFIE V2.5 AIR
Standard 3" 3 Cell (Black, Red, or Blue) - 1" Cable OD Max. [SDSFIE V2.5
AIR FORCE]
Standard 4" 3 Cell (Green) - 1.25" Cable OD Max. [SDSFIE V2.5 AIR
Detachable 1.25" 1 Cell (White - Teardrop) - 1.25" Cable OD Max.
[SDSFIE V2.5 AIR FORCE]
Detachable 2" 2 Cell (Purple) - 1" Cable OD Max. [SDSFIE V2.5 AIR
Detachable 2" 3 Cell (Yellow) - 1" Cable OD Max. [SDSFIE V2.5 AIR
Detachable 3" 3 Cell (Black, Red, or Blue) - 1" Cable OD Max. [SDSFIE
V2.5 AIR FORCE]
Detachable 4" 3 Cell (Green) - 1.25" Cable OD Max. [SDSFIE V2.5 AIR
Plenum 1.25" 1 Cell (White - Teardrop) - 1.25" Cable OD Max. [SDSFIE
V2.5 AIR FORCE]
Plenum 2" 2 Cell (Purple) - 1" Cable OD Max. [SDSFIE V2.5 AIR FORCE]
Plenum 2" 3 Cell (Yellow) - 1" Cable OD Max. [SDSFIE V2.5 AIR FORCE]
Plenum 3" 3 Cell (Black, Red, or Blue) - 1" Cable OD Max. [SDSFIE V2.5
AIR FORCE]
Other. [SDSFIE V2.5 AIR FORCE]
To Be Determined. [SDSFIE V2.5 AIR FORCE]
Unknown. [SDSFIE V2.5 AIR FORCE]

mcnvty_d

Value

COAX_TO_MM
COAX_TO_SM

Definition (Notes) [Source]

Coaxial Cable to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
Coaxial Cable to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]

OTHER	Other. [SDSFIE V2.5 AIR FORCE]
SM_TO_MM	Single Mode Fiber to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
STP_TO_MM	Shielded Twisted Pair to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
STP_TO_SM	Shielded Twisted Pair to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
UTP_TO_MM	Unshielded Twisted Pair to Multi Mode Fiber. [SDSFIE V2.5 AIR FORCE]
UTP_TO_SM	Unshielded Twisted Pair to Single Mode Fiber. [SDSFIE V2.5 AIR FORCE]
meas_ty_d	
Value	Definition (Notes) [Source]
INSIDE	inside diameter [SDSFIE V1.4]
NOMINAL	nominal or average diameter [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OUTSIDE	outside diameter [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
media_ty_d	
Value	Definition (Notes) [Source]
COPPER	Copper. [SDSFIE V2.3 Tinker Air Force Base]
FIBER_OPTIC	Fiber Optics. [SDSFIE V2.31 Air Force]
MICROWAVE	Microwave. [SDSFIE V2.31 Air Force]
MULTI_MODE_FIBER	Multi-Mode Fiber [SDSFIE V2.3 Tinker Air Force Base]
SINGLE_MODE_FIBE	Single Mode Fiber. [SDSFIE V2.3 Tinker Air Force Base]
meter_ty_d	
Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
metertyp_d, readout_d	
Value	Definition (Notes) [Source]
ANALOG	analog (dial) display [SDSFIE V1.4]
DIGITAL	digital display [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
method_d	
Value	Definition (Notes) [Source]
AMP	Amp [SDSFIE V2 Austin and Pitts]
B	B-connectors [SDSFIE V2 Austin and Pitts]
ELAST	Elastomeric Fiber Splice [SDSFIE V2 Austin and Pitts]
FACTORY	Factory Splice [SDSFIE V2 Austin and Pitts]
FUSION	Fusion Fiber Splice [SDSFIE V2 Austin and Pitts]
M	Modular [SDSFIE V2 Austin and Pitts]
MECH	Other Mechanical [SDSFIE V2 Austin and Pitts]
OTHER	Other [SDSFIE V2 Austin and Pitts]
ROTARY	Rotary Fiber Splice [SDSFIE V2 Austin and Pitts]
SL	Scotch Locks (Copper) [SDSFIE V2 Austin and Pitts]
TBD	To Be Determined [SDSFIE V2]
TS	Twist and Solder or Sleeve [SDSFIE V2 Austin and Pitts]
UNKNOWN	Unknown [SDSFIE V2]
mexcellc_d	
Value	Definition (Notes) [Source]
BLACK	Black. [SDSFIE V2.5 AIR FORCE]
BLUE	Blue. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RED	Red. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
mh_size_d	
Value	Definition (Notes) [Source]
1X1.5X2	1x1.5x2 Standard Manhole Size as measured in feet [SDSFIE V2.31 Tinker Air Force Base]
3X5X2.5	3x5x2.5 Standard Manhole Dimensions in Feet [SDSFIE V2.31 Tinker Air Force Base]
3X5X3	3x5x3 Standard Manhole Dimensions in Feet

3X5X4	[SDSFIE V2.31 Tinker Air Force Base] 3x5x4 Standard Manhole Dimensions in Feet
4X4X3	[SDSFIE V2.31 Tinker Air Force Base] 4x4x3 Standard Manhole Dimensions in Feet
4X4X4	[SDSFIE V2.31 Tinker Air Force Base] 4x4x4 Standard Manhole Dimensions in Feet
4X6X4	[SDSFIE V2.31 Tinker Air Force Base] 4x6x4 Standard Manhole Dimensions in Feet
4X6X6	[SDSFIE V2.31 Tinker Air Force Base] 4x6x6 Standard Manhole Dimensions in Feet
6X10X6	6x10x6 Standard Manhole Dimensions in Feet. [SDSFIE V2.5 AIR
6X12X6	6x12x6 Standard Manhole Dimensions in Feet. [SDSFIE V2.5 AIR
6X4X6	6x4x6 Standard Manhole Dimensions in Feet [SDSFIE V2.31 Tinker Air Force Base]
8X4X7	8x4x7 Standard Manhole Dimensions in Feet. [SDSFIE V2.5 AIR FORCE]
8X6X6	8x6x6 Standard Manhole Dimensions in Feet. [SDSFIE V2.5 AIR FORCE]

mhl_type_d, type_d

Value

1T1
4T1
5T1
6T1
6T2
8T1
A
CEMH
HH_TYPE_A
J3
J4
JC9C
L
OTHER
R2A
T
TBD
UNKNOWN

Definition (Notes) [Source]

1T2. [SDSFIE V2.5 AIR FORCE]
4T2. [SDSFIE V2.5 AIR FORCE]
5T2. [SDSFIE V2.5 AIR FORCE]
6T1. [SDSFIE V2.5 AIR FORCE]
6T2. [SDSFIE V2.5 AIR FORCE]
8T2. [SDSFIE V2.5 AIR FORCE]
A Type. [SDSFIE V2.5 AIR FORCE]
controlled environment manhole [SDSFIE V2 Tinker Air Force Base]
Handhole Type A [SDSFIE V2.31 Tinker Air Force Base]
J3 Manhole. [SDSFIE V2.5 AIR FORCE]
J4 manhole [SDSFIE V2 Tinker Air Force Base]
JC9C (2450mm x 1750mm x 1450mm) [SDSFIE V2 Tinker Air Force Base]
L Manhole. [SDSFIE V2.5 AIR FORCE]
Other [SDSFIE V2 Tinker Air Force Base]
R2A manhole [SDSFIE V2 Tinker Air Force Base]
T Manhole. [SDSFIE V2.5 AIR FORCE]
To Be Determined [SDSFIE V2 Tinker Air Force Base]
Unknown [SDSFIE V2 Tinker Air Force Base]

mon_typ_d

Value

A
ACTUAL
B
C
CAP
D
E
F
G
INTERMITTENT_CAP
INTERMITTENT_ROD
OTHER
PIN_ROD_PIPE
REFERENCE

Definition (Notes) [Source]

A type marker. [SDSFIE V2.4]
Actual. [SDSFIE V2.4 USGS]
B type marker. [SDSFIE V2.4]
C type marker. [SDSFIE V2.4]
Cap. [SDSFIE V2.4 REEGIS]
D type marker. [SDSFIE V2.4]
E type marker. [SDSFIE V2.4]
F type marker. [SDSFIE V2.4]
G type marker. [SDSFIE V2.4]
Intermittent cap. [SDSFIE V2.4 REEGIS]
Intermittent rod. [SDSFIE V2.4 REEGIS]
Other. [SDSFIE V2.4 REEGIS]
Pin, rod, pipe. [SDSFIE V2.4 REEGIS]
Reference. [SDSFIE V2.4 USGS]

motor_ty_d

Value

OTHER
TBD
UNKNOWN

Definition (Notes) [Source]

other [SDSFIE V1.4]
to be determined [SDSFIE V1.4]
unknown [SDSFIE V1.4]

mount_d

Value

CEILING_MOUNTED
PAD_MOUNTED
POLE_MOUNTED
WALL_MOUNTED

Definition (Notes) [Source]

Ceiling mounted. [SDSFIE V2.3 Tinker Air Force Base]
pad mounted transformer bank [SDSFIE V2.1 FGDC Utilities Classification]
pole mounted transformer bank [SDSFIE V2.1 FGDC Utilities]
Wall mounted [SDSFIE V2.3 Tinker Air Force Base]

mtimzone_d

Value

Definition (Notes) [Source]

CZ	The Contiguous Zone is a U.S. maritime boundary extending to 24 nautical miles from the baseline. [SDSFIE V2.5 NAVFAC]
EEX	The Exclusive Economic Zone is an area beyond and adjacent to the territorial sea. [SDSFIE V2.5 NAVFAC]
FZ	The Fishing Zone area as defined in the Fisheries Management Act 1991 (FMA). [SDSFIE V2.5 NAVFAC]
HS	High Seas, International Waters, meaning the open seas of the world outside the territorial waters of any nation. [SDSFIE V2.5 NAVFAC]
IW	Internal Waters. [SDSFIE V2.5 NAVFAC]
JDZ	Joint Development Zones. [SDSFIE V2.5 NAVFAC]
MZ	Military Zones. [SDSFIE V2.5 NAVFAC]
SZ	Special Zones. [SDSFIE V2.5 NAVFAC]
TS	The Territorial Sea is U.S. maritime boundary extending to 12 nautical miles as measured from the baseline. [SDSFIE V2.5 NAVFAC]

mtr_use_d, reg_use_d

Value	Definition (Notes) [Source]
ACPOWERPANEL	ac power panel [SDSFIE V1.4]
ALARMPULLBOX	alarm pullbox [SDSFIE V1.4]
BATTERY	battery [SDSFIE V1.4]
CAPACITOR	capacitor [SDSFIE V1.4]
CIRCUITBREAK	circuit breaker [SDSFIE V1.4]
COMMERCIAL	commercial service [SDSFIE V1.4]
DCPOWERPANEL	dc power panel [SDSFIE V1.4]
DISTRIBFRAME	distribution frame [SDSFIE V1.4]
DISTRIBPANEL	distribution panel [SDSFIE V1.4]
ELEC_METER	electric meter [SDSFIE V1.4]
ELEC_MOTOR	electric motor [SDSFIE V1.4]
FIELDINTERFC	field interface [SDSFIE V1.4]
GENERATOR	generator [SDSFIE V1.4]
GROUND	ground [SDSFIE V1.4]
INTDISTRFRAM	intermediate distribution frame [SDSFIE V1.4]
JUNCTIONBOX	junction box [SDSFIE V1.4]
LIGHT	light [SDSFIE V1.4]
LOAD_POINT	load point [SDSFIE V1.4]
MAINDISTRFRAM	main distribution frame [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
PEDESTAL	pedestal [SDSFIE V1.4]
RECTIFIER	rectifier [SDSFIE V1.4]
RESIDENTIAL	residential service [SDSFIE V1.4]
SPLICE	splice [SDSFIE V1.4]
SWITCH	switch [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TRAFFICSIGNL	traffic signal [SDSFIE V1.4]
TRANSFORMER	transformer [SDSFIE V1.4]
TRFSIGCONBOX	traffic signal control box [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VOLTREGULATE	voltage regulator [SDSFIE V1.4]

name_d

Value	Definition (Notes) [Source]
5	lagoon #5 [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

name_d, src_name_d

Value	Definition (Notes) [Source]
ART_WELL_7	Artisan Well #7 [SDSFIE V1.6]

FEDERALES	Arroyo Federales [SDSFIE V1.6]
LAFOUCHE	Bayou LaFouche [SDSFIE V1.6]
MAGEES_CREEK	Magees Creek [SDSFIE V1.6]
OTHER	other [SDSFIE V1.6]
TBD	to be determined [SDSFIE V1.4]
TYLERTOWN	Tylertown Wellfield [SDSFIE V1.6]
UNKNOWN	unknown [SDSFIE V1.4]
net_aff_d	
Value	Definition (Notes) [Source]
ABC	ABC Network. [SDSFIE V2.31 HSIP]
CBL	CBL Network. [SDSFIE V2.31 HSIP]
CBS	CBS Network. [SDSFIE V2.31 HSIP]
FOX	FOX Network. [SDSFIE V2.31 HSIP]
NBC	NBC Network. [SDSFIE V2.31 HSIP]
PBS	PBS Network. [SDSFIE V2.31 HSIP]
netbw_d	
Value	Definition (Notes) [Source]
0_3	300 bps - 300 Bits Per Second (Bell 103, ITU-T V.21). [SDSFIE V2.5 AIR FORCE]
1_1_2	1200 bps - 1200 Bits Per Second (Bell 212A, ITU-T V.22). [SDSFIE V2.5 AIR FORCE]
1_14_4	14.4K bps - 14.4K Bits Per Second (ITU-T V.32bis, V.33). [SDSFIE V2.5 AIR FORCE]
1_19_2	19.2K bps - 19.2K Bits Per Second (ITU-T V.34, V.32terbo) [SDSFIE V2.5 AIR FORCE]
1_2_4	2400 bps - 2400 Bits Per Second (ITU-T V.22bis). [SDSFIE V2.5 AIR FORCE]
1_28_8	28.8K bps - 28.8K Bits Per Second (ITU-T V.34). [SDSFIE V2.5 AIR FORCE]
1_33_6	33.6K bps - 33.6K Bits Per Second (ITU-T V.34). [SDSFIE V2.5 AIR FORCE]
1_38_4	38.4K bps - 38.4K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_4_8	4800 bps - 4800 Bits Per Second (Bell 208 A/B, ITU-T V.29). [SDSFIE V2.5 AIR FORCE]
1_48_0	48K bps - 48K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_56_0	56K bps - 56K Bits Per Second (ITU-T V.9x). [SDSFIE V2.5 AIR FORCE]
1_57_6	57.6K bps - 57.6K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_64_0	64K bps - 64K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
1_7_2	7200 bps - 7200 Bits Per Second (ITU-T V.29). [SDSFIE V2.5 AIR FORCE]
1_9_6	9600 bps - 9600 Bits Per Second (ITU-T V.29, V.32, V.22bis). [SDSFIE V2.5 AIR FORCE]
1115_2	115.2K bps - 115.2K Bits Per Second. [SDSFIE V2.5 AIR FORCE]
2_1_544_T_1	1.544 Mbps (T-1, DS-1). [SDSFIE V2.5 AIR FORCE]
2_10_BT	10 Mbps (10 BaseT Copper). [SDSFIE V2.5 AIR FORCE]
2_2_048_E_1	2.048 Mbps (E-1). [SDSFIE V2.5 AIR FORCE]
2_44_736_T_3	44.736 Mbps (T-3, DS-3). [SDSFIE V2.5 AIR FORCE]
2_51_84_OC1	51.84 Mbps (OC1). [SDSFIE V2.5 AIR FORCE]
2100_BT	100 Mbps (100 BaseT Copper, 100 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
2155_52_OC3	155.52 Mbps (OC3c, OC3/STM-1). [SDSFIE V2.5 AIR FORCE]
2622_08_OC12	622.08 Mbps (OC12c, OC12/STM-4). [SDSFIE V2.5 AIR FORCE]
3_1_BT	1 Gbps (1000 BaseT Copper, 1000 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
3_10_BF	10 Gbps (10000 BaseF Fiber). [SDSFIE V2.5 AIR FORCE]
3_2_488_OC48	2.488 Gbps (OC48c, OC48/STM-16). [SDSFIE V2.5 AIR FORCE]
3_39_81_OC768	39.81 Gbps (OC-768c, OC-768/STM-256). [SDSFIE V2.5 AIR FORCE]
3_40_OC48WDM	40 Gbps (OC48 WDM). [SDSFIE V2.5 AIR FORCE]
3_9_952_OC192	9.952 Gbps (OC192c, OC192/STM-64). [SDSFIE V2.5 AIR FORCE]
3160_OC3072	160 Gbps (OC-3072). [SDSFIE V2.5 AIR FORCE]
4_6_4_OC768DWDW	6.4 Tbps (OC-768 DWDW). [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
netprc_d	
Value	Definition (Notes) [Source]
ADSL	Asymmetric Digital Subscriber Loop. [SDSFIE V2.5 AIR FORCE]
ATM	Asynchronous Transfer Mode. [SDSFIE V2.5 AIR FORCE]
DSL	Digital Subscriber Loop. [SDSFIE V2.5 AIR FORCE]
ETHERNET	Ethernet. [SDSFIE V2.5 AIR FORCE]
FDDI	Fiber Distributed Data Interface. [SDSFIE V2.5 AIR FORCE]
FIBERCHANNEL	Fiber Channel. [SDSFIE V2.5 AIR FORCE]
FRAMERELAY	Frame Relay. [SDSFIE V2.5 AIR FORCE]
ISDN	Integrated Services Digital Network. [SDSFIE V2.5 AIR FORCE]

OTHER	Other. [SDSFIE V2.5 AIR FORCE]
SONET	Synchronous Optical Network. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TOKENRING	Token Ring. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
node_typ_d	
Value	Definition (Notes) [Source]
DBGROUP	Virtual Ductbank Group (not drawn). [SDSFIE V2.5 AIR FORCE]
DUCT_OPENING	Duct or Inner duct Opening. [SDSFIE V2.5 AIR FORCE]
DUCT2DIRECT	Duct to/from a Direct-Buried Path. [SDSFIE V2.5 AIR FORCE]
GENERAL	General Transition (i.e. PVC to PE duct). [SDSFIE V2.5 AIR FORCE]
HOLE	Vault Vertical Hole. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
RISER	Vertical pipe or covering. [SDSFIE V2.5 AIR FORCE]
nozzl_ty_d	
Value	Definition (Notes) [Source]
OVERWING	Jumbo VASI with a TCH to accommodate long-bodied or jumbo aircraft. [SDSFIE V2.4 Air Force]
SINGLE_PT	None. [SDSFIE V2.4 Air Force]
SINGLEPT_OVRWING	Not Applicable. [SDSFIE V2.4 Air Force]
UNKNOWN	PVASI (Pulsating VASI). [SDSFIE V2.4 Air Force]
ops_typ_d	
Value	Definition (Notes) [Source]
AROT	air refueling operations track [SDSFIE V1.4]
BDP	butterfly dart pattern [SDSFIE V1.4]
CTR	conventional air traffic route [SDSFIE V1.4]
DATGRANG	dual air-to-ground range flight pattern [SDSFIE V1.4]
DZFP	drop zone flight pattern [SDSFIE V1.4]
FAI	Federal Aeronautics International (FAI) course [SDSFIE V1.4]
FIGURE8DP	figure 8 dart pattern [SDSFIE V1.4]
GAEE	general aviation entry/exit route [SDSFIE V1.4]
HLAEE	helicopter/light aircraft entry/exit route [SDSFIE V1.4]
HLP	helicopter landing pattern [SDSFIE V1.4]
JET	Jet Route. [SDSFIE V2.22 AFCEE]
LASCC	low altitude speed calibration course [SDSFIE V1.4]
LLMTR	low level military training route [SDSFIE V1.4]
LOWLIF_DRG	low lift over drag approach route [SDSFIE V1.4]
MBTR	Main Base traffic route [SDSFIE V1.4]
NBTR	North Base traffic route [SDSFIE V1.4]
NRTP	North Range traffic pattern [SDSFIE V1.4]
SIDR	standard instrument departure route [SDSFIE V1.4]
SRTP	South Range traffic pattern [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TFBP	tower flyby pattern [SDSFIE V1.4]
TFRR	terrain following radar route [SDSFIE V1.4]
TR	transit route [SDSFIE V1.4]
p_class_d	
Value	Definition (Notes) [Source]
CLASS_1	Class 1, MHBL 4500, Minimum Top Circumference 27 [SDSFIE V1.75]
CLASS_2	Class 2, MHBL 3700, Minimum Top Circumference 25 [SDSFIE V1.75]
CLASS_3	Class 3, MHBL 3000, Minimum Top Circumference 23 [SDSFIE V1.75]
CLASS_4	Class 4, MHBL 2400, Minimum Top Circumference 21 [SDSFIE V1.75]
CLASS_5	Class 5, MHBL 1900, Minimum Top Circumference 19 [SDSFIE V1.75]
CLASS_6	Class 6, MHBL 1500, Minimum Top Circumference 17 [SDSFIE V1.75]
CLASS_7	Class 7, MHBL 1200, Minimum Top Circumference 15 [SDSFIE V1.75]
parc_use_d	
Value	Definition (Notes) [Source]
ADMINISTRATE	administration [SDSFIE V1.4]
AGRIFIELD	agricultural field [SDSFIE V1.4]
AIRFLDCLEAR	airfield clearance [SDSFIE V1.4]
AIRFLDPAVEMT	airfield pavement [SDSFIE V1.4]
AIROPSMAINTN	aircraft operations and maintenance [SDSFIE V1.4]
AMMOSTORAGE	ammunition storage [SDSFIE V1.4]
BEQ	bachelor enlisted quarters [SDSFIE V1.4]
BOQ	bachelor officer quarters [SDSFIE V1.4]
CIV_AEROPLANE_AP	civil aeroplane airport [SDSFIE V2.2 S-57]

CIVIL_HELIPORT	CIVIL_HELIPORT [SDSFIE V2.2 S-57]
COMMCOMMERCE	community commercial [SDSFIE V1.4]
COMMFACILITY	community facility [SDSFIE V1.4]
COMMSERVICE	community service [SDSFIE V1.4]
COMMSERVICES	commercial services [SDSFIE V1.4]
CROP_PRODUCT	crop production [SDSFIE V1.4]
ELECOMBTTEST	electronic combat ground test [SDSFIE V1.4]
EMERGENCY_AFIELD	emergency airfield [SDSFIE V2.2 S-57]
ENLISTBARRAK	enlisted barracks [SDSFIE V1.4]
EXPLOSIVSAFZ	munitions/explosive safety hazard zone [SDSFIE V1.4]
FAMILYHOUSNG	family housing [SDSFIE V1.4]
FARM_CROPS	farming, crops [SDSFIE V1.4]
FARM_GRAZING	farming, grazing [SDSFIE V1.4]
FARM_NUTREE	farming, nuts [SDSFIE V1.4]
FARM_ORCHARD	farming, orchard fruit [SDSFIE V1.4]
FARM_VINEYRD	farming, vineyard [SDSFIE V1.4]
FLOW_EASEMENT	Flowage Easement [SDSFIE V1.9 REEGIS]
FLTLIN_RDTE	flight line/research-development-testing-evaluation [SDSFIE V1.4]
FLYWAY	flyway [SDSFIE V1.4]
FOREST	forest [SDSFIE V1.4]
FUELS_AREA	fuels area [SDSFIE V1.4]
GLIDER_AIRFIELD	GLIDER_AIRFIELD [SDSFIE V2.2 S-57]
GOVERNMENTAL	governmental [SDSFIE V1.4]
GRANT	grant [SDSFIE V1.4]
GRAZING_AREA	grazing area [SDSFIE V1.4]
HAY_PRODUCE	hay production area [SDSFIE V1.4]
HELIPORT	heliport [SDSFIE V1.4]
HISTORIC	historic [SDSFIE V1.4]
HOUSEACCOMP	housing accompanied [SDSFIE V1.4]
HOUSUNACOMP	housing unaccompanied [SDSFIE V1.4]
HQ	headquarters, HQ [SDSFIE V1.4]
HUNTING_AREA	hunting area [SDSFIE V1.4]
INSTRUCOMMUN	instrumentation/communication [SDSFIE V1.4]
LAND_RESTORE	land restoration [SDSFIE V1.4]
LEASED_LAND	leased land [SDSFIE V1.4]
LEVEE	Levee [SDSFIE V1.9 REEGIS]
MAINTENANCE	maintenance [SDSFIE V1.4]
MANUF_PRODUC	manufacturing and production [SDSFIE V1.4]
MEDIC_DENTAL	medical/dental [SDSFIE V1.4]
MIL_AEROPLANE_AP	military aeroplane airport [SDSFIE V2.2 S-57]
MILITARY	military [SDSFIE V1.4]
MILITARY_HELIPOR	MILITARY_HELIPORT [SDSFIE V2.2 S-57]
MINING	mining [SDSFIE V1.4]
MOBILE_HOME	Mobile Home. [SDSFIE V2.4 USGS]
NOISEOVFLGT	noise/overflight [SDSFIE V1.4]
OPENBUFFZONE	open space/buffer zone [SDSFIE V1.4]
OPERATIONS	operations [SDSFIE V1.4]
OUTDOOR_REC	outdoor recreation [SDSFIE V1.4]
PARCEL	parcel [SDSFIE V1.4]
PASTURE	pasture [SDSFIE V1.4]
PRIVATE	private [SDSFIE V1.4]
RAILROAD	railroad [SDSFIE V1.4]
RANGE	range [SDSFIE V1.4]
RDTE	research, development, testing, and evaluation [SDSFIE V1.4]
REAL_ESTATE	real estate [SDSFIE V1.4]
REC_CENTER	recreation center [SDSFIE V1.4]
RECREATIONAL	recreational [SDSFIE V1.4]
RESIDEOTHER	residence, other [SDSFIE V1.4]
RESIDPRIMARY	residence, primary [SDSFIE V1.4]
ROAD	road [SDSFIE V1.4]
SANITATION	sanitation [SDSFIE V1.4]
SCHOOL	school [SDSFIE V1.4]
SMALL_PLANE_AFLD	small planes airfield [SDSFIE V2.2 S-57]
SPACEPORT	space port [SDSFIE V1.4]
SUPPLY_STORE	supply/storage [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TEST_RANGE	test range [SDSFIE V1.4]
TIMBER	timber [SDSFIE V1.4]
TRAINING	training [SDSFIE V1.4]
TROOP_HOUSE	troop housing [SDSFIE V1.4]

TROOPSUPPORT	troop support [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UTILCORRIDOR	utilities corridor [SDSFIE V1.4]
UTILITY	utility [SDSFIE V1.4]
VOQ	visiting officers quarters [SDSFIE V1.4]
WATER	water [SDSFIE V1.4]
park_use_d	
Value	Definition (Notes) [Source]
CENTRALIZED	an area for temporary vehicle parking due to heightened security levels. [SDSFIE V2.3 NAVAIR]
COMBINED	Parking is for multiple facilities. [SDSFIE V1.4]
HOSPITAL	Parking is for medical or hospital facilities. [SDSFIE V1.4]
HUNTING	Hunting [SDSFIE V1.9]
OFFICE_WORK	Parking is for office or work facilities [SDSFIE V1.4]
RECREATION	Parking is for recreation facilities. [SDSFIE V1.4]
SHOPPING	Parking is for shopping facilities. [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
path_cnt_d	
Value	Definition (Notes) [Source]
3	Fiber and Copper (twisted-pair). [SDSFIE V2.5 AIR FORCE]
4	Coax. [SDSFIE V2.5 AIR FORCE]
5	Coax and Fiber. [SDSFIE V2.5 AIR FORCE]
6	Coax and Copper (twisted-pair). [SDSFIE V2.5 AIR FORCE]
7	Coax, Copper (twisted-pair), Fiber. [SDSFIE V2.5 AIR FORCE]
path_typ_d	
Value	Definition (Notes) [Source]
AERIAL	Above ground path between, poles, towers or buildings. [SDSFIE V2.5 AIR FORCE]
CABLE_BRIDGE	Bridge only used for cables. [SDSFIE V2.5 AIR FORCE]
CABLE_TROUGH	Pathway on top of ground for cables. [SDSFIE V2.5 AIR FORCE]
DIRECT_BURIED	Below ground path where soil has direct contact with cable. [SDSFIE V2.5 AIR FORCE]
DUCT	Single communications duct. [SDSFIE V2.5 AIR FORCE]
DUCTBANK	A container for multiple ducts. [SDSFIE V2.5 AIR FORCE]
ROAD_CROSSING	A duct for cables, usually under a road. [SDSFIE V2.5 AIR FORCE]
STUB_OUT	Short duct used with manholes and vaults. [SDSFIE V2.5 AIR FORCE]
percent_d	
Value	Definition (Notes) [Source]
0	Unknown. [SDSFIE V2.5 NAVFAC]
1	Bare. [SDSFIE V2.5 NAVFAC]
2	Sparse. [SDSFIE V2.5 NAVFAC]
3	Patchy. [SDSFIE V2.5 NAVFAC]
4	Continuous. [SDSFIE V2.5 NAVFAC]
phas_ltr_d	
Value	Definition (Notes) [Source]
A	A phase [SDSFIE V1.4]
AB	AB phase [SDSFIE V1.4]
ABC	ABC phase [SDSFIE V1.4]
AC	AC phase [SDSFIE V1.4]
B	B phase [SDSFIE V1.4]
BC	BC phase [SDSFIE V1.4]
C	C phase [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
phase_1_d, phase_2_d	
Value	Definition (Notes) [Source]
A	1 [SDSFIE V1.9]
B	2 [SDSFIE V1.9]
C	3 [SDSFIE V1.9]
phn_typ_d	
Value	Definition (Notes) [Source]
COURTESY	Courtesy [SDSFIE V2 Tinker Air Force Base]
EMERGENCY	Emergency [SDSFIE V2]
EXTENSION	Extension [SDSFIE V2 Tinker Air Force Base]

HOTLINE	Hotline [SDSFIE V2 Tinker Air Force Base]
OTHER	Other [SDSFIE V2]
PAYPHONE	Payphone [SDSFIE V2 Tinker Air Force Base]
TBD	To Be Determined [SDSFIE V2]
UNKNOWN	Unknown [SDSFIE V2]
pipty_d	
Value	Definition (Notes) [Source]
ABOVE_GROUND	above ground [SDSFIE V1.8 USGS]
ELEVATED	elevated [SDSFIE V1.8 USGS]
SUBMERGED	submerged [SDSFIE V1.8 USGS]
TBD	to be determined [SDSFIE V1.8 USGS]
UNDERGROUND	underground [SDSFIE V1.8 USGS]
UNKNOWN	unknown [SDSFIE V1.8 USGS]
plnt_typ_d	
Value	Definition (Notes) [Source]
EPIPHYTES	epiphyte-aerophyte-aparasitic-Spanish moss [SDSFIE V1.4]
FORBS	forbs-weed or broadleaf herb other than grass [SDSFIE V1.4]
GRASSES	grass-monocotyledonous plant, family Gramineae [SDSFIE V1.4]
HERBS	herb-fleshy stemmed, annual plant [SDSFIE V1.4]
LIANAS	liana-woody or herbaceous climber with roots in the ground [SDSFIE V1.4]
SAPROPHYTE	saprophyte-plant that lives on decaying or organic matter [SDSFIE V1.4]
SHRUBS	shrub-low woody plant having several stems-bush [SDSFIE V1.4]
SUCCULENTS	succulent-plant with juicy, fleshy tissue [SDSFIE V1.4]
TREES	perennial woody plant with a single trunk [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
pol_src_d	
Value	Definition (Notes) [Source]
AGRI_OTHER	Other type of Agricultural activity or area. [SDSFIE V2]
AIRCRAFT_CRASH	Aircraft crash site. [SDSFIE V2.3 CH2MHILL]
BIO_CHEM_WARFARE	An area or site where biological or chemical warfare materials have been manufactured, stored, used, or disposed of. [SDSFIE V2]
BURIAL_PIT	Burial Pit. [SDSFIE V2.5 AIR FORCE]
CONSTRUCTION	Area of past or present construction activity. [SDSFIE V2]
CROPLAND	Agricultural Cropland. [SDSFIE V2]
FOREST	Forested area. [SDSFIE V2]
FUEL_TANK	A tank (either above or below ground) used to store fuel. [SDSFIE V2]
GRASSLAND	Area used to grow grass or grain to be harvested for livestock or human consumption. [SDSFIE V2]
HAZWASTE_DIS	An area or site where hazardous waste has been buried or disposed of. [SDSFIE V2]
INDUSTRIAL	An industrial activity or area. [SDSFIE V2]
INDUSTRIAL_TANK	Storage tank (either above or below ground) used to store chemicals, hazardous materials, or hazardous waste. [SDSFIE V2]
LANDFILL	Area or site of a past or present solid waste landfill. [SDSFIE V2]
MINING	Present or past mining operations [SDSFIE V2]
MUNITIONS	Area or site used for testing, training, or disposal of conventional munitions. [SDSFIE V2]
ORCHARD	Area where fruit and nut trees are grown. [SDSFIE V2]
PASTURE	Pasture or area where grass is grown for the purpose of feeding domestic animals (e.g., cattle, horses, sheep, swine). [SDSFIE V2]
RADIOACTIVE	An area or site where radioactive materials or waste have been manufactured, stored, used, or disposed of. [SDSFIE V2]
SPILL_LAND	An uncontrolled release or spill occurring on land. [SDSFIE V2]
SPILL_WATER	An uncontrolled release or spill occurring on a water body (e.g., river, stream, lake, ocean). [SDSFIE V2]
STOCKYARD	An area where domestic animals (e.g., cattle, sheep, swine, or horses) are kept temporarily for slaughter, market, or shipping. [SDSFIE V2]
TANK_FARM	An area consisting of several storage tanks (either above or below ground) which contain fuel or chemicals regulated by environmental regulatory authorities. [SDSFIE V2]
TBD	to be determined [SDSFIE V1.4]
URBAN	An urban or municipal area. [SDSFIE V2]
WASTEWATER_DOM	Wastewater originating from a residential or urban area. [SDSFIE V2]
WASTEWATER_IND	Wastewater originating from an industry or industrial complex. [SDSFIE V2]
poll_typ_d	
Value	Definition (Notes) [Source]
CARBON_MONOXIDE	The measured pollutant is Carbon Monoxide (CO).

DISCHARGE_GWATER	[SDSFIE V2.22 EMA]
DISCHARGE_LAND	Uncontrolled release or non-permitted discharge to groundwater. [SDSFIE
DISCHARGE_WATER	Uncontrolled release or non-permitted discharge originating on land.
LEAD	Uncontrolled or non-permitted release or discharge to a water body.
	The measured pollutant is Lead (Pb).
	[SDSFIE V2.22 EMA]
NITROGEN_DIOXIDE	The measured pollutant is Nitrogen Dioxide (NO2).
	[SDSFIE V2.22 EMA]
OZONE	The measured pollutant is Ozone (O3).
	[SDSFIE V2.22 EMA]
PARTICULATE_MATT	The measured pollutant is Particulate Matter (PM).
	[SDSFIE V2.22 EMA]
SPILL_LAND	Spill originating or occurring on land. [SDSFIE V2.22]
SPILL_WATER	Spill occurring on a water body (e.g., river, stream, lake or ocean).
SULFUR_DIOXIDE	The measured pollutant is Sulfur Dioxide (SO2).
	[SDSFIE V2.22 EMA]
WASTEWATER	Waste Water [SDSFIE V2 REEGIS]
polr_typ_d	
Value	Definition (Notes) [Source]
CLOCKWISE	Installed with the plane of polarization rotating right-hand circular.
	[SDSFIE V2.5 AIR FORCE]
COUNT_CLOCKWISE	Installed with the plane of polarization rotating left-hand circular. [SDSFIE
	V2.5 AIR FORCE]
HORIZONTAL	Installed with the plane of polarization parallel to earth's surface. [SDSFIE
	V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
VERTICAL	Installed with the plane of polarization perpendicular to earth's surface.
	[SDSFIE V2.5 AIR FORCE]
pos_acc_d	
Value	Definition (Notes) [Source]
EXCELLENT	Excellent (0 to 50 feet). [SDSFIE V2.1 DOT - NPMS]
GOOD	Good (301 to 500 feet). [SDSFIE V2.1 DOT - NPMS]
POOR	Poor (501 to 1000 feet). [SDSFIE V2.1 DOT - NPMS]
UNKNOWN	Unknown [SDSFIE V2.1 DOT - NPMS]
VERY_GOOD	Very Good (51 to 300 feet). [SDSFIE V2.1 DOT - NPMS]
power_d	
Value	Definition (Notes) [Source]
AC	Alternating Current [SDSFIE V2.3 Tinker Air Force Base]
DC	Direct Current [SDSFIE V2.3 Tinker Air Force Base]
pri_volt_d, pwr_req_d, sec_volt_d,	
Value	Definition (Notes) [Source]
110V	110 volts [SDSFIE V1.4]
115000V	115,000 volts [SDSFIE V1.4]
115V	115 volts [SDSFIE V1.4]
120_240V	120/240 volts [SDSFIE V1.4]
12000V	12,000 volts [SDSFIE V1.4]
12000Y_6930V	12,000Y/6,930 volts [SDSFIE V1.4]
120V	120 volts [SDSFIE V1.4]
12470V	12,470 volts [SDSFIE V1.4]
12470Y_7200V	12,470Y/7,200 volts [SDSFIE V1.4]
12V	12 volts [SDSFIE V1.4]
13200V	13,200 volts [SDSFIE V1.4]
13200Y_7620V	13,200Y/7,620 volts [SDSFIE V1.4]
138000V	138,000 volts [SDSFIE V1.4]
15000V	15,000 volts [SDSFIE V1.4]
15930V	15,930 volts [SDSFIE V1.4]
19920V	19,920 volts [SDSFIE V1.4]
20780V	20,780 volts [SDSFIE V1.4]
20780Y_12000V	20,780Y/12,000 volts [SDSFIE V1.4]
208V	208 volts [SDSFIE V1.4]
208Y_120V	208Y/120 volts [SDSFIE V1.4]
220V	220 volts [SDSFIE V1.4]
22860V	22,860 volts [SDSFIE V1.4]
22860Y_13200V	22,860Y/13,200 volts [SDSFIE V1.4]
230000V	230,000 volts [SDSFIE V1.4]

230V	230 volts [SDSFIE V1.4]
2400V	2,400 volts [SDSFIE V1.4]
240V	240 volts [SDSFIE V1.4]
24940V	24,940 volts [SDSFIE V1.4]
24940Y_14400V	24,940Y/14,400 volts [SDSFIE V1.4]
24V	24 volts [SDSFIE V1.4]
27600V	27,600 volts [SDSFIE V1.4]
27600Y_15930V	27,600Y/15,930 volts [SDSFIE V1.4]
277V	277 volts [SDSFIE V1.4]
345000V	345,000 volts [SDSFIE V1.4]
34500V	34,500 volts [SDSFIE V1.4]
34500Y_19920V	34,500Y/19,920 volts [SDSFIE V1.4]
400V	400 volts [SDSFIE V1.4]
4160V	4,160 volts [SDSFIE V1.4]
4160Y_2400V	4,160Y/2400 volts [SDSFIE V1.4]
43800V	43,800 volts [SDSFIE V1.4]
460V	460 volts [SDSFIE V1.4]
4800V	4,800 volts [SDSFIE V1.4]
480V	480 volts [SDSFIE V1.4]
480Y_277V	480Y/277 volts [SDSFIE V1.4]
48V	48 volts [SDSFIE V1.4]
500000V	500,000 volts [SDSFIE V1.4]
5000V	5,000 volts [SDSFIE V1.4]
52V	52 volts [SDSFIE V1.4]
600V	600 volts [SDSFIE V1.4]
69000V	69,000 volts [SDSFIE V1.4]
7200V	7,200 volts [SDSFIE V1.4]
7620V	7,620 volts [SDSFIE V1.4]
765000V	765,000 volts [SDSFIE V1.4]
7970V	7,970 volts [SDSFIE V1.4]
8320V	8,320 volts [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

prod_typ_d

Value	Definition (Notes) [Source]
CHW	chilled water: water less than 45 deg. F. [SDSFIE V1.4]
HTW_CHW	high temp - chilled water [SDSFIE V1.4]
LTW	low temperature water: water less than 250 deg. F. [SDSFIE V1.4]
LTW_CHW	low temp - chilled water [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
S	steam [SDSFIE V1.4]
S_CHW	steam - chilled water [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

product_d

Value	Definition (Notes) [Source]
BAUXITE	BAUXITE [SDSFIE V2.2 S-57]
CEMENT	CEMENT [SDSFIE V2.2 S-57]
CHEMICALS	CHEMICALS [SDSFIE V2.2 S-57]
COAL	COAL [SDSFIE V2.2 S-57]
COKE	COKE [SDSFIE V2.2 S-57]
DRINKING_WATER	DRINKING_WATER [SDSFIE V2.2 S-57]
GAS	GAS [SDSFIE V2.2 S-57]
GRAIN	GRAIN [SDSFIE V2.2 S-57]
IRON_INGOTS	IRON_INGOTS [SDSFIE V2.5 S-57CENTER]
LIQUIF_PETROGAS	LIQUIFIED_PETROLEUM_GAS [SDSFIE V2.2 S-57]
LIQUIFIED_NATGAS	LIQUIFIED_NATURAL_GAS [SDSFIE V2.2 S-57]
MILK	MILK [SDSFIE V2.2 S-57]
OIL	OIL [SDSFIE V2.2 S-57]
ORE	ORE [SDSFIE V2.2 S-57]
SALT	SALT [SDSFIE V2.2 S-57]
SAND	SAND [SDSFIE V2.2 S-57]
SAWDUST_WOODCHIP	SAWDUST_WOODCHIPS [SDSFIE V2.2 S-57]
SCRAP_METAL	SCRAP_METAL [SDSFIE V2.2 S-57]
STONE	STONE [SDSFIE V2.2 S-57]
TIMBER	TIMBER [SDSFIE V2.2 S-57]
WATER	WATER [SDSFIE V2.2 S-57]

WINE	WINE [SDSFIE V2.2 S-57]
pstatus_d	
Value	Definition (Notes) [Source]
ACTIVE	active [SDSFIE V1.8 REEGIS]
CLOSED	closed [SDSFIE V1.9]
CLOSED_NF	Non-Federal closed range. [SDSFIE V2.4 Army]
HISTORIC	A range that no longer exists, but is not closed, transferred, or transferring. [SDSFIE V2.4 Army]
INACTIVE	inactive [SDSFIE V1.8 REEGIS]
TBD	TBD [SDSFIE V1.9]
TRANSFERRED	transferred [SDSFIE V1.9]
TRANSFERRED_NF	Non-Federal transferred range. [SDSFIE V2.4 Army]
TRANSFERRING	transferring [SDSFIE V1.9]
TRANSFERRING_NF	Non-Federal transferring range. [SDSFIE V2.4 Army]
UNKNOWN	unknown [SDSFIE V1.9]
ptz_typ_d	
Value	Definition (Notes) [Source]
FIXED_FIXED	Fixed position, Fixed lens. [SDSFIE V2.5 AIR FORCE]
FIXED_ZOOM	Fixed position, Zoom lens. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
PT_FIXED	Pan and Tilt capabilities with a Fixed lens. [SDSFIE V2.5 AIR FORCE]
PT_ZOOM	Pan and Tilt capabilities with a Zoom lens. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
pwsouce_d	
Value	Definition (Notes) [Source]
GROUNDWATER	Water source originates from ground water. [SDSFIE V2 AWWA]
PUR_GROUNDWATER	Source of water supply originates from ground water, but is purchased from another water utility. [SDSFIE V2 AWWA]
PUR_SURFACEWATER	Source of water supply originates from a surface water body, but is purchased from another water utility. [SDSFIE V2 AWWA]
SURFACE_WATER	Source of water supply originates from a surface water body, e.g., a river, lake, or stream. [SDSFIE V2 AWWA]
rad_typ_d	
Value	Definition (Notes) [Source]
HF	High Frequency. [SDSFIE V2.3 Tinker Air Force Base]
LF	Low Frequency. [SDSFIE V2.3 Tinker Air Force Base]
UHF	Ultra High Frequency. [SDSFIE V2.3 Tinker Air Force Base]
VHF	Very High Frequency. [SDSFIE V2.3 Tinker Air Force Base]
radio_ty_d	
Value	Definition (Notes) [Source]
BASE_STATION	Base Station Type. [SDSFIE V2.3 Tinker Air Force Base]
MOBILE	Mobile Type. [SDSFIE V2.3 Tinker Air Force Base]
PORTABLE	Portable Type. [SDSFIE V2.3 Tinker Air Force Base]
REPEATOR	Repeater Type. [SDSFIE V2.3 Tinker Air Force Base]
reg_type_d	
Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VOLTREG_1	1-phase, 7.5-19.9 Kvs, 50-418 amps, 7.6-19.9 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator. [SDSFIE V1.4]
VOLTREG_3	3-phase, 13-34 Kvs, 220-445 amps, 500-2670 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator. [SDSFIE V1.4]
rel_typ_d	
Value	Definition (Notes) [Source]
FINITESTEADY	finite - steady [SDSFIE V1.4]
FINITEVARIABLE	finite - variable [SDSFIE V1.4]
INFINITESTEADY	infinite - steady [SDSFIE V1.4]
INFINITVARIABLE	infinite - variable [SDSFIE V1.4]
INSTANTLY	instantaneous [SDSFIE V1.4]
SLOW_RELEASE	slow release [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]

UNKNOWN	unknown [SDSFIE V1.4]
rem_urg_d	
Value	Definition (Notes) [Source]
CRITICAL	Critical [SDSFIE V1.8]
ESSENTIAL	Essential [SDSFIE V1.8]
HIGH	High. [SDSFIE V2.4 Project 03.019]
LOW	Low. [SDSFIE V2.4 Project 03.019]
MEDIUM	Medium. [SDSFIE V2.4 Project 03.019]
N_A	Not applicable [SDSFIE V1.8]
NON_CRITICAL	Non-Critical [SDSFIE V1.8]
TBD	to be determined [SDSFIE V1.4]
res_typ_d	
Value	Definition (Notes) [Source]
LAGOON	lagoon [SDSFIE V1.4]
LAKE	lake [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
POND	pond [SDSFIE V1.4]
TANK	tank [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
restrict_d	
Value	Definition (Notes) [Source]
OTHER	other [SDSFIE V1.9]
TBD	To be determined [SDSFIE V1.9]
UNKNOWN	unknown [SDSFIE V1.9]
rock_cnd_d	
Value	Definition (Notes) [Source]
HIGH	high dry strength/toughness [SDSFIE V1.4]
LOW	low dry strength/toughness [SDSFIE V1.4]
MEDIUM	medium dry strength/toughness [SDSFIE V1.4]
NONE	very weak, no strength, probably should class as soil [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERYHIGH	very high dry strength/toughness [SDSFIE V1.4]
rou1_typ_d, rou2_typ_d, rou3_typ_d	
Value	Definition (Notes) [Source]
COUNTY	County Highway/Road/Route or Secondary State Route [SDSFIE V1.8]
FEDERAL	Federal control not otherwise classified as an Interstate or US Highway, but located on Federal Property installations [SDSFIE V1.8 USGS]
INTERSTATE	Interstate Highway [SDSFIE V1.8 USGS]
INTERSTATE_BL	Interstate Highway (Business Loop) [SDSFIE V1.8 USGS]
INTERSTATE_BS	Interstate Highway (Business Spur) [SDSFIE V1.8 USGS]
LOCAL	City or other local jurisdiction beneath the County level [SDSFIE V1.8]
OTHER	Otherwise defined road [SDSFIE V1.8 USGS]
PRIVATE	Privately owned/maintained [SDSFIE V1.8 USGS]
STATE	(Primary) State Highway/Road/Route [SDSFIE V1.8 USGS]
UNKNOWN	Unknown owner/maintainer [SDSFIE V1.8 USGS]
US_HWY	US Highway. Includes Alternate, Business, and Bypass US Highways. [SDSFIE V1.8 USGS]
scrn_ty_d	
Value	Definition (Notes) [Source]
HORZBAR	horizontal bar/pipe [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERTBAR	vertical bar/pipe [SDSFIE V1.4]
severity_d	
Value	Definition (Notes) [Source]
EPI	Environmental Practice Issue. [SDSFIE V1.4]
MAJOR	Major violation of an environmental law or regulation which will result, or has resulted, in fines and/or civil penalties. [SDSFIE V1.4]
MEDIUM	Medium violation of an environmental law or regulation which could result in fines and/or civil penalties if not quickly resolved. [SDSFIE V1.4]
MINOR	Minor violation of an environmental law or regulation which does not

TBD	result in a fine and/or civil penalty. [SDSFIE V1.4]
UNKNOWN	to be determined. [SDSFIE V1.4]
	Unknown as to what extent an environmental law or regulation has occurred. [SDSFIE V1.4]
shr_typ_d	
Value	Definition (Notes) [Source]
MHW	The average of all observed high tides for the shoreline. [SDSFIE V1.6]
MLLW	The average height of the lower low tides observed over a specific interval for the shoreline. [SDSFIE V1.6]
MLW	The average of all observed low tides for the shoreline. [SDSFIE V1.6]
size_d, vlv_dia_d, vlv_size_d	
Value	Definition (Notes) [Source]
0.25	1/4 inch (0.25 inch) [SDSFIE V2]
0.5	1/2 inch (0.5 inch) [SDSFIE V2]
0.75	3/4 inch (0.75 inch) [SDSFIE V2]
1	1inch (1.0 inch) [SDSFIE V2]
1.25	1 1/4 inch (1.25 inches) [SDSFIE V2]
1.5	1 1/2 inch (1.5 inches) [SDSFIE V2]
1.75	1 3/4 inch (1.75 inches) [SDSFIE V2]
10	10 inch (10.0 inches) [SDSFIE V2]
12	12 Inch (12.0 inches) [SDSFIE V2]
14	14 Inch (14.0 inches) [SDSFIE V2 Cherry Point]
15	15 Inch (15.0 inches) [SDSFIE V2 Cherry Point]
16	16 Inch (16.0 inches) [SDSFIE V2 Cherry Point]
18	18 Inch (18.0 inches) [SDSFIE V2 Cherry Point]
2	2 inch (2.0 inches) [SDSFIE V2]
2.5	2 1/2 inch (2.5 inches) [SDSFIE V2]
20	20 Inch (20.0 inches) [SDSFIE V2]
21	21 Inch (21.0 inches) [SDSFIE V2 Cherry Point]
22	22 Inch (22.0 inches) [SDSFIE V2]
24	24 Inch (24.0 inches) [SDSFIE V2 Cherry Point]
28	28 Inch (28.0 inches) [SDSFIE V2]
3	3 inch (3.0 inches) [SDSFIE V2]
30	30 Inch (30.0 inches) [SDSFIE V2 Cherry Point]
32	32 Inch (32.0 inches) [SDSFIE V2]
36	36 Inch (36.0 inches) [SDSFIE V2]
4	4 inch (4.0 inches) [SDSFIE V2]
42	42 Inch (42.0 inches) [SDSFIE V2]
48	48 Inch (48.0 inches) [SDSFIE V2]
5	5 Inch (5.0 inches) [SDSFIE V2 Cherry Point]
6	6 inch (6.0 inches) [SDSFIE V2]
60	60 Inch (60.0 inches) [SDSFIE V2]
64_INCH	64 Inch (64.0 inches). [SDSFIE V2.5 AIR FORCE]
65_INCH	65 Inch (65.0 inches). [SDSFIE V2.5 AIR FORCE]
66_INCH	66 Inch (66.0 inches). [SDSFIE V2.5 AIR FORCE]
67_INCH	67 Inch (67.0 inches). [SDSFIE V2.5 AIR FORCE]
72	72 Inch (72.0 inches) [SDSFIE V2]
8	8 inch (8.0 inches) [SDSFIE V2]
84_INCH	84 Inch (84.0 inches). [SDSFIE V2.5 AIR FORCE]
85_INCH	85 Inch (84.0 inches). [SDSFIE V2.5 AIR FORCE]
OTHER	other [SDSFIE V1.4]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
soil_cdn_d, soil_cnd_d	
Value	Definition (Notes) [Source]
FIRM	firm [SDSFIE V1.4]
HARD	hard [SDSFIE V1.4]
MEDIUMFIRM	medium firm [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
SOFT	soft [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERYHARD	very hard [SDSFIE V1.4]
VERYSOFT	very soft [SDSFIE V1.4]
soil_ero_d	
Value	Definition (Notes) [Source]
0.02	0.02 [SDSFIE V1.7 FGDC Soils Classification]

0.05	0.05 [SDSFIE V1.7 FGDC Soils Classification]
0.10	0.10 [SDSFIE V1.7 FGDC Soils Classification]
0.17	0.17 [SDSFIE V1.7 FGDC Soils Classification]
0.20	0.20 [SDSFIE V1.7 FGDC Soils Classification]
0.24	0.24 [SDSFIE V1.7 FGDC Soils Classification]
0.28	0.28 [SDSFIE V1.7 FGDC Soils Classification]
0.32	0.32 [SDSFIE V1.7 FGDC Soils Classification]
0.37	0.37 [SDSFIE V1.7 FGDC Soils Classification]
0.43	0.43 [SDSFIE V1.7 FGDC Soils Classification]
0.49	0.49 [SDSFIE V1.7 FGDC Soils Classification]
0.55	0.55 [SDSFIE V1.7 FGDC Soils Classification]
0.64_OR_MORE	0.64 or more [SDSFIE V1.7 FGDC Soils Classification]
0_02	0.02 [SDSFIE V1.4 FGDC Soils Classification]
0_05	0.05 [SDSFIE V1.4 FGDC Soils Classification]
0_10	0.10 [SDSFIE V1.4 FGDC Soils Classification]
0_15	0.15 [SDSFIE V1.4 FGDC Soils Classification]
0_17	0.17 [SDSFIE V1.4 FGDC Soils Classification]
0_20	0.20 [SDSFIE V1.4 FGDC Soils Classification]
0_24	0.24 [SDSFIE V1.4 FGDC Soils Classification]
0_28	0.28 [SDSFIE V1.4 FGDC Soils Classification]
0_32	0.32 [SDSFIE V1.4 FGDC Soils Classification]
0_37	0.37 [SDSFIE V1.4 FGDC Soils Classification]
0_43	0.43 [SDSFIE V1.4 FGDC Soils Classification]
0_49	0.49 [SDSFIE V1.4 FGDC Soils Classification]
0_55	0.55 [SDSFIE V1.4 FGDC Soils Classification]
0_64_OR_MORE	0.64 or more [SDSFIE V1.4 FGDC Soils Classification]
TBD	to be determined [SDSFIE V1.4 FGDC Soils Classification]
UNKNOWN	unknown [SDSFIE V1.4 FGDC Soils Classification]
soil_fam_d	
Value	
ALTAVISTA	fine-loamy, mixed, thermic Aquic Hapludults [SDSFIE V1.4]
AUTRYVILLE	loamy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4]
AYCOCK	fine-silty, siliceous, thermic Typic Paleudults [SDSFIE V1.4]
BLANEY	loamy, siliceous, thermic Arenic Hapludults [SDSFIE V1.4]
BRAGG	fine-loamy, siliceous, acid, thermic Typic Udorthents [SDSFIE V1.4]
BUTTERS	coarse-loamy, siliceous, thermic Typic Paleudults [SDSFIE V1.4]
BYARS	clayey, kaolinitic, thermic Umbric Paleaquults [SDSFIE V1.4]
CANDOR	sandy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4]
CAPEFEAR	clayey, mixed, thermic Typic Umbraquults [SDSFIE V1.4]
CHEWACLA	fine-loamy, mixed, thermic Fluvaquentic Dystrochrepts [SDSFIE V1.4]
COXVILLE	clayey, kaolinitic, thermic Typic Paleaquults [SDSFIE V1.4]
GRAVEN	clayey, mixed, thermic Aquic Hapludults [SDSFIE V1.4]
CROATAN	loamy, siliceous, dysic, thermic Terric Medisaprists [SDSFIE V1.4]
DELOSS	fine-loamy, mixed, thermic Typic Umbraquults [SDSFIE V1.4]
DOGUE	clayey, mixed, thermic Aquic Hapludults [SDSFIE V1.4]
DOTHAN	fine-loamy, siliceous, thermic Plinthic Paleudults [SDSFIE V1.4]
DUNBAR	clayey, kaolinitic, thermic Aeris Paleaquults [SDSFIE V1.4]
DUPLIN	clayey, kaolinitic, thermic Aquic Paleudults [SDSFIE V1.4]
DYSTROCHREPT	loamy, thermic Dystrochrepts [SDSFIE V1.4]
EXUM	fine-silty, siliceous, thermic Aquic Paleudults [SDSFIE V1.4]
FACEVILLE	clayey, kaolinitic, thermic Typic Paleudults [SDSFIE V1.4]
FUQUAY	loamy, siliceous, thermic Arenic Plinthic Paleudults [SDSFIE V1.4]
GILEAD	clayey, kaolinitic, thermic Aquic Hapludults [SDSFIE V1.4]
GOLDSBORO	fine-loamy, siliceous, thermic Aquic Paleudults [SDSFIE V1.4]
GRANTHAM	fine-silty, siliceous, thermic Typic Paleaquults [SDSFIE V1.4]
JOHNSTON	coarse-loamy, siliceous, acid, thermic Cumulic Humaquepts [SDSFIE V1.4]
KALMIA	fine-loamy over sandy or sandy skeletal, siliceous, thermic Typic Hapludults [SDSFIE V1.4]
KENANSVILLE	loamy, siliceous, thermic Arenic Hapludults [SDSFIE V1.4]
KUREB	thermic, uncoated Spodic Quartzipsamments [SDSFIE V1.4]
LAKELAND	thermic, coated Typic Quartzipsamments [SDSFIE V1.4]
LENOIR	clayey, mixed, thermic Aeris Paleaquults [SDSFIE V1.4]
LEON	sandy, siliceous, thermic Aeris Haplaquods [SDSFIE V1.4]
LYNCHBURG	fine-loamy, siliceous, thermic Aeris Paleaquults [SDSFIE V1.4]
LYNNHAVEN	sandy, siliceous, thermic Typic Haplaquods [SDSFIE V1.4]
MCCOLL	clayey, kaolinitic, thermic Typic Fragaquults [SDSFIE V1.4]
NAHUNTA	fine-silty, siliceous, thermic Aeris Paleaquults [SDSFIE V1.4]
NORFOLK	fine-loamy, siliceous, thermic Typic Paleudults [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
Definition (Notes) [Source]	

PACTOLUS	thermic, coated Aquic Quartzipsamments [SDSFIE V1.4]
PANTEGO	fine-loamy, siliceous, thermic Umbric Paleaquults [SDSFIE V1.4]
RAINS	fine-loamy, siliceous, thermic Typic Paleaquults [SDSFIE V1.4]
ROANOKE	clayey, mixed, thermic Typic Ochraqults [SDSFIE V1.4]
STALLINGS	coarse-loamy, siliceous, thermic Aeris Paleaquults [SDSFIE V1.4]
TARBORO	mixed, thermic Typic Udipsamments [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TORHUNTA	coarse-loamy, siliceous, acid, thermic Typic Humaquepts [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VAUCLUSE	fine-loamy, siliceous, thermic Typic Hapludults [SDSFIE V1.4]
WAGRAM	loamy, siliceous, thermic Arenic Paleudults [SDSFIE V1.4]
WAHEE	clayey, mixed, thermic Aeris Ochraqults [SDSFIE V1.4]
WICKHAM	fine-loamy, mixed, thermic Typic Hapludults [SDSFIE V1.4]
WOODINGTON	coarse-loamy, siliceous, thermic Typic Paleaquults [SDSFIE V1.4]
soil_tex_d	
Value	
ASHY	Ashy [SDSFIE V1.8 FGDC Soils Classification]
BOLDGRAVEL	boulder gravel [SDSFIE V1.4]
BY	Bouldery [SDSFIE V1.8 FGDC Soils Classification]
BYV	Very bouldery [SDSFIE V1.8 FGDC Soils Classification]
BYX	Extremely bouldery [SDSFIE V1.8 FGDC Soils Classification]
C/SS	Clay/Sand with Stone. [SDSFIE V2.4 Army]
CB	Cobbly [SDSFIE V1.8 FGDC Soils Classification]
CBV	Very cobbly [SDSFIE V1.8 FGDC Soils Classification]
CBX	Extremely cobbly [SDSFIE V1.8 FGDC Soils Classification]
CLAY	clay [SDSFIE V1.4 FGDC Soils Classification]
CLAYLOAM	clay loam [SDSFIE V1.4 FGDC Soils Classification]
CN	Channery [SDSFIE V1.8 FGDC Soils Classification]
CNV	Very channery [SDSFIE V1.8 FGDC Soils Classification]
CNX	Extremely channery [SDSFIE V1.8 FGDC Soils Classification]
COARSANDYLOM	course sandy loam [SDSFIE V1.4 FGDC Soils Classification]
COARSESD	coarse sand [SDSFIE V1.4 FGDC Soils Classification]
COARSESILT	coarse silt [SDSFIE V1.4]
COP	Coprogenous [SDSFIE V1.8 FGDC Soils Classification]
CORSCOBLGRAV	coarse cobble gravel [SDSFIE V1.4]
CORSPBLGRAVL	coarse pebble gravel [SDSFIE V1.4]
CS/CS	Clay-Sand/Clay-Silt. [SDSFIE V2.4 Army]
DIA	Diatomaceous [SDSFIE V1.8 FGDC Soils Classification]
FINCOBLGRAV	fine cobble gravel [SDSFIE V1.4]
FINEPBLGRAVL	fine pebble gravel [SDSFIE V1.4]
FINESAND	fine sand [SDSFIE V1.4 FGDC Soils Classification]
FINESANDYLOM	fine sandy loam [SDSFIE V1.4 FGDC Soils Classification]
FINESILT	fine silt [SDSFIE V1.4]
FL	Flaggy [SDSFIE V1.8 FGDC Soils Classification]
FLV	Very flaggy [SDSFIE V1.8 FGDC Soils Classification]
FLX	Extremely flaggy [SDSFIE V1.8 FGDC Soils Classification]
G/GS	Gravel/Gravel-Sand. [SDSFIE V2.4 Army]
GR	Gravelly [SDSFIE V1.8 FGDC Soils Classification]
GRAVEL	gravel [SDSFIE V1.4]
GRC	Coarse gravelly [SDSFIE V1.8 FGDC Soils Classification]
GRF	Fine gravelly [SDSFIE V1.8 FGDC Soils Classification]
GRM	Medium gravelly [SDSFIE V1.8 FGDC Soils Classification]
GRV	Very gravelly [SDSFIE V1.8 FGDC Soils Classification]
GRX	Extremely gravelly [SDSFIE V1.8 FGDC Soils Classification]
GS	Grassy [SDSFIE V1.8 FGDC Soils Classification]
GYP	Gypsiferous [SDSFIE V1.8 FGDC Soils Classification]
HB	Herbaceous [SDSFIE V1.8 FGDC Soils Classification]
HYDR	Hydrous [SDSFIE V1.8 FGDC Soils Classification]
LOAM	loam [SDSFIE V1.4 FGDC Soils Classification]
LOAMCOARSAND	loamy course sand [SDSFIE V1.4 FGDC Soils Classification]
LOAMFINESAND	loamy fine sand [SDSFIE V1.4 FGDC Soils Classification]
LS	loamy sand [SDSFIE V1.8 FGDC Soils Classification]
LVFS	loamy very fine sand [SDSFIE V1.8 FGDC Soils Classification]
MEDCOBLGRAVL	medium cobble gravel [SDSFIE V1.4]
MEDIUMSAND	medium sand [SDSFIE V1.4]
MEDIUMSILT	medium silt [SDSFIE V1.4]
MEDL	Medial [SDSFIE V1.8 FGDC Soils Classification]
MEDPEBLGRAVL	medium pebble gravel [SDSFIE V1.4]
MK	Mucky [SDSFIE V1.8 FGDC Soils Classification]
Definition (Notes) [Source]	

MR	Marly [SDSFIE V1.8 FGDC Soils Classification]
MS	Mossy [SDSFIE V1.8 FGDC Soils Classification]
OTHER	other [SDSFIE V1.4]
PBY	Parabouldery [SDSFIE V1.8 FGDC Soils Classification]
PBYV	Very parabouldery [SDSFIE V1.8 FGDC Soils Classification]
PBYX	Extremely parabouldery [SDSFIE V1.8 FGDC Soils Classification]
PCB	Paracobbly [SDSFIE V1.8 FGDC Soils Classification]
PCBV	Very paracobbly [SDSFIE V1.8 FGDC Soils Classification]
PCBX	Extremely paracobbly [SDSFIE V1.8 FGDC Soils Classification]
PCN	Parachannery [SDSFIE V1.8 FGDC Soils Classification]
PCNV	Very parachannery [SDSFIE V1.8 FGDC Soils Classification]
PCNX	Extremely parachannery [SDSFIE V1.8 FGDC Soils Classification]
PERMAFROST	permafrost [SDSFIE V1.4]
PF	Permanently frozen [SDSFIE V1.8 FGDC Soils Classification]
PFL	Paraflaggy [SDSFIE V1.8 FGDC Soils Classification]
PFLV	Very paraflaggy [SDSFIE V1.8 FGDC Soils Classification]
PFLX	Extremely paraflaggy [SDSFIE V1.8 FGDC Soils Classification]
PGR	Paragravelly [SDSFIE V1.8 FGDC Soils Classification]
PGRV	Very paragravelly [SDSFIE V1.8 FGDC Soils Classification]
PGRX	Extremely paragravelly [SDSFIE V1.8 FGDC Soils Classification]
PST	Parastony [SDSFIE V1.8 FGDC Soils Classification]
PSTV	Very parastony [SDSFIE V1.8 FGDC Soils Classification]
PSTX	Extremely parastony [SDSFIE V1.8 FGDC Soils Classification]
PT	Peaty [SDSFIE V1.8 FGDC Soils Classification]
ROCK	Rock. [SDSFIE V2.4 Army]
S	sand [SDSFIE V1.8 FGDC Soils Classification]
S/GS	Sand/Gravel Sand. [SDSFIE V2.4 Army]
S/SC	Silt/Silty-Clay. [SDSFIE V2.4 Army]
SANDYCLAY	sandy clay [SDSFIE V1.4 FGDC Soils Classification]
SANDYCLAYLOM	sandy clay loam [SDSFIE V1.4 FGDC Soils Classification]
SANDYLOAM	sandy loam [SDSFIE V1.4 FGDC Soils Classification]
SI	silt [SDSFIE V1.8 FGDC Soils Classification]
SILTYCLAY	silty clay [SDSFIE V1.4 FGDC Soils Classification]
SILTYLOAM	silty loam [SDSFIE V1.4 FGDC Soils Classification]
SLITYCLAYLOM	silty clay loam [SDSFIE V1.4 FGDC Soils Classification]
SR	Stratified [SDSFIE V1.8 FGDC Soils Classification]
SS/SC	Sand-Silt/Sand-Clay. [SDSFIE V2.4 Army]
ST	Stony [SDSFIE V1.8 FGDC Soils Classification]
STONES	stones [SDSFIE V1.4]
STV	Very stony [SDSFIE V1.8 FGDC Soils Classification]
STX	Extremely stony [SDSFIE V1.8 FGDC Soils Classification]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VERYCOARSAND	very coarse sand [SDSFIE V1.4]
VERYFINESAND	very fine sand [SDSFIE V1.4 FGDC Soils Classification]
VERYFINESILT	very fine silt [SDSFIE V1.4]
VRYCRSPBGRVL	very coarse pebble gravel [SDSFIE V1.4]
VRYFINPBLGRV	very fine pebble gravel [SDSFIE V1.4]
VRYFINSANLOM	very fine sandy loam [SDSFIE V1.4 FGDC Soils Classification]
WD	Woody [SDSFIE V1.8 FGDC Soils Classification]

source_d, type_d

Value	Definition (Notes) [Source]
ARROYO	arroyo/draw/wash [SDSFIE V1.4]
ARTISAN_WELL	artisan well [SDSFIE V1.4]
BAYOU	bayou [SDSFIE V1.4]
CREEK	creek [SDSFIE V1.4]
DEEPWELL	deep well [SDSFIE V1.4]
DRY_PLAYA	dry playa [SDSFIE V1.4]
FUMAROLE	fumarole [SDSFIE V1.8 USGS]
GEOHERMAL	geothermal well [SDSFIE V1.8 USGS]
GEYSER	geyser [SDSFIE V1.4]
GLACIER	glacier [SDSFIE V1.4]
GULF	gulf [SDSFIE V1.4]
HAIL	hail [SDSFIE V1.4]
ICEBERG	iceberg [SDSFIE V1.4]
LAKE	lake [SDSFIE V1.4]
MUD_POT	mud pot [SDSFIE V1.8 USGS]
OCEAN	ocean [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]

POND	pond [SDSFIE V1.4]
RAINFALL	rainfall [SDSFIE V1.4]
RESERVOIR	reservoir [SDSFIE V1.4]
RIME	hoarfrost, dew, condensed fog [SDSFIE V1.4]
RIVER	river [SDSFIE V1.4]
RUNOFF	runoff [SDSFIE V1.4]
SLEET	sleet [SDSFIE V1.4]
SLOUGH	slough [SDSFIE V1.4]
SNOWFALL	snowfall [SDSFIE V1.4]
SPRING	spring [SDSFIE V1.4]
STREAM	stream [SDSFIE V1.4]
SWAMP	swamp [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
WET_PLAYA	wet playa [SDSFIE V1.4]

spcszone_d

Value

1001
1002
101
102
1101
1102
1103
1201
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2302
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2500
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2701
2702
2703

Definition (Notes) [Source]

Georgia East State Plane [SDSFIE V2 SEMMS]
Georgia West State Plane [SDSFIE V2 SEMMS]
Alabama East State Plane [SDSFIE V2 SEMMS]
Alabama West State Plane [SDSFIE V2 SEMMS]
Idaho East State Plane [SDSFIE V2 SEMMS]
Idaho Central State Plane [SDSFIE V2 SEMMS]
Idaho West State Plane [SDSFIE V2 SEMMS]
Illinois East State Plane [SDSFIE V2 SEMMS]
Illinois West State Plane [SDSFIE V2 SEMMS]
Indiana East State Plane [SDSFIE V2 SEMMS]
Indiana West State Plane [SDSFIE V2 SEMMS]
Iowa North State Plane [SDSFIE V2 SEMMS]
Iowa South State Plane [SDSFIE V2 SEMMS]
Kansas North State Plane [SDSFIE V2 SEMMS]
Kansas South State Plane [SDSFIE V2 SEMMS]
Kentucky North State Plane [SDSFIE V2 SEMMS]
Kentucky South State Plane [SDSFIE V2 SEMMS]
Louisiana North State Plane [SDSFIE V2 SEMMS]
Louisiana South State Plane [SDSFIE V2 SEMMS]
Louisiana Offshore State Plane [SDSFIE V2 SEMMS]
Maine East State Plane [SDSFIE V2 SEMMS]
Maine West State Plane [SDSFIE V2 SEMMS]
Maryland State Plane [SDSFIE V2 SEMMS]
Massachusetts Mainland State Plane [SDSFIE V2.2 USGS]
Massachusetts Island State Plane [SDSFIE V2 SEMMS]
Arizona East State Plane [SDSFIE V2 SEMMS]
Arizona Central State Plane [SDSFIE V2 SEMMS]
Arizona West State Plane [SDSFIE V2 SEMMS]
Michigan East State Plane - Obsolete [SDSFIE V2 SEMMS]
Michigan Central State Plane, TM - Obsolete [SDSFIE V2 SEMMS]
Michigan West State Plane - Obsolete [SDSFIE V2 SEMMS]
Michigan North State Plane [SDSFIE V2 SEMMS]
Michigan Central State Plane, L [SDSFIE V2 SEMMS]
Michigan South State Plane [SDSFIE V2 SEMMS]
Minnesota North State Plane [SDSFIE V2 SEMMS]
Minnesota Central State Plane [SDSFIE V2 SEMMS]
Minnesota South State Plane [SDSFIE V2 SEMMS]
Mississippi East State Plane [SDSFIE V2 SEMMS]
Mississippi West State Plane [SDSFIE V2 SEMMS]
Missouri East State Plane [SDSFIE V2 SEMMS]
Missouri Central State Plane [SDSFIE V2 SEMMS]
Missouri West State Plane [SDSFIE V2 SEMMS]
Montana (NAD 83) [SDSFIE V2 SEMMS]
Montana North (NAD 27) [SDSFIE V2 SEMMS]
Montana Central (NAD 27) [SDSFIE V2 SEMMS]
Montana South (NAD 27) [SDSFIE V2 SEMMS]
Nebraska (NAD 83) [SDSFIE V2 SEMMS]
Nebraska North (NAD 27) [SDSFIE V2 SEMMS]
Nebraska South (NAD 27) [SDSFIE V2 SEMMS]
Nevada East State Plane [SDSFIE V2 SEMMS]
Nevada Central State Plane [SDSFIE V2 SEMMS]
Nevada West State Plane [SDSFIE V2 SEMMS]

2800	New Hampshire State Plane [SDSFIE V2 SEMMS]
2900	New Jersey State Plane [SDSFIE V2 SEMMS]
3001	New Mexico East State Plane [SDSFIE V2 SEMMS]
3002	New Mexico Central State Plane [SDSFIE V2 SEMMS]
3003	New Mexico West State Plane [SDSFIE V2 SEMMS]
301	Arkansas North State Plane [SDSFIE V2 SEMMS]
302	Arkansas South State Plane [SDSFIE V2 SEMMS]
3101	New York East State Plane [SDSFIE V2 SEMMS]
3102	New York Central State Plane [SDSFIE V2 SEMMS]
3103	New York West State Plane [SDSFIE V2 SEMMS]
3104	New York Long Island State Plane [SDSFIE V2 SEMMS]
3200	North Carolina State Plane [SDSFIE V2 SEMMS]
3301	North Dakota North State Plane [SDSFIE V2 SEMMS]
3302	North Dakota South State Plane [SDSFIE V2 SEMMS]
3401	Ohio North State Plane [SDSFIE V2 SEMMS]
3402	Ohio South State Plane [SDSFIE V2 SEMMS]
3501	Oklahoma North State Plane [SDSFIE V2 SEMMS]
3502	Oklahoma South State Plane [SDSFIE V2 SEMMS]
3601	Oregon North State Plane [SDSFIE V2 SEMMS]
3602	Oregon South State Plane [SDSFIE V2 SEMMS]
3701	Pennsylvania North State Plane [SDSFIE V2 SEMMS]
3702	Pennsylvania South State Plane [SDSFIE V2 SEMMS]
3800	Rhode Island State Plane [SDSFIE V2 SEMMS]
3900	South Carolina (NAD 83) [SDSFIE V2 SEMMS]
3901	South Carolina North (NAD 27) [SDSFIE V2 SEMMS]
3902	South Carolina South (NAD 27) [SDSFIE V2 SEMMS]
4001	South Dakota North State Plane [SDSFIE V2 SEMMS]
4002	South Dakota South State Plane [SDSFIE V2 SEMMS]
401	California I State Plane [SDSFIE V2 SEMMS]
402	California II State Plane [SDSFIE V2 SEMMS]
403	California III State Plane [SDSFIE V2 SEMMS]
404	California IV State Plane [SDSFIE V2 SEMMS]
405	California V State Plane [SDSFIE V2 SEMMS]
406	California VI State Plane [SDSFIE V2 SEMMS]
407	California VII State Plane [SDSFIE V2 SEMMS]
4100	Tennessee State Plane [SDSFIE V2 SEMMS]
4201	Texas North State Plane [SDSFIE V2 SEMMS]
4202	Texas North Central State Plane [SDSFIE V2 SEMMS]
4203	Texas Central State Plane [SDSFIE V2 SEMMS]
4204	Texas South Central State Plane [SDSFIE V2 SEMMS]
4205	Texas South State Plane [SDSFIE V2 SEMMS]
4301	Utah North State Plane [SDSFIE V2 SEMMS]
4302	Utah Central State Plane [SDSFIE V2 SEMMS]
4303	Utah South State Plane [SDSFIE V2 SEMMS]
4400	Vermont State Plane [SDSFIE V2 SEMMS]
4501	Virginia North State Plane [SDSFIE V2 SEMMS]
4502	Virginia South State Plane [SDSFIE V2 SEMMS]
4601	Washington North State Plane [SDSFIE V2 SEMMS]
4602	Washington South State Plane [SDSFIE V2 SEMMS]
4701	West Virginia North State Plane [SDSFIE V2 SEMMS]
4702	West Virginia South State Plane [SDSFIE V2 SEMMS]
4801	Wisconsin North State Plane [SDSFIE V2 SEMMS]
4802	Wisconsin Central State Plane [SDSFIE V2 SEMMS]
4803	Wisconsin South State Plane [SDSFIE V2 SEMMS]
4901	Wyoming East State Plane [SDSFIE V2 SEMMS]
4902	Wyoming East Central State Plane [SDSFIE V2 SEMMS]
4903	Wyoming West Central State Plane [SDSFIE V2 SEMMS]
4904	Wyoming West State Plane [SDSFIE V2 SEMMS]
5001	Alaska Zone 1 State Plane [SDSFIE V2.2 SEMMS]
5002	Alaska Zone 2 State Plane [SDSFIE V2.2 SEMMS]
5003	Alaska Zone 3 State Plane [SDSFIE V2.2 SEMMS]
5004	Alaska Zone 4 State Plane [SDSFIE V2.2 SEMMS]
5005	Alaska Zone 5 State Plane [SDSFIE V2.2 SEMMS]
5006	Alaska Zone 6 State Plane [SDSFIE V2.2 SEMMS]
5007	Alaska Zone 7 State Plane [SDSFIE V2 SEMMS]
5008	Alaska Zone 8 State Plane [SDSFIE V2 SEMMS]
5009	Alaska Zone 9 State Plane [SDSFIE V2 SEMMS]
501	Colorado North State Plane [SDSFIE V2 SEMMS]
5010	Alaska Zone 10 State Plane - All of the Aleutian Island group lying west and south of Unimak Pass. [SDSFIE V2.2]

502	Colorado Central State Plane [SDSFIE V2 SEMMS]
503	Colorado South State Plane [SDSFIE V2 SEMMS]
5101	Hawaii 1 State Plane [SDSFIE V2 SEMMS]
5102	Hawaii State Plane Zone 2 [SDSFIE V2.2]
5103	Hawaii State Plane Zone 3 [SDSFIE V2.2 USGS]
5104	Hawaii State Plane Zone 4 [SDSFIE V2.2 USGS]
5105	Hawaii 5 State Plane [SDSFIE V2 SEMMS]
5201	Puerto and Virgin Islands State Plane [SDSFIE V2 SEMMS]
5202	St. Croix (NAD 27) [SDSFIE V2.2 SEMMS]
5300	American Samoa (NAD 27) [SDSFIE V2.2 USGS]
5400	Guam [SDSFIE V2.2 USGS]
600	Connecticut State Plane [SDSFIE V2 SEMMS]
700	Delaware State Plane [SDSFIE V2 SEMMS]
901	Florida East State Plane [SDSFIE V2 SEMMS]
902	Florida West State Plane [SDSFIE V2 SEMMS]
903	Florida North State Plane [SDSFIE V2 SEMMS]
spec_con_d	
Value	Definition (Notes) [Source]
ALIVE	Alive. [SDSFIE V2.5 NAVFAC]
INJURED	Injured. [SDSFIE V2.5 NAVFAC]
NEST	Nest. [SDSFIE V2.5 NAVFAC]
STRANDING	Stranding. [SDSFIE V2.5 NAVFAC]
spkimp_d	
Value	Definition (Notes) [Source]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
VARIABLE	Variable (selectable). [SDSFIE V2.5 AIR FORCE]
spl_typ_d	
Value	Definition (Notes) [Source]
DROP_INSERT	DROP INSERT SPLICE [SDSFIE V2 Air Force]
HALFTAP_FOLDBACK	Half tap fold back splice. [SDSFIE V2 AIR FORCE]
HALFTAP_INLINE	half tap inline splice [SDSFIE V2]
JUNCTION_FOLDBACK	Junction fold back splice. [SDSFIE V2.5 AIR FORCE]
JUNCTION_INLINE	junction inline splice [SDSFIE V2]
LOAD_FOLDBACK	Load fold back splice. [SDSFIE V2.5 AIR FORCE]
LOAD_INLINE	load inline splice [SDSFIE V2]
MULTIPLE_INLINE	Multiple inline splice. [SDSFIE V2.5 AIR FORCE]
MULTIPLEFOLDBACK	Multiple fold back splice. [SDSFIE V2.5 AIR FORCE]
STRAIGHT_INLINE	straight inline splice [SDSFIE V2]
STRAIGHTFOLDBACK	Straight inline splice. [SDSFIE V2.5 AIR FORCE]
splt_typ_d	
Value	Definition (Notes) [Source]
2_WAY	2 Way Splitter [SDSFIE V2 Tinker Air Force Base]
3_WAY	3 Way Splitter [SDSFIE V2 Tinker Air Force Base]
4_WAY	4 Way Splitter [SDSFIE V2 Tinker Air Force Base]
5_WAY	5 Way Splitter [SDSFIE V2 Tinker Air Force Base]
6_WAY	6 Way Splitter [SDSFIE V2 Tinker Air Force Base]
srf_typ_d, surf_mat_d	
Value	Definition (Notes) [Source]
2SURFACTREAT	double surface treatment [SDSFIE V1.4]
AC	asphaltic concrete [SDSFIE V1.4]
AC_PC	asphalt over concrete overlay [SDSFIE V1.4]
ASPHLCONC	asphaltic concrete [SDSFIE V1.8 NGA/NIMA]
BBM	bitumen bond macadam [SDSFIE V1.8 NGA/NIMA]
BEDROCK	bedrock [SDSFIE V1.8 NGA/NIMA]
BITUMEN_TAR_ASP	Bituminous Tar or Asphalt, mixed in place, oil or bitumen - bound. [SDSFIE V2.31 Air Force]
BRICK	brick [SDSFIE V1.8 NGA/NIMA]
CEMENT	cement [SDSFIE V1.4]
CHIPPEDSEAL	chipped seal [SDSFIE V1.4]
CINDERS	cinders [SDSFIE V1.4]
CLAY	clay [SDSFIE V1.8 NGA/NIMA]
COAL	coal [SDSFIE V1.8 NGA/NIMA]
COMPOSITE	Composite. [SDSFIE V2.31 Air Force]

CONCRETE	concrete [SDSFIE V1.4]
CORAL	coral [SDSFIE V1.8 NGA/NIMA]
CRUSHSTONE	crushed stone [SDSFIE V1.4]
EARTH	earth [SDSFIE V1.8 NGA/NIMA]
FOGSEAL	fog seal [SDSFIE V1.4]
GEOFAB	geofabric [SDSFIE V1.8 NGA/NIMA]
GLASS_REIN_PLAS	Glass Reinforced Plastic [SDSFIE V2.2 S-57]
GRADED_DRAIN	graded and drained [SDSFIE V1.4]
GRASS	grass [SDSFIE V1.4]
GRAVEL	gravel [SDSFIE V1.4]
HARD_SURFACED	Hard Surfaced - specific surface unspecified [SDSFIE V2.2 S-57]
ICE	ice [SDSFIE V1.8 NGA/NIMA]
LATERITE	laterite [SDSFIE V1.8 NGA/NIMA]
LIMESTN	limestone [SDSFIE V1.8 NGA/NIMA]
LOOSE_BOULDERS	Loose Boulders [SDSFIE V2.2 S-57]
LOWBITUMEN	low bituminous [SDSFIE V1.4]
MASONRY	MASONRY [SDSFIE V2.2 S-57]
MEDBITUMEN	medium bituminous [SDSFIE V1.4]
METAL	Metal - specific type unspecified [SDSFIE V2.2 S-57]
METALPORTAB	metal portable runway [SDSFIE V1.4]
OIL_CLAY	oil and clay [SDSFIE V1.4]
OTHER	other [SDSFIE V1.8 NGA/NIMA]
PAINTED	Painted [SDSFIE V2.2 S-57]
PIERCALPLANK	pierced aluminum plank [SDSFIE V1.8 NGA/NIMA]
PIERCSTEELPL	pierced steel planking [SDSFIE V1.4]
PLANTMIXBIT	plant mix bit [SDSFIE V1.4]
PLANTMIXSEAL	plant mix seal coat [SDSFIE V1.4]
PORTLDCEMENT	Portland cement [SDSFIE V1.4]
RECYCLBITMEN	recycled bituminous [SDSFIE V1.4]
REINFORCONCR	reinforced concrete [SDSFIE V1.4]
SALTFLAT	saltflat [SDSFIE V1.4]
SAND	sand [SDSFIE V1.4]
SAND_ASPHALT	sand and asphalt [SDSFIE V1.4]
SAND_CLAY	sand and clay [SDSFIE V1.4]
SAND_OIL	sand and oil [SDSFIE V1.4]
SILT	silt [SDSFIE V1.8 NGA/NIMA]
SLURRYSEAL	slurry seal [SDSFIE V1.4]
SNOW	snow [SDSFIE V1.4]
SOD	sod [SDSFIE V1.4]
SOILCEMENT	Mix-In-Place using non-bituminous binders such as Portland Cement -- also referred to as soil cement. [SDSFIE V2.31 Air Force]
STONEMASTIC	stone mastic [SDSFIE V1.4]
SURFACTREAT	single surface treatment [SDSFIE V2.2]
TBD	to be determined [SDSFIE V1.4]
TUNDRA	tundra [SDSFIE V1.8 NGA/NIMA]
UNIMPROVED	unimproved [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.8 NGA/NIMA]
VOLC_ASH	volcanic ash [SDSFIE V1.8 NGA/NIMA]
WATER	water [SDSFIE V1.4]
WIRE_COMB	wire combined [SDSFIE V1.8 NGA/NIMA]
WOOD	wood [SDSFIE V1.4]

sst_ty_d

Value

DISTRIBUTION
OTHER
SUBTRANSMISSION

TBD
TRANSMISSION

UNKNOWN

sta_ty_d

Value

BOOSTER
PRESS_REDUCE
PUMP

start_ty_d

Value

Definition (Notes) [Source]

Substations located in the middle of a load area. [SDSFIE V1.6]
other [SDSFIE V1.4]
Electric substations with equipment used to switch circuits operating at voltages in the range of 34.5 to 161kV. [SDSFIE V1.6]
to be determined [SDSFIE V1.4]
A substation which uses alternating current which contains equipment used to sectionalize the system when a fault or circuit develops. [SDSFIE V1.4]
unknown [SDSFIE V1.4]

Definition (Notes) [Source]

booster station [SDSFIE V2.1 FGDC Utilities Classification]
pressure reducer station [SDSFIE V2.1 FGDC Utilities Classification]
pump station [SDSFIE V2.1 FGDC Utilities Classification]

Definition (Notes) [Source]

AUTOTRN_START
 CAPCTR_RUN
 CAPCTR_START
 LINE_START
 OTHER
 REACTR_REDUV
 RESIST_REDUV
 SHADED_POLE
 SOLDSTATSTR
 TBD
 UNKNOWN
 Y_START_DELTA_RUN
status_d
Value
 ACTIVE
 ACTIVE
 INACTIVE
 NONACTIVE
 OTHER
 TBD
 TERMINATED
 UNKNOWN
status_d, use_typ_d
Value
 ABANDONED
 ACTIVE
 UNKNOWN
str_stat_d
Value
 DEMOLISHED
 DEMOLITION
 DISPOSAL
 EXISTING
 INCONCLUSIVE
 NONOPERATIONAL
 OPERATIONAL
 PERMANENT
 PORTABLE
 SEMI_PERM
 TEMPORARY
 UNKNOWN
str_type_d
Value
 APARTMENT
 AQUATHEATER
 ARENA
 BARN
 BUNKER
 CAPITOL
 CHURCH
 CITY_HALL
 COMMUNITYCENTER
 CONCERT_HALL
 CONDO
 COURT_HOUSE
 DRY_STORAGE_DOCK
 DUPLEX
 DWELLING
 EARTHWORKS
 EMS_STATION
 FEDERAL_RESERVE
 FIRE_HOUSE
 GARAGE

 GOVERNORS_HOUSE
 GRAIN_ELEVATOR
 HANGAR

autotransformer start [SDSFIE V1.4]
 capacitor run [SDSFIE V1.4]
 capacitor start [SDSFIE V1.4]
 line start [SDSFIE V1.4]
 other [SDSFIE V1.4]
 reactor type, reduced voltage [SDSFIE V1.4]
 resistor type, reduced voltage [SDSFIE V1.4]
 shaded pole [SDSFIE V1.4]
 solid state start [SDSFIE V1.4]
 to be determined [SDSFIE V1.4]
 unknown [SDSFIE V1.4]
 Y start delta run [SDSFIE V1.4]

Definition (Notes) [Source]

active and working [SDSFIE V1.4]
 active [SDSFIE V1.9]
 inactive [SDSFIE V1.9]
 not being used [SDSFIE V1.4]
 other [SDSFIE V1.4]
 to be determined [SDSFIE V1.4]
 terminated [SDSFIE V1.9]
 unknown [SDSFIE V1.4]

Definition (Notes) [Source]

The transportation feature is inactive and not in use [SDSFIE V1.4]
 The transportation feature is currently in use [SDSFIE V1.4]
 Unknown. [SDSFIE V2.4 Air Force]

Definition (Notes) [Source]

Structure that has been demolished. [SDSFIE V2.31 Army]
 Structural definition and status of a building slated for demolition.
 Disposal other than demolition [SDSFIE V2.2 OSD Coordination]
 Existing structure [SDSFIE V2.1]
 Inconclusive Analysis. [SDSFIE V2.31 Air Force]
 Non-Operational. [SDSFIE V2.31 Air Force]
 Operational. [SDSFIE V2.31 Air Force]
 Structural definition and status of a permanent building. [SDSFIE V1.4]
 Structural definition and status of a portable building. [SDSFIE V1.4]
 Structural definition and status of a semi-permanent building. [SDSFIE V1.4]
 Structural definition and status of a temporary building. [SDSFIE V1.4]
 Unknown. [SDSFIE V2.31 Air Force]

Definition (Notes) [Source]

apartment building [SDSFIE V1.4]
 Aquatheater [SDSFIE V2.4 USGS]
 Arena. [SDSFIE V2.4 USGS]
 barn [SDSFIE V1.4]
 Bunker. [SDSFIE V2.31 Air Force]
 Capitol. [SDSFIE V2.4 USGS]
 church/temple [SDSFIE V1.4]
 City Hall. [SDSFIE V2.4 USGS]
 Community Center. [SDSFIE V2.4 USGS]
 Concert Hall. [SDSFIE V2.4 USGS]
 condominium [SDSFIE V1.4]
 Court House. [SDSFIE V2.4 USGS]
 Dry Storage Dock [SDSFIE V1.9 USACE OPERATIONS]
 house, duplex [SDSFIE V1.4]
 dwelling [SDSFIE V1.9 REEGIS]
 Earthworks. [SDSFIE V2.4 USGS]
 EMS Station. [SDSFIE V2.4 USGS]
 Federal Reserve. [SDSFIE V2.4 USGS]
 Fire House. [SDSFIE V2.4 USGS]
 A structure used for the maintenance, storage, and display of motor vehicles.
 Governors House. [SDSFIE V2.4 USGS]
 Grain Elevator. [SDSFIE V2.4 USGS]
 Hangar. [SDSFIE V2.31 Air Force]

HOSPITAL	Hospital. [SDSFIE V2.4 USGS]
HOUSE	house, single family [SDSFIE V1.4]
JAIL_OR_PRISON	Jail or Prison. [SDSFIE V2.4 USGS]
LAW_ENFORCEMENT	Law Enforcement. [SDSFIE V2.4 USGS]
MEDICAL_CENTER	Medical Center. [SDSFIE V2.4 USGS]
MEMORIAL	Memorial. [SDSFIE V2.4 USGS]
MOBILE_HOME	Mobile home or trailer [SDSFIE V1.95 USGS]
MUSEUM	Museum. [SDSFIE V2.4 USGS]
OFFICE	office building [SDSFIE V1.4]
OFFSHR_PLTFRM	Offshore Platform. [SDSFIE V2.5 NAVFAC]
OTHER	other [SDSFIE V1.4]
POST_OFFICE	Post Office. [SDSFIE V2.4 USGS]
POWER_PLANT	A facility used in the production and distribution of electrical power. [SDSFIE V2.3 REEGIS]
POWERGEN_FAC	A facility used in the production and distribution of electrical power. [SDSFIE V2.3 HSIP]
RADIO_FACILITY	Radio Facility. [SDSFIE V2.4 USGS]
RAILROAD_STATION	Railroad Station. [SDSFIE V2.4 USGS]
RAIN_SHED	Rain Shed. [SDSFIE V2.4 USGS]
SCHOOL	Any building or structure whose primary purpose is education. [SDSFIE V2.4 Air Force]
SECURITY	Security. [SDSFIE V2.4 Air Force]
SKYSCRAPER	skyscraper [SDSFIE V1.4]
SUPREME_COURT	Supreme Court. [SDSFIE V2.4 USGS]
SURVIVALSHLT	survival shelter [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
THEATER	Theater. [SDSFIE V2.4 USGS]
TOWER	Tower. [SDSFIE V2.4 USGS]
TOWN_HALL	Town Hall. [SDSFIE V2.4 USGS]
TOWNHOUSE	townhouse [SDSFIE V1.4]
US_MINT	US Mint. [SDSFIE V2.4 USGS]
WHITE_HOUSE	White House. [SDSFIE V2.4 USGS]
swt_sta_d	
Value	Definition (Notes) [Source]
CLOSED	closed [SDSFIE V1.4]
CLOSEDCLOSED	closed - normally closed [SDSFIE V1.4]
CLOSEDOPEN	closed - normally open [SDSFIE V1.4]
OPEN	open [SDSFIE V1.4]
OPENCLOSED	open - normally closed [SDSFIE V1.4]
OPENOPEN	open - normally open [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
systyp_d	
Value	Definition (Notes) [Source]
COMMERCIAL	commercial [SDSFIE V1.9 USACE OPERATIONS]
COOLING_COIL	Cooling Coil [SDSFIE V1.9 USACE OPERATIONS]
HEAT_COIL	Heat Coil [SDSFIE V1.9 USACE OPERATIONS]
MUNICIPAL	Municipal [SDSFIE V1.9 USACE OPERATIONS]
PRIVATE	Private [SDSFIE V1.9 USACE OPERATIONS]
tank_des_d, use_d	
Value	Definition (Notes) [Source]
DISPOSAL	disposal tank [SDSFIE V1.8]
SEPTIC_TANK	septic tank [SDSFIE V1.8]
tank_st_d, tank_sty_d, trap_st_d	
Value	Definition (Notes) [Source]
ABOVEGROUND	A receptacle or chamber of which 90 percent or more is located above the surface of the ground. [SDSFIE V1.4]
ABVGRND_UNDRGRND	Aboveground and underground. [SDSFIE V2.31 Air Force]
ALODINE_TANK	alodine tank [SDSFIE V2.3 Edwards Air Force Base]
BARRELS	Barrels, drums or cans. [SDSFIE V2.31 Air Force]
DRAINSUMP	drain sump tank [SDSFIE V1.4]
ELEVATED	elevated [SDSFIE V1.4]
HOT_WATER_TANK	hot water rinse tank [SDSFIE V2.3 Edwards Air Force Base]
HYDROPNEU	hydropneumatic [SDSFIE V1.4]
IND_WASTE_TANK	industrial waste tank [SDSFIE V2.3 Edwards Air Force Base]
OTHER	other [SDSFIE V1.4]
RAILROAD_TANKCAR	Railroad Tank Car. [SDSFIE V2.31 Air Force]
SCP	self contained propane gas tank [SDSFIE V1.4]

SEMIBRD_UNDRGRND	Semi-buried and Underground. [SDSFIE V2.31 Air Force]
SEMIBURIED	Semi-buried. [SDSFIE V2.31 Air Force]
STANDPIPE	standpipe [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TRUCK	Truck. [SDSFIE V2.31 Air Force]
UNCONFNDRESV	unconfined reservoir [SDSFIE V1.4]
UNDERGROUND	A receptacle or chamber of which 10 percent or more is located beneath the surface of the ground. [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
tank_use_d	
Value	Definition (Notes) [Source]
CHEMICAL	chemical [SDSFIE V1.4]
DISPOSAL	disposal tank [SDSFIE V1.4]
EWS	Reserve water source used by emergency firefighting services. [SDSFIE V2.21 Lakenheath AFB]
FUEL	fuel [SDSFIE V1.4]
NATGAS	natural gas [SDSFIE V1.4]
OIL	oil [SDSFIE V1.75]
OTHER	other [SDSFIE V1.4]
POL	Petroleum, Oil, and Lubricants. [SDSFIE V2.31 Air Force]
POTWATER	potable water [SDSFIE V1.4]
PROPGAS	propane gas [SDSFIE V1.4]
RAWWATER	raw water [SDSFIE V1.4]
SEPTIC_TANK	septic tank [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
temp_u_d	
Value	Definition (Notes) [Source]
DEG_C	A unit division of a temperature scale that registers the freezing pt of water at 0 deg C and the boiling pt as 100 deg C under standard atmospheric pressure. [SDSFIE V2.5 SI ANSI]
DEG_F	A unit division of a temperature scale that registers the freezing pt of water at 32 deg F and the boiling pt as 212 deg F under standard atmospheric pressure. [SDSFIE V2.5 SI ANSI]
K	Degrees Kelvin. [SDSFIE V2.5 ISO10004-2]
term_typ_d	
Value	Definition (Notes) [Source]
BNC_F	BNC-F - Bayonet Neill Concelman (BMC), Female. [SDSFIE V2.5 AIR
BNC_M	BNC-M - Bayonet Neill Concelman (BMC), Male. [SDSFIE V2.5 AIR
ENC	Enclosure [SDSFIE V2 Austin and Pitts]
ENCAP	Encapsulated [SDSFIE V2 Austin and Pitts]
F_TYPE_F	F-F - F TYPE, Female. [SDSFIE V2.5 AIR FORCE]
F_TYPE_M	F-M - F TYPE, Male. [SDSFIE V2.5 AIR FORCE]
FC	Fixed Count [SDSFIE V2 Austin and Pitts]
FC_F	FC-F - MIL-C-39012 category D type, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FC_M	FC-M - MIL-C-39012 category D type, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
FCCP	Fixed Count Control Point [SDSFIE V2 Austin and Pitts]
FCTP	Fixed Count Taper Point [SDSFIE V2 Austin and Pitts]
FDDI_F	FDDI-F - Fiber Distributed Data Interface, FO connector, Female. [SDSFIE V2.5 AIR FORCE]
FDDI_M	FDDI-M - Fiber Distributed Data Interface, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
LC_F	LC-F - Limited Co-ordination Specification (LC Spec.), Female. [SDSFIE V2.5 AIR FORCE]
LC_M	LC-M - Limited Co-ordination Specification (LC Spec.), Male. [SDSFIE V2.5 AIR FORCE]
N_TYPE_F	N-F - N TYPE, Female. [SDSFIE V2.5 AIR FORCE]
N_TYPE_M	N-M - N TYPE, Male [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
OTHER	Other [SDSFIE V2]
RA	Ready Access [SDSFIE V2 Austin and Pitts]
RACP	Ready Access Control Point [SDSFIE V2 Austin and Pitts]
RATP	Ready Access Taper Point [SDSFIE V2 Austin and Pitts]
RE	Reenterable [SDSFIE V2 Austin and Pitts]
SC_F	SC-F - Plug and socket, push-pull latch, FO connector, Female. [SDSFIE V2.5 AIR FORCE]

SC_M	SC-M - Plug and socket, push-pull latch, FO connector, Male. [SDSFIE V2.5 AIR FORCE]
SMA_AF	SMA-AF - Subminiature Version A, Female. [SDSFIE V2.5 AIR FORCE]
SMA_AM	SMA-AM - Subminiature Version A, Male. [SDSFIE V2.5 AIR FORCE]
SMC_CF	SMC-CF - Subminiature Version C, Female. [SDSFIE V2.5 AIR FORCE]
SMC_CM	SMC-CM - Subminiature Version C, Male. [SDSFIE V2.5 AIR FORCE]
ST_F	ST-F - ST, Female. [SDSFIE V2.5 AIR FORCE]
ST_M	ST-M - ST, Male. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined [SDSFIE V2 Austin and Pitts]
TNC_F	TNC-F - TNC Female. [SDSFIE V2.5 AIR FORCE]
TNC_M	TNC-M - TNC Male. [SDSFIE V2.5 AIR FORCE]
UNKNOWN	Unknown [SDSFIE V2]
UNKNOWN	Unknown. [SDSFIE V2.5 AIR FORCE]
test_ty_d	Definition (Notes) [Source]
Value	biological O2 dissolved [SDSFIE V1.4]
BOD	chemical O2 dissolved [SDSFIE V1.4]
COD	dissolved O2 [SDSFIE V1.4]
DO	fecal coliform [SDSFIE V1.4]
FC	other [SDSFIE V1.4]
OTHER	suspended solids [SDSFIE V1.4]
SS	to be determined [SDSFIE V1.4]
TBD	total coliform bacteria [SDSFIE V1.4]
TC	unknown [SDSFIE V1.4]
UNKNOWN	
tox_stt_d	Definition (Notes) [Source]
Value	A substance or agent producing or inciting cancer. [SDSFIE V1.4]
CARCINOGENIC	Contaminant can exhibit chronic toxicity through skin absorption. [SDSFIE V1.4]
CHRONIC_ABS	Contaminant can exhibit chronic toxicity through skin and/or eye contact. [SDSFIE V1.4]
CHRONIC_CON	Contaminant can exhibit chronic toxicity through ingestion. [SDSFIE V1.4]
CHRONIC_ING	Contaminant can exhibit chronic toxicity through inhalation. [SDSFIE V1.4]
CHRONIC_INH	Long term exposure can lead to illness or damage. [SDSFIE V1.4]
CHRONICTOXICITY	Highly toxic in more than one route of entry into the body. [SDSFIE V1.4]
HIGHLYTOXIC	Contaminant can be highly toxic through skin absorption. [SDSFIE V1.4]
HIGHLYTOXIC_ABS	Contaminant can be highly toxic through skin and/or eye contact. [SDSFIE V1.4]
HIGHLYTOXIC_CON	Contaminant can be highly toxic through ingestion. [SDSFIE V1.4]
HIGHLYTOXIC_ING	Contaminant can be highly toxic through inhalation. [SDSFIE V1.4]
HIGHLYTOXIC_INH	Contaminants are present at or above the concentration considered to be immediately dangerous to life or health. [SDSFIE V1.4]
IDLH	Nontoxic [SDSFIE V1.4]
NONTOXIC	Low level radiation, non-deadly, but may lead to chronic illness or complications. [SDSFIE V1.4]
RADANDNONDEADLY	Radioactive and toxic [SDSFIE V1.4]
RADANDTOXIC	to be determined. [SDSFIE V1.4]
TBD	Contaminant can be toxic through skin absorption. [SDSFIE V1.4]
TOXIC_ABS	Contaminant can be toxic through skin and/or eye contact. [SDSFIE V1.4]
TOXIC_CON	Contaminant can be toxic through ingestion. [SDSFIE V1.4]
TOXIC_ING	Contaminant can be toxic through inhalation. [SDSFIE V1.4]
TOXIC_INH	Level of toxicity is currently unknown. [SDSFIE V1.4]
UNKNOWN	
treattyp_d	Definition (Notes) [Source]
Value	The pole has been treated with creosote. [SDSFIE V1.6]
CREOSOTE	Other, Not otherwise listed [SDSFIE V1.6]
OTHER	The pole has been painted to prevent corrosion. [SDSFIE V1.6]
PAINT	To be determined [SDSFIE V1.6]
TBD	Unknown [SDSFIE V1.6]
UNKNOWN	
trt_lev_d	Definition (Notes) [Source]
Value	Other. [SDSFIE V2.31 HSIP]
OTHER	Primary. [SDSFIE V2.31 HSIP]
PRIMARY	Quaternary. [SDSFIE V2.31 HSIP]
QUATERNARY	Secondary. [SDSFIE V2.31 HSIP]
SECONDARY	Tertiary. [SDSFIE V2.31 HSIP]
TERTIARY	
truck_ty_d	

Value	Definition (Notes) [Source]
FUEL_SVC_UNIT	Trailer-mounted Fuel Servicing Unit [SDSFIE V2.31 Air Force]
HOSE_CART	Hose cart - truck only [SDSFIE V2.31 Air Force]
UNKNOWN	Unknown [SDSFIE V2.31 Air Force]
WATER_SEPARATOR	Filter - Water separator [SDSFIE V2.31 Air Force]
tun_typ_d	
Value	Definition (Notes) [Source]
CANAL	canal [SDSFIE V1.8 USGS]
OTHER	any other type of tunnel or unknown [SDSFIE V1.8 USGS]
RAILROAD	railroad [SDSFIE V1.8 USGS]
ROAD	road / highway [SDSFIE V1.8 USGS]
TRAIL	pedestrian trail [SDSFIE V1.8 USGS]
type_d	
Value	Definition (Notes) [Source]
ABOVEGROUND	above ground [SDSFIE V1.4]
AERATOR	aerator [SDSFIE V1.4]
AEROBIC	aerobic [SDSFIE V1.4]
ANAEROBIC	anaerobic [SDSFIE V1.4]
ANGLE	pipe angle [SDSFIE V1.4]
API	API standard [SDSFIE V1.4]
AUTOREDCNTRL	automated meter reading - centralized system [SDSFIE V1.4]
AUTOREDPTPR	automated meter reading - pit probe [SDSFIE V1.4]
AUTOREDTPAD	automated meter reading - touch pad [SDSFIE V1.4]
BAFFLE	baffle block basin [SDSFIE V1.4]
BALL	Ball Type. [SDSFIE V2.5 AIR FORCE]
BD	Buried Distribution Closure, size unknown. [SDSFIE V2.5 AIR FORCE]
BIOLOGIC	biological treatment process [SDSFIE V1.4]
BOOSTER	booster station [SDSFIE V1.4]
BOX	Rectangular box type enclosure, accessed by removing a cover panel. [SDSFIE V2.5 AIR FORCE]
BOX	box [SDSFIE V1.4]
BOX_FLIP_LID	Box Flip Lid. [SDSFIE V2.31 Air Force]
CAB	Cabinet enclosure, accessed through a hinged door. [SDSFIE V2.5 AIR]
CABELTV	cable television [SDSFIE V1.4]
CAD	Controlled Access Distribution Closure. [SDSFIE V2.5 AIR FORCE]
CAP	pipe cap [SDSFIE V2.1 FGDC Utilities Classification]
CAP	pipe cap [SDSFIE V1.4]
CAP	Cap or Plug fitting. [SDSFIE V2.1 FGDC Utilities Classification]
CAP	pipe cap [SDSFIE V1.6]
CEMENT	cement [SDSFIE V1.4]
CHEMICALTRET	chemical treatment process [SDSFIE V1.4]
CHILLING_PLANT	chill water plant [SDSFIE V2.1 FGDC Utilities Classification]
CIRCULAR	circular [SDSFIE V1.4]
CLEANOUT	pipe cleanout [SDSFIE V1.4]
CLEANOUT	pipe cleanout [SDSFIE V1.6]
COMMUNICATE	communication/telephone system [SDSFIE V1.4]
COMPOUND	piston/turbine - single register [SDSFIE V1.4]
CONCRETE	concrete [SDSFIE V1.4]
CONDULET_POLE	condulet and pole mount (above ground) [SDSFIE V1.4]
CROSS	pipe cross [SDSFIE V1.4]
CROSS	Cross Fitting [SDSFIE V2.1 FGDC Utilities Classification]
DEEP_DEPTH_DISK	Disk Type shield for marking features at depths up to eight feet. [SDSFIE V2.5 AIR FORCE]
DETECTOR	detector check valve - turbine - fire line, sprinklers [SDSFIE V1.4]
DIAPHRAGM	diaphragm - positive displacement - normal residence [SDSFIE V1.4]
DIST_BOX	distribution box [SDSFIE V1.4]
DOUBLE_POL	double pole [SDSFIE V1.75]
DRAIN	drainage field [SDSFIE V1.4]
DRAINPIT	drain pit [SDSFIE V1.4]
DUALCASE	pump/rotary/vanes - case in case - normal terminal [SDSFIE V1.4]
ELBOW	pipe elbow [SDSFIE V1.4]
ELECTRICAL	electrical [SDSFIE V1.4]
FACULTATIVE	facultative [SDSFIE V1.4]
FIBERGLASS	fiber glass [SDSFIE V1.4]
FLANGE	pipe flange [SDSFIE V2.1 FGDC Utilities Classification]
FLANGE	pipe flange [SDSFIE V1.4]
FLIPBUCK	flip bucket [SDSFIE V1.4]
FLUSH_GRADE	flush to grade (in ground) [SDSFIE V1.4]

FREE_STANDING_PO	Free Standing Pole. [SDSFIE V2.31 Air Force]
FUEL	fuel system [SDSFIE V1.4]
GARBAGEINCIN	garbage incinerator plant [SDSFIE V1.4]
GATE	gates [SDSFIE V1.4]
GEARCASE	metal gears - positive displacement - normal bulk plant [SDSFIE V1.4]
GENEREMOTE	generator remote system - compound and propeller meters [SDSFIE V1.4]
HEATING_PLANT	high temp, low temp, and/or steam plant [SDSFIE V2.1 FGDC Utilities Classification]
HYDRANT	hydrant meter at fire hydrant - turbine [SDSFIE V1.4]
IMPACT	impact basin [SDSFIE V1.4]
INDUSTRIAL	industrial waste system [SDSFIE V1.4]
INDUSTRIALWS	industrial waste treatment plant [SDSFIE V1.4]
IRRIGATE	irrigation meters - continuous, high flows [SDSFIE V1.4]
JUNCTION_BOX	junction box [SDSFIE V1.4]
LINED_FAB	lagoon with geotextile liner [SDSFIE V1.4]
LINED_SOIL	lagoon with soil liner [SDSFIE V1.4]
METER	Metering Station [SDSFIE V1.4]
METER	meter [SDSFIE V1.4]
MID_DEPTH_MAT	Mat or spoke shield type for marking features at depths up to six feet. [SDSFIE V2.5 AIR FORCE]
NATGAS	natural gas system [SDSFIE V1.4]
NEAR_SURF_STAKE	Cylindrical shaped stake type for marking features at depths of up to two feet. [SDSFIE V2.5 AIR FORCE]
OFF_SITE	off site, off base, out of system [SDSFIE V1.75]
OPEN	open discharge point [SDSFIE V1.4]
ORIFICE	orifice - pressure drop across plate - city gate, transmission company [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
OTHER	other [SDSFIE V1.4]
OTHER	Other. [SDSFIE V2.31 Air Force]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	Other [SDSFIE V2 Austin and Pitts]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OVALONGAXHRZ	oval long axis horizontal [SDSFIE V1.4]
OVALONGAXVRT	oval long axis vertical [SDSFIE V1.4]
OVERFLOW	overflow [SDSFIE V1.75]
PARALELPLATE	parallel plate [SDSFIE V1.4]
PED12	12 inch pedestal [SDSFIE V2 Austin and Pitts]
PED4	4 inch pedestal [SDSFIE V2 Austin and Pitts]
PED6	6 inch pedestal [SDSFIE V2 Austin and Pitts]
PED8	8 inch pedestal [SDSFIE V2 Austin and Pitts]
PEDESTAL	pedestal [SDSFIE V1.4]
PERFORATPIPE	perforated pipe [SDSFIE V1.4]
PIPEARCH	pipe arch [SDSFIE V1.4]
PISTON	pump/3 piston/chamber - normal service station [SDSFIE V1.4]
PISTON	oscillating piston - positive displacement - normal residence [SDSFIE V1.4]
PIT	pit [SDSFIE V1.4]
PLUG	pipe plug [SDSFIE V1.4]
POLE	pole [SDSFIE V1.4]
POLYURETHANE	polyurethane [SDSFIE V1.4]
PPSP	Propane Peak Shaving Station [SDSFIE V1.4]
PRESS_REDUCE	pressure reducing station [SDSFIE V1.4]
PRESSREDVAL	pressure reducing valve [SDSFIE V1.4]
PROPELLER	propeller meters - continuous, high flows [SDSFIE V1.4]
PUMP	pumping station [SDSFIE V1.4]
REDUCER	pipe reducer [SDSFIE V2.1 FGDC Utilities Classification]

REDUCER	pipe pressure reducer [SDSFIE V1.4]
REDUCER	reducer [SDSFIE V2.1 FGDC Utilities Classification]
REDUCER	reducer [SDSFIE V1.4]
REDUCER	reducer [SDSFIE V1.8]
REGULATOR	regulator [SDSFIE V1.4]
REGULATOR	regulator [SDSFIE V2.1 FGDC Utilities Classification]
REINFORCONCR	reinforced concrete [SDSFIE V1.4]
RIPRAP	riprap [SDSFIE V1.4]
RISER_POLE	riser pole [SDSFIE V1.75]
ROTARY	pump/rotary/vanes - normal bulk plant [SDSFIE V1.4]
ROTARY	rotary - impeller driven - normal commercial, industrial [SDSFIE V1.4]
ROTARYIMPLER	rotary impeller - pressure driven - normal pipeline [SDSFIE V1.4]
SANITARY	sanitary system [SDSFIE V1.4]
SEEPAGEPIT	seepage pit [SDSFIE V1.4]
SERVICE	Service connection. [SDSFIE V2 AWWA]
SEWAGETREAT	sewage treatment plant [SDSFIE V1.4]
STD_REFCL_JNCBX	Standard Reference Cell Junction Box [SDSFIE V1.4]
STD_RESIS_JNCBX	Standard Resistor Junction Box [SDSFIE V1.4]
STD_SHNT_JNCBX	Standard Shunt Junction Box [SDSFIE V1.4]
STD_TERM_JNCBX	Standard Terminal Junction Box [SDSFIE V1.4]
STEEL1	steel single [SDSFIE V1.4]
STEEL2	steel double [SDSFIE V1.4]
STEELENCASED	steel encased [SDSFIE V1.4]
STILLBASIN	stilling basin [SDSFIE V1.4]
SUBMURCTFG	submersible/centrifugal [SDSFIE V1.4]
SUBMURTRBN	submersible/turbine [SDSFIE V1.4]
SUBSTATION	electrical substation [SDSFIE V1.4]
SUMP	sump [SDSFIE V1.4]
SURFACE	open discharge to surface [SDSFIE V1.75]
TAPE	Tape Type. [SDSFIE V2.5 AIR FORCE]
TAPPING_SLEEVE	Tapping Sleeve [SDSFIE V2 AWWA]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	To Be Determined [SDSFIE V2 Austin and Pitts]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TEE	pipe tee [SDSFIE V1.4]
TEE	Tee fitting. [SDSFIE V2.1 FGDC Utilities Classification]
TOWER	tower [SDSFIE V1.4]
TURBINE	turbine - turbine driven, continuous flow - normal industrial [SDSFIE V1.4]
TURBINE	turbine - turbine driven, continuous flow - normal industrial [SDSFIE V1.4]
UNDERGROUND	under ground [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	Unknown [SDSFIE V2 Austin and Pitts]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]

UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNLINED	lagoon with out engineering designed liner [SDSFIE V1.4]
UTILITY_POLE	Utility Pole. [SDSFIE V2.31 Air Force]
VERTLFTCTFG	vertical lift/centrifugal [SDSFIE V1.4]
VERTLFTDISPL	vertical lift/displacement [SDSFIE V1.4]
VERTLFTMAG	vertical lift/magnetic [SDSFIE V1.4]
VERTLFTTRBN	vertical lift/turbine [SDSFIE V1.4]
WATER	water system [SDSFIE V1.4]
WATERTREAT	water treatment plant [SDSFIE V1.4]
WEIR	open channel weir [SDSFIE V1.4]
WEIR	weir [SDSFIE V1.4]
WYE	Y shaped fitting [SDSFIE V1.9]
use_code_d	
Value	Definition (Notes) [Source]
NSU_1	HIGH ALTITUDE [SDSFIE V2 DISA]
NSU_2	LOW ALTITUDE [SDSFIE V2 DISA]
NSU_3	ALL ALTITUDES [SDSFIE V2 DISA]
NSU_4	RANDOM NAVIGATION [SDSFIE V2 DISA]
NSU_5	TERMINAL [SDSFIE V2 DISA]
UNKNOWN	Unknown. [SDSFIE V2.31 Air Force]
use_d	
Value	Definition (Notes) [Source]
ABANDONED	abandoned/inactive pipe [SDSFIE V2.1 FGDC Utilities Classification]
ABANDONED	abandoned/inactive pipe [SDSFIE V2.1 FGDC Utilities Classification]
ABANDONED	abandoned line [SDSFIE V2.1 FGDC Utilities Classification]
ABANDONED	Abandoned/inactive hcs-water line. [SDSFIE V2.1 FGDC Utilities
ABANDONED	abandoned/inactive pipe [SDSFIE V1.75]
ABANDONED	abandoned/inactive pipe [SDSFIE V1.6]
AIR	air [SDSFIE V1.4]
BACKFLOW	backflow preventer [SDSFIE V2.1 FGDC Utilities Classification]
BLOW_OFF	a blow-off valve [SDSFIE V2.1 FGDC Utilities Classification]
CHECK	Check Valve. [SDSFIE V2 AWWA]
CHECK	check or one-way valve [SDSFIE V1.4]
CHEMICALS	chemicals [SDSFIE V1.4]
CHILLWATER	chilled water [SDSFIE V1.4]
CHW_M	Chilled Water Main: water less than 45 deg. F. [SDSFIE V2.1 FGDC
	Utilities Classification]
CHW_S	Chilled Water Service: water less than 45 deg. F. [SDSFIE V2.1 FGDC
	Utilities Classification]
CIRCULAR	Circular [SDSFIE V2.31 Air Force]
CONTROL	control valve [SDSFIE V1.4]
DEFUELING	defueling line [SDSFIE V2.1 FGDC Utilities Classification]
DISTRIB_BOX	distribution box [SDSFIE V1.4]
DRAIN	Drain [SDSFIE V2.1 FGDC Utilities Classification]
DRAIN	drain/flush valve [SDSFIE V1.4]
DRIP_POT	drip pot [SDSFIE V2.1 FGDC Utilities Classification]
DTW_M	Dual Temperature Main Service Supply [SDSFIE V2.1 FGDC Utilities
	Classification]
DTW_S	Dual Temperature Building Service Supply [SDSFIE V2.1 FGDC Utilities
	Classification]
FIRE	fire protection [SDSFIE V1.7]
FISH_WILD	fish and wildlife [SDSFIE V1.4]
FM	force main [SDSFIE V2.1 FGDC Utilities Classification]
FM	force main [SDSFIE V1.75]
FREON	freon [SDSFIE V1.4]
FUEL	Fuel [SDSFIE V2.3 Cherry Point]
GASOLINE	gasoline [SDSFIE V1.4]
GATE	Gate Valve [SDSFIE V2 AWWA]
GLOBE	Globe Valve [SDSFIE V2 AWWA]
HANDHOLE	handhole [SDSFIE V2.1 FGDC Utilities Classification]
HOTWATER	hot water [SDSFIE V1.4]
HPDRIP	High Pressure Drip [SDSFIE V2.1 FGDC Utilities Classification]
HTW_M	High Temperature Water Main: water greater that 250 deg. F [SDSFIE
	V2.1 FGDC Utilities Classification]
HTW_S	High Temperature Water Service: water greater that 250 deg. F [SDSFIE
	V2.1 FGDC Utilities Classification]

HYDRANT_PIT	hydrant control pit [SDSFIE V2.1 FGDC Utilities Classification]
HYDRO	hydropower [SDSFIE V1.4]
IRREGULAR	Irregular (not circular or rectangular) [SDSFIE V2.31 Air Force]
JUNCTION_BOX	junction box [SDSFIE V2.1 FGDC Utilities Classification]
JUNCTION_BOX	junction box [SDSFIE V1.4]
JUNCTION_BOX	junction box [SDSFIE V2.1 FGDC Utilities Classification]
JUNCTION_BOX	junction box [SDSFIE V1.4]
JUNCTION_BOX	junction box [SDSFIE V2.1 FGDC Utilities Classification]
JUNCTION_BOX	junction box [SDSFIE V2.1 FGDC Utilities Classification]
JUNCTION_BOX	junction box [SDSFIE V2.1 FGDC Utilities Classification]
LIQUIDFUEL	liquid fuel [SDSFIE V1.4]
LTW_M	Low Temperature Water Main: water less than 250 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
LTW_S	Low Temperature Water Service: water less than 250 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
MAIN	main line [SDSFIE V2.1 FGDC Utilities Classification]
MAIN	main line [SDSFIE V2.1 FGDC Utilities Classification]
MAIN	main line [SDSFIE V1.75]
MAIN	main line [SDSFIE V2.1 FGDC Utilities Classification]
MAIN	main line [SDSFIE V1.6]
MAIN	main control valve [SDSFIE V1.4]
MANHOLE	manhole [SDSFIE V1.4]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V2.1 FGDC Utilities Classification]
MANHOLE	manhole [SDSFIE V1.4]
NATGAS	natural gas [SDSFIE V1.4]
NOT_APPLICABLE	Not Applicable [SDSFIE V2.31 Air Force]
OIL	oil [SDSFIE V1.4]
ORDNANCE	Ordinance. [SDSFIE V2.31 Cherry Point]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
OVERFLOW	directs excessive wastewater to another location [SDSFIE V1.75]
POSTINDICATOR	post indicator gate valve [SDSFIE V2 AWWA]
PRV	Pressure Reducing Valve [SDSFIE V2.1 FGDC Utilities Classification]
PULL_BOX	pull box [SDSFIE V2.1 FGDC Utilities Classification]
RAW_WATER	raw water line [SDSFIE V1.6]
RECREAT	recreation [SDSFIE V1.4]
RECTANGULAR	Rectangular [SDSFIE V2.31 Air Force]
RET_CHW_M	Chilled Water Main Return: water less than 45 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
RET_CHW_S	Chilled Water Service Return: water less than 45 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
RET_DTW_M	Dual Temperature Main Service Return [SDSFIE V2.1 FGDC Utilities Classification]
RET_DTW_S	Dual Temperature Building Service Return [SDSFIE V2.1 FGDC Utilities Classification]
RET_HTW_M	High Temperature Water Main Return: water greater that 250 deg. F [SDSFIE V2.1 FGDC Utilities Classification]
RET_HTW_S	High Temperature Water Service Return: water greater that 250 deg. F [SDSFIE V2.1 FGDC Utilities Classification]
RET_LTW_M	Low Temperature Water Main Return: water less than 250 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
RET_LTW_S	Low Temperature Water Service Return: water less than 250 deg. F. [SDSFIE V2.1 FGDC Utilities Classification]
RET_S_M	Steam Main Return [SDSFIE V2.1 FGDC Utilities Classification]
RET_S_S	Steam Service Return [SDSFIE V2.1 FGDC Utilities Classification]
RETURN	Miscellaneous Return Line [SDSFIE V2.1 FGDC Utilities Classification]
S_M	Steam Main [SDSFIE V2.1 FGDC Utilities Classification]
S_S	Steam Service [SDSFIE V2.1 FGDC Utilities Classification]
SANITATION	sanitation sewage [SDSFIE V1.4]
SERVICE	building/facility service [SDSFIE V2.1 FGDC Utilities Classification]
SERVICE	building/facility service [SDSFIE V1.75]
SERVICE	building/facility service [SDSFIE V2.1 FGDC Utilities Classification]
SERVICE	service line [SDSFIE V2.1 FGDC Utilities Classification]
SERVICE	service control valve [SDSFIE V1.4]

SERVICE	building/facility service [SDSFIE V1.6]
SIPHON	siphon line used to transport water [SDSFIE V1.8 USGS]
SLUDGE	sludge [SDSFIE V1.4]
SLUDGE	Sludge. [SDSFIE V2.31 Air Force]
SPRINKLER	sprinkler head [SDSFIE V1.6]
STEAM	steam [SDSFIE V1.4]
STORMWATER	storm/rainwater [SDSFIE V1.4]
TAP	line tap [SDSFIE V2.1 FGDC Utilities Classification]
TAP	line tap [SDSFIE V2.1 FGDC Utilities Classification]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
TEST_BOX	test box [SDSFIE V2.1 FGDC Utilities Classification]
TMPHOLD	temporary holding basin [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	Unknown [SDSFIE V2.31 Air Force]
UNKNOWN	unknown [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
VALVE	valve [SDSFIE V2.1 FGDC Utilities Classification]
VALVE	valve [SDSFIE V2.1 FGDC Utilities Classification]
VALVE_PIT	valve pit [SDSFIE V1.4]
VALVE_PIT	valve pit [SDSFIE V2.1 FGDC Utilities Classification]
VALVE_PIT	valve pit [SDSFIE V2.1 FGDC Utilities Classification]
VALVE_PIT	valve pit [SDSFIE V2.1 FGDC Utilities Classification]
VENT	vent line [SDSFIE V2.1 FGDC Utilities Classification]
VENT	vent line [SDSFIE V2.1 FGDC Utilities Classification]
VENT_PIT	vent pit [SDSFIE V2.1 FGDC Utilities Classification]
VENT_PIT	vent pit [SDSFIE V2.1 FGDC Utilities Classification]
WASTEWATER	wastewater [SDSFIE V1.4]
WATER	water [SDSFIE V1.4]
WATERSUP	water supply [SDSFIE V1.4]
utilown_d	
Value	Definition (Notes) [Source]
PRIVATE	Private entity (e.g., individual, corporation, etc.). [SDSFIE V2 AWWA]
PUBLIC	Public entity (e.g., federal, state, or local government). [SDSFIE V2
vehdtype_d	
Value	Definition (Notes) [Source]
GOV	Areas that contain government owned vehicles only. [SDSFIE V2.5]
POV	Areas that contain privately owned vehicles. [SDSFIE V2.5]
vert_loc_d	
Value	Definition (Notes) [Source]
ELEVATED	Elevated. [SDSFIE V2.4 USGS]
NEAR	Near. [SDSFIE V2.4 USGS]
UNDERGROUND	Underground. [SDSFIE V2.4 USGS]
UNSPECIFIED	Unspecified. [SDSFIE V2.4 USGS]
volt_req_d	
Value	Definition (Notes) [Source]
AC_+120V	+120 Volt AC. [SDSFIE V2.5 AIR FORCE]
DC_+5V	+5 Volt DC. [SDSFIE V2.5 AIR FORCE]
DC_+5V_+12V	+5 and +12 Volt DC. [SDSFIE V2.5 AIR FORCE]
DC_+9V	+9 Volt DC. [SDSFIE V2.5 AIR FORCE]
DC_12V	-12 Volt DC. [SDSFIE V2.5 AIR FORCE]
DC_24V	-24 Volt DC. [SDSFIE V2.5 AIR FORCE]
OTHER	Other. [SDSFIE V2.5 AIR FORCE]
TBD	To Be Determined. [SDSFIE V2.5 AIR FORCE]
watts_d	
Value	Definition (Notes) [Source]
100	100w. [SDSFIE V2.4 USMC]
1000	1000w. [SDSFIE V2.4 USMC]
150	150w. [SDSFIE V2.4 USMC]
175	175w. [SDSFIE V2.4 USMC]
200	200w. [SDSFIE V2.4 USMC]
250	250w. [SDSFIE V2.4 USMC]
400	400w. [SDSFIE V2.4 USMC]
7	7w [SDSFIE V1.9]
70	70w [SDSFIE V1.9]

weight_u_d, wght_u_d

Value	Definition (Notes) [Source]
CARAT	Carat. [SDSFIE V2.5]
CWT	Short hundredweights - cental. [SDSFIE V2.5]
DALB	A unit of mass equal to ten pounds. [SDSFIE V2.5 SI]
DWT	Pennyweights. [SDSFIE V2.5]
G_CC	Grams per cubic centimeter. [SDSFIE V2.5]
G_CM3	Gram per cubic centimeter. [SDSFIE V2.5 SI]
G_KG	Gram per kilogram. [SDSFIE V2.5 SI]
G_L	Gram per liter. [SDSFIE V2.5]
G_M2	Gram per square meter. [SDSFIE V2.5 SI]
G_M3	Gram per cubic meter. [SDSFIE V2.5 SI]
G_ML	Gram per milliliter. [SDSFIE V2.5 SI]
GAL_ACR	Gallon per acre. [SDSFIE V2.5 ANSI]
GMP100CC	Grams per 100cc. [SDSFIE V2.5]
GR	Grains. [SDSFIE V2.5 ANSI3.50-1986]
GR_FT3	Grains per cubic foot. [SDSFIE V2.5 ANSI]
HLB	A unit of mass equal to one hundred pounds. [SDSFIE V2.5 SI]
KG	Kilograms. [SDSFIE V2.5 ISO10003-1]
KG_GAL	Kilogram per gallon. [SDSFIE V2.5 SI ANSI]
KG_HA	Kilogram per hectare. [SDSFIE V2.5 SI]
KG_KG	Kilogram per kilogram. [SDSFIE V2.5 SI]
KG_KGAL	Kilogram per kilogallon. [SDSFIE V2.5 SI ANSI]
KG_L	Kilogram per liter. [SDSFIE V2.5 SI]
KG_M2	Kilogram per square meter. [SDSFIE V2.5 SI]
KG_M3	Kilogram per cubic meter. [SDSFIE V2.5 SI]
KG_MG	Kilogram per megagram. [SDSFIE V2.5 SI ANSI]
KLB	A unit of mass equal to one thousand pounds. [SDSFIE V2.5 SI]
KLB_LB	Kilopound per pound. [SDSFIE V2.5 SI ANSI]
KTONS	Kilotons. [SDSFIE V2.5]
LB	Pounds (Avoirdupois). [SDSFIE V2.5 ANSI3.50-1986]
LB_ACR	Pound per acre. [SDSFIE V2.5 SI ANSI]
LB_BBL	Pound per barrel. [SDSFIE V2.5 SI ANSI]
LB_GAL	Pound per gallon. [SDSFIE V2.5 SI ANSI]
LB_HLB	Pound per hundred pounds. [SDSFIE V2.5 SI ANSI]
LB_KGAL	Pound per kilogallon. [SDSFIE V2.5 SI ANSI]
LB_KLB	Pound per kilopound. [SDSFIE V2.5 SI ANSI]
LB_MBTU	Pound per million BTU. [SDSFIE V2.5 SI ANSI]
LB_MOL	Molecular weight. [SDSFIE V2.5 SI]
LB_TON	Pound per ton. [SDSFIE V2.5 SI ANSI]
LBT	Pounds (Troy). [SDSFIE V2.5]
MEGAGRAM	Megagrams. [SDSFIE V2.5 Air Force]
MG_CM3	Milligram per cubic centimeter. [SDSFIE V2.5 SI]
MG_G	Milligram per gram. [SDSFIE V2.5 SI]
MG_KG	Milligram per kilogram. [SDSFIE V2.5 SI]
MG_L	Milligram per liter. [SDSFIE V2.5 SI]
MG_M2	Milligram per square meter. [SDSFIE V2.5 SI]
MG_M3	Milligram per cubic meter. [SDSFIE V2.5 SI]
MGL	Milligrams per liter. [SDSFIE V2.5]
MILLIGRAM	Milligrams. [SDSFIE V2.5 ISO10003-1 ANSI]
ML_L	Milliliter per liter. [SDSFIE V2.5 SI]
MLB	A unit of mass equal to one thousandth of a pound or equal to one million pounds. [SDSFIE V2.5 SI]
MOL_L	Mole per liter. [SDSFIE V2.5 SI]
NG	A unit of mass equal to one billionth of a gram. [SDSFIE V2.5 SI]
NG_CM3	Nanogram per cubic centimeter. [SDSFIE V2.5 SI]
NG_G	Nanogram per gram. [SDSFIE V2.5 SI]
NG_KG	Nanogram per kilogram. [SDSFIE V2.5 SI]
NG_L	Nanogram per liter. [SDSFIE V2.5 SI]
NG_M2	Nanogram per square meter. [SDSFIE V2.5 SI]
NG_M3	Nanogram per cubic meter. [SDSFIE V2.5 SI]
OZ	Ounces (Avoirdupois). [SDSFIE V2.5 ANSI3.50-1986]
OZPTON	Ounces per ton. [SDSFIE V2.5]
PG	A unit of mass equal to one trillionth of a gram. [SDSFIE V2.5 SI]
PG_CM3	Picogram per cubic centimeter. [SDSFIE V2.5 SI]
PG_G	Picogram per gram. [SDSFIE V2.5 SI]
PG_KG	Picogram per kilogram. [SDSFIE V2.5 SI]
PG_L	Picogram per liter. [SDSFIE V2.5 SI]
PG_M2	Picogram per square meter. [SDSFIE V2.5 SI]

PG_M3	Picogram per cubic meter. [SDSFIE V2.5 SI]
PPFT3	Pounds per cubic foot. [SDSFIE V2.5]
PPM3	Pounds per cubic meter. [SDSFIE V2.5]
PPYD3	Pounds per cubic yard. [SDSFIE V2.5]
QNT	Quintals. [SDSFIE V2.5]
T_HA	Metric ton per hectare. [SDSFIE V2.5 SI]
TNL	Tons (long). [SDSFIE V2.5]
TNSH	Tons (short). [SDSFIE V2.5]
TON	A unit of mass equal to 2000 pounds, 0.907 metric ton, or 907.20 kilograms. Also referred to as a short ton. [SDSFIE V2.5 SI ANSI]
TOZ	Ounces (Troy). [SDSFIE V2.5 ANSI X3.50-1986]
UG	A unit of mass equal to one millionth of a gram. [SDSFIE V2.5 SI]
UG_CM3	Microgram per cubic centimeter. [SDSFIE V2.5 SI]
UG_G	Microgram per gram. [SDSFIE V2.5 SI]
UG_KG	Microgram per kilogram. [SDSFIE V2.5 SI]
UG_L	Microgram per liter. [SDSFIE V2.5 SI]
UG_M2	Microgram per square meter. [SDSFIE V2.5 SI]
UG_M3	Microgram per cubic meter. [SDSFIE V2.5 SI]
ULB	A unit of mass equal to one millionth of a pound. [SDSFIE V2.5 SI]
UMOL	Microgram per mole. [SDSFIE V2.5 SI]
wind_ty_d	
Value	Definition (Notes) [Source]
DELTA	delta [SDSFIE V1.4]
GROUND_Y	grounded wye [SDSFIE V1.4]
HIGHLEG_DELTA	high-leg delta [SDSFIE V1.4]
OPEN_DELTA	open delta [SDSFIE V1.4]
OTHER	other [SDSFIE V1.4]
TBD	to be determined [SDSFIE V1.4]
UNKNOWN	unknown [SDSFIE V1.4]
Y	wye [SDSFIE V1.4]
wssystem_d	
Value	Definition (Notes) [Source]
COMMUNITY	Water systems that serve the same people or facilities year-round (e.g., in homes, businesses, or military installations). [SDSFIE V2 AWWA]
NT_NONCOMMUNITY	Water systems that serve the same people and facilities, but not year-round (e.g., schools that have their own system). [SDSFIE V2 AWWA]
TR_NONCOMMUNITY	Water systems that do not consistently serve the same people (e.g., rest stops, campgrounds, gas stations that have their own water system). [SDSFIE V2 AWWA]
wwsystem_d	
Value	Definition (Notes) [Source]
COMMERCIAL	Commercial type wastewater system (i.e., serves residential areas, businesses, industry, etc. outside the boundaries of a municipality).
MUNICIPAL	Municipal type of wastewater treatment system or utility (i.e., serves residential areas, businesses, and industry located within a municipality).

Appendix C – CADD TO GIS CROSSWALK

This appendix lists each of the CADD layers defined in MAA's CADD Standards Manual, Issue 1.0 which are associated with GIS layers defined in this document. The CADD layers are grouped by category (i.e. Airfield, Airspace, Environmental, etc.) and by Feature Type (i.e. Air Operations Area, Aircraft Deicing Area, etc.) as the GIS layers were in Appendix. Each Feature Type has one or more CADD layers associated with it. For each CADD layer, the layer name and description are provided. More information about these layers can be found in the CADD Standards Manual. It is important to note that many CADD layers included in the CADD Standards Manual are not relevant for GIS and are therefore excluded from this appendix.

Group: Airfield

AircraftDeicingArea Polygon Accuracy: +/- 5 Ft Sensitivity: Unclassified

An area where frost, ice, or snow is removed from aircraft in order to provide clean surfaces and/or clean surfaces of the aircraft receive protection against the formation of frost or ice and accumulation of snow or slush for a limited period of time [Source: AC 150/5300-13*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-APRN-DEIC	Aircraft Deicing Area

AircraftGateStand Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

Operational area of gate (parking) stand. If no gate stand area painting is available, a virtual parking stand area should be provided [Source: RTCA DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-APRN-ACPK	Aircraft gate/stand parking area

AircraftNonMovementArea Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

An area where aircraft cannot be seen by a control tower and therefore are restricted to move.

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-APRN-ANOM	Aircraft non-movement area

AirfieldLight Point Accuracy: +/- 5 Ft Sensitivity: Restricted

Any lighting located within or near an airport boundary that provides guidance for airborne and ground maneuvering of aircraft [Source: AIM, AC 150/5340-24]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
E-AFLD-LITE-APPR	Approach lights
E-AFLD-LITE-DIST	Distance and arresting gear markers
E-AFLD-LITE-LANE	Hoverlane, taxilane, and helipad lights
E-AFLD-LITE-OBST	Obstruction lights
E-AFLD-LITE-RUNW	Runway lights
E-AFLD-LITE-SIGN	Taxiway guidance signs
E-AFLD-LITE-TAXI	Taxiway lights
E-AFLD-LITE-THRS	Threshold lights
E-LITE-APPR	Approach lights
E-LITE-APRN	Apron Lighting
E-LITE-CONS	Constant Current Regulators
E-LITE-DIST	Distance and arresting gear markers and lights
E-LITE-EXTR-IDEN	Exterior light identifier tags, symbol modifiers, and text

E-LITE-IDEN	Light fixture identifier tags
E-LITE-LANE	Hoverlane, taxilane, and helipad lights
E-LITE-OBST	Obstruction lights
E-LITE-RNWX-GARD	Runway guard lights
E-LITE-ROOF	Roof lighting
E-LITE-RUNW-CNTR	Runway Centerline lights
E-LITE-RUNW-DTGS1	Runway Distance to go lights
E-LITE-RUNW-EDGE	Runway edge lights
E-LITE-RUNW-TDZN	Runway Touchdown Zone lights
E-LITE-SIGN	Taxiway guidance signs
E-LITE-TAXI-CNTL	Taxiway centerline lights
E-LITE-TAXI-EDGE	Taxiway edge lights
E-LITE-THRS	Threshold lights
V-AFLD-LITE-APPR	Approach lights
V-AFLD-LITE-DIST	Distance and arresting gear markers
V-AFLD-LITE-LANE	Hoverlane, taxilane, and helipad lights
V-AFLD-LITE-OBST	Obstruction lights
V-AFLD-LITE-RUNW	Runway lights
V-AFLD-LITE-SIGN	Taxiway guidance signs
V-AFLD-LITE-TAXI	Taxiway lights
V-AFLD-LITE-THRS	Threshold lights
V-LITE-APPR	Approach lights
V-LITE-LANE	Hoverlane, taxilane, and helipad lights
V-LITE-OBST	Obstruction lights
V-LITE-RUNW-CNTR	Runway Centerline lights
V-LITE-RUNW-TDZN	Runway Touchdown Zone lights
V-LITE-TAXI	Taxiway lights
V-LITE-THRS	Threshold lights

AirOperationsArea

Polygon Accuracy: +/- 5 Ft Sensitivity: Unclassified

Area, specified in the airport security program, where security measures are carried out (aircraft movement, aircraft parking, loading, and safety areas as well as any adjacent areas that are not separated by adequate security systems or procedures) [Source: 49 CFR Part 1542, Airport Security*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-AHOA	Air Operations Area

AirportBoundary

Polygon Accuracy: +/- 1 Ft Sensitivity: Restricted

A polygon, or a set of polygons, that encompasses all property owned or controlled by the airport for aviation purposes [Source: AC 150/5300-13, Appendix 7, Order 5190.6A, Section 5]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-PROP	Airport property
C-PROP-IDEN	Property annotation
V-PROP-IDEN	Property annotation

AirportSign

Point Accuracy: +/-10 Ft Sensitivity: Restricted

Signs at an airport other than surface painted signs [Source: AC 150/5340-18]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
A-ELEV-SIGN	Signage
A-FLOR-SIGN	Signage
C-APRN-SIGN	Airfield signs on the apron
C-NGAS-SIGN	Surface markers/signs

C-PRKG-SIGN	Signs
C-ROAD-SIGN	Signs
C-RUNW-SIGN	Airfield signs on the runway such as distance remaining signs
C-SSWR-SIGN	Surface markers/signs
C-STRM-SIGN	Surface markers/signs
C-TAXI-SIGN	Airfield signs on the taxiway such as taxiway designator, hold short and directional signs
E-SPCL-TRAF	Traffic signal system
I-FLOR-SIGN	Signage
S-SIGN-BUOY	Sign buoys
S-SIGN-EXTN	Extrusions
S-SIGN-FRMG	Framing & connections
S-SIGN-GAGE	Staff gages
S-SIGN-PANL	Sign panels
S-SIGN-SPRT	Supports
S-SIGN-TEXT	Signage text
V-LITE-DIST	Distance and arresting gear markers
V-LITE-SIGN	Taxiway guidance signs
V-NGAS-SIGN	Surface markers/signs
V-PRKG-SIGN	Signs
V-ROAD-SIGN	Signs
V-SPCL-TRAF	Traffic signal system
V-SSWR-SIGN	Surface markers/signs
V-STRM-SIGN	Surface markers/signs

Apron Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A defined area on an airport or heliport, paved or unpaved, intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling, parking, or maintenance [Source:

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-APRN-GRND	Grounding points
C-APRN-IDEN	Airfield apron - annotation
C-APRN-OTLN	Airfield apron - outlines
V-APRN-IDEN	Airfield apron - annotation
V-APRN-OTLN	Airfield apron - outlines

DesignSurface Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A three-dimensional surface that is used in runway design [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-DSRF-BLDR	Building Restriction Line
C-AFLD-DSRF-KEYH	Key holes
C-AFLD-DSRF-NMOV	Aircraft Non-Movement Area
C-AFLD-DSRF-OFA_	Object Free Area
C-AFLD-DSRF-OFZ_	Object Free Zone
C-AFLD-DSRF-POFA	Precision Object Free Area
C-AFLD-DSRF-RPZ_	Runway Protection Zone
C-AFLD-DSRF-RSA_	Runway Safety Area
C-HELI-DSRF	Helipad design surface
C-OVRN-CNTR-IDEN	Centerline annotation
C-OVRN-IDEN	Airfield overrun area - annotation
C-OVRN-OTLN	Airfield overrun area - outlines
C-RUNW-CLRW	Runway clearway
V-OVRN-IDEN	Airfield overrun area - annotation

V-OVRN-OTLN Airfield overrun area - outlines

DisplacedThreshold Point Accuracy: +/- 5 Ft Sensitivity: Restricted

The beginning of that portion of the runway available for landing when it is located at a point other than the physical end of the runway [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-DISP	Displaced threshold markings
C-RUNW-THRS	Threshold markers

FrequencyArea Polygon Accuracy: +/-20 Ft Sensitivity: Unclassified

Area specifying the designated part of the surface movement area where a specific frequency is required by ATC or ground control [Source: RTCA DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-FREQ	Frequency Area

Helipad Polygon Accuracy: +/- 5 Ft Sensitivity: Unclassified

A small designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. Also known as the Touchdown and Lift-Off Area (TLOF) [Source: AC 150/5390-2B]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-CNTR	Centerline markings

HelipadFATO Polygon Accuracy: +/- 5 Ft Sensitivity: Unclassified

A defined area over which the final phase of the approach to a hover, or a landing, is completed and from which the takeoff is initiated. This area was called the "takeoff and landing area" in previous publications [Source: AC 150/5390-2B]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-FATO	Helipad FATO

HelipadThreshold Point Accuracy: +/- 5 Ft Sensitivity: Unclassified

Based on the predominant wind direction, the helipad threshold position is congruent with the approach/takeoff paths [Source: RTCA DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-DISP	Displaced threshold markings
C-HELI-THRS	Threshold markers

HelipadTLOF Polygon Accuracy: +/- 5 Ft Sensitivity: Unclassified

A load bearing, generally paved area, normally centered in the FATO, on which the helicopter lands or takes off. The TLOF is frequently called a helipad or helideck. TLOFs shall be photogrammetrically determined [Source: AC 150/5390-2B]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-TLOF	Helipad take off and landing area

MarkingArea Polygon Accuracy: +/- 2 Ft Sensitivity: Unclassified

An element of Marking whose geometry is a polygon [Source: AC 150/5340-1]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-IDEN	Heliport numbers and letters

C-HELI-TDZM	Touchdown zone markers
C-RUNW-DIST	Fixed distance markings
C-RUNW-IDEN	Airfield runway annotation
C-RUNW-TDZM	Touchdown zone markers
V-RUNW-CNTR-MRKG	Centerline markings
V-RUNW-DISP	Displaced threshold markings
V-RUNW-DIST	Fixed distance markings
V-RUNW-SIDE	Side stripes
V-RUNW-TDZM	Touchdown zone markers
V-RUNW-THRS	Threshold markers

MarkingLine Line Accuracy: +/- 2 Ft Sensitivity: Restricted

An element of Marking whose geometry is a line [Source: AC 150/5340-1, RTCA/DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-APRN-CNTR	Apron centerlines
C-APRN-HOLD	Holding position markings
C-APRN-MRKG	Apron markings
C-APRN-SECU	Security zone markings
C-APRN-SHLD	Shoulders with annotation
C-APRN-SHLD-MRKG	Shoulder stripes
C-HELI-BLST	Blast pad and stopway markings
C-HELI-CNTR-MARK	Centerline markings
C-HELI-DIST	Fixed distance markings
C-HELI-SIDE	Side stripes
C-OVRN-CNTR	Centerlines
C-OVRN-SHLD-MRKG	Shoulder markings
C-PADS-CNTR	Centerlines
C-PADS-OTLN	Pad - outlines
C-PVMT-MRKG-WHIT	Roadway markings (white)
C-PVMT-MRKG-YELO	Roadway markings (yellow)
C-RUNW-CNTR-MARK	Centerline markings
C-RUNW-CNTR-MRKG	Centerline markings
C-RUNW-SHLD	Shoulder markings
C-RUNW-SIDE	Side stripes
C-TAXI-CNTR-MARK	Centerline markings
C-TAXI-CNTR-MRKG	Centerline markings
C-TAXI-EDGE	Edge markings
C-TAXI-SHLD	Shoulders with annotation
V-APRN-HOLD	Holding position markings
V-APRN-MRKG	Apron markings
V-APRN-SECU	Security zone markings
V-APRN-SHLD-MRKG	Shoulder stripes
V-OVRN-SHLD-MRKG	Shoulder markings
V-PVMT-MRKG	Pavement markings
V-TAXI-CNTR-IDEN	Centerline annotation
V-TAXI-CNTR-MRKG	Centerline markings

PassengerLoadingBridge Polygon Accuracy: +/-10 Ft Sensitivity: Restricted

A bridge for loading/unloading access to airplanes for passengers and crew

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
A-EQPM-JETB	Aircraft Jetbridge

RestrictedAccessBoundary Line Accuracy: +/- 5 Ft Sensitivity: Confidential

A restricted area boundary defines aircraft movement area that is strictly reserved for use by authorized personnel only. These boundaries, typically found on joint civil/military use airports, are often painted red lines on taxiway or apron surfaces. [Source: NGS*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-SECR-RSTR	Military restricted access boundary

RsaBoundary Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

The boundary of the Runway Safety Area (RSA) for which the Airport Authority has maintenance responsibility. [Source: AC 150/53XX-XX (Vol. C)]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-SAFT	Runway Safety Area

Runway Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A rectangular area on a land airport prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees: e.g., Runway 10/28, Runway 07/25. [Source: AC 150/5300-13*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-EDGE	Airfield runway edges
V-RUNW-EDGE	Airfield runway edges
V-RUNW-IDEN	Airfield runway annotation

RunwayArrestingArea Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

FAA-approved high energy absorbing material of a specific strength that will reliably and predictably bring aircraft to a stop without imposing loads that exceed design limits, cause major structural damage, or impose excessive forces on its occupants. [Source: AC 150/5220-22*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-ARST	Runway Arresting Gear Location

RunwayBlastPad Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A specially prepared surface placed adjacent to the ends of runways to eliminate the erosive effect of the high wind forces produced by airplanes at the beginning of their takeoff rolls [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-BLST	Blast pad and stopway markings
V-RUNW-BLST	Blast pad and stopway markings

RunwayCenterline Line Accuracy: +/- 2 Ft Sensitivity: Restricted

Continuous line along the painted centerline of a runway connecting the middle-points of the two outermost thresholds. Centerline is composed of many centerline points (see RunwayControlPoint). It is used to calculate grade and line-of-sight criteria. [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-CNTR	Centerlines
V-RUNW-CNTR	Centerlines

RunwayEnd Point Accuracy: +/- 1 Ft Sensitivity: Restricted

End of the runway surface suitable for landing or takeoff of aircraft. They are related to and describe approach and departure procedure characteristics of a runway threshold. It is the same as the runway threshold when the threshold is not displaced. [Source: NGS*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-ENDP	Runway endpoint

RunwayIntersection Polygon Accuracy: +/- 2 Ft Sensitivity: Restricted

The area of intersection between two or more runways [Source: RTCA DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-INTS	Runway intersection

RunwayLabel Point Accuracy: +/- 1 Ft Sensitivity: Secret

The bottom center position of the runway designation marking [Source: NGS]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-ENDP-MARK	Runway label marking point

RunwayLAHSO Line Accuracy: +/- 5 Ft Sensitivity: Restricted

Runway markings where an aircraft is to stop when the runway is normally used as a taxiway or used for Land and Hold Short Operations per letter of agreement with the ATCT. [Source: Order 7110.118*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-LAHS	Runway land and hold short area

RunwaySegment Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A section of the runway surface. The runway surface can be defined by a set of non-overlapping RunwaySegment polygons. Use RunwaySegment to model the physical runway pavement in terms of surface, material, strength and condition. [Source: AC 150/5335-5, AC 150/5320-12, AC 150/5320-17, AC 150/5320-6*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-SEGM	Runway segment

Shoulder Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft running off the pavement; enhance drainage; and blast protection [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-HELI-SHLD	Shoulder markings
C-PADS-SHLD	Shoulders with annotation
V-APRN-SHLD	Shoulders with annotation
V-RUNW-SHLD	Shoulder markings
V-TAXI-SHLD	Shoulders with annotation

Stopway Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A defined rectangular surface beyond the end of a runway prepared or suitable for use in lieu of runway to support an airplane, without causing structural damage to the airplane, during an aborted takeoff [Source: AC 150/5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RUNW-STWY	Runway stopway markings

TaxiwayHoldingPosition Line Accuracy: +/- 2 Ft Sensitivity: Restricted

A designated position at which taxiing aircraft and vehicles shall stop and hold position, unless otherwise authorized by the aerodrome control tower [Source: RTCA DO-272]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TAXI-HOLD	Holding lines
V-TAXI-HOLD	Holding lines

TaxiwaySegment Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

The taxiway segment features are used to represents taxiway, apron taxiway, rapid exit taxiway, taxiway intersection, and aircraft stand taxilane surface [Source: AC 150-5300-13]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TAXI-IDEN	Taxiway - annotation
C-TAXI-OTLN	Taxiway - outlines
V-TAXI-EDGE	Edge markings
V-TAXI-IDEN	Taxiway - annotation
V-TAXI-OTLN	Taxiway - outlines

Group: Airspace

FlightTrackLine Line Accuracy: +/-20 Ft Sensitivity: Unclassified

A line indicating the general flight track used in the vicinity of airfields. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-ARWY	Airway
C-AFLD-TRKL	Flight Track Line
V-AERI-PATH	Aerial flight lines/paths

FlightTrackPoint Point Accuracy: +/-20 Ft Sensitivity: Unclassified

A point in space that designates aircraft arrival and departure routes [Source: FAA]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-TRKP	Flight Track Point

LandmarkSegment Line Accuracy: +/-10 Ft Sensitivity: Unclassified

Geographic features located in the vicinity of an airport that aid geographic orientation. The features may or may not have obstruction value. These may include objects such as roads, fences, utility lines, shorelines, levees, quarries and airports, etc [Source: NGS*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AIRS-LNDM	Landmark segment

Obstacle Point Accuracy: +/- Ft Sensitivity: Restricted

All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that represent a defined Obstruction Identification Surface [Source: NGS]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AIRS-OBSC	Airfield obstruction
C-AIRS-OBST-PPNT	Airspace obstructions - Point
C-OBST-AIRS	Airspace obstructions
C-OBST-AIRS-IDEN	Obstruction annotation
V-OBST-AIRS	Airspace obstructions
V-OBST-AIRS-IDEN	Airspace obstruction annotation

ObstructionArea Polygon Accuracy: +/-20 Ft Sensitivity: Restricted

Areas penetrating the plane of a specified or supplemental obstruction identification surface (OIS). Penetrating groups of trees, ground, buildings, and mobile cranes are the most common types of area limits found within the surfaces of a FAR-77 survey. [Source: NGS*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AIRS-OBST-LINE	Airspace obstructions - Line
C-AIRS-OBST-POLY	Airspace obstructions - Polygon

ObstructionSurface Polygon Accuracy: +/-20 Ft Sensitivity: Restricted

A derived imaginary Obstruction Identification Surface defined by the FAA. [Source: NGS]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AIRS-OTHR	Other airspace surfaces
C-AIRS-PART-APRC	FAR Part 77 Approach Surface
C-AIRS-PART-CONL	FAR Part 77 Conical Surface
C-AIRS-PART-HORZ	FAR Part 77 Horizontal Surface
C-AIRS-PART-PRIM	FAR Part 77 Primary Surface
C-AIRS-PART-TRNS	FAR Part 77 Transitional Surface
C-AIRS-TERP	TERPS surfaces

RegulatedAirspaceArea Polygon Accuracy: +/-40 Ft Sensitivity: Confidential

3D airspace which must be confined due to the types of operations in that area. Includes any associated underlying surface and subsurface training areas. [Source: SDSFIE*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AIRS-ISOC	Approach surface isoclines
C-TRAF-IDEN	Airfield traffic area annotation
C-TRAF-TYPA	Type A traffic area
C-TRAF-TYPB	Type B traffic area
C-TRAF-TYPC	Type C traffic area
V-TRAF-IDEN	Airfield traffic area annotation
V-TRAF-TYPA	Type A traffic area
V-TRAF-TYPB	Type B traffic area
V-TRAF-TYPC	Type C traffic area

Group: Cadastral

County Polygon Accuracy: +/-50 Ft Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the county government. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-PROP-CNTY	County Boundary

EasementAndRightofWay Polygon Accuracy: +/- 0. Ft Sensitivity: Confidential

A parcel of land for which formal or informal deed easement rights exist [Source: SDSFIE (modified)]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-PROP-ESMT	Easements
C-PROP-RWAY	Right of ways
C-PROP-RWAY-ACQU	Right of way to be acquired in perpetuity
V-PROP-ESMT	Easements

V-PROP-RWAY Right of ways

FAARegionArea Polygon Accuracy: +/-40 Ft Sensitivity: Unclassified

This feature depicts the FAA regions. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-FAAR	FAA Region

LandUse Polygon Accuracy: +/-50 Ft Sensitivity: Confidential

A description of the human use of land and water [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-PROP-LUSE	Land Use Area

LeaseZone Polygon Accuracy: +/- 0. Ft Sensitivity: Unclassified

A parcel of land leased by an individual, agency, or organization for their use. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
A-PROP-LEAS	Lease line (interior)
C-PROP-LEAS	Lease line (exterior / ground lease)
V-PROP-LEAS	Lease line (surveyed)

Municipality Polygon Accuracy: +/-50 Ft Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the municipal government. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-PROP-MUNI	Municipal Boundary

Parcel Polygon Accuracy: +/- 1 Ft Sensitivity: Restricted

A single cadastral unit, which is the spatial extent of the past, present, and future rights and interests in real property and the geographic framework to support the description of the spatial extent. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-PROP-LINE	Property lines (Existing recorded plats)
V-PROP-QTRS	Quarter lines
V-PROP-SECT	Section lines
V-PROP-SXTS	Sixteenth lines (40 lines)

State Polygon Accuracy: +/-50 Ft Sensitivity: Restricted

Boundary line of the land and water under the right, power, or authority of the state government. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-PROP-STAT	State Boundary

Zoning Polygon Accuracy: +/-50 Ft Sensitivity: Restricted

A parcel of land zoned specifically for real estate and land management purposes; more specifically for commercial, residential, or industrial use. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
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Group: Environmental**ContaminationArea**

Polygon

Accuracy: +/-10 Ft Sensitivity: Restricted

A facility or other locational entity, (as designated by the Environmental Protection Agency) that is regulated or monitored because of environmental concerns. [Source: SDSFIE]

Associated CADD Layers:**Layer Name****Description**

H-POLL-CONC

Polluted area of concern

H-POLL-POTN

Potential spill, emission, or release source

FaunaHazardArea

Polygon

Accuracy: +/-10 Ft Sensitivity: Restricted

An area where there are hazards due to wildlife activities. This includes bird aircraft strike hazard (BASH) areas, and deer strike areas. [Source: SDSFIE]

Associated CADD Layers:**Layer Name****Description**

C-BORW-IDEN

Borrow/spoil area annotation

C-BORW-LINE

Borrow/spoil area

C-ECCO-BURR

Burrow

C-ECCO-DENS

Den

C-ECCO-GATR

Gator hole

C-ECCO-HUMK

Hummocks

C-ECCO-IDEN

Habitat annotation

C-ECCO-NEST

Nest, nesting tree

C-ECCO-PRCH

Perch/nesting hole

V-BORW-IDEN

Borrow/spoil area annotation

V-BORW-LINE

Borrow/spoil area

V-ECCO-BURR

Burrow

V-ECCO-DENS

Den

V-ECCO-GATR

Gator hole

V-ECCO-HUMK

Hummocks

V-ECCO-IDEN

Habitat annotation

V-ECCO-NEST

Nest, nesting tree

V-ECCO-PRCH

Perch/nesting hole

V-TOPO-SPEC

Species Site

FloodZone

Polygon

Accuracy: +/-10 Ft Sensitivity: Unclassified

Areas subject to 100-year, 500-year and minimal flooding [Source: SDSFIE]

Associated CADD Layers:**Layer Name****Description**

C-FLHA-025Y

25 year mark

C-FLHA-050Y

50 year mark

C-FLHA-100Y

100 year mark

C-FLHA-200Y

200 year mark

C-FLHA-500Y

500 year mark

C-FLHA-IDEN

Flood hazard area annotation

C-TOPO-FLZN

Flood Zone

V-FLHA-025Y

25 year mark

V-FLHA-050Y

50 year mark

V-FLHA-100Y

100 year mark

V-FLHA-200Y

200 year mark

V-FLHA-500Y

500 year mark

V-FLHA-IDEN

Flood hazard area annotation

FloraSpeciesSite Point Accuracy: +/-20 Ft Sensitivity: Unclassified

The specific location where an individual flora species or an aggregate of flora species has been identified [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
L-PLNT-CTNR	Containers or planters
L-PLNT-IDEN	Annotation
L-PLNT-PLTS	Planting plants (e.g., ornamental annuals and perennials)
L-PLNT-TREE	Trees (e.g., evergreen, deciduous, etc.)

ForestStandArea Polygon Accuracy: +/-10 Ft Sensitivity: Confidential

A forest flora community with similar characteristics. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
L-PLNT-BEDS	Planting beds (perennial and annual beds)
L-PLNT-BUSH	Bushes and shrubs (e.g., evergreen, deciduous, etc.)
L-PLNT-BUSH-LINE	Bush and shrub line
L-PLNT-GRND	Groundcover and vines
L-PLNT-MLCH	Mulches - organic and inorganic
L-PLNT-SPRG	Sprigs
L-PLNT-TREE-LINE	Tree line
L-PLNT-TURF	Lawn areas (turfing limits)
V-SITE-VEGE	Existing treelines and vegetation

HazMatStorageSite Point Accuracy: +/-10 Ft Sensitivity: Unclassified

A defined or bounded geographical area designated and used for the storage of contained hazardous materials. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
H-STOR-HAZM	Hazardous materials
H-STOR-HAZW	Hazardous waste

NoiseContour Polygon Accuracy: +/- 1 Ft Sensitivity: Confidential

An area that describes the noise attributed to operations. For aircraft operations, the Day/Night average sound level (Ldn) descriptor is typically used to categorize noise levels [Source: 14 CFR Part 150]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TOPO-AUZN	Noise Contour/Zone

NoiseIncident Point Accuracy: +/-10 Ft Sensitivity: Restricted

A formal complaint by an individual or group regarding excessive noise resulting from airport operations

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TOPO-AUCO	Noise Complaint

NoiseMonitoringPoint Point Accuracy: +/-10 Ft Sensitivity: Restricted

The location of noise sensing equipment or where a noise sample is taken. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TOPO-AUST	Noise Monitoring Station

SampleCollectionPoint

Point

Accuracy: +/-10 Ft Sensitivity: Confidential

The physical location at which one or more environmental hazards field samples are collected. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
B-BORE-CONE	Cone penetrometer test location
B-BORE-HOLE	Geophysical boring locations
B-BORE-IDEN	Geophysical location identification
B-BORE-LINE	Geophysical transect lines
B-BORE-PUSH	Direct push test location
B-BORE-STRK	Geophysical strike line
B-LOGS-FORM	Bore log form
B-LOGS-FRAM-TEXT	Text associated with boring log frame
B-SAMP-AUGR	Auger sample location
B-SAMP-CORE	Core sample location
B-SAMP-DRVE	Drive sample (shelby split spoon) location
B-SAMP-GRAB	Grab sample location
B-SAMP-IDEN	Sample location identification
B-SAMP-PERC	Percolation test hole
B-SAMP-PITS	Test pit sample location
B-SAMP-VERT	Vertical core hole location
B-SAMP-WASH	Wash bored hole location
B-WELL-ASR~	ASR wells
B-WELL-MONT	Monitoring wells
B-WELL-PIZO	Piezometers
C-TOPO-BORE	Boring locations and text
H-MNST-AIRQ	Air quality
H-MNST-IDEN	Annotation
H-SAMP-AIRS	Air samples
H-SAMP-BIOL	Biological samples
H-SAMP-GWTR	Ground water samples
H-SAMP-IDEN	Annotation
H-SAMP-MAGN	Magnetometer location points
H-SAMP-SEDI	Sediment samples
H-SAMP-SOIL	Soil samples
H-SAMP-SOLI	Solid material samples
H-SAMP-SWTR	Surface water samples
H-SAMP-WAST	Waste samples
V-BORE-GENL-LOCN	General boring X,Y location marker
V-BORE-GENL-NAME	General boring name
V-BORE-GENL-NOTE	General boring notes
V-BORE-GPRO-LOCN	GeoProbe X,Y location marker
V-BORE-GPRO-NAME	GeoProbe boring name
V-BORE-GPRO-NOTE	GeoProbe boring notes
V-BORE-UNDS-LOCN	Undisturbed boring X,Y location marker
V-BORE-UNDS-NAME	Undisturbed boring name
V-BORE-UNDS-NOTE	Undisturbed boring notes
V-BORE-VCOR-LOCN	Vibra-Core X,Y location marker
V-BORE-VCOR-NAME	Vibra-Core name
V-BORE-VCOR-NOTE	Vibra-Core notes
V-TOPO-BORE	Boring locations and text

Shoreline

Line

Accuracy: +/-10 Ft Sensitivity: Restricted

The boundary of a body of water including oceans, seas, lakes, rivers, streams, ponds, etc.

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-CHAN-BANK-IDEN	Channel/canal top of bank annotation
C-CHAN-BANK-TOP~	Channel/canal top of bank
C-CHAN-DACL	De-authorized channel limits, anchorages, etc.
C-CHAN-DACL-IDEN	De-authorized channel limits, anchorages, etc. - annotation
C-CHAN-LIMT	Channel limits, anchorages, turning basins, disposal areas,
C-CHAN-LIMT-IDEN	Channel limits, anchorages, turning basins, disposal areas, etc. - annotation
C-CHAN-SYMB	Channel/canal symbols
C-DRED-OHWM	Ordinary high water marks
C-RIVR-BANK-TOP~	Top of river bank
C-RIVR-EDGE	River edge
C-RIVR-IDEN	Identifier tags, symbol modifiers, and text
H-MNST-GWTR	Ground water
H-MNST-SWTR	Surface water
V-CHAN-BANK-IDEN	Channel/canal top of bank annotation
V-CHAN-BANK-TOP~	Channel/canal top of bank
V-CHAN-DACL	De-authorized channel limits, anchorages, etc.
V-CHAN-DACL-IDEN	De-authorized channel limits, anchorages, etc. - annotation
V-CHAN-LIMT	Channel limits, anchorages, turning basins, disposal areas,
V-CHAN-LIMT-IDEN	Channel limits, anchorages, turning basins, disposal areas, etc. - annotation
V-CHAN-SYMB	Channel/canal symbols
V-CHAN-TEXT	Channel/canal text, annotation with associated leaders
V-RIVR-BANK-TOP~	Top of river bank
V-RIVR-EDGE	River edge
V-RIVR-IDEN	Identifier tags, symbol modifiers, and text
V-SITE-EWAT	Edge of water
V-SITE-WATR	Water features
V-TOPO-SHOR	Shorelines, land features, and references

Wetland

Polygon Accuracy: +/-10 Ft Sensitivity: Restricted

Transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. [Source: SDSFIE*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-WETL-BOGS	Bogs
C-WETL-FENS	Fens
C-WETL-IDEN	Wetland annotation
C-WETL-MRSH	Fresh water marshes
C-WETL-MRSH-SALT	Tidal saltwater marshes
C-WETL-MRSH-TIDL	Tidal freshwater marsh
C-WETL-PCSN	Pocosins
C-WETL-PHOL	Vernal pools, playas, prairie potholes, wet meadows, and wet prairies
C-WETL-RPRN	Riparian forested wetlands
C-WETL-SLGH	Sloughs
C-WETL-SWMP	Swamps
V-TOPO-WETL	Wetland
V-WETL-BOGS	Bogs
V-WETL-FENS	Fens
V-WETL-IDEN	Wetland annotation
V-WETL-MRSH	Fresh water marshes
V-WETL-MRSH-SALT	Tidal saltwater marshes

V-WETL-MRSH-TIDL	Tidal freshwater marsh
V-WETL-PCSN	Pocosins
V-WETL-PHOL	Vernal pools, playas, prairie potholes, wet meadows, and wet prairies
V-WETL-RPRN	Riparian forested wetlands
V-WETL-SLGH	Sloughs
V-WETL-SWMP	Swamps

Group: Geodetic

AirportControlPoint Point Accuracy: +/- 0. Ft Sensitivity: Restricted

A control station established in the vicinity of, and usually on, an airport and tied to the National Spatial Reference System (NSRS) [Source: NGS]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-TOPO-RNYE	Runway centerline elevation point
C-TOPO-SPOT	Spot elevations
C-TOPO-SPOT-IDEN	Spot elevations - annotation
V-CTRL-BMRK	Benchmarks
V-CTRL-HCPT	Horizontal control points
V-CTRL-HVPT	Horizontal/vertical control points
V-CTRL-IDEN	Control point annotation
V-CTRL-TRAV	Traverse points
V-CTRL-VCPT	Vertical control points
V-SURV-DATA	Survey data (benchmarks and horizontal control points or monuments)
V-TOPO-SPOT	Spot elevations

CoordinateGridArea Line Accuracy: +/- 1 Ft Sensitivity: Restricted

A regular pattern of horizontal and vertical lines used to represent regular coordinate intervals along the x and y axis. This grid line can be used to generate an arbitrary grid system which is common on locator maps. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-DETL-GRPH	Graphics, gridlines, non-text items
C-GRID-FRAM	Frame
C-GRID-MAJR	Major grid lines
C-GRID-MINR	Minor grid lines
C-GRID-TEXT	Border text, annotation
C-TOPO-COOR	Coordinate grid ticks and text
C-TOPO-COOR-LALO	Latitude and longitude grid ticks
C-TOPO-COOR-STAT	State Plane coordinate ticks
G-GRID-COOR	X-Y coordinate grid lines
G-GRID-COOR-IDEN	X-Y coordinate grid lines annotation
G-GRID-EXTR	Column grid outside building
G-GRID-IDEN	Column grid tags
G-PROJ-LALO-COOR	Latitude/longitude coordinate grid ticks
G-PROJ-LALO-IDEN	Latitude/longitude coordinate text
G-PROJ-STAT-COOR	State plane coordinate grid ticks
G-PROJ-STAT-IDEN	State plane coordinate text
S-GRID-HORZ	Grid lines (horizontal)
S-GRID-VERT	Grid lines (vertical)
V-CTRL-GRID	Grid
V-GRID-FRAM	Frame
V-GRID-MAJR	Major grid lines

V-GRID-MINR	Minor grid lines
V-GRID-TEXT	Border text, annotation
V-TOPO-COOR	Coordinate grid ticks and text
V-TOPO-COOR-LALO	Latitude and longitude grid ticks
V-TOPO-COOR-STAT	State Plane coordinate ticks

ElevationContour Line Accuracy: +/- 1 Ft Sensitivity: Restricted

Connecting points on the surface of the earth of equal vertical elevation representing some fixed elevation interval. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-GRAD-EXST	Existing grade, ground line
C-GRAD-FNSH	Finished grade
C-TOPO-BKLN	Breaklines
C-TOPO-DTMP	DTM points
C-TOPO-DTMT	DTM triangles
C-TOPO-MAJR	Major contours
C-TOPO-MAJR-IDEN	Major contours - annotation
C-TOPO-MINR	Minor contours
C-TOPO-MINR-IDEN	Minor contours - annotation
C-TOPO-MINR-ONEF	Minor contours - One Foot Intervals
C-TOPO-MINR-TWOF	Minor contours - Two Foot Intervals
C-TOPO-SLOP-FILL	Cut/fill slopes
C-TOPO-SLOP-IDEN	Cut/fill slope, top/toe slope annotation
C-TOPO-SLOP-TOPT	Top/toe slopes
C-TOPO-SOUN	Soundings and overbanks
S-WATR-SURF	Water surface
V-GRAD-AFTR	After dredge depth
V-GRAD-EXST	Existing grade, ground line
V-GRAD-EXST-BASE	Base survey
V-GRAD-EXST-SYR1	Survey year one or area one
V-GRAD-EXST-SYR2	Survey year two or area two
V-GRAD-EXST-SYR3	Survey year three or area three
V-GRAD-EXST-SYR4	Survey year four or area four
V-GRAD-IDEN	Grade annotation
V-GRAD-PRED	Pre-dredge
V-GRAD-SCLN	Stability control line
V-TOPO-BKLN	Breaklines
V-TOPO-DTMP	DTM points
V-TOPO-DTMT	DTM triangles
V-TOPO-MAJR	Major contours
V-TOPO-MAJR-IDEN	Major contours - annotation
V-TOPO-MINR	Minor contours
V-TOPO-MINR-IDEN	Minor contours - annotation
V-TOPO-SLOP-FILL	Cut/fill slopes
V-TOPO-SLOP-IDEN	Cut/fill slope, top/toe slope annotation
V-TOPO-SLOP-TOPT	Top/toe slopes
V-TOPO-SOUN	Soundings and overbanks

ImageArea Polygon Accuracy: +/-20 Ft Sensitivity: Confidential

The image foot print or coverage area. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
V-AERI-BNDY	Aerial photography boundaries

V-AERI-IDEN	Aerial annotation
V-AERI-INDX	Aerial photo index
V-AERI-PHOT	Photo center (exposure station)
V-AERI-PNPT	Panel points

Group: Manmade Structures

Building Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

A three dimensional permanent structure modeled with a bounding polygon. This feature includes all on-airport buildings within an Airport Parcel and any building in the vicinity of the airport that affects air navigation or airport design requirements [Source: FAA]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
A-ELEV-OTLN	Building outlines
B-EXST-BLDG	Existing building
C-BLDG-IDEN	Building and other structure annotation
C-BLDG-OTLN	Building and other structure outlines
C-BLDG-OVHD	Building overhangs
C-BLDG-PATT	Building hatching and patterns
G-PLAN-OTLN	Floor outline/perimeter/building footprint
H-BLDG-IDEN	Annotation
H-BLDG-OTLN	Command posts, information centers
M-ELEV-OTLN	Building outlines
S-DECK-FLOR	Floor deck
S-DECK-ROOF	Roof deck
S-OTLN-BLDG	Building outline
S-OTLN-STRC	Misc. structures
V-BLDG-DECK	Outdoor decks (attached, no roof overhead)
V-BLDG-DOCK	Loading docks
V-BLDG-IDEN	Building and other structure annotation
V-BLDG-OTLN	Building and other structure outlines
V-BLDG-OVHD	Building overhangs
V-BLDG-PRCH	Porches (attached, roof overhead)

ConstructionArea Polygon Accuracy: +/-10 Ft Sensitivity: Restricted

A defined area that is under construction, not intended for active use until authorized by the concerned authority. The area defines a boundary for personnel, material, and equipment engaged in the construction activity [Source: FAA]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-PROP-CONS	Construction limits/controls, staging area
G-SITE-OTLN	Site plan - key map

Fence Line Accuracy: +/-10 Ft Sensitivity: Restricted

Any fencing (chain-link, razor wire, PVC, etc. [Source: FAA]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-DETL-FENC-SECU	Security Fencing
C-SITE-FENC	Fences and handrails
L-SITE-FENC	Fencing
S-SAFE-FENC	Fencing rails, fabric, supports, and gates
V-SITE-FENC	Fences and handrails

Gate Line Accuracy: +/-10 Ft Sensitivity: Restricted

The location of an entry or exit point. These entry or exit points could be security checkpoints or open

access points. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
L-DETL-GATE	Gate
L-SITE-GATE	Gate
S-GATE-AXIS	Gate axis and centerlines
S-GATE-MISC	Gates incidental to structure

Tower Point Accuracy: +/- 5 Ft Sensitivity: Restricted

An existing structure that was created, by man, to facilitate an activity at an elevated level above the ground. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-STRC-TOWR	Tower
V-STRC-TOWR	Tower

Group: Navigational Aids

NAVAIDEquipment Point Accuracy: +/- 5 Ft Sensitivity: Unclassified

Any ground-based visual or electronic device that provides point to point guidance information or position to aircraft in flight. The location is specified by FAA Specification 405 [Source: FAA Specification 405]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-AIDS-COMM	Communications airfield navigational aides
C-AFLD-AIDS-CRIT	Airfield Navigational Aid - Critical Area
C-AFLD-AIDS-GPS_	GPS airfield navigational aides
C-AFLD-AIDS-ILS_	Airfield Instrument Landing System
C-AFLD-AIDS-MCWV	Microwave airfield navigational aides
C-AFLD-AIDS-OTHR	Other airfield navigational aides
C-AFLD-AIDS-RADI	Radio airfield navigational aides
C-AFLD-AIDS-RADR	Radar airfield navigational aides
C-AFLD-AIDS-RMTE	Remote airfield navigational aides
C-AFLD-AIDS-SITE	Airfield Navigational Aid - Site
C-AFLD-AIDS-SYST	NAVAID system
C-AFLD-AIDS-WTHR	Weather airfield navigational aides
E-AFLD-BCNS-IDEN	Identifier tags, symbol modifiers, and text
E-AFLD-BCNS-MISC	Miscellaneous navaids - windcones and beacons
E-AFLD-BCNS-STRB	Strobe beacons
V-AFLD-BCNS-IDEN	Identifier tags, symbol modifiers, and text
V-AFLD-BCNS-MISC	Miscellaneous navaids - windcones and beacons
V-AFLD-BCNS-STRB	Strobe beacons

Group: SeaPlane

FloatingDockSite Polygon Accuracy: +/-10 Ft Sensitivity: Unclassified

A floating facility which can serve as a mooring place for vessels or as a floating dry dock. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SEAP-DOCK	Seaplane dock

NavigationBuoy Point Accuracy: +/- 5 Ft Sensitivity: Unclassified

A floating marker which is moored to the bottom at a specific known location, which is used as an aid to navigation or for other special purpose. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SEAP-BUOY	Seaplane navigation buoy

SeaplaneLandingArea Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted
An area specifically designated for take-offs and landings of sea planes. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SEAP-LNDA	Seaplane landing area

SeaplaneRampCenterline Line Accuracy: +/- 5 Ft Sensitivity: Restricted
The centerline of ramps specifically designed to transit seaplanes from land to water and vice versa. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SEAP-RAMP-CNTR	Seaplane ramp centerline

SeaplaneRampSite Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted
Ramps specifically designed to transit seaplanes from land to water and vice versa. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SEAP-RAMP	Seaplane ramp site

Group: Security

Sida Polygon Accuracy: +/- 5 Ft Sensitivity: Secret
Portions of an airport, specified in the airport security program, in which security measures required by regulation must be carried out. This area includes the security area and may include other areas of the airport. [Source: DHS]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-AFLD-SECR-SIDA	Security Identification Display Area

Group: Surface Transportation

Bridge Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted
A structure used by vehicles that allows passage over or under an obstacle such as a river, chasm, mountain, road or railroad. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-BRDG-CNTR	Bridge centerlines
C-BRDG-DECK	Bridge deck
C-BRDG-IDEN	Bridge annotation
C-BRDG-OTLN	Bridge outlines
L-SITE-BRDG	Bridges (pedestrian)
M-MATL-CRAN	Cranes
S-BRDG-BEAR	Bridge bearing
V-BRDG-DECK	Bridge deck
V-BRDG-IDEN	Bridge annotation
V-BRDG-OTLN	Bridge outlines
V-SITE-STRC	Structures (bridges, sheds, foundation pads, footings, etc.)

DrivewayArea Polygon Accuracy: +/-10 Ft Sensitivity: Restricted
An access to a residence or other vehicle parking lot or storage area. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-ROAD-DRIV	Driveway edge of pavement

DrivewayCenterline Line Accuracy: +/-10 Ft Sensitivity: Restricted
The center of the driveway as measured from the edge of the paved surface. The segments of a driveway centerline will coincide with the road segments in order to provide network connectivity. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-ROAD-DRIV-CNTR	Driveway centerline

ParkingLot Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted
An area of an airport used for parking of automobiles, buses, etc. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-PRKG-IDEN	Parking lot annotation
C-PRKG-OTLN	Parking lot outlines
V-PRKG-IDEN	Parking lot annotation
V-PRKG-OTLN	Parking lot outlines

RailroadCenterline Line Accuracy: +/- 5 Ft Sensitivity: Confidential
Represents the centerline of each pair of rails [Source: ANSI: Data Content Standards For Transportation Networks: Roads]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RAIL-CNTR	Railroad track centerlines
C-RAIL-CNTR-IDEN	Railroad track centerline annotation
C-RAIL-IDEN	Railroad - annotation
C-RAIL-TRAK	Railroad tracks
V-RAIL-CNTR	Railroad track centerlines
V-RAIL-CNTR-IDEN	Railroad track centerline annotation
V-RAIL-TRAK	Railroad tracks

RailroadYard Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted
Represents a railroad yard [Source: ANSI: Data Content Standards For Transportation Networks: Roads]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-RAIL-YARD	Railroad Yard

RoadCenterline Line Accuracy: +/- 5 Ft Sensitivity: Confidential
The center of the roadway as measured from the edge of the paved surface. The segments of a road centerline will coincide with the road segments in order to have similar characteristics. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-ROAD-CNTR	Road centerlines
V-ROAD-CNTR	Road centerlines
V-ROAD-CNTR-IDEN	Road centerline annotation

RoadPoint Point Accuracy: +/-10 Ft Sensitivity: Confidential

A point along the roadway which has some special significance either for starting or ending a road segment or for representing a significant position along the roadway system such as the start or center of a bridge or the center of an intersection [Source: ANSI: Data Content Standards For Transportation Networks: Roads*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-ROAD-POIN	Road Point

RoadSegment Polygon Accuracy: +/- 5 Ft Sensitivity: Confidential

A section of the road system designed for, or the result of, human or vehicular movement; must be continuous (no gaps) and cannot branch; no mandates are provided on how to segment the road system except that data providers adopt a consistent method [Source: ANSI: Data Content Standards For Transportation Networks: Roads*]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-ROAD-ASPH	Road outlines - asphalt surface
C-ROAD-CNTR-IDEN	Road centerline annotation
C-ROAD-CONC	Road outlines - concrete surface
C-ROAD-CURB	Curbs and gutters
C-ROAD-GRVL	Road outlines - gravel surface
C-ROAD-IDEN	Road, street, highway annotation
C-ROAD-SHLD	Roadway shoulder
C-ROAD-UPVD	Road outlines - unpaved surface
V-ROAD-ASPH	Road outlines - asphalt surface
V-ROAD-CONC	Road outlines - concrete surface
V-ROAD-GRVL	Road outlines - gravel surface
V-ROAD-IDEN	Road, street, highway annotation
V-ROAD-OTLN	Road outlines
V-ROAD-UPVD	Road outlines - unpaved surface

Sidewalk Line Accuracy: +/-10 Ft Sensitivity: Restricted

A paved or concrete pad used as a pedestrian walkway. Usually is composed of one or more SideWalkSegments. [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
C-SITE-WALK	Walks, trails and bicycle paths
L-SITE-WALK	Walks and steps
S-BRDG-CURB	Curbs/sidewalks on structure
S-GATE-WALK	Walkway
V-SITE-WALK	Walks, trails, and bicycle paths

Tunnel Polygon Accuracy: +/- 5 Ft Sensitivity: Restricted

The area of a transportation passage, open at both ends, used to provide access through or under a natural obstacle [Source: SDSFIE]

Associated CADD Layers:

<u>Layer Name</u>	<u>Description</u>
L-SITE-TUNL	Tunnels
S-ACCS-TUNL	Tunnels
S-FNDN-TUNL	Service tunnel/duct banks

Appendix D - METADATA ELEMENTS

This appendix list the metadata elements defined in this standard. These elements have been extracted from ISO's Geographic Information – Metadata standard (ISO 19115). For each element, the name, type, description and ISO information are provided. Also provided, are indicators as to which level(s) of metadata the element can be applied.

CATEGORY: Overview (1)

status	CodeList	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	Status of the the data being submitted. Acceptable values are (completed, histoicalArchive, obsolete, onGoing, planned, required, under development)				
ISO	<i>idStatus (28)</i>				
ISO Definition:	<i>status of the resource(s)</i>				
geometricObjectCount	Integer	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	Number of feature instances being transmitted				
ISO	<i>geoObjCnt (185)</i>				
ISO Definition:	<i>Total number of the point or vector object type occurring in the dataset</i>				
abstract	String (254)	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	Description of the contents of the data collection being submitted				
ISO	<i>idAbs (25)</i>				
ISO Definition:	<i>brief narrative summary of the content of the resource(s)</i>				

CATEGORY: Useage (62)

specificUsage	String (254)	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	Description of how the data should be used				
ISO	<i>specUsage (63)</i>				
ISO Definition:	<i>brief description of the resource and/or resource series usage</i>				
BegusageDateTime	See ISO 8601	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	The first date/time for which the data described by the scope is valid				
ISO	<i>usageDate (64)</i>				
ISO Definition:	<i>date and time of the first use or range of uses of the resource and/or resource series</i>				
endUsageDateTime	See ISO 8601	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	The last date/time for which the data described by the scope is valid				
ISO	<i>usageDate (64)</i>				
ISO Definition:					

CATEGORY: Source (92)

city	string (50)	<i>Applies to:</i>	Collections	Classes	Attrib.
<i>Description:</i>	City				
ISO	<i>city (382)</i>				
ISO Definition:	<i>city of the location</i>				

statement	String (254)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Description of the source of the data			
<i>ISO</i>	<i>statement (83)</i>			
<i>ISO Definition:</i>	<i>general explanation of the data producer's knowledge about the lineage of the dataset</i>			
individualName	String (50)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Name of the person submitting the data			
<i>ISO</i>	<i>rpIndName (375)</i>			
<i>ISO Definition:</i>	<i>name of the responsible person- surname, given name, title separated by a delimiter</i>			
organizationName	String (75)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Organization of the person submitting the data			
<i>ISO</i>	<i>rpOrgName (376)</i>			
<i>ISO Definition:</i>	<i>name of the responsible organization</i>			
deliveryPoint	String (254)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Street address of the person submitting the data			
<i>ISO</i>	<i>delPoint (381)</i>			
<i>ISO Definition:</i>	<i>address line for the location (as described in ISO 11180, Annex A)</i>			
administrativeArea	string (20)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	State			
<i>ISO</i>	<i>adminArea (383)</i>			
<i>ISO Definition:</i>	<i>state, province of the location</i>			
postalCode	string (10)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Zip Code			
<i>ISO</i>	<i>postCode (384)</i>			
<i>ISO Definition:</i>	<i>ZIP or other postal code</i>			
electronicMailAddress	String (50)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	e-Mail address			
<i>ISO</i>	<i>eMailAdd (386)</i>			
<i>ISO Definition:</i>	<i>address of the electronic mailbox of the responsible organization or individual</i>			
voice	String (20)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Phone			
<i>ISO</i>	<i>voiceNum (388)</i>			
<i>ISO Definition:</i>	<i>telephone number by which individuals can speak to the responsible organization or</i>			
positionName	String (30)	Applies to: Collections	Classes	Attrib.
<i>Description:</i>	Title of the person submitting the data			
<i>ISO</i>	<i>rpPosName (377)</i>			
<i>ISO Definition:</i>	<i>role or position of the responsible person</i>			

CATEGORY: Data Quality (99)

evaluationMethodDescription	String (254)	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Description of the evaluation method used			
<i>ISO</i>	<i>evalMethDesc (104)</i>			
<i>ISO Definition:</i>	<i>description of the evaluation method</i>			
pass	Boolean	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Indication of whether data described by the scope passed or failed in evaluation			
<i>ISO</i>	<i>conPass (132)</i>			
<i>ISO Definition:</i>	<i>indication of the conformance result where 0=fail or 1=pass</i>			
title	String (20)	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Name of the evaluation method used			
<i>ISO</i>	<i>resTitle (360)</i>			
<i>ISO Definition:</i>	<i>name by which the cited resource is known</i>			

CATEGORY: Scope (149)

dataset	String	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	List of feature classes to which the metadata pertains (seperated by commas)			
<i>ISO</i>	<i>datasetSet (154)</i>			
<i>ISO Definition:</i>	<i>dataset to which the information applies</i>			
features	String	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	List of feature names to which the metadata pertains (seperated by commas)			
<i>ISO</i>	<i>featSet (151)</i>			
<i>ISO Definition:</i>	<i>features to which the information applies</i>			
attributes	See ISO	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	List of attribute names to which the metadata pertains (seperated by commas)			
<i>ISO</i>	<i>attribSet (150)</i>			
<i>ISO Definition:</i>	<i>Attributes to which the information applies</i>			

CATEGORY: Coordinate System (189)

projection	RS_Identifier	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Name of the projection used (SPCS, LL)			
<i>ISO</i>	<i>projection (190)</i>			
<i>ISO Definition:</i>	<i>identity of the projection used</i>			

datum	RS_Identifier	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Horizontal datum of submitted data (NAD27, NAD83 or WGS84)			
<i>ISO</i>	<i>datum (192)</i>			
<i>ISO Definition:</i>	<i>identify of the datum used</i>			
code	String (4)	<i>Applies to: Collections</i>	<i>Classes</i>	<i>Attrib.</i>
<i>Description:</i>	Four digit code for the state place coordinate system used. A list of codes can be found in NOAA manual NOS NGS 5.			
<i>ISO</i>	<i>identCode (207)</i>			
<i>ISO Definition:</i>	<i>alphanumeric value indicating an instance in the namespace</i>			



AEIS

Maryland Aviation Administration

Office of Engineering and Construction Management

Airport Engineering Information System

**NAMING, IDENTIFICATION &
ADDRESSING STANDARD**

**Version 1.1
July 2007**

**Airport Engineering Information System
Naming, Identification & Addressing Standard
For the Maryland Aviation Administration**

Version 1.1, July 2007

Table of Contents

1.	INTRODUCTION.....	3
1.1.	Purpose.....	3
1.2.	Scope.....	3
1.3.	Audience	4
1.4.	Background.....	4
1.5.	Related Material.....	4
1.6.	Change Control.....	5
2.	PROPERTY ADDRESSING	7
2.1.	Facility	7
2.2.	Parcel.....	7
2.3.	Building.....	8
2.4.	Zone	9
2.5.	Floor.....	9
2.6.	Room.....	10
2.7.	Space.....	10
3.	GRID MAPS.....	12
3.1.	Grid Map for BWI	13
3.2.	Grid Map for MTN	14
3.3.	Database Considerations.....	14
4.	BOX GRID MAPS	15
4.1.	Box Grid Map for BWI.....	15
4.2.	Box Grid Map for MTN.....	16
4.3.	Database Considerations.....	16
5.	ASSETS.....	17
5.1.	Type codes based on UNIFORMAT II.....	17
5.2.	Assignment of Unique Identifiers.....	17
5.3.	Navigational Aids	17
6.	EVENTS.....	18
6.1.	Type Codes	18
6.2.	Assignment of Unique Identifiers.....	18
7.	GLOSSARY.....	19
8.	APPENDICES	20
	Appendix A1 - List of BWI Parcels.....	20
	Appendix A2 - List of MTN Parcels.....	26
	Appendix B1 - List of BWI Buildings.....	27
	Appendix B2 - List of MTN Buildings.....	30
	Appendix C - URISA Addressing Standard	31
	Appendix D - UNIFORMAT II Standard.....	36
	Appendix F – Event Codes	41
	Appendix E – Martin State Airport Gate Status	47

1. INTRODUCTION

1.1. Purpose

This Naming, Identification & Addressing Standard provides guidance for identifying Maryland Aviation Administration (MAA) owned and/or occupied properties so they can be uniquely and consistently referenced by personnel and information systems alike. The personnel who will use these identifiers include MAA staff, contractors, emergency responders, and in some cases the traveling public. The information systems that will use these identifiers include MAA's Airport Engineering Information System (AEIS), as well as any other information system that contains data on the physical property and assets that MAA manages. This standard also establishes a consistent method for assigning addresses and locational attributes to assets that occupy and events that take place on MAA properties.

1.2. Scope

This standard comprises seven hierarchical levels that define locations within MAA owned and/or occupied property. Each level is a more detailed breakdown of its preceding level. This is often referred to as a parent-child relationship. For example, a floor of a building contains rooms but rooms cannot stand alone, with no relationship to a floor. The levels and an example of the hierarchy follow:

- Facility
- Parcel
- Building
- Zone
- Floor
- Room
- Space

The first three levels, Facility, Parcel and Building, define exterior locations. Zone, Floor, Room, and Space all define interior locations. For each of the seven levels, this Standard defines identifiers to be assigned, along with labeling and database considerations. For example, besides a building number identifier, buildings are assigned a mailing address that is based on the Urban and Regional Information Systems Association (URISA) Street Address Data Standard.

A further element of the Standard is derived from the American Society for Testing and Materials (ASTM) UNIFORMAT II Building and Related Sitework standard. UNIFORMAT II provides a system for classifying assets that are common to most buildings, such as services, equipment, etc. Classification facilitates asset management by enabling locational attributes to be assigned to assets.

A final element of this standard assigns locations and codes to represent events that are recorded on MAA owned or occupied properties. An event is something noteworthy to record, such as mechanical outage, fire, security breach, or injury, which occurs at a specific location at a specific time for a duration of time.

1.3. Audience

The Standard is intended for MAA departments operating at Baltimore-Washington International (BWI) and Martin State (MTN) airports and their surrounds, as well as any other MAA facility in the State of Maryland. Departments specifically using this standard include, but are not limited to, Fire and Rescue, Operations and Security, Planning, Maintenance, Utilities and Terminal Services, Commercial Management, and Engineering and Construction Management.

1.4. Background

The Standard was developed based on existing addressing standards, input from the MAA Airport Engineering Information System (AEIS) Committee members, and from consultation with other airport specialists. The Standard also relies on established industry standards wherever possible. Specifically, the URISA Street Address Data Standard as well as the UNIFORMAT II Building and Related Sitework standard are used.

1.5. Related Material

The following documents have all been used as a resource in the development of the Standard and are referenced herein. The resources are informative versus normative in nature, which means that compliance with their guidelines is not required in order to be in compliance with this Standard. Readers and users of the Standard may wish to review the following documents for further details on a specific topic. In most cases, the documents can be downloaded for free from the Web sites listed. In other cases that are indicated by an asterisk (*), instructions for obtaining the documents are provided on the associated Web site.

- URISA Street Address Data Standard, Urban and Regional Information Systems Association
http://www.urisa.org/address_data_standard.htm
- * UNIFORMAT II Standard Classification for Building Elements & Related Sitework
<http://www.uniformat.com>
- Kansas Geospatial Data Addressing Standard, Final, 1999
<http://gisdasc.kgs.ku.edu/kgcc/docs/uploaded/2address.pdf>
- Oregon Geospatial Data Addressing Standard, Draft, 2004
http://egov.oregon.gov/DAS/IRMD/GEO/standards/docs/OR_Address_Std_110504.pdf
- US Postal Service Publication 28, Postal Addressing Standards, 2000
<http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf>

*Standard is available for a charge.

1.6. Change Control

Following is a chronological list of changes made to this document since it was first released. A version number and the date of release are indicated for each revision.

Version Number	Date of Release	Changes Addressed
1.0	12/23/2005	Original release
1.1	7/9/2007	Section 1.6 added for change control. Title changed from “Addressing Standard” to “Naming, Identification & Addressing Standard” to be more descriptive of contents. Clarification added to Section 2.2 as to the distinction between the Parcel and Airport Parcels feature classes and why Parcel is an important component of land identification.

Readers are encouraged to suggest additional changes to this document. Comments and suggestions should be recorded using the form on the following page and submitted to the AEIS Program Manager for MAA’s consideration. Accepted changes will be reflected in a subsequent version of this document.

**MAA Naming, Identification & Addressing Standard
Document Revision Form**

Date: _____

To:

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MAA USE ONLY

Change Tracking # _____

Date Received: _____

Assigned To: _____

Date Addressed: _____

Change in Version: _____

From:

Name: _____
Title: _____
Organization: _____
Address: _____
City, State, Zip: _____,
E-Mail: _____
Phone: _____

Comments:

#	Reference*	Comment or Suggested Change	MAA Resolution

** Reference must provide a clear indication of where the change is recommended (e.g. section, page, paragraph and sentence or figure number).*

Additional pages can be used if required.

2. PROPERTY ADDRESSING

Each building or feature on MAA property shall be assigned a unique identifier based on its associated level on the following hierarchy. Examples of unique identifiers are given in parentheses.

- Facility (Example: BWI)
- Parcel (Example: 2434567897685943)
- Building (Example: 100)
- Zone (Example: A)
- Floor (Example: 2)
- Room (Example: 56)
- Space (Example: 56S)

The method for assigning unique identifiers, along with labeling and database considerations, is presented for each level of the hierarchy on the following pages.

2.1. Facility

Assigning Unique Identifiers

A 3-character facility identifier indicates the facility where a building or feature is located.

- BWI is used for Baltimore Washington International Airport
- MTN is used for Martin State Airport
- 991 is used for MAA Offices at 991 Corporate Blvd.
- 902 is used for MAA Offices at 902 Corporate Blvd.

Labeling Considerations

Physical Labeling is not required at this level in the hierarchy.

Database Considerations

In a database environment, the facility identifier attribute shall be referred to as “facility_id”. A 3-character string that can accommodate alphanumeric characters should be used.

2.2. Parcel

Assigning Unique Identifiers

Parcels are identified by a 16-digit Maryland Department of Assessment and Taxation parcel account number derived from the Maryland Department of Planning (MDP) Maryland PropertyView Database. These parcels are the equivalent to the Parcel feature class defined by MDP and included in MAA’s GIS Data Standard. This is different than the Airport Parcel feature class also defined in the GIS Data Standard, which is used to track parcels acquired by MAA and for which acquisition records may need to be kept to satisfy FAA reporting requirements. Both types of parcels are needed to accurately track MAA land ownership, although the Airport Parcel is primarily used for historical record

keeping and may not reflect how land is used or subdivided by MAA. Tracking MAA property in a manner that is consistent with MDP facilitates data exchange between MAA and surrounding jurisdictions. Below is a detailed breakdown of the MDP account number relevant to property around MAA facilities:

- Anne Arundel positions 1-2 are the jurisdiction (county) code; positions 3-4 are the tax district; positions 5-7 are the subdivision; the remaining 9 positions are the parcel account number.
- Baltimore City positions 1-2 are the jurisdiction (city) code; positions 3-4 are the ward; positions 5-6 are the section; positions 7-11 are the block; positions 12-15 are the lot; position 16 is filler.
- For all other counties, positions 1-2 are the jurisdiction (county) code; positions 3-4 are the tax/election district; the remaining 12 positions are the parcel account number.

See Appendix A1 and Appendix A2 for detailed lists of MAA parcels for BWI and MTN.

Labeling Considerations

Physical Labeling is not required at this level in the hierarchy.

Database Considerations

In a database environment, the Parcel attribute shall be referred to as “acctID”. This is consistent with the Maryland Property View database. The field type should be a string of length 13 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

2.3. Building

Assigning Unique Identifiers

The Building identifier uniquely differentiates each of the MAA buildings from others at a given facility. See Appendix B1 and Appendix B2 for complete lists of MAA buildings for BWI and MTN.

In addition to a unique number, each building on MAA property will be assigned a street address, whether the building is located on the airside or landside of airport operations.

If a building is accessible via public roads (landside), then a street address shall be assigned using the appropriate street according to the guidelines established by the URISA Street Address Data Standard.

If a building is not accessible via public roads (airside), then a street address shall be assigned using the nearest airside road that is used to access the building. Airside roads include surfaces such as taxiways, service roads, and runways. Address ranges shall be established for each of these types of thoroughfares on airside properties to accommodate

addressing of existing buildings and features, as well as buildings or features that may be added in the future. Addresses assigned to airside roads shall follow the guidelines established by the URISA Street Address Data Standard.

Labeling Considerations

Buildings shall be labeled at the main entrance with the appropriate building number as established by the MAA Fire and Rescue Department and referenced in Appendix B1 and B2. Consideration shall also be given to labeling the building at all other secondary and auxiliary entrances. Labels shall be visible from roads and approaches to buildings.

Database Considerations

In a database environment, the Building attribute shall be referred to as “building_no”. The field type should be a string of length 16 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

2.4. Zone

Assigning Unique Identifiers

The Zone identifier uniquely identifies recognized sections or areas within large MAA buildings. Currently, the only building subdivided into zones is the Main Terminal at BWI. This building includes the following five zones, which are generally called “piers.”

- Pier A
- Pier B
- Pier C
- Pier D
- Pier E (International Terminal)

Labeling Considerations

Zones shall be labeled in conspicuous places such as walls adjacent to doors in stairwells. Zones shall be labeled in conjunction with Floor, Room, and Space labels.

Database Considerations

In a database environment, the Zone attribute shall be referred to as “building_zone”. The field type should be a string of length 30 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

2.5. Floor

Assigning Unique Identifiers

The Floor identifier differentiates the various floor levels of MAA buildings. Floors shall be numbered using a number starting with “1” for the ground level and progressively increased by one for each subsequent floor (i.e., the 1st floor is Floor 1, the 2nd floor is Floor 2, and so on). Levels below ground such as basement floors shall be identified with a zero. If multiple basement levels exist, they shall carry a suffix with a dash and the number of levels down that they progress (i.e., 0-1, 0-2, 0-3, and so on).

Labeling Considerations

At a minimum, floor labels shall be placed on the walls adjacent to doors in stairwells and near elevator shafts. Floor numbers shall also be incorporated into room labels (e.g, 170 indicates a room on the first floor; 340 indicates a room on the third floor, and so on).

Database Considerations

In a database environment, the Floor attribute shall be referred to as “floorname”. The field type should be a string of length 50 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

2.6. Room

Assigning Unique Identifiers

The Room identifier differentiates rooms within MAA buildings. The first digit of the identifier shall represent the floor number of the room, as in the example given in section 2.5, Floor. On piers within a main terminal, the room number shall be prefaced by a letter indicating the pier. Where practical, odd numbers shall be assigned on the right as one walks from landside to airside, and even numbers shall be assigned on the left. For example, “A170” indicates a specific room on the left side of the first floor of Pier A. Room numbers shall be unique within a building and therefore unique across all MAA facilities once the building number is added.

Labeling Considerations

Room number labels shall be attached on the top sill or on the wall near the door handle of doorways leading into that room.

Database Considerations

In a database environment, the Room attribute shall be referred to as “roomname”. The field type should be a string of length 50 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

2.7. Space

Assigning Unique Identifiers

The Space identifier differentiates spaces within MAA buildings. Spaces can be areas outside of rooms, such as hallways or common areas, or distinct areas within large rooms. Space numbers are similar to room numbers. On piers within a main terminal, the room number shall be prefaced by a letter indicating the pier. The first digit then represents the floor number and the remaining two digits represent the space number. The letter “S” shall follow the numbers to indicate that the area is a Space. For example, “A170S” indicates space 70 on the first level of Pier A.

Labeling Considerations

Space number labels shall be placed on all walls leading into that space.

Database Considerations

In a database environment, the Space attribute shall be referred to as “spacename”. The field type should be a string of length 50 capable of storing alphanumeric characters, as indicated in MAA’s GIS standard.

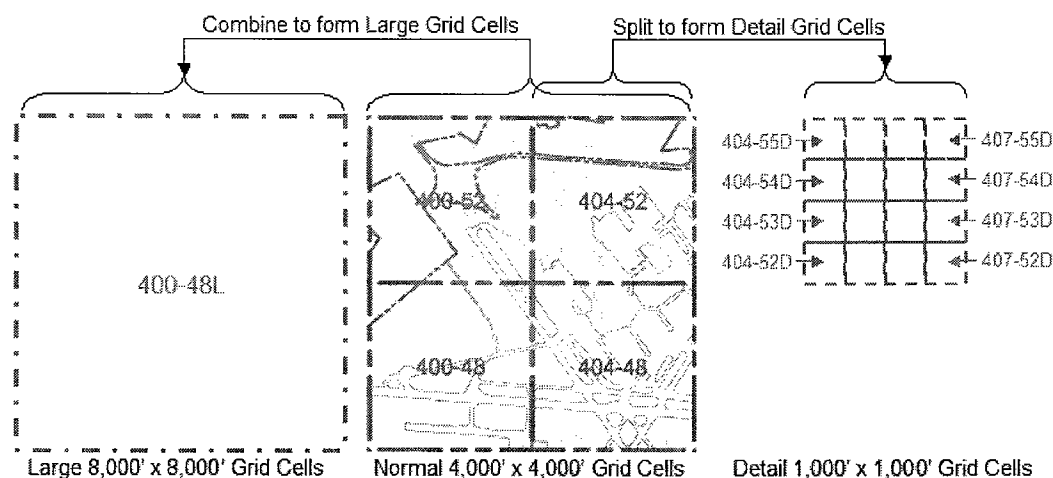
3. GRID MAPS

A grid shall be used to further identify buildings and features with locations at MAA facilities. These grids are complementary to the identification standards established in Section 2 and they do not impact the assignment of identifiers in any way. Some individuals and systems may reference a given feature such as a building by the grid cell(s) it occupies (e.g. the Main Terminal at BWI occupies grid cell 404-48).

Each grid cell should be referenced by the thousands digits of the Northing and Easting coordinate (Maryland State Plane, NAD83, U.S. Survey Foot) of the lower left corner of the grid cell. For example, the Northing and Easting coordinates for the lower left corner of the grid cell that contains the Main Terminal building are 404,000 East and 48,000 North. The grid cell identifier is therefore 404-48. Note that all grid cell identifiers are evenly divisible by 4.

This grid naming convention allows users of the grid to expand or contract their area of interest as desired. For instance, terminal maintenance personnel may wish to focus only on the nine grid cells encompassing the terminal and its immediate surrounds. They can then reference individual 1,000' x 1,000' cells (i.e. 404-50S, 404-51S, etc.) if a more detailed breakdown of these 9 areas is necessary. These detail grid cells references should be followed by an 'D' to avoid confusion with the 4,000' x 4,000' areas (see the figure below). Similarly, emergency rescue personnel may wish to expand the grid by referencing areas further away from BWI (e.g. 384-72 for an area to the Northwest of the airport). If necessary, they could aggregate large grid cells to refer to a broader area by adding an 'L' to the end of the grid cell identifier. When aggregating grid cells to cover larger areas, the coordinates of the lower left corners of the resulting larger grid areas should be evenly divisible by 8 (e.g. 400-48L).

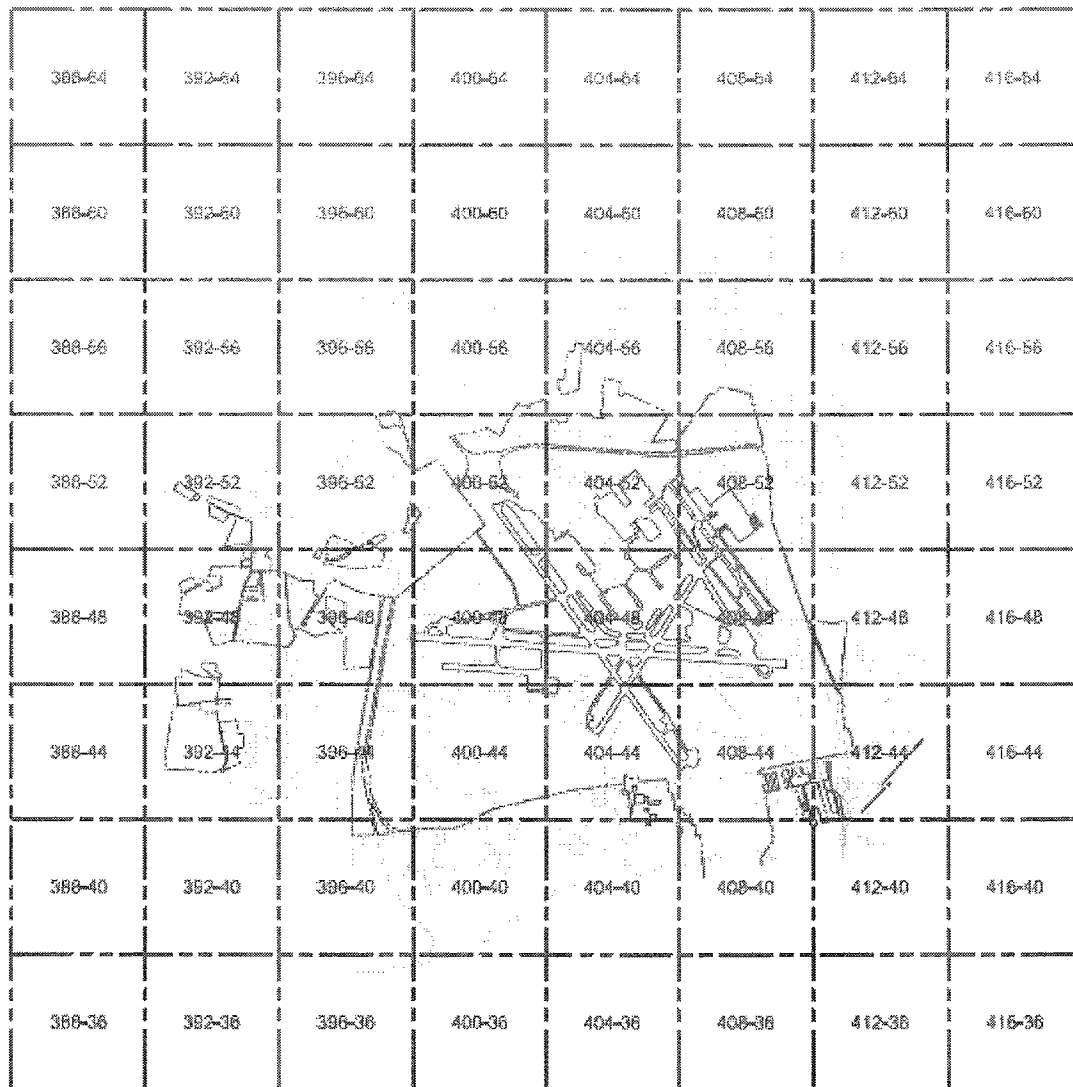
Figure 1
Large, Normal and Detail Grid Cells



3.1. Grid Map for BWI

The following figure shows the BWI Grid superimposed on a basemap of the airport. This figure displays 4,000' x 4,000' grid cells.

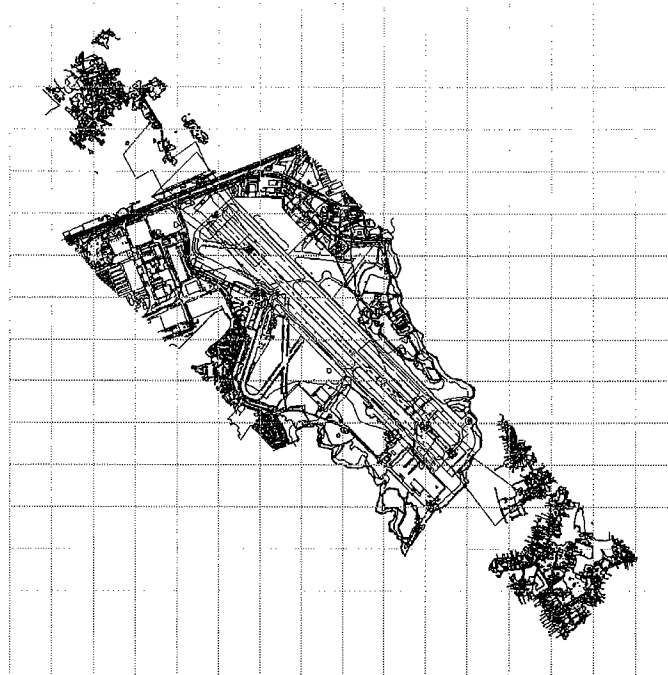
Figure 2
Normal Sized Grid Cells for BWI



3.2. Grid Map for MTN

The following figure shows the 1000' by 1000' MTN Grid superimposed on the Airport Layout Plan (ALP).

Figure 3
Normal Sized Grid Cells for BWI



3.3. Database Considerations

Database field referencing grid cells must be able to accommodate one or more grid cell identifiers. Alternatively, a database may accommodate this by establishing a one-to-many relationship between the feature and the grid cell(s).

4. BOX GRID MAPS

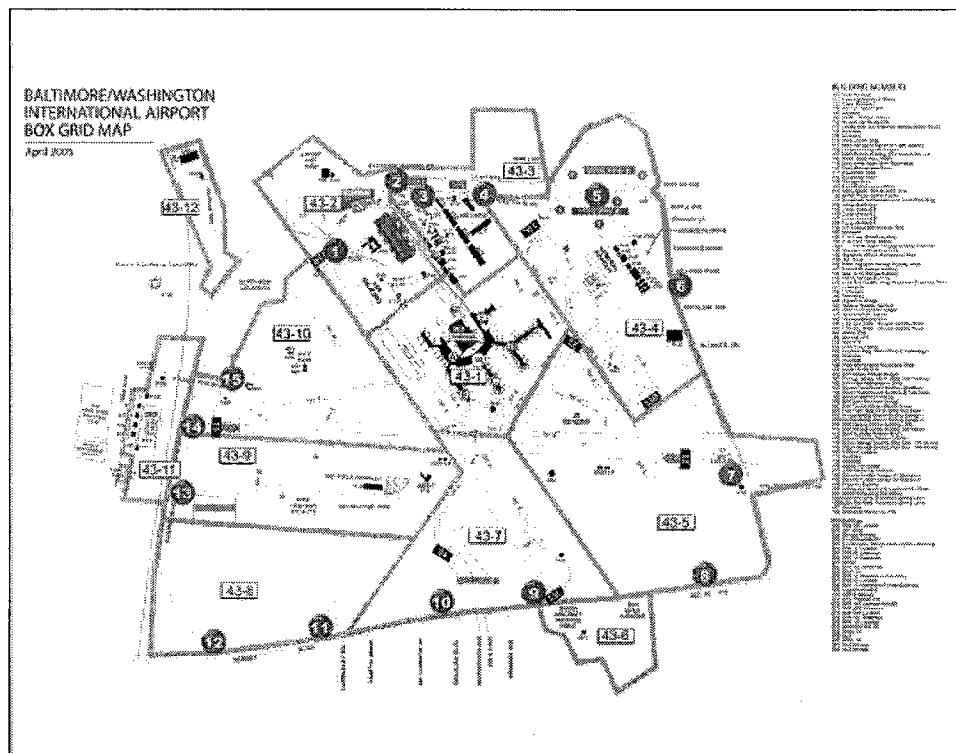
Sections and Posts from the BWI and MTN Box Grid Maps shall be used to further identify buildings and features with locations at MAA facilities. Sections shall be used to subdivide BWI and will contain all buildings and features. These sections and posts are complementary to the identification standards established in Section 2 and they do not impact the assignment of identifiers in any way. Unlike BWI, MTN is not subdivided into sections due to its smaller size. Posts shall be used to indicate the closest gate or emergency entry point, along facility perimeter fences, to each building and feature.

4.1. Box Grid Map for BWI

The BWI Box Grid Map is divided into twelve sections as defined by the MAA Fire and Rescue Division. These sections are labeled “43-1”, “43-2”, “43-3”, etc. Each building shall be assigned the section number in which it is located.

Fifteen gates, also known as posts, are located along the perimeter fence of BWI and are labeled “Post 1”, “Post 2”, “Post 3” etc. These posts are always locked and are used only for emergency access to the airfield. Each building and facility shall be assigned the closest respective emergency entry post.

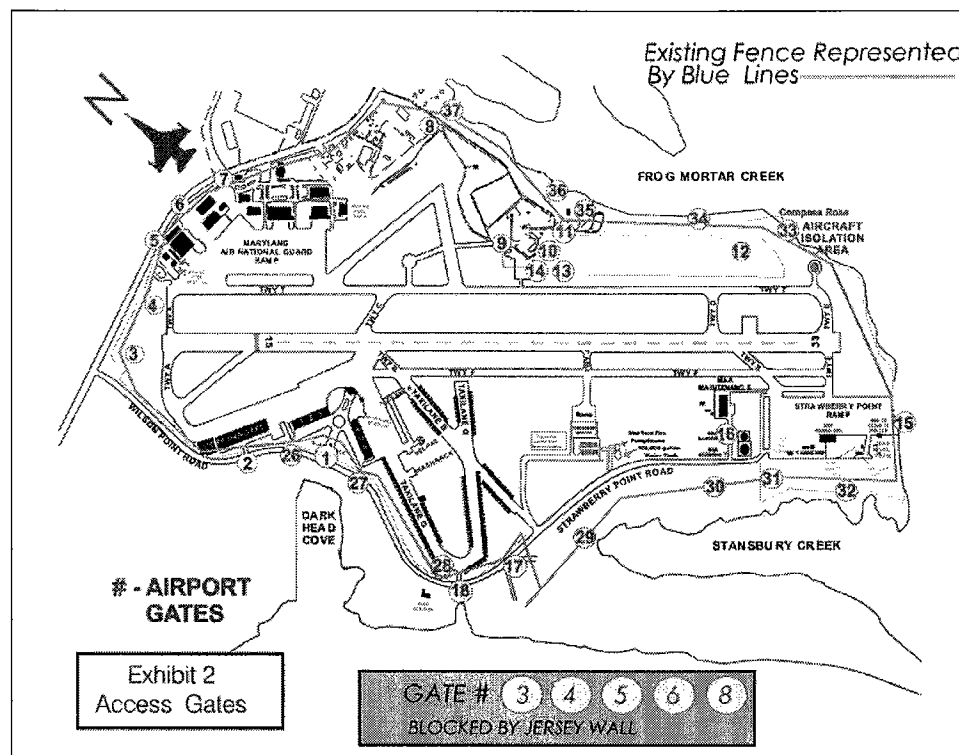
Figure 4
Box grid Map for BWI



4.2. Box Grid Map for MTN

The MTN Box Grid Map is not divided into sections. Only gates, both regular-use and emergency-use, are shown on the map. Please refer to Appendix E for the status of every MTN gate. Each building and facility shall be assigned the closest respective gate used for access.

Figure 5
Box grid Map for MTN



4.3. Database Considerations

In a database environment, the Section and Post (Gate) attributes shall be referred to as "section" and "post" respectively. A string field type and ample field width shall be used to accommodate these attributes, which could include punctuation such as dashes.

5. ASSETS

Selected MAA assets shall be identified and labeled using the UNIFORMAT II Building and Related Sitework standard. This standard provides a classification of assets that are common to most buildings (e.g., services, equipment, etc.). This classification system shall be utilized for management, tracking, and inventory of both stationary and moving assets.

5.1. Type codes based on UNIFORMAT II

See Appendix D for the selected types of assets that will be identified and labeled according to the UNIFORMAT II standard.

5.2. Assignment of Unique Identifiers

Unique identifiers for specific, individual assets shall be assigned following the guidelines previously stated in this standard. In instances where there are multiple assets of the same type, this standard shall be adapted as appropriate to accommodate each individual unit. For example, two separate heating/cooling air handling units sharing a space in a building would receive UNIFORMAT codes D306003-1 and D306003-2 respectively.

Any current identification scheme shall be retained and maintained by MAA along with the UNIFORMAT II classification system. This will provide needed redundancy during transition to the new classification and will establish guidelines to follow for new assets and current assets that have not yet been identified.

5.3. Navigational Aids

Navigational aids are a special subset of assets that are unique to airports and therefore have an FAA-approved identification system. The Navigational Aid Equipment Types, along with their appropriate abbreviations, are listed in Appendix E.

6. EVENTS

Events are noteworthy emergency, maintenance and operations occurrences (e.g., fire, security breach, injury, work order, wildlife sighting, etc.) on MAA owned or occupied property that are categorized by standard codes. Events occur at a specific location at a specific time or for a duration of time and therefore shall be assigned an identifier and a location.

6.1. Type Codes

Event type codes from nationally accepted incident reporting systems shall be used to categorize events that occur on MAA property. The following code systems are incorporated into this standard.

MAA Fire and Rescue:
National Fire Incident Reporting System (NFIRS)

Maryland Transportation Authority Police:
Associated Public Safety Communications Officers, Inc.
Extract of Police 10-CODES

Event codes and their descriptions are listed in Appendix F.

6.2. Assignment of Unique Identifiers

The event type code systems above shall be used to assign a unique identifier to events occurring on MAA properties. In addition, a date/time stamp shall be assigned, as well as any user comments to further classify and catalog events and incidents.

7. GLOSSARY

The following acronyms have been used in this standard:

ASTM	American Society for Testing and Materials
BWI	Baltimore/Washington International Thurgood Marshall Airport
FAA	Federal Aviation Administration
MAA	Maryland Aviation Administration
MTN	Martin State Airport
NFIRS	National Fire Incident Reporting System
URISA	Urban and Regional Information Systems Association

The key terms and phrases used in this standard are defined below.

Assets refer to features such as equipment, infrastructure, etc. that are owned by MAA.

Building refers to a physical structure located at an MAA facility.

Events refer to emergency- and operations-type occurrences on airport property that are categorized by an incident/occurrence code as defined by MAA.

Facility refers to an airport or other MAA location where a building or feature is located.

Floor refers to physical levels within an MAA building.

Grid refers to a grid system use for locating buildings and features on MAA facilities.

Parcel refers to a delineated portion of land that is owned by MAA.

Room refers to a walled or partitioned part of the inside of an MAA building.

Section refers to divisions or areas of a facility as defined by MAA.

Space refers to an open area, not bounded by partitions or walls, on the inside of an MAA building.

Zone refers to areas or sectors within an MAA building that are made up of floors, rooms, and spaces.

8. APPENDICES

Appendix A1 - List of BWI Parcels

BWI Parcels as provided by the 2003 Maryland Department of Planning
Maryland PropertyView Database

ACCTID	DIGXCORD	DIGYCORN	LEGAL1	LEGAL2	LEGAL3	ACRES
020500212514895	428960.7	165935.4	LTS 45 TO 47 BK B	515 ARUNDEL AVE	ARUNDEL MANOR	0.150
020500212007702	428960.7	165935.4	LTS 25 TO 29 BK A	518 ARUNDEL AVE	ARUNDEL MANOR	0.270
020500212416600	428789.5	165840.7	LTS 2 3 BK R	522 ARUNDEL AVE	ARUNDEL MANOR	0.010
020500207002180	428960.7	165935.4	LTS 3 TO 6 BK K	527 ARUNDEL AVE	ARUNDEL MANOR	0.210
020500001853610	430549.2	166912.5	.601 ACRE	6901 AVIATION BLVD	FERNDAL	0.601
020500001939000	430358.2	167420.7	LT 67X185 IMPS	6931 AVIATION BLVD	NR FERNDAL	0.280
020500001937600	430321.2	167417.5	LT 60X51	6933 AVIATION BLVD	FERNDAL	0.070
020500016955010	430281.7	167459.1	1 ACRE	6935 AVIATION BLVD	GLEN BURNIE	1.000
020500001844850	430323.7	167442.4	.475 ACRE	6937 AVIATION BLVD	FERNDAL	0.475
020500002604709	430324.2	167482.8	LT 150X209	6939 AVIATION BLVD	FERNDAL	0.720
020500015463200	430090.3	167847.7	IMPS26.60 ACRES	6949 AVIATION BLVD	GLEN BURNIE	26.600
020500012074000	430030.0	168096.6	IMPS4.6886 ACRES	7001 AVIATION BLVD	NR FERNDAL FARMS	4.680
020500002668500	428712.2	166039.9	.241 ACRE	7507 W B & A RD	MCPHERSON STATION	0.241
020500003116400	428719.6	165950.0	IMPS.451 ACRE	7511 W B & A RD	MCPHERSON STATION	0.451
020503606701943	424704.2	167968.3	LT 2 BK A	7202 BENTWOODS RD	BENTWOODS	1.000
020503615239703	424835.9	167919.9	LT 2 BK B	7203 BENTWOODS RD	BENTWOODS	1.090
020503617624508	424660.2	167925.5	LT 3 BK A	7204 BENTWOODS RD	BENTWOODS	1.000
020503603571850	424773.7	167910.0	LT 3 BK B	7205 BENTWOODS RD	BENTWOODS	1.000
020503602892700	424623.5	167901.2	LT 4 BK A	7206 BENTWOODS RD	BENTWOODS	1.020
020503614397700	424732.2	167863.4	LT 4 BK B	7207 BENTWOODS RD	BENTWOODS	1.070
020503607418500	424691.2	167848.0	LT 5 BK B	7209 BENTWOODS RD	BENTWOODS	1.030
020500003773050	428710.1	169180.8	.693 ACRE	800 CAMP MEADE RD	HANOVER	0.690
020500003033475	428675.0	169185.8	.387 ACRE	804 CAMP MEADE RD	HANOVER	0.380
020532206452890	430452.4	165921.3	IMPSLT 3	7432 CLASSIC DR	GLENBROOK	0.671
020532200051990	430452.4	165921.3	LT 2	7439 CLASSIC DR	GLENBROOK	0.259
020532203056300	430452.4	165921.3	LT 4 RESUB LT J	7440 CLASSIC DR	GLENBROOK	0.671
020532211897200	430452.4	165921.3	LT 3	7441 CLASSIC DR	GLENBROOK	0.259
020532209990400	430452.4	165921.3	LT 4 RESUB LT K	7443 CLASSIC DR	GLENBROOK	0.259
020532216455630	430452.4	165921.3	LT 5 RESUB LT K	7445 CLASSIC DR	GLENBROOK	0.259
020532211119400	430452.4	165921.3	IMPSLT 5 RESUB LT J	7446 CLASSIC DR	GLENBROOK	0.671
020527090028127	428530.3	166046.8	LT 8 OR 1.281 ACRES	501 DIGIULIAN BLVD	FRIENDSHIP AIRPARK	1.280
020527090028126	428540.3	165981.4	LT 7 OR 1.357 ACRES	505 DIGIULIAN BLVD	FRIENDSHIP AIRPARK	1.350
020527090028125	428575.6	165924.5	LT 6 OR 2.075 ACRES	509 DIGIULIAN BLVD	FRIENDSHIP AIRPARK	2.070
020527090028124	428645.0	165858.3	LT 5 OR 1.927 ACRES	513 DIGIULIAN BLVD	FRIENDSHIP AIRPARK	2.170
020527090028123	428640.9	165786.3	LT 4 OR 1.40 ACRES	517 DIGIULIAN BLVD	FRIENDSHIP AIRPARK	1.400
020532205293400	430452.4	165921.3	PT LT 21	1037 DORSEY RD	GLENBROOK	0.260
020532203172400	430452.4	165921.3	N HLF LT 10	1201 DORSEY RD	GLENBROOK	0.580
020532214505800	430452.4	165921.3	N HLF LT 8	1207 DORSEY RD	GLENBROOK	0.581
020532210029750	430452.4	165921.3	N HLF LT 7	1209 DORSEY RD	GLENBROOK	0.580
020500200051965	428960.7	165935.4	LTS 28 TO 31 BK H	1819 DORSEY RD	ARUNDEL MANOR	0.020

020500002330300	428731.5	166049.4	.5 ACRE	2101 DORSEY RD	MCPHERSON STATION	0.500
020500002677600	428708.0	166079.8	IMPS.252 ACRE	2103 DORSEY RD	MCPHERSON STATION	0.252
020526906253800	428650.1	166071.2	LT 2 BK C	2107 DORSEY RD	FRIENDSHIP MANOR	0.275
020526906244100	428603.9	166066.1	LT 3 BK B	2201 DORSEY RD	FRIENDSHIP MANOR	0.340
020526916758900	428583.0	166064.5	LT 2 BK B	2205 DORSEY RD	FRIENDSHIP MANOR	0.040
020500016114020	424853.3	167004.6	LT 2 OR 7.737 AC	1000 DORSEY RIDGE RD	RIDGE BUSINESS CENTER	7.730
020500016595305	424807.3	166771.4	IMPSLT 3 OR 5.16 AC	1001 DORSEY RIDGE RD	RIDGE BUSINESS CENTER	5.160
020500090079013	424670.7	166993.9	LT 1 OR 12.22 AC	1004 DORSEY RIDGE RD	RIDGE BUSINESS CENTER	12.220
020500015461038	428604.2	167076.6	IMPS778.667 ACRES	7153 ELM RD	BALTO-WASH AIRPORT BALTO-WASHINGTON AIRPORT	778.660 778.660
020500090068728	428604.2	167076.6	IMPS778.667 ACRES	7153 ELM RD		
020532209541938	430452.4	165921.3	IMPSPT LT F	520 FAUBERT RD	GLENBROOK	0.200
020532218381300	430452.4	165921.3	PT LT F	521 FAUBERT RD	GLENBROOK	0.210
020532207025900	430452.4	165921.3	RR PT LT F	525 FAUBERT RD	GLENBROOK	0.940
020532200114000	430452.4	165921.3	PT LTS 8 9 R/S LT E	503 GLENBROOK RD	GLENBROOK	0.620
020532212696600	430452.4	165921.3	LT 7 RESUB LT E	505 GLENBROOK RD	GLENBROOK	0.370
020532212479650	430452.4	165921.3	LT 1 RESUB LT E	507 GLENBROOK RD	GLENBROOK	0.790
020532214412400	430452.4	165921.3	LT 3 RESUB LT E	511 GLENBROOK RD	GLENBROOK	0.250
020532214394808	430452.4	165921.3	LT 4 RESUB LT E	513 GLENBROOK RD	GLENBROOK	0.250
020500012064200	425108.9	168426.3	.500 ACRE	1309 HANOVER RD	HANOVER	0.500
020500016452380	425053.5	168349.6	2.49 ACRES	1311 HANOVER RD	HANOVER	2.490
020500090039714	425053.4	168518.9	TRACT A OR .48 ACRE	1316 HANOVER RD	HANOVER	0.480
020500090039713	425031.9	168539.6	TRACT B OR .39 ACRE	1318 HANOVER RD	HANOVER	0.390
020500011261600	425009.8	168548.6	TRACT C OR .61 ACRE	1320 HANOVER RD	HANOVER	0.610
020500002473110	424954.8	168494.2	LT 5	1321 HANOVER RD	PLT OF CARDER SUB DIV	0.580
020500004439500	424988.1	168568.9	.455 AC	1322 HANOVER RD	HANOVER	0.450
020500002473100	424924.0	168497.6	LT 4	1323 HANOVER RD	PLT OF CARDER SUB DIV	0.580
020500000532930	424964.1	168584.2	IMPS.336 ACRE	1324 HANOVER RD	HANOVER	0.330
020500002473500	424870.7	168576.1	LT 1	1331 HANOVER RD	CARDER PROP SUB DIV	0.600
020500003817500	424898.8	168627.9	.50 ACRE	1332 HANOVER RD	HANOVER	0.500
020500015381800	424924.3	168800.7	IMPS2 ACRES	1338 HANOVER RD	HANOVER	2.000
020500010902500	424743.6	168657.2	1.094 ACRES	1343 HANOVER RD	HANOVER	1.090
020500002510300	424620.2	168588.9	IMPS1 ACRE	1347 HANOVER RD	HANOVER	1.000
020500090054588	424682.7	168652.8	1.40 ACRES	1351 HANOVER RD	HANOVER	1.400
020500006147900	424646.0	168681.4	1.352 ACRES	1357 HANOVER RD	HANOVER	1.350
020500002555110	424618.5	168716.9	IMPS1.238 ACRES	1359 HANOVER RD	HANOVER	1.230
020500015325900	424578.6	168749.3	1.493 ACRES	1361 HANOVER RD	HANOVER	1.490
020400002017400	429861.1	165373.3	1.02 ACRES	501 JONES RD	SNOWDENTOWN	1.020
020400090011768	429892.4	165366.3	1.02 ACRES	505 JONES RD	SEVERN	1.020
020400006374200	429997.9	165106.4	.296 ACRE	552 JONES RD	SNOWDENTOWN	0.290
020500008457700	425365.9	167956.6	LT 4	7207 LINDA AVE	FRIENDSHIP	0.260
020500016902460	425382.4	167931.5	LT 5	7209 LINDA AVE	FRIENDSHIP	0.260
020500009364015	425382.4	167908.6	IMPSLT 6	7211 LINDA AVE	FRIENDSHIP	0.260
020500012371750	425315.5	167899.1	LT 16	7212 LINDA AVE	FRIENDSHIP	0.270
020500000287700	425376.2	167884.4	LT 7	7213 LINDA AVE	FRIENDSHIP	0.260
020500013658408	425315.5	167872.2	LT 15	7214 LINDA AVE	FRIENDSHIP	0.270
020500009374400	425373.0	167858.8	LT 8	7215 LINDA AVE	FRIENDSHIP	0.260
020500003541360	425318.7	167848.0	LT 14	7216 LINDA AVE	FRIENDSHIP	0.270
020500009163100	425373.0	167836.5	LT 9	7217 LINDA AVE	FRIENDSHIP	0.260
020500003541375	425317.5	167826.2	LT 13	7218 LINDA AVE	FRIENDSHIP	0.270

020500001300000	425316.9	167808.4	LT 12	7220 LINDA AVE	FRIENDSHIP	0.270
020500010548300	425374.9	167813.5	LTS 10 11	7221 LINDA AVE	FRIENDSHIP	0.520
020500090039004	425389.0	167668.3	2 ACRES	7223 LINDA AVE	HANOVER	2.000
020541209362875	428615.2	169676.0	PT LT 24	505 LYMAN AVE	HOMELAND PARK	2.500
020541213979051	428525.5	169705.5	LT 23	515 LYMAN AVE	HOMELAND PARK	4.500
020541205149200	427908.0	169413.0	LTS 29TO35 90 91 PT	1007 MAIN AVE	HOMELAND PARK-WHITE FARM	6.130
020526911797900	428677.8	166016.7	LT 4 BK C	503 MCPHERSON AVE	FRIENDSHIP MANOR	0.250
020526916434080	428600.7	166015.0	IMPSLT 7 BK B	504 MCPHERSON AVE	FRIENDSHIP MANOR	0.270
020526904166000	428672.7	165991.5	LT 5 BK C	505 MCPHERSON AVE	FRIENDSHIP MANOR	0.250
020526916642500	428600.7	165991.5	LT 9 BK B	506 MCPHERSON AVE	FRIENDSHIP MANOR	0.270
020526911211200	428676.9	165969.9	LT 6 BK C	507 MCPHERSON AVE	FRIENDSHIP MANOR	0.250
020500090052998	428815.9	169416.5	28.38673 ACRES RESID	525 OLD STONY RUN RD	BWI PLAZA ASSOCS NEW IMP	28.380
020400090007496	430499.0	163828.4	1.07 ACRES	7831 QUARTERFIELD RD	SEVERN	1.070
020500016535008	424222.7	168831.5	1 ACRE	7117 RACE RD	HANOVER	1.000
020500012051000	424192.0	168683.4	.572 ACRE	7131 RACE RD	HANOVER	0.570
020500012168800	424123.7	168662.3	.258 ACRE	7134 RACE RD	HANOVER	0.250
020500011303850	425334.5	168202.4	IMPS.0224 ACRES	7173 RIDGE RD	STONEY RUN	2.020
020500000580300	425184.1	168257.7	.767 ACRE	7178 RIDGE RD	STONEY RUN	0.760
020500013735400	425191.8	168200.4	LT 180X209	7180-7184 RIDGE RD	HANOVER	0.860
020500006638800	425197.0	168154.7	.449 ACRE	7190 RIDGE RD	NR STONEY RUN	0.440
020500005345000	425162.3	168144.3	IMPS.3716 ACRE	7192 RIDGE RD	HANOVER	0.370
020500011261400	425195.6	168127.7	.418 ACRE	7194 RIDGE RD	HANOVER	0.410
020500007177100	425119.5	168028.5	1.32 ACRES	7202 RIDGE RD	HANOVER	1.320
020500090021214	425128.4	168067.5	1.715 ACRES	7202 RIDGE RD	HANOVER	1.710
020500013597100	425107.2	167991.1	IMPS1.33 ACRES	7206 RIDGE RD	HANOVER	1.330
020500012685400	425217.0	167950.8	IMPS1 ACRE	7209 RIDGE RD	STONEY RUN	1.000
020500012278510	425061.9	167924.2	4.71 ACRES	7210 RIDGE RD	HANOVER	4.710
020500005587400	425193.5	167884.4	IMPS.80 ACRE	7217 RIDGE RD	STONEY RUN	0.800
020500005584600	425196.1	167853.1	1.12 ACRES	7219 RIDGE RD	STONEY RUN	1.120
020500003863400	425101.6	167852.1	1.03 ACRES	7220 RIDGE RD	HANOVER	1.030
020500013883600	424917.2	167753.2	27.37 ACRES	7226 RIDGE RD	HANOVER	27.370
020500006952400	425155.7	167717.9	1 ACRE	7233 RIDGE RD	STONEY RUN	1.000
020500090040473	425245.7	167628.5	18.111 ACRES #8 PAP	NOISE ABATEMENT PROGRAM	HANOVER	18.110
020500006952100	425131.3	167628.5	99X150	7239 RIDGE RD	HANOVER	0.340
020500003984400	425265.9	167475.0	7.6196 ACRES	7243 RIDGE RD	STONEY RUN	7.610
020500003983000	425098.0	167468.1	.705 ACRE	7249 RIDGE RD	STONEY RUN RD	0.700
020500008629800	424940.4	167152.3	IMPS.65 ACRE	7320 RIDGE RD	HANOVER	0.880
020500013882500	424665.8	167271.0	IMPS9.214 ACRES	7322 RIDGE RD	STONEY RUN	9.210
020500003000100	424946.8	166868.9	2.804 ACRES	7353 RIDGE RD	STONEY RUN RD	2.800
020500015756610	424633.7	166764.9	IMPS5 ACRES	7358 RIDGE RD	HANOVER	5.000
020500001647103	424808.9	166702.6	2.643 ACRES	7404 RIDGE RD	HANOVER	2.640
020500003248200	424893.5	166681.0	.246 ACRE	7406 RIDGE RD	HANOVER	0.240
020500012813500	424969.4	166662.5	IMPSLT C OR .66 ACRE	7411 RIDGE RD	HANOVER	0.660
020500001318800	425059.3	166506.3	11.148 ACRES	7415 RIDGE RD	HANOVER	11.140
020500016601160	425040.5	166444.4	1.27 ACRES	7429 RIDGE RD	STONEY RUN	1.270
020500011818900	425041.8	166383.3	IMPSLT 2 OR 1.2770 ACRES	7433 RIDGE RD	MYTYCH PROP	1.270
020500011818105	425029.0	166321.5	IMPSLT 1 OR 2.0093 ACRES	7439 RIDGE RD	MYTYCH PROP	2.000
020500014819565	424788.2	166419.4	13 ACRES	7440 RIDGE RD	HANOVER	13.000
02050000696500	424823.6	166158.4	IMPS.828 ACRE	7456 RIDGE RD	HANOVER	0.828

020500018025000	426339.7	168359.6	IMPS1.15 ACRES	1129 STONEY RUN RD	HANOVER	1.150
020500009884905	426297.3	168331.8	.497 ACRE	1131 STONEY RUN RD	HANOVER	0.490
020500010654000	426261.2	168355.5	.28 ACRE	1140 STONEY RUN RD	HANOVER	0.280
020500013964800	426262.2	168298.4	IMPSLT 36	1141 STONEY RUN RD	HANOVER	0.360
020500007637000	426252.1	168235.9	1.08 ACRES	1149 STONEY RUN RD	HANOVER	1.080
0205000090036527	426254.2	168185.4	1.353 ACRES	1151 STONEY RUN RD	HANOVER	1.350
020500002063925	426006.6	168217.1	3.8 ACRES	1168 STONEY RUN RD	STONEY RUN	3.800
0205000090036526	426175.5	168238.8	2.647 ACRES	1171 STONEY RUN RD	HANOVER	2.640
020500004097800	426200.3	168114.7	IMPS2.60 ACRES	1175 STONEY RUN RD	HANOVER	2.600
020500012166000	426099.3	168111.8	2.6 ACRES	1181 STONEY RUN RD	HANOVER	2.600
020500008784525	425975.1	168137.2	IMPS3.09 ACRES	1191 STONEY RUN RD	HANOVER	3.090
020500001374128	425872.8	168224.4	1.03 ACRES	1196 STONEY RUN RD	HANOVER	1.030
020500006986300	425730.5	167910.9	IMPS2 ACRES	1225 STONEY RUN RD	STONEY RUN	2.000
020500014373100	425663.0	167945.0	1.73 ACRES	1235 STONEY RUN RD	STONEY RUN	1.730
020500015849200	425657.8	167775.9	1.8702 ACRES	1241 STONEY RUN RD NOISE ABATEMENT PROGRAM	HANOVER	1.870
020500014614650	425575.8	167896.0	1.47 ACRES #12 PAP		STONEY RUN	1.470
020500007695830	425590.1	167945.2	LT .28 ACRES	1245 STONEY RUN RD	HANOVER	0.280
020500010923000	425538.0	167992.6	.62 ACRE	1249 STONEY RUN RD	HANOVER	0.620
020500011818100	425489.2	167994.8	IMPS1.53 ACRES	1255 STONEY RUN RD NOISE ABATEMENT PROGRAM	HANOVER	1.530
020500016910630	425454.0	167996.0	1.8720 ACRES #11 PAP		STONEY RUN	1.870
020500005971200	425471.9	168095.1	IMPS1.21 ACRES	1260 STONEY RUN RD	HANOVER	1.210
020500005246800	425417.0	167979.4	1.879 ACRES	1261 STONEY RUN RD	STONEY RUN	1.870
020500010299375	425385.6	168125.7	LT 174X428	1262 STONEY RUN RD	HANOVER	1.700
020500010780200	425427.9	167732.2	IMPS4.638 ACS & 15 FT R/	1263 STONEY RUN RD	STONEY RUN	4.630
0205000090005531	425378.1	168007.5	LT 1	1267 STONEY RUN RD	FRIENDSHIP	0.270
0205000090005530	425353.2	168004.4	LT 2	1269 STONEY RUN RD	FRIENDSHIP	0.250
020500009160206	425316.1	167996.8	LT 19	1271 STONEY RUN RD	FRIENDSHIP	0.260
020500007014500	425245.9	168011.4	1.30 ACRES	1279 STONEY RUN RD	HANOVER	1.300
020500005487325	425496.2	167844.7	IMPS1.480 ACRES	7212 VALLEY RD	HANOVER	1.480
020500013654500	425652.3	167851.3	2.0298 ACRES	7217 VALLEY RD	HANOVER	2.020
020500004771400	425538.2	167758.2	IMPS2.394 ACRES	7218 VALLEY RD	STONEY RUN	2.390
020500007427480	425593.7	167793.9	.50 ACRE	7221 VALLEY RD NOISE ABATEMENT PROGRAM	STONEY RUN	0.500
020500013892900	425629.2	167708.0	2.01 ACRES #9 PAP		STONEY RUN	2.010
020500010251300	425656.5	167651.5	1.99 ACRES	7235 VALLEY RD	STONEY RUN	1.990
020500002198900	425546.7	167581.4	2.247 ACS 40X170.75	7236 VALLEY RD	HANOVER	2.400
020500009747200	425629.2	167584.6	2.649 ACRES	7241 VALLEY RD	STONEY RUN	2.640
020532210988600	430452.4	165921.3	IMPSW HLF LT H	500 WALTER RD	GLENBROOK	2.500
020532217649200	430452.4	165921.3	PT LT G 85X100	501 WALTER RD	GLENBROOK	0.200
020532203547700	430452.4	165921.3	PT LT G 85X100	505 WALTER RD	GLENBROOK	0.200
020532216856000	430452.4	165921.3	PT LT G	509 WALTER RD	GLENBROOK	0.390
020541215375125	428590.0	169401.3	LT 17	781 WARREN AVE	HOMELAND PARK	2.000
020541215375150	428532.4	169410.5	LT 16	785 WARREN AVE	HOMELAND PARK	2.000
020541216581190	428502.2	169569.2	LT 20	786 WARREN AVE	HOMELAND PARK	3.000
020541207764500	428471.9	169436.7	LT 15	787 WARREN AVE	HOMELAND PARK	2.300
020500016933300	425029.6	168063.2	1.25 ACRES	1315 WEEPING WILLOW RD	HANOVER	1.250
020500000126540	424984.8	168074.4	1.605 ACRES	1319 WEEPING WILLOW RD	PLT CATH DOWGALSKI PROP	1.600
020500012782800	424933.3	168075.7	1 ACRE	1321 WEEPING WILLOW RD	PLT CATH DOWGALSKI PROP	1.000
020500010920200	424883.7	168066.3	1.107 ACRES	1323 WEEPING WILLOW RD	PLT OF C DOWGALSKI PROP HOMELAND PARK-WHITE FARM	1.100
020541209283100	428029.9	169380.3	LTS 93 94	1000 WHITE AVE		2.500

020532210490330	430452.4	165921.3	PT LT G	1103 WILSON RD	GLENBROOK	0.304
020532200836075	430452.4	165921.3	NW .25 LT G 85X557	1105 WILSON RD	GLENBROOK	1.080
020532210588900	430342.5	166176.5	S HLF LT 15	1106 WILSON RD	GLENBROOK	0.580
020532211093600	430452.4	165921.3	R LT G 199X556 RW 12	1107 WILSON RD	GLENBROOK	2.540
020532215619803	430452.4	165921.3	S PT LT 14	1108 WILSON RD	GLENBROOK	0.460
020532200756000	430452.4	165921.3	PT LT F	1109 WILSON RD	GLENBROOK	1.620
020532203074085	430452.4	165921.3	S HLF LT 13	1110 WILSON RD	GLENBROOK	0.581
020532213694005	430452.4	165921.3	PT LT F 91X364	1111 WILSON RD	GLENBROOK	0.760
020532201920950	430452.4	165921.3	S HLF LT 12 100X253	1112 WILSON RD	GLENBROOK	0.581
020532205541300	430452.4	165921.3	S HLF LT 11	1114 WILSON RD	GLENBROOK	0.580
020532216171400	430452.4	165921.3	IMPSLT 10 RESUB LT E	1115 WILSON RD	GLENBROOK	0.880
020532203173800	430452.4	165921.3	S HLF LT 10	1200 WILSON RD	GLENBROOK	0.581
020532210490325	430452.4	165921.3	LT D1	1201 WILSON RD	GLENBROOK	0.360
020532200819000	430452.4	165921.3	S HLF LT 9	1202 WILSON RD	GLENBROOK	0.580
020532214597800	430452.4	165921.3	S HLF LT 8	1208 WILSON RD	GLENBROOK	0.585
020532217319505	430452.4	165921.3	SE .25 LT 7	1210 WILSON RD	GLENBROOK	0.290
020532290042562	430452.4	165921.3	IMPSPT LT 4 OR.448AC R/S	1211 WILSON RD	GLENBROOK	0.448
020532206917700	430452.4	165921.3	LT 3 RESUB LT B	1213 WILSON RD	GLEN BROOK	0.300
020532290016459	430452.4	165921.3	IMPSLTS 1 2 RESUB LT B	1215 WILSON RD	GLENBROOK	0.200
020532214527800	430452.4	165921.3	SE .25 OF LT 4 50X25	1220 WILSON RD	GLEN BROOK	0.290
020532205370400	430452.4	165921.3	SW PT LT 4	1222 WILSON RD	GLENBROOK	0.290
020532211251500	430452.4	165921.3	PT LT 1A 75X128	415 WIRTH RD	GLENBROOK	0.220
020532214980740	430452.4	165921.3	IMPSPT LT 25 OR .793 AC	7422 ZACHARY LN	GLENBROOK	0.790
020532203935425	430452.4	165921.3	IMPSPT LT J	7425 ZACHARY LN	GLENBROOK	0.399
020532215903785	430452.4	165921.3	IMPSPT LT J	7427 ZACHARY LN	GLENBROOK	0.982
020500000134520	428604.2	167076.6	IMPS10 AC IMPS	STONEY RUN RD	FRIENDSHIP AIRPORT	10.000
020500000359002	424536.1	166393.3	49.402 ACRES	RIDGE RD	HANOVER	49.400
020500003589650	425291.2	168002.4	.70 ACRE	STONEY RUN RD	STONEY RUN	0.700
020500003984405	425169.1	167439.4	1.8459 ACRES	RIDGE RD	NR BALTO-WASH AIRPORT	1.840
020500003984410	425471.5	167383.4	1.6302 ACRES	VALLEY RD	STONEY RUN	1.630
020500004408000	425602.0	167761.9	.5 ACRE	VALLEY RD	STONEY RUN	0.500
020500005487305	425460.6	167528.5	5.37 ACS	VALLEY RD	STONEY RUN RD	5.370
020500006986900	425790.5	167671.4	IMPS12.31 ACRES	STONEY RUN RD	HANOVER	12.310
020500008628200	424841.7	167230.6	2.56 ACRES	RIDGE RD	HANOVER	2.560
020500008628400	424803.1	167205.2	.948 ACRE	RIDGE RD	HANOVER	0.940
020500009169410	426347.1	168017.5	44.2929 AC	STONEY RUN RD	NR PATAPSCO	44.290
020500012164600	426124.5	168178.0	.74 ACRE	STONEY RUN RD	HANOVER	0.740
020500012169900	424117.5	168701.1	1.334 ACRES	RACE RD	HANOVER	1.330
020500013654550	425597.8	167826.2	1.35 ACRES	VALLEY RD	HANOVER	1.350
020500013883525	424980.1	167170.4	LT 3950 SQ FT	RIDGE RD PAP #125	S OF STONEY RUN RD	0.090
020500014819550	424788.2	166404.8	2 ACRES	RIDGE RD	HARMANS	2.000
020500090014226	426188.8	165794.7	21.198 ACRES	DORSEY RD	HARMANS	21.190
020500090016527	426520.7	169594.2	5.299 ACRES	PENN R R ADJ BWI AIRPORT	HANOVER	5.290
020500090021215	425055.0	168030.3	.353 ACRE	WEeping WILLOW RD	HANOVER	0.350
020500090032909	424878.0	166523.9	7.421 ACRES	RIDGE RD	HARMANS	7.420
020500090035113	428239.1	169303.9	20 ACRES	STONEY RUN RD	SHIPLEY	20.000
020500090039938	425517.8	167984.8	.69 ACRE	VALLEY RD	HANOVER	0.690
020500090040474	425135.4	167587.4	.859 ACRE	RIDGE RD	HANOVER	0.850
020500090041916	428604.2	167076.6	1555.1007 ACS.	AVIATION BLVD	BALTO-WASH AIRPORT	1555.100

020500090050346	426784.3	169518.1	12.2783ACRES	BALTO WASH PKWY	FRIENDSHIP AIRPORT	12.270
020500090050472	425561.6	167476.4	2.3075 ACRES	VALLEY RD	HANOVER	2.300
020500090059019	430541.4	167313.9	13.583 ACRES OR PAR	HOLLINS FERRY RD	FERNDAL	13.580
020500090060504	428985.8	169451.3	4.306 ACRES P/O RESI	OLD STONY RUN RD	BWI PLAZA ASSOCS NEW IMP	4.300
020500090079014	424567.8	167074.5	2.560 ACRES	RESERVE PARCEL	RIDGE BUSINESS CENTER	2.560
020500090102072	426671.4	168575.3	IMPS4.610 ACS	FT MEADE RD	FRIENDSHIP AIRPORT	4.610
020500090211133	425758.2	167779.6	5.2592 ACRES	STONEY RUN RD	HANOVER	5.250
020500090212960	425982.4	168042.0	9.9183 ACS	STONEY RUN RD	HANOVER	9.910
020500212269608	428960.7	165935.4	LTS 17 18 BK H	JEFFERY AVE	ARUNDEL MANOR	0.010
020500212269615	428960.7	165935.4	LTS 19 20 BK H	JEFFERY AVE	ARUNDEL MANOR	0.110
020500212269620	428960.7	165935.4	LTS 25 TO 27 BK H	JEFFERY AVE	ARUNDEL MANOR	0.160
020500212269625	428960.7	165935.4	LTS 21 TO 24 BK H	JEFFERY AVE	ARUNDEL MANOR	0.210
020500212415200	428789.5	165840.7	LTS 1 4TO20 BK R LTS	16 BK A ARUNDEL AVE	ARUNDEL MANOR	1.010
020500212514890	428960.7	165935.4	LTS 26 TO 28 BK B	BERTRAM AVE	ARUNDEL MANOR	0.150
020500216480825	428960.7	165935.4	LTS 59 60 61 BK B	ARUNDEL AVE	ARUNDEL MANOR	0.150
020500217644675	428960.7	165935.4	LTS 3 4 BK B	DORSEY RD	ARUNDEL MANOR	0.110
020500217644676	428960.7	165935.4	LTS 5 TO 9 BK B	DORSEY RD	ARUNDEL MANOR	0.280
020500217644677	428960.7	165935.4	LTS 10 11 BK B	DORSEY RD	ARUNDEL MANOR	0.110
020532218369200	430452.4	165921.3	PT LT F 91X109	S/S WILSON RD	GLENBROOK	0.230
020541205037200	428630.4	169671.6	PT LT 24	LYMAN AVE	HOMELAND PARK	0.170
020541212450200	428579.8	169546.5	LT 19 OR 2 ACRES	WARREN AVE	HOMELAND PARK	2.000
020541290069847	428650.2	169537.8	LT 18 PT LT 25	LYMAN AVE	HOMELAND PARK	2.250

Appendix A2 - List of MTN Parcels

Martin State Airport Parcels as provided by the 2003 Maryland Department of Planning
Maryland PropertyView Database

ACCTID	DIGXCORD	DIGYCORD	LEGAL1	LEGAL2	LEGAL3	ACRES
04152200005872	450179.8	185646.0	8.638 AC	NS EASTERN BLVD	1560 W LYNBROOK RD	8.630
04152000011482	449256.3	185574.9	2.3259 AC		LELAND INDUSTRIAL PARK	2.320
04152000011483	449256.3	185574.9	5.6765 AC		LELAND INDUSTRIAL PARK	5.670
04152000011485	449256.3	185574.9	1.0193 AC		LELAND INDUSTRIAL PARK	1.010
04152000011484	449256.3	185574.9	4.4352 AC		LELAND INDUSTRIAL PARK	4.430
04152000011487	449256.3	185574.9	1.9038 AC PARCEL B		LELAND INDUSTRIAL PARK	1.900
04151700003471	450691.0	183817.7	IMPS740.17 AC PAR EXE	STRAWBERRY POINT RD	SE COR WILSON POINT 1100FT E WILSON POINT RD	740.170
04151521450221	449829.6	185415.5	IMPS24 AC			24.000
04151700003472	449780.4	183824.4	7.74 AC SWS	WILSON POINT RD	SW COR DOGWOOD RD	7.740
04152000001160	449097.5	185642.6	LTS 22-23 19.809 AC		MIDDLE RIVER FARMS	19.800
04152000011486	449256.3	185574.9	.8711 AC PARCEL A		LELAND INDUSTRIAL PARK	0.870

Appendix B1 - List of BWI Buildings

BWI buildings as provided by Fire and Rescue Division - October 2005

Building Number	Building Name/Description
100	Main Terminal
101	Field Lighting Vault (Ramp)
102	Cargo Building F
103	Service Station A&W
104	Trichulator at Fuel Farm
105	ARFF – Midfield Station
106	Budget Car Rental
107	United Auto & MSP- MSFM- Bomb UNIT
108	National Car Rental (QTA)- NRR
109	Avis Car Rental (QTA)
110	Hertz Car Rental (Service \ Admin QTA)
111	MAA Storage/Signature Flight Support
112	United\ American - Air Freight
113	MAA Storage (Elm Road & Spring Lane)
114	HVAC Utility Plant (CUP)
115	MAA Snow Team Dorm\Warehouse
116	Field Maintenance Shop
117	Equipment Shed (behind Field Maint Build)
118	Equipment Shed (behind Field Maint Build)
119	Storage Shed (behind Field Maint storage buildings)
120	Field Maintenance Offices
121	MAA Vehicle Maintenance Shop
122	MTA Police - Canine Facility (old Horse Barn)
123	Equipment Self-Maintenance Shop (Blue Building @ Fuel Farm)
124	Cargo Building A
125	Cargo Building B
126	Cargo Building C
127	Cargo Building D
128	Cargo Building E
129	US Airways Maintenance Shop (down at fuel farm)
130	Alamo Car Rental (QTA) NRR
131	Fuel Farm Monitoring Shack
132	Fuel Farm Pump Station at Colonial Leased space
132A	Pump Station Storage bldg. at Colonial leased space (FF)
133	Sheraton International Hotel
134	Signature Vehicle Maintenance Shop (at fuel farm)
135	Salt Dome (Spring Lane)
136	FMX/Signature Storage bldg. (blue) near Spring Lane
137	FMX/BMX Storage bldg. behind field Maint. build-rear gate
138	AUTO Shop Storage Building/Supplies
139	Safety Storage Building (near Salt Dome)

140	CNG Bus Maintenance Facility
141	T-Hangar 1- GA Ramp
142	T-Hangar 2- GA Ramp
143	T-Hangar 3- GA Ramp
144	Signature Hangar - GA Ramp
145	General Aviation Terminal (Offices) old Signature
146	Northrop-Grumman Hangar at GA Complex
147	Amtrak Station
148	Taxi/Bus Staging Building (Friendship Road)
149	LSG Sky Chiefs
150	LSG Sky Chiefs
151	Alamo Rent-A-Car (old Elkridge-Landing)
152	National Car Rental (old Elkridge-Landing)
153a,b	Avis Admin Service Building (/)
154	CNG Fuel Facility (Signature East)
155	Kaufman Bldg. {MAA Office of Technology}
156	A- Gate Trichulator Building
157	Spare
158	Field Maintenance Equipment garage
159	Thrifty Rent-A-Car Service Building NRR (8)
160	BWI Parking Garage - Hourly
161	BWI Parking Garage Administration Building
162	Field Maintenance Shed
163	Glycol pump/control building @ midfield behind electrical vault
164	Glycol pump/control building @ fuel farm
165	Benson Hammond House
166	BWIA- Central Parking Garage - Daily
167	Hudson General Offices
168	Fuel Farm Shell Oil Building (box trailer)
169	Amtrak Station MTA Parking Garage (old)
169A	Amtrak Station MTA Parking Garage (new)
170	BWI Deicing Control Building at 15R-33L (on top of hill)
171	BWI Deicing Control Building @ 15L-33R GA Ramp
172	MAC Building – BMX
173	Glycol Pumping station 15R/33L (United Airlines) metal shed
174	Glycol Storage bldg. (Red barn building 15R De-ice Area)
175	Glycol Storage bldg. (Red barn building) 15R De-ice Area)
176	Midfield Cargo G
177	Future Cargo H
178	Future Cargo I
179	Rental Car Parking Garage
180	CSB Rental Car Complex
181	General Aviation Hangar #1 (Signature)
182	General Aviation Hangar #2 (Signature)
184	G.A. Facility Terminal & Signature F.S. Office
185	QTA Electrical Substation
186A	Light Rail Electrical Substation (Near Spring Lane)
186B	Light Rail Electrical Substation (Near Spring Lane)

187	Spare
188	Enterprise QTA Admin.
189	Future RAC #9
190	Future RAC #10
200	R/W 33L Localizer/MALSR (at approach end of R/W 15R) - FAA
203	N/C Shop (located to right of ASR9 Bldg.-labeled "storage")- FAA
204	Storage (left of ASR9 Bldg.) - FAA
205	Environmental Unit (across from Logistics Bldg.) - FAA
207	Landscaping Storage (across from Logistics Bldg.) - FAA
260	R/W 10 Localizer (at approach end of R/W 10) - FAA
261	R/W 28 Glideslope (at approach end of R/W 28) - FAA
262	R/W 15R Glideslope (at approach end of R/W 15R- labeled "RTR Glideslope") - FAA
263	VORTAC (alongside R/W 10 on approach side of R/W 28) - FAA
264	R/W 33L Glideslope (at approach end of R/W 33L and TWY "T" intersection) - FAA
265	BALE SX (next to RTR Transmitter-labeled "RTR Transmitter")
266	R/W 10 Glideslope E/G Bldg. (at approach of R/W 10 and "H" TWY- labeled "RTR Glideslope") - FAA
267	R/W 28 Localizer (at approach of R/W 10)
268	R/W 10 Glideslope (at intersection of R/W 10 and TWY "G" – labeled "R/W 10 Glideslope") (4 small buildings) - FAA
269	Logistics Building (across from Environmental Unit
270	ASR & Storage (top of service road off of TWY "W", to left of N/C Bldg.-used on N/C Shop #203) - FAA
271	RTR Receiver Site (on hill behind taxi stand) - FAA
272	R/W 15R Localizer/MALSR (on Dorsey Rd. next to Observation area) - FAA
273	R/W 33R Glideslope (at intersection of TWY "M" and "S") - FAA
274	R/W 33R Localizer (at approach of R/W 15L) - FAA
275	R/W 15L Glideslope (at intersection of TWY "N" and "S") - FAA
276	R/W 15L Localizer (at approach of R/W 33L) - FAA
277	BW/IOEH MALSR (at approach end of R/W 10) - FAA
278	BALC SX (at approach end of R/W 10) - FAA
279	ALS (on service road at approach of R/W 10) - FAA
280	BALC SX (on service road at approach of R/W 11) - FAA
281	ALS Storage (on service road at approach of R/W 12) - FAA
282	ALS Storage (on service road at approach of R/W 13) - FAA

Appendix B2 - List of MTN Buildings

Martin State Airport buildings as provided by Martin State Airport – December 2005

Building Number	Description
1	Hangar #1
2	Hangar #2
3	Hangar #3
4	Hangar #4
5	Hangar #5
6	Hangar #6
7	Hangar #7
15	Terminal Building
16	Aircraft Service Trailer
499	Corporate Hanger
501	Corporate Hanger
503	Corporate Hanger
505	Corporate Hanger
507	Corporate Hanger
509	Corporate Hanger
511	Corporate Hanger
8	Lockheed Martin Building
16	Mid-field Fire Pumphouse
17	500,000 gallon Water Tank
11	MTN Sand/UREA
12	SHA Sand/Salt
9	MTN Maintenance Shop
10	MTN Maintenance Equipment Storage
18	MTN Maintenance- Supply Storage
19	MTN Maintenance Storage Shed
13	MD State Police
14	Baltimore County Marine Police
20	Baltimore County Aviation Police - (In progress- constructed next to Hangar 6)
21	T-Hangers 1 through 190
22	MTN Fuel Farm
23	Black & Decker Fuel Farm
24	Lockheed Martin Farm
25	Sinclair Farm
26	Control Tower Building - Mid Field - Start Construction 06/07
27	Community Hangar - Mid-field - Start Construction 06
28	MTN - Remote Transmitter Receiver Site
29	MTN Runway Lighting Vault
N/A	Maryland Air National Guard Fire Station - Not Part of AEIS
N/A	Maryland Air National Guard Fuel Farm - Not Part of AEIS
N/A	14 Other Maryland Air National Guard Buildings - Not Part of AEIS

Appendix C - URISA Addressing Standard

The following is extracted from the Urban and Regional Information Systems Association (URISA) Street Address Data Standard Executive Summary. This extract highlights basic address elements to be used for assigning addresses to MAA buildings and features. Please visit http://www.urisa.org/address_data_standard.htm to view or download the entire Executive Summary and the entire URISA Standard.

Introduction

Street addresses are the location identifiers most widely-used by state and local government and the public. Street addresses are critical information for administrative, emergency response, research, marketing, mapping, GIS, routing and navigation, and many other purposes. Because they have evolved over many decades, under the control of thousands of local jurisdictions, in many different record and database formats, and to serve many purposes, different address formats and types pose a number of complex geoprocessing and modeling issues. As a consequence, government agencies struggle with these issues as they seek to integrate large, mission-critical files into master address repositories.

Objective

The Street Address Data Standard provides, in four separate parts, data content, classification quality, and exchange standards for street, landmark, and postal addresses. The standard has been created to meet the following objectives:

- Describe a way to express the content, applicability, data quality, and accuracy of an address dataset or data element.
- Codify some commonly used discrete units of address information, referred to as descriptive elements, and thereby provide standardized terminology and definitions to alleviate inconsistencies in the use of descriptive elements and to simplify the documentation process.
- Provide a method for documenting the content of address information.
- Facilitate street address data exchange, and offer a migration path from legacy formats to standards compliant ones.
- Provide a statement of best practices for street address data content and classification.
- Recognize, as a practical matter, that different users may require different levels of standardization.
- Define standards and tests and means of describing street address data quality.

Scope

This standard covers street addresses. A street address specifies a location by reference to a thoroughfare, or a landmark; or it specifies a point of postal delivery. There are three basic classes of street address:

1. Thoroughfare addresses specify a location by reference to a thoroughfare.
2. Landmark addresses specify a location by reference to a named landmark.
3. Postal addresses specify points of postal delivery which have no definite relation to the location of the recipient, such as post office boxes, rural route boxes, etc.

4. General (for lists including any or all of the above types)

Other important points:

- This definition excludes addressees, occupants, persons, or businesses.
- The definition treats coordinate values as attributes of the address.
- The standard applies only to addresses within the United States.
- The standard excludes electronic addresses, such as e-mail addresses.

Standards Development Procedure

This standard builds on USPS Publication 28, and on the Address Data Content Standard previously proposed by the Federal Geographic Data Committee (FGDC) (Public Review Draft, April 17, 2003). The FGDC effort led the Urban and Regional Information Systems Association (URISA) to propose, with the support of the National Emergency Number Association (NENA) and the U.S. Bureau of the Census, the convening of a Street Address Standards Working Group to include representatives from a range of interested federal, state, regional, and local government agencies, the private-sector, and professional associations. The proposal was accepted by the FGDC Standards Working Group on April 13, 2005.

Maintenance Authority

The Census Bureau will maintain the standard under the auspices of its duties as theme lead for the FGDC Subcommittee on Cultural and Demographic Data (SCDD), ensuring that the standard is revisited on the 5-year schedule as stipulated, or updating and revising as necessary.

Draft Address Standard Part 1: Address Data Content

The address data content standard specifies the data elements that may appear in street addresses. There are simple elements, complex elements, and attribute elements:

1. Simple elements are address components that are defined independently of all other elements
2. Complex elements are formed from two or more simple or other complex elements
3. Attributes contain descriptive information about the address.

ADDRESS NUMBER ELEMENTS

ELEMENT NAME	DEFINITION	EXAMPLE
Address Number Prefix	A non-integer portion of the address number that precedes the address number itself.	N6W2 3001 Bluemound Road A19 Calle 117
Address Number	The numeric identifier for the house, building or other feature along the thoroughfare.	1234 North Main Street
Address Number	A non-integer portion of the address number that follows the Suffix address number itself.	123 1/2 Main Street B317 A Calle 117

STREET NAME ELEMENTS

ELEMENT NAME	DEFINITION	EXAMPLE
Street Name Pre-Modifier	A word preceding all other elements of the street name that is not a street pre-directional or a street pre-type.	123 Old North First Street
Street Name Pre-Directional	A word preceding the street name that indicates the directional taken by the thoroughfare from an arbitrary starting point, or the sector where it is located.	1234 North Main Street
Street Pre-Type	The part of the street name preceding the primary name that indicates the type of street.	1234 Avenue A 1234 Calle Aurora
Street Name	Official name of a street or an alternate (alias) name that is used and recognized.	234 Central Street Southwest
Street Post-Type	The part of the street name following the primary name that indicates the type of street.	1234 Central Street Southwest
Street Post-Directional	A word following the street name that indicates the directional taken by the thoroughfare from an arbitrary starting point, or the sector where it is located.	1234 Cherry Street North
Street Name Post-Modifier	A word following all other elements of the street name that is not a street post-type or street post-directional.	1230 Main Street Extended

BUILDING, FLOOR, AND UNIT ELEMENTS

ELEMENT NAME	DEFINITION	EXAMPLE
Building Type	The type of structure (when several structures are found at the same address).	Building 6 123 Main Street 123 Main Street Block 5
Building ID	The letter, number, or word used to distinguish one structure from another when several occur at the same address.	Tower B Block 12
Floor Type	The word describing level or story of a building where an address is located.	Floor 2 Mezzanine Level
Floor ID	The number, letter, or word or combination of numbers and letters distinguishing one floor from another within a structure.	Floor 2 Mezzanine Level
Unit Type	The name given to an individual occupancy within a building or structure.	Apartment 2B Suite 1040
Unit ID	The numbers, letters, words, or combination thereof distinguishing one occupancy from another.	123 Main Street Apartment 17 456 Oak Lane Suite 2C
Private Mailbox	A mailbox rented from a private commercial mail receiving agency (CMRA).	RR 1 Box 12 PMB 596 10 Main Street PMB 234

INTERSECTION ADDRESS ELEMENT

ELEMENT NAME	DEFINITION	EXAMPLE
Intersection Connector	The word or symbol placed between the names of intersecting streets.	Eighth Street and Pine Street

LANDMARK NAME ELEMENT

ELEMENT NAME	DEFINITION	EXAMPLE
Landmark Name	The name by which a feature is publicly known.	Statue of Liberty White House Stanford University

LARGER-AREA ELEMENTS

ELEMENT NAME	DEFINITION	EXAMPLE
Community (Urbanization) Place Name	A named area, sector, or development that is not an incorporated municipality or other governmental unit, such as a neighborhood or subdivision in a city, or a rural settlement in unincorporated area. Often called "urbanization" or "barrio" in Puerto Rican addressing usage.	New Hope Community Capitol Hill neighborhood Urbanization Los Olmos Jardine Fagota
Municipality Place Name	The name of the municipality (city, township, or other non-county local government) in which the address is physically located.	Birmingham, AL Castle Rock Township, MN
USPS Place Name	The name given by the U.S. Postal Service to the post office from which mail is delivered to the address. In many places this will be different from the name of the municipality in which the address is physically located.	Washington, DC
County	The primary administrative subdivision of a state in the United States.	Shelby County, AL
State	The primary legal subdivision of the United States, represented by its two-letter USPS abbreviation.	San Francisco, CA St. Louis, MO
ZIP Code	A five-digit code that identifies a specific geographic [postal] delivery area.	Birmingham, AL 35305
ZIP+4	A four-digit extension of the five-digit ZIP Code that identifies a portion of a carrier route for USPS mail delivery.	Birmingham, AL 35242-3426
Nation	The name of the nation in which the address is located.	United States of America

ADDRESS ATTRIBUTE ELEMENTS

ELEMENT NAME	DEFINITION	EXAMPLE
Address X Coordinate	The X coordinate of address location.	80 degrees west longitude
Address Y Coordinate	The Y coordinate of the address location.	40 degrees north latitude

Locational Attributes

Reprinted from the Urban and Regional Information Systems Association (URISA) Draft Street Address Data Standard Executive Summary.

Appendix D - UNIFORMAT II Standard

The following extracted codes from the American Society for Testing and Materials (ASTM) UNIFORMAT II Building and Related Sitework standard shall be used to identify and label selected types of assets on MAA property.

TABLE X1.1 - Example Levels 3 and 4 for the UNIFORMAT II Classification of Building Elements

<u>Level 3 Elements</u>	<u>Level 4 Sub-Elements</u>
B1010 Floor Construction	B101004 Ramps B101005 Exterior Stairs and Fire Escapes B101006 Floor Raceway Systems B101099 Other Floor Construction
B2030 Exterior Doors	B203002 Solid Exterior Doors B203003 Revolving Doors B203004 Overhead Doors B203005 Door Wall Opening Elements B203099 Other Exterior Doors
B3020 Roof Openings	B302001 Glazed Roof Openings B302002 Roof Hatches
C1010 Partitions	C101001 Fixed Partitions C101002 Demountable Partitions C101003 Retractable Partitions C101004 Site Built Toilet Partitions C101005 Site Built Compartments and Cubicles C101006 Interior Balustrades and Screens C101007 Interior Windows & Storefronts
C1020 Interior Doors	C102001 Interior Doors C102002 Interior Door Frames C102003 Interior Door Hardware C102004 Interior Door Wall Opening Elements C102005 Interior Door Sidelights & Transoms C102006 Interior Hatches & Access Doors
C1030 Fittings	C103001 Fabricated Compartments & Cubicles C103003 Storage Specialties C103004 Fabricated Cabinets & Counters C103005 Identifying/Visual Aid Specialties C103006 Internal Traffic Protection/Aids

	C103099 Other Fittings
C2010 Stair Construction	C201001 Regular Stairs C201002 Curved Stairs C201003 Spiral Stairs C201004 Stair Handrails and Balustrades
D1010 Elevators & Lifts	D101001 Passenger Elevators D101002 Freight Elevators D101003 Lifts
D1020 Esc. & Moving Walks	D102001 Escalators D102002 Moving Walks
D1090 Other Conveying Systems	D109001 Dumbwaiters D109002 Pneumatic Tube Systems D109003 Hoists & Cranes D109004 Conveyors D109005 Chutes D109006 Turntables D109007 Baggage Handling & Loading Systems D109008 Transportation Systems
D3050 Terminal & Package Units	D305001 Terminal Self-Contained Units D305002 Package Units
D4030 Fire Protection Specialties	D403001 Fire Extinguishers D403002 Fire Extinguisher Cabinets D403099 Other Fire Protection Specialties
D4090 Other Fire Protection Syst.	D409001 Carbon Dioxide Systems D409002 Foam Generating Equipment D409003 Clean Agent System D409004 Dry Chemical Systems D409005 Hood & Duct Fire Protection D409099 Misc. Other Fire Protection Systems
D5030 Comm. & Security	D503001 Public Address & Music Systems D503002 Intercommunication & Paging Systems D503003 Telephone Systems D503004 Call Systems D503005 Television Systems D503006 Data Networking D503007 Fire Alarm Systems D503008 Security and Detection Systems D503009 Clock and Program Systems

D503099 Other Communications & Security Systems

E1010 Commercial Equipment	E101001 Security & Vault Equipment E101002 Teller and Service Equipment E101003 Registration Equipment E101004 Checkroom Equipment E101005 Mercantile Equipment E101006 Laundry & Dry Cleaning Equipment E101007 Vending Equipment E101008 Office Equipment E101099 Other Commercial Equipment
E1020 Institutional Equipment	E102005 Auto-visual Equipment E102006 Detention Equipment E102099 Other Institutional Equipment
E1030 Vehicular Equipment	E103001 Vehicular Service Equipment E103002 Parking Control Equipment E103003 Loading Dock Equipment E103009 Other Vehicular Equipment
E2010 Fixed Furnishings	E201001 Fixed Artwork E201002 Fixed Casework E201003 Blinds and Other Window Treatment E201004 Fixed Floor Grilles and Mats E201005 Fixed Multiple Seating E201006 Fixed Interior Landscaping
E2020 Movable Furnishings	E202001 Movable Artwork E202002 Furniture & Accessories E202003 Movable Rugs and Mats E202004 Movable Multiple Seating E202005 Movable Interior Landscaping
F1010 Special Structures	F101001 Air Supported Structures F101002 Pre-engineered Structures F101003 Other Special Structures
F1020 Integrated Construction	F102001 Integrated Assemblies F102002 Special Purpose Rooms F102003 Other Integrated Construction
F1030 Special Construction Syst.	F103003 Special Security Systems F103004 Vaults

F103099 Other Special Construction Systems

F1040 Special Facilities

F104003 Site Constructed Incinerators

F104004 Kennels & Animal Shelters

F104005 Liquid & Gas Storage Tanks

F104099 Other Special Facilities

F1050 Special Controls & Instru.

F105002 Building Automation Systems

F105099 Other Special Controls & Instrumentation

F2020 Hazard. Comp. Abatement

F202001 Removal of Hazardous Components

F202002 Encapsulation of Hazardous Components

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Appendix E – Navigational Aid Equipment Types

ARSR	Air Route Surveillance Radar
ASR	Airport Surveillance Radar
DF	Direction Finder
DME	Distance Measuring Equipment
FAN	FAN Marker Beacon
ILS	Instrument Landing System
LOC	Localizer System
MLS	Microwave Landing System
MSBLS	Microwave Scan Beam Landing System
NDB/C	Nondirectional Radio Beacon -- Compass Locator
NDB/H	Nondirectional Radio Beacon -- High Frequency
NDB/M	Nondirectional Radio Beacons/Medium HF
NDB/U	Nondirectional Radio Beacons/Ultra HF
PAR	Precision Approach Radar
SDF	Simplified Direction Facility
SECRA	Secondary Radar
TACAN	Tactical Air Navigation
TLS	Transponder Landing System
VDME	VHF Omirange w/Distance Measuring Equipment
VOR	VHF Omirange
VORTAC	VHF Omirange w/Tactical Air Navigation
VOT	VOR Test

Appendix F – Event Codes

National Fire Incident Reporting System (NFIRS) Incident Codes Provided by BWI Fire and Rescue Division

Code	Description
1	Fire
10	Fire, Other
100	Fire, Other
11	Structure Fire
111	Building Fire
112	Fires in structures other than in a building
113	Cooking fire, confined to container
114	Chimney or flue fire, confined to chimney or flue
115	Incinerator overload or malfunction, fire confined
116	Fuel burner/boiler malfunction, fire confined
117	Commercial compactor fire, confined to rubbish
118	Trash or rubbish fire, contained
12	Fire in mobile property used as a fixed structure
120	Fire in mobile prop used as a fixed structure, Other
121	Fire in mobile home used as a fixed residence
122	Fire in motor home, camper, recreational vehicle
123	Fire in portable building, fixed location
13	Mobile property (vehicle) fire
130	Mobile property (vehicle) fire, Other
131	Passenger vehicle fire
132	Road freight or transport vehicle fire
133	Rail vehicle fire
134	Water vehicle fire
135	Aircraft fire
136	Self-propelled motor home or recreational vehicle
137	Camper or recreational vehicle (RV) fire
138	Off-road vehicle or heavy equipment fire
14	Natural vegetation fire
140	Natural vegetation fire, Other
141	Forest, woods, or wildland fire
142	Brush, or brush and grass mixture fire
143	grass fire
15	Outside rubbish fire
150	Outside rubbish fire, Other
151	Outside rubbish, trash or waste fire
152	Garbage dump or sanitary landfill fire
153	Construction or demolition landfill fire
154	Dumpster or other outside trash receptacle fire
155	Outside stationary compactor/comoacted trash fire
16	Special outside fire
160	Special outside fire, Other
161	Outside storage fire

- 162 Outside equipment fire
- 163 Outside gas or vapor combustion explosion
- 164 Outside mailbox fire
- 17 Cultivated vegetation, crop fire**
- 170 Cultivated vegetation, crop fire, Other
- 171 Cultivated grain or crop fire
- 172 Cultivated orchard or vineyard fire
- 173 Cultivated trees or nursery stock fire
- 2 Overpressure Rupture, Explosion, Overheat -no fire**
- 20 Overpressure rupture, explosion, overheat, Other**
- 200 Overpressure rupture, explosion, overheat, other
- 21 Overpressure rupture from steam (no ensuing fire)**
- 210 Overpressure rupture from steam, Other
- 211 Overpressure rupture of steam pipe or pipeline
- 212 Overpressure rupture of steam boiler
- 213 Steam rupture of pressure or process vessel
- 22 Overpressure from air or gas -no fire**
- 220 Overpressure from air or gas, Other
- 221 Overpressure rupture of air or gas pipe/pipeline
- 222 Overpressure rupture of boiler from air or gas
- 223 Air or gas rupture of pressure or process vessel
- 23 Overpressure rupture, chemical reaction - no fire**
- 231 Chemical reaction rupture of process vessel
- 24 Explosion (no fire)**
- 240 Explosion (no fire), Other
- 241 Munitions or bomb explosion (no fire)
- 242 Blasting agent explosion (no fire)
- 243 Fireworks explosion (no fire)
- 25 Excessive heat, scorch burns with no ignition**
- 251 Excessive heat, scorch burns with no ignition
- 3 Rescue & Emergency Medical Service Incidents**
- 30 Rescue, emergency medical (EMS) call , Other**
- 300 Rescue, emergency medical call (EMS), Other
- 31 Medical Assist**
- 311 Medical assist, assist EMS crew
- 32 Emergency medical service (EMS)**
- 321 EMS call, excluding vehicle accident with injury
- 322 Vehicle accident with injuries
- 323 Motor vehicle/pedestrian accident (MV Ped)
- 33 Lock-In**
- 331 Lock-In (If lock-out, use 511)
- 34 Search for lost person**
- 340 Search, Other
- 341 Search for person on land
- 342 Search for person in water
- 343 Search for person underground
- 35 Extrication, rescue**
- 350 Extrication, rescue, Other
- 351 Extrication of victim(s) from building/structure
- 352 Extrication of victim(s) from vehicle

- 353 Removal of victim(s) from stalled elevator
- 354 Trench/below grade rescue
- 355 Confined Space Rescue
- 356 High Angle Rescue
- 357 Extrication of victim(s) from machinery
- 36 Water or ice-related rescue**
- 360 Water & ice related rescue, Other
- 361 Swimming/recreational water areas rescue
- 362 Ice Rescue
- 363 Swift water rescue
- 364 Surf rescue
- 365 Watercraft rescue
- 37 Electrical Rescue**
- 370 Electrical rescue, Other
- 371 Electrocutation or potential electrocution
- 372 Trapped by power lines
- 38 Rescue or EMS standby**
- 381 Rescue or EMS standby
- 4 Hazardous Conditions, (no fire)**
- 40 Hazardous condition, Other**
- 400 Hazardous condition, Other
- 41 Combustible/flammable spills & leaks**
- 410 Flammable gas or liquid condition, Other
- 411 Gasoline or other flammable liquid spill
- 412 Gas leak (natural gas or LPG)
- 413 Oil or other combustible liquid spill
- 42 Chemical release, reaction, or toxic condition**
- 420 Toxic condition, Other
- 421 Chemical hazard (no spill or leak)
- 422 Chemical spill or leak
- 423 Refrigeration leak
- 424 Carbon monoxide incident
- 43 Radioactive condition**
- 430 Radioactive condition, Other
- 431 Radiation leak, radioactive material
- 44 Electrical wiring/equipment problem**
- 440 Electrical wiring/equipment problem, Other
- 441 Heat from short circuit (wiring), defective/worn
- 442 Overheated motor
- 443 Light ballast breakdown
- 444 Power line down
- 445 Arcing, shorted electrical equipment
- 45 Biological hazard**
- 451 Biological hazard, confirmed or suspected
- 46 Accident, potential accident**
- 460 Accident, potential accident, Other
- 461 Building or structure weakened or collapsed
- 462 Aircraft standby
- 463 Vehicle accident, general cleanup
- 47 Explosive, bomb removal**

- 471 Explosive, bomb removal (for bomb scare, use 721)
- 48 Attempted burning, illegal action**
- 480 Attempted burning, illegal action, Other
- 481 Attempt to burn
- 482 Threat to burn
- 5 Service Call**
- 50 Service call, Other**
- 500 Service Call, Other
- 51 Person in distress**
- 510 Person in distress, Other
- 511 Lock-Out
- 512 Ring or jewelry removal
- 52 Water problem**
- 520 Water problem, Other
- 521 Water evacuation
- 522 Water or steam leak
- 53 Smoke, odor problem**
- 531 Smoke or odor problem, Other
- 54 Animal problem or rescue**
- 540 Animal problem, Other
- 541 Animal problem
- 542 Animal rescue
- 55 Public service assistance**
- 550 Public service assistance, Other
- 551 Assist police or other government agency
- 552 Police matter
- 553 Public service
- 554 Assist invalid
- 555 Defective elevator, no occupants
- 56 Unauthorized burning**
- 561 Unauthorized burning
- 57 Cover assignment, standby at fire station, move-up**
- 571 Cover assignment, standby, move-up
- 6 Good Intent Call**
- 60 Good intent call, Other**
- 600 Good intent call, Other
- 61 Dispatched and cancelled en route**
- 611 Dispatched and cancelled en route
- 62 Wrong location**
- 621 Wrong location
- 63 Controlled burning**
- 631 Authorized controlled burning
- 632 Prescribed fire
- 64 Vicinity alarm**
- 641 Vicinity alarm (incident in other location)
- 65 Steam, Other gas mistaken for smoke**
- 650 Steam, Other gas mistaken for smoke, Other
- 651 Smoke scare, odor of smoke
- 652 Steam, vapor, fog or dust thought to be smoke
- 653 Barbeque, tar kettle

- 66 **EMS call where party has been transported**
- 661 EMS call, party transported by non-fire agency
- 67 **Hazmat release investigation w/no hazmat**
- 671 Hazmat release investigation w/no hazmat
- 672 Biological hazard investigation
- 7 **False Alarm & False Call**
- 70 **False Alarm & False Call, Other**
- 700 False alarm or false call, Other
- 71 **Malicious, mischievous false alarm**
- 710 Malicious, mischievous false alarm, Other
- 711 Municipal alarm system, malicious false alarm
- 712 Direct tie to FD, malicious/false alarm
- 713 Telephone, malicious false alarm
- 714 Central station, malicious false alarm
- 715 Local alarm system, malicious false alarm
- 72 **Bomb Scare**
- 721 Bomb scare - no bomb
- 73 **System or detector malfunction**
- 730 System malfunction, Other
- 731 Sprinkler activation due to malfunction
- 732 Extinguishing system activation due to malfunction
- 733 Smoke detector activation due to malfunction
- 734 Heat detector activation due to malfunction
- 735 Alarm system sounded due to malfunction
- 736 CO detector activation due to malfunction
- 74 **Unintentional system/detector operation - no fire**
- 740 Unintentional transmission of alarm, Other
- 741 Sprinkler activation, no fire - unintentional
- 742 Extinguishing system activation
- 743 Smoke detector activation - no fire - unintentional
- 744 Detector activation - no fire - unintentional
- 745 Alarm system sounded - no fire - unintentional
- 746 Carbon monoxide detector activation - no CO
- 75 **Biohazard Scare**
- 751 Biological hazard, malicious false report
- 8 **Severe Weather & National Disaster**
- 800 Severe weather & national disaster, Other
- 811 Earthquake assessment
- 812 Flood assessment
- 813 Wind storm, tornado/hurricane assessment
- 814 Lightning strike (no fire)
- 815 Severe weather or natural disaster standby
- 9 **Special type of incident**
- 90 **Special type of incident**
- 900 Special type of incident, Other
- 91 **Citizen complaint**
- 911 Citizen complaint

Extract of Associated Public Safety Communications Officers, Inc.
Police 10-CODES
 Provided by Maryland Transportation Authority

Code	Description
10-10	Fight In Progress
10-11	Dog Case
10-13	Weather - Road Report
10-14	Prowler Report
10-15	Civil Disturbance
10-16	Domestic Problem
10-26	Detaining Subject, Expedite
10-30	Unnecessary Use of Radio
10-31	Crime In Progress
10-32	Man With A Gun
10-34	Riot
10-35	Major Crime Alert
10-37	(Investigating) Suspicious Vehicle
10-45	Animal carcass At: _____
10-46	Assist Motorist/Disabled Vehicle
10-47	Emergency Road Repair At: _____
10-48	Traffic Standard Repair At: _____
10-49	Traffic Light Out At: _____
10-50	Accident (F, PI, PD)
10-53	Road Blocked At: _____
10-54	Livestock On Highway
10-55	Intoxicated/Drugged Driver
10-56	Intoxicated/Drugged Pedestrian
10-57	Hit And Run (F, PI, PD)
10-70	Fire Alarm
10-73	Smoke Report
10-80	Chase In Progress
10-81	Breathalyzer Report
10-89	Bomb Threat
10-90	Bank Alarm At: _____
10-92	Improperly Parked Vehicle
10-93	Blockade
10-94	Drag Racing
10-98	Prison/Jail Break

Agency Codes Utilized

Sig 13 Officer Down Need Back Up **NOW**
10-37P Hitchhiker
Code 16 Bridge Jumper

Appendix E – Martin State Airport Gate Status

1. Main Entrance – Security Guard – 24 hours
2. Corporate Entrance – Electronic Keypad
3. Emergency use only – Locked W/Jersey Wall
4. Emergency use only – Locked W/Jersey Wall
5. Emergency use only – Locked W/Jersey Wall
6. Emergency use only – Locked W/Jersey Wall
7. Main Entrance – MDANG Base – Security Police
8. Emergency use only – Locked W/Jersey Wall
9. Emergency use only – Locked W/Best Lock
10. Emergency use only – Locked W/Best Lock
11. Emergency use only – Locked W/Best Lock
12. Emergency use only – Locked W/Best Lock
13. Emergency use only – Locked W/Best Lock
14. Emergency use only – Locked W/Best Lock
15. Boat Ramp Gate – Locked W/Best Lock
16. Gate to Sand/UREA Dome, Not perimeter fence Locked/Best Lock
17. Strawberry Point Entrance – Electronic Keypad
18. Emergency use only – Locke W/Best Lock
19. Entrance to Mid-Field Area – Electronic Keypad
20. Vehicle & Pedestrian access point to AOA – Restriction Signs
21. Pedestrian access point to AOA-Restriction Signs

22. Pedestrian access point to AOA-Restriction Signs
23. Pedestrian access point to AOA-Restriction Signs
24. Pedestrian access point to AOA-Restriction Signs
25. Vehicle & Pedestrian access point to AOA – Restriction Sign
26. Vehicle access gate to AOA – Not perimeter fencing – Locked opened/ Closed as required.
27. Vehicle access gate to AOA – Not perimeter fencing – Locked opened/ Closed as required.
28. RS – 1 Lighting vault – Vehicle Gate – Locked W/Best Lock
29. Perimeter Vehicle Gate – Maintenance access to Shoreline – Locked W/Best Lock
30. Perimeter Vehicle Gate – Maintenance access to Shoreline – Locked W/Best Lock
31. Personnel Gate – Maintenance outfall access – Locked W/Best Lock.
32. Vehicle gate access to Emergency Fire Trails – Locked W/Best Lock.
33. Perimeter Vehicle Gate – Maintenance access to Shoreline – Locked W/Best Lock.
34. Perimeter Vehicle Gate – Maintenance access to Shoreline – Locked W/Best Lock.
35. Personnel Gate access to Military Pavilion – Locked W/Best Lock.
36. Vehicle Gate access to Military Pavilion – Locked W/Best Lock.
37. Vehicle access gate to Boat Ramp – Locked W/Best Lock.
38. Personnel Gate – Maintenance outfall access – Locked W/Best Lock.



AEIS

Maryland Aviation Administration

Office of Engineering and Construction Management

Airport Engineering Information System

DATA QUALITY STANDARD

Version 1.1

July 2007

**Airport Engineering Information System
Data Quality Standard
For the Maryland Aviation Administration
Version 1.1, July 2007**

Table of Contents

1.	INTRODUCTION.....	3
1.1.	Purpose.....	3
1.2.	Scope.....	3
1.3.	Audience	3
1.4.	Related Material.....	3
1.5.	Change Control.....	4
2.	DEFINING QUALITY	6
2.1.	What is Quality?	6
2.2.	Range of Data Quality	6
2.3.	User Expectations of Data Quality	7
2.4.	Measures of Data Quality	7
3.	HOW TO ASSES DATA QUALITY	8
3.1.	Accuracy	8
3.2.	Conformity.....	15
3.3.	Completeness	15
3.4.	Uniqueness.....	15
3.5.	Consistency.....	16
3.6.	Intuitiveness.....	16
3.7.	Presence of Metadata	17
4.	WHEN TO ASSESS DATA QUALITY.....	18
4.1.	Quality Control During AEIS Data Development.....	18
4.2.	Quality Audit Prior to Submittal of AEIS Data Sets	18
4.3.	MAA Acceptance of Data Delivered by Contractors	19
4.4.	Automated Checking Before Loading into Production Database.....	19
4.5.	Ongoing Checking and Updates of AEIS Data.....	19
5.	RECORDING QUALITY	20
5.1.	Data Quality Metadata Elements	20
5.2.	Statements of Positional Accuracy	21
5.3.	Quality of Data Collected in the Field	21
5.4.	Quality Audit and Acceptance Testing Results	21

1. INTRODUCTION

1.1. Purpose

The purpose of this standard is to define the term *data quality* and delineate methods for establishing, measuring and recording the level of quality of Maryland Aviation Administration (MAA) Airport Engineering Information System (AEIS) data sets.

1.2. Scope

This standard applies to all data created for, stored within, or provided by the AEIS. This includes data in a geographic information system (GIS) format (e.g., ESRI shape files and geodatabases), computer automated design and drafting files (e.g., Autodesk DWGs), orthophotography (e.g., aerial images of MAA property in a tagged image file format), and survey data (e.g., point coordinates in comma delimited ASCII files).

All data development procedures should reference this document or portions of it, describing how the quality objectives defined herein are satisfied. Furthermore, all data deliverables should come with metadata that describes whether the data being provided adhere to this standard or not.

1.3. Audience

This standard is intended for individuals who create, check, or accept data for the MAA AEIS. It is technical in nature and assumes that readers have a working knowledge of the data types and methods of creating the data contained in the MAA AEIS. These data types are further defined in the MAA GIS and CADD Standards documents.

System developers should also review this document so that any databases, business logic, or user interfaces developed for AEIS are capable of storing, maintaining, and disseminating data of the quality levels defined herein as well as the associated metadata.

1.4. Related Material

The following documents are related to this Data Quality Standard and are referenced herein. These resources are informative (versus normative) in nature: compliance with the requirements of the following documents is not required in order to be in compliance with this standard. Readers of this standard may wish to review the related reading material listed below for further details on a specific topic. The URL for each is provided. In some cases, the document can be downloaded for free from the Web sites. In other cases, as indicated with an asterisk, instructions on how to purchase a copy are provided.

- Quality Systems Terminology (ANSI/ASQ A3-1987), American Society of Quality Control, 1987, <http://e-standards.asq.org/perl/catalog.cgi?item=T2110> *
- Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998, Federal Geographic Data Committee, <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/accuracy/part3/chapter3>

- Geospatial Positioning Accuracy Standards, Part 4: Architecture, Engineering, Construction, and Facilities Management, FGDC-STD-007.4-2002, <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/accuracy/part4/FGDC-endorsed-standard>
- Document #405, Standards for Aeronautical Surveys and Related Products, Fourth Editions, September 1996, Federal Aviation Administration, U.S. Department of Transportation, <http://www.ngs.noaa.gov/AERO/aerospecs.htm#FAA405>
- Sampling Procedures and Tables for Inspection by Attributes (ANSI/ASQ Z1.4-2003), American Society for Quality, <http://qualitypress.asq.org/perl/catalog.cgi?item=T004> *
- AEIS GIS Data Standard, Maryland Aviation Administration, Version 1.1, July 2007
- AEIS Data Maintenance and Update Procedures, Maryland Aviation Administration, Version 1.0, June 2006

1.5. Change Control

Following is a chronological list of changes made to this document since it was first released. A version number and the date of release are indicated for each revision.

Version Number	Date of Release	Changes Addressed
1.0	5/1/2006	Original release
1.1	7/9/2007	<p>IndividualName and OrganizationName added to the list of metadata elements that are relevant to data quality in Figure 4 of Section 5.1.</p> <p>Section 1.5 added for change control.</p> <p>Reference to appendix removed and included in references.</p> <p>Hyperlinks in Section 1.4 updated.</p>

Readers are encouraged to suggest additional changes to this document. Comments and suggestions should be recorded using the form on the following page and submitted to the AEIS Program Manager for MAA's consideration. Accepted changes will be reflected in a subsequent version of this document.

**AEIS Data Quality Standard
Document Revision Form**

Date: _____

To:

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From:

Name: _____
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Change Tracking # _____

Date Received: _____

Assigned To: _____

Date Addressed: _____

Change in Version: _____

Comments:

#	Reference*	Comment or Suggested Change	MAA Resolution

** Reference must provide a clear indication of where the change is recommended (e.g. section, page, paragraph and sentence or figure number).*

Additional pages can be used if required.

2. DEFINING QUALITY

2.1. What is Quality?

“Quality” as defined by the American Society of Quality Control is “the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs”. “Quality” as applied to the data stored within AEIS is the degree to which a given data element helps the system’s users make the types of decisions for which the data are intended. For example, survey data in AEIS is intended to help engineers and other technicians locate or measure features such as runways, water valves or airfield lights with a high degree of precision. Survey data accurate to only +/- 20 feet would not allow them to adequately perform these tasks and would therefore be considered poor quality. Conversely, parcel boundaries or future building locations accurate to +/- 20 feet may adequately help planners make decisions and therefore could be considered quality data.

This example above illustrates the following two important aspects of data quality. First, data quality varies based on the user and the way the data are intended to be used. Second, the level of quality that can be considered acceptable varies among the feature types included in the AEIS database.

2.2. Range of Data Quality

Airports typically possess large amounts of engineering information¹ because of the regulations they operate within and the complexity of their operations. This data can be found in the form of an Federal Aviation Administration (FAA) required Airport Layout Plan (ALP), design and as-built construction drawings, lease exhibits, obstruction charts, runway approach plates, etc. As a result, it is impossible for an airport to possess no data.

On the opposite end of the spectrum, airports are very dynamic places. They are constantly undergoing construction and space allocation changes to meet travel and tenant demand. Furthermore, major airports are typically owned by government agencies and they rely on private sector contractors for much of the information they require. Such outsourcing can cause delays in transmitting data to airport personnel once a physical change has been made. Therefore, an airport cannot have “perfect” data, meaning that all of the information required to make all decisions is current and within the specification required by the users.

For all airports, the range of data quality falls between the impossibilities of no data and perfect data. The objective of this standard is to help MAA assess the quality of its data at any given time and to ensure that all AEIS related data collection, cleaning, and conversion processes improve the quality of data as defined in this standard.

¹ Engineering information is defined herein as spatial data including survey data, vector data stored in GIS and CADD formats, imagery as well as related technical documents and images.

2.3. User Expectations of Data Quality

Given that the goal of achieving data perfection is unrealistic, a system's users must understand the quality of the data with which they are working. Users can then make informed judgments about where, when, and how to use the data they are offered. Information about the quality of data is conveyed in metadata, which is information about the data. Metadata elements describe the time and method of data collection, the data collector, and other factors that convey information about the data quality. Each AEIS data standard features a section that describes specific metadata elements required for the type of data defined in that standard.

2.4. Measures of Data Quality

Often geospatial data, which forms a large part of the engineering information in AEIS, is judged based on its accuracy. Typically, this refers to the position indicated by the data as compared with the feature's true position on the face of the earth. More specifically, this is referred to as horizontal, absolute positional accuracy and is only one measure of the quality of a data set. The measures of data quality that will be considered for AEIS include:

- Horizontal accuracy
- Vertical accuracy
- Temporal accuracy
- Conformity
- Completeness
- Uniqueness
- Consistency
- Intuitiveness
- Presence of Metadata

These measures of data quality are discussed in the following section.

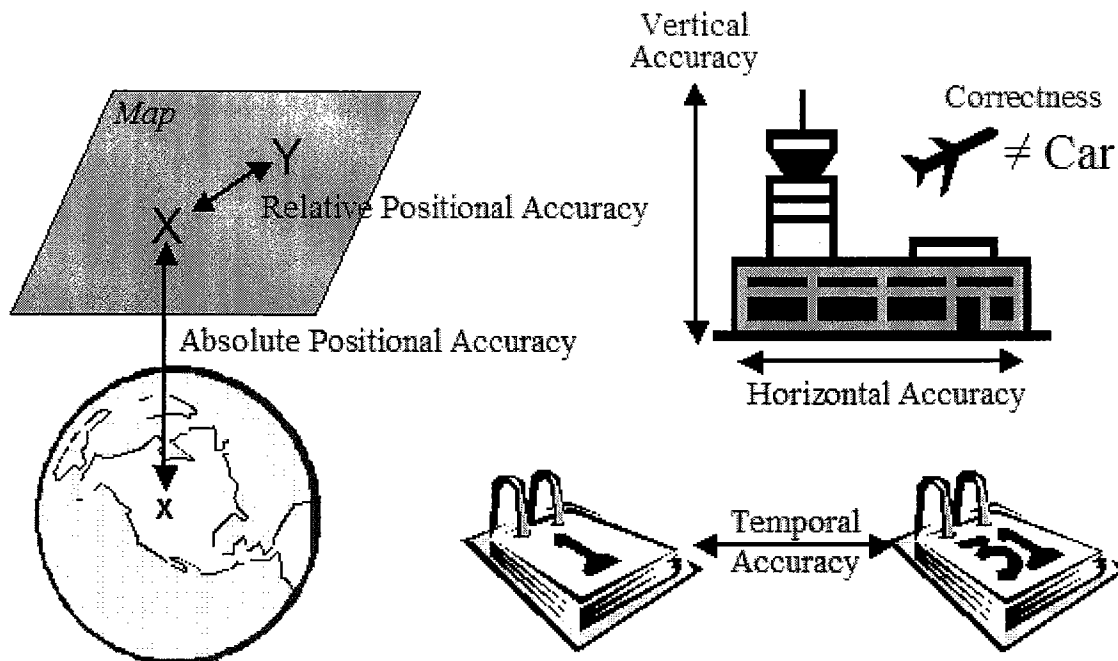
3. HOW TO ASSES DATA QUALITY

This section describes each of the measures of data quality that are relevant to AEIS. Each term is defined, along with the methods that should be used to assess its contribution to a data set's overall quality. Steps taken to enhance this element of quality are also described in general and references are provided to other AEIS documents that define these steps in detail.

3.1. Accuracy

Accuracy refers to a data element's likeness to the real world feature it is intended to represent. This definition is vague, so the specific aspects of accuracy that are relevant to data within AEIS must be more succinctly defined. These include positional accuracy, correctness, and temporal accuracy as depicted in Figure 1 below and described in the following sections.

Figure 1
Diagram Showing the Different Types of Accuracies



Positional Accuracy

Positional accuracy refers to how closely the data depict a feature's indicated position in relation to its true position. This applies to any form of spatial data, including coordinates expressed in plain text, vector data, and raster data. Positional accuracy also applies to both horizontal and vertical data. A further distinction is made between absolute accuracy, which compares the indicated position with the feature's actual location on the face of the Earth, and relative accuracy, which compares the indicated position of a feature in relation to the location of other features. In AEIS, accuracy with regard to spatial data refers to absolute horizontal and vertical positional accuracy unless otherwise stated.

The positional accuracy of AEIS data should be assessed based on procedures outlined in the Federal Geographic Data Committee (FGDC's) Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy (NSSDA). In short, this procedure requires that the location of a minimum of 20 points be tested. These points should be dispersed throughout the area covered by the data set being tested. Horizontal accuracy is assessed by comparing the coordinates of each point tested with those of the same point as indicated by an independent source of higher accuracy. Similarly, vertical accuracy is assessed by measuring the elevation of the point being tested with the elevation of the same point as indicated by an independent source of higher accuracy. If 20 points are tested, only one is allowed to fall outside the required accuracy tolerance to achieve the 95% confidence level² required of all AEIS data.

The level of absolute horizontal positional accuracy required of AEIS features at the 95% confidence level is listed in Figure 2 on the following page. The accuracies listed have been derived in part from the FGDC's Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C) and Facility Management and FAA Document #405, Standards for Aeronautical Surveys and Related Products. The feature classes correspond to those in the AEIS GIS Data Standard. The units expressed are U.S. Survey Foot.

² The 95% confidence level is a statistical indication that 95% or more of the features in a given data set fall within the required specifications. The 95% confidence level was selected for AEIS as this is the most widely accepted level of confidence accepted for data within the aviation industry. It is also the level required by the International Civil Aviation Organization (ICAO) for most aviation related spatial data.

Figure 2
List of Horizontal Accuracies Required of AEIS GIS Feature Types
(expressed as number of U.S. Survey Feet +/- of actual location at 95% confidence level)

<u>Airfield</u>		<u>Airspace</u>	
AircraftDeicingArea	5	LandmarkSegment	10
AircraftGateStand	5	Obstacle	
AircraftNonMovementArea	5	ObstructionArea	20
AirfieldLight	5	ObstructionIdentificationSurface	20
AirfieldLinearFeatureSafetyLine	5	AirwayLine	100
AirOperationsArea	5	FlightTrackLine	20
AirportBoundary	1	FlightTrackPoint	20
AirportSign	10	RegulatedAirspaceArea	40
Apron	5		
Clearway	5	<u>Cadastral</u>	
DisplacedThreshold	5	AirportParcel	1
FrequencyArea	20	ArcheologicalSite	5
Helipad	5	County	50
HelipadFATO	5	EasementsAndRightofWays	0.5
HelipadThreshold	5	FAARegionArea	40
HelipadTLOF	5	LandUse	50
MarkingArea	2	LeaseZone	0.5
MarkingLine	2	Municipality	50
PassengerLoadingBridge	10	Parcel	1
PavementSection	5	State	50
RestrictedAccessBoundary	5	Zoning	50
Runway	5		
RunwayArrestingArea	5	<u>Environmental</u>	
RunwayBlastPad	5	EnvironmentalContaminationArea	10
RunwayCenterline	2	FaunaHazardArea	10
RunwayEnd	1	FloodZone	10
RunwayHelipadDesignSurface	5	FloraSpeciesSite	20
RunwayIntersection	2	ForestStandArea	10
RunwayLabel	1	HazMatStorageSite	10
RunwayLAHSO	5	NoiseContour	1
RunwaySafetyAreaBoundary	5	NoiseIncident	10
RunwaySegment	5	NoiseMonitoringPoint	10
Shoulder	5	SampleCollectionPoint	10
Stopway	5	Shoreline	10
TaxiwayHoldingPosition	2	ShorelineBufferCriticalArea	40
TaxiwayIntersection	5	SoilArea	40
TaxiwaySegment	5	WatershedArea	40
		Wetland	10

Geotechnical

AirportControlPoint	0.07
CoordinateGridArea	1
ElevationContour	1
ImageArea	20

Interior

Door	0.5
Elevator	0.5
Floor	0.5
Room	0.5
Space	0.5
Stairs	0.5
Walls	0.5
Windows	0.5

Manmade Structures

Building	5
ConstructionArea	10
Fence	10
Gate	10
Tower	5

Navigational Aids

NAVAIDCriticalArea	5
NAVAIDEquipment	5
NAVAIDSite	20
NAVAIDSystem	5

Seaplane

FloatingDockSite	10
NavigationBuoy	5
SeaplaneLandingArea	5
SeaplaneRampCenterline	5
SeaplaneRampSite	5

Security

SecurityArea	5
SecurityIdentificationDisplayArea	5
SecurityPerimeterLine	10
SterileArea	5

Surface Transportation

Bridge	5
DrivewayArea	10
DrivewayCenterline	10
ParkingLot	5
RailroadCenterline	5
RailroadYard	5
RoadCenterline	5
RoadPoint	10
RoadSegment	5
Sidewalk	10
Tunnel	5
TankSite	3
Utilities	5

Other

OtherLine	10
OtherPoint	10
OtherPolygon	10

Correctness

With regard to attribute data and metadata, accuracy refers to how closely the data match the true value. For most types of attribute data, this is simply a matter of whether the data value is correct or not. In these cases, accuracy is also referred to as correctness. For numeric attributes that fall within a range (e.g., outside air temperature or wind speed) values can have varying degrees of accuracy; however, since AEIS will not be measuring the numeric values directly, the values will still be assessed based on whether or not they match the original source for the data and correctness can be used as the measure of accuracy.

The correctness of attribute data and metadata within AEIS will be assessed by comparing the data value against the original source for the data. The correctness of a data set will be assessed by comparing values of a statistically valid number of randomly sampled values (a method similar to the one used for positional accuracy). The American Society for Quality Sampling Procedures and Tables for Inspection by Attributes (ANSI/ASQ Z1.4-2003) defines the procedure by which AEIS attribute data and metadata will be assessed. In short, this procedure requires that a statistically valid number of randomly sampled values be taken from the data set being tested (referred to as the *lot*) and compared with the corresponding value indicated in the original source for that data. As with spatial data, attribute data and metadata will be tested at a 95% confidence level.

Figure 3
Lot and Sample Sizes and # of Allowable Errors at 95% Confidence Level
(Derived from ANSI/ASQC Z1.4-2003)

Lot Size		Sample Size	# Allowable Errors	
<u>Minimum</u>	<u>Maximum</u>		<u>Normal</u>	<u>Tightened</u>
2	15	2	1	0
16	25	7	1	0
26	90	7	1	0
91	150	7	1	0
151	280	7	1	0
281	500	17	2	1
501	1200	28	3	2
1201	3200	53	5	3
3201	10000	81	7	5
10001	35000	125	10	8
35001	150000	187	14	12
150001	500000	300	21	18
500001	999999999	300	21	18

During data production, logical groups of data should be tested as they are completed and not at the end when all data in a given set have been completed. This method identifies any problems in the data development process in an early stage. If any interim lot being tested fails (meaning that the number of allowable errors is surpassed), then subsequent lots of the same data must be tested with a tightened number of allowable errors. After five consecutive lots tested under the

tightened criteria pass (an indicator that any systematic problems in the data production process have been resolved) then the normal number of allowable errors can be re-instigated.

Temporal Accuracy

The final type of accuracy to be considered for AEIS data is temporal accuracy. Temporal accuracy refers to how closely the data describe a feature's current state. For example, if a building has been digitized using aerial photography taken in 2002 but is subsequently demolished, then any data sets that show that building would be temporally inaccurate, or simply put, out of date.

Temporal accuracy is most often assessed by merely reviewing the metadata to determine how old a data set is. This method is only useful when comparing the quality of two data sets that depict the same features, such as two maps showing water utility infrastructure in the vicinity of Terminal A. Using such a comparison to evaluate two *different* data sets can be misleading. For example, a 10-year-old drawing that shows water utilities in an area around Terminal C that has not been altered for over 20 years is more temporally accurate than a 2-year old drawing showing water utilities in an area of Terminal A where construction occurred within the past year.

Temporal accuracy can also be assessed by comparing the number of outdated features as a percentage of the total features in a data set with the number of outdated features in other data sets. The problem with assessing temporal accuracy in this manner is that it assumes all features in a data set are equally relevant to end users. This assumption is clearly not valid. Consider, for example, two data sets that depict buildings. The first data set contains an outdated version of BWI's main terminal. The other data set features the updated main terminal but contains an outdated version of an off-airfield maintenance shed. The first data set is still less useful (and therefore of poorer quality) than the second because the main terminal is more important to more AEIS users than the maintenance shed.

Because of the difficulties described above in measuring temporal accuracy, efforts will be made to update data rather than to measure temporal accuracy. Requirements for updating data will be established based on the relative benefit of each data set, the costs of obtaining new data, and the budgets available for data maintenance. Some of the measures that will be taken to improve the temporal accuracy of AEIS data include the following, which are described in more detail in the AEIS Data Maintenance and Update Procedures:

- Exterior basemaps will be updated annually from aerial or satellite imagery (alternating between the two each year).
- Interior floor plans will be updated on an on-going basis through a change notification process prompted by the approval of construction permits.
- The allocation of space to airport tenants will be updated based on prompts from new lease agreements made with tenants.
- Utilities data will be updated when construction projects or other activities make measuring the location of existing utility assets more convenient.

3.2. Conformity

Conformity refers to how well a data set conforms to the specifications established for that data set. For example, the MAA GIS standard requires that runways be depicted as polygons on a layer called 'Runway'. A runway depicted as a line on a GIS layer called 'RWY' would have a low degree of conformity. The specifications for AEIS data can be found in AEIS data standards and in project scope documents that may define more specific requirements.

Conformity with AEIS data standards should be monitored by the individuals who are working on the data while the data are being developed, and as documented in quality control procedures. Contractors should also check for conformity with standards as a part of their quality auditing process. This audit should be carried out immediately before the data is delivered to MAA. Once data are delivered, MAA may use discretion to perform acceptance testing as a check for conformity. Quality control, quality auditing, and acceptance testing procedures are described in more detail in Section 4 of this document.

3.3. Completeness

Completeness refers to how many of the total number of existing features a data set represents. For example, a GIS data layer for runways at BWI that contains two of the four existing runways would be considered incomplete. Sometimes, completeness is limited by a project's scope or the intent of the data being submitted. For instance, a construction project intended to extend the 15L end of Runway 15L/33R would only be expected to provide as-built drawings of that runway. In such cases, the extent of the data should be described in the metadata so that the level of completeness can be assessed.

Perhaps the simplest way to check for completeness is to count all features provided and compare the total with the total number of features known to exist. If there are less features in the data set than are known to exist, then the data are incomplete. In cases where the total number of features is not as obvious as in the runway example given above, other data sources such as aerial imagery or equipments lists will be used. For example, features that are visible in up-to-date imagery but not in the submitted data set indicate a lack of completeness. If it is impossible or not cost-justified to determine the number of total features in a given area, steps should be taken so that a comprehensive data discovery process is performed so that all possible source documents related to the area of interest are uncovered.

With regard to required attributes and metadata elements, completeness can be checked by the AEIS system by making sure that required fields have been populated with valid values. All AEIS modules should perform such validation steps before the data are saved in the AEIS database.

3.4. Uniqueness

Uniqueness refers to the degree to which a data element is not redundant with another data element. For example, if a GIS data layer for runways at BWI contains two Runways 15L-33R, then the data set has a low degree of uniqueness. In some cases it is acceptable to have two instances of a given feature. For example, one might be the current depiction of a runway and a second might be a depiction of the same runway after a proposed lengthening. This is

acceptable, since the two instances of the runway are intended to convey different information. In such cases, it is critical to have metadata that sufficiently describes the status of the information and any other unique differences.

Data developers should assess the uniqueness of a feature by comparing it with other features in the same data set. For example, if the feature being entered adds quality by enhancing another aspect of quality such as temporal accuracy, then it should be entered and the existing feature should be flagged for removal. If the feature being worked on provides no additional value, it should be skipped. Data developers should also ascertain that graphic components of a given feature are not repeated. To depict a runway for instance, a CADD technician may create the polygon using multiple line segments. The technician should avoid duplicating any of those line segments in the drawing provided to MAA.

Data can be checked for uniqueness in a variety of ways. Perhaps the simplest method is to count all features provided and compare the total with the total number of features known to exist. If there are more features in the data set than are known to exist, then there may be a lack of uniqueness in the data. When checking for uniqueness, it is important to compare all aspects of a feature, including geometry, attributes, and metadata.

3.5. Consistency

Consistency refers to the degree to which all instances of features in a data set are depicted (spatially, as well as with attributes and metadata) in a similar manner. For example, if three of four runways at BWI are populated with attributes describing their width and length, but one is not, then there is a low degree of consistency within the data set.

In some cases, consistency may be limited by the scope of a project. For example, a project may require that all runways at BWI be depicted graphically, but that attributes only be provided for the runway that will be affected by proposed modifications. In these cases, metadata must be provided to describe why only some attributes are submitted.

Spatial data can be checked for consistency by visual examination. Attribute and metadata can also be checked by visual examination, although queries and sorting can be applied to allow patterns and inconsistencies to become more apparent. For example, if the `road_name` attribute of a layer containing road segments is consistently populated with the value `Main Street`, but one segment is populated with the value `Main St.` or `Main Blvd.`, then this inconsistency will be apparent when sorting the data by this attribute.

3.6. Intuitiveness

Intuitiveness refers to the ease with which a user can interpret the data provided. For example, data about a runway provided in an XML format intended for a system is less intuitive than data provided in a tabular format intended for a human to read.

Intuitiveness is difficult to assess because it is subjective. The best way to evaluate the intuitiveness of a given display of data is to ask the individuals who use the data. Generally, users will be able to compare the relative intuitiveness of several representations of similar data. Wherever possible, AEIS text entries that are not bound by AEIS data standards (e.g., comment

fields) should use standard industry terms (e.g., “marking” versus “paint stripe”) and, if necessary, acronyms (e.g., VOR for Very High Frequency Omni-Directional Range). In addition, the AEIS Committee has recommended the use of a Usability Consultant to assess the intuitiveness of and recommend changes to the AEIS graphical user interface. Following their recommendations, measures to enhance the intuitiveness of all AEIS data displays will include frequent interaction with users, the development of screen and report mock-ups, and the use of AEIS design guides.

3.7. Presence of Metadata

The final measure of data quality considered for AEIS is the presence of metadata. As described in Section 2, metadata is essential for conveying information to users regarding the adequacy of a data set for decision-making purposes. Without metadata, users have no information to base decisions on relative to using the data provided. Therefore, data that are provided with appropriate metadata are of higher quality than data provided without metadata. The presence of metadata should be checked by manually inspecting data files submitted or by performing queries if the data have been entered into a database.

4. WHEN TO ASSESS DATA QUALITY

The quality of AEIS data should be assessed during development, prior to submission to MAA, prior to acceptance by MAA, prior to storage within the AEIS database, and as periodically as warranted to keep it up-to-date. The following sections describe the steps that should be taken during each of these phases of the data set lifecycle.

4.1. Quality Control During AEIS Data Development

Quality control (QC) is defined by the American Society of Quality Control as the “operational techniques and the activities used to fulfill the requirements of quality”. Relative to AEIS data, QC includes the steps that are taken during the data development process to ensure that each of the elements of data quality defined in Section 3 are satisfied per the specifications for the data as defined by the appropriate AEIS data standard, or further specified by individual project requirements.

QC of spatial data is performed by GIS and CADD technicians while digitizing, converting, and cleaning the graphic entities used to depict features on a map or drawing. QC should be built into the data development processes from the beginning and should be performed throughout the data development process. QC processes might include using object snapping to determine that there are no overshoots, undershoots, or gaps, etc. in vector data. Periodically, data developers may also wish to check their own work. Such QC checks might include adding the area of individual rooms or leased area to determine that they add up to the total area on that floor of a building. The specific QC measures that are applied will vary by data set, project, and contractor. *All* QC processes should be documented so that they are performed consistently.

4.2. Quality Audit Prior to Submittal of AEIS Data Sets

A Quality Audit (QA³) is defined by the American Society of Quality Control as “a systematic and independent examination and evaluation to determine whether quality activities and results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.” A QA should be performed on all data before the data are submitted to MAA. The assessments performed as a part of a QA should follow the guidelines recommended in Section 3 for each aspect of data quality described. The accuracy and correctness tests required to ensure that data meet specifications at a 95% confidence level are the most stringent.

A QA should be performed by individuals who are familiar with the requirements of the data but who were not directly involved in the data development process. This independence minimizes any biases that may exist because of misunderstood requirements, time pressures, inadequate training, or any other circumstances that may prevent a data technician from recognizing mistakes.

³ Note QA is often used to refer to the term Quality Assurance. Quality assurance is defined by the American Society for Quality Control as “all those planned or systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality”. Based on this definition, quality assurance refers to all the actions described in this document. The acronym QA will therefore be used to refer more specifically to the quality audit.

For large data sets or production processes that span several months, it is highly recommended that QAs be performed at periodic intervals once a subset of the data has been completed. This helps to identify systematic problems in the data development process before they become costly to resolve.

4.3. MAA Acceptance of Data Delivered by Contractors

MAA (either MAA staff or a designated contractor that did not submit the data being tested) will perform acceptance tests on all AEIS data. The extent and timing of these tests may vary based on the relative importance of the data being submitted, availability of staff, and other factors. It is recommended that acceptance testing be carried out on *all* data delivered to MAA before final payment is made to the submitter.

Acceptance testing will follow the assessment methods described in Section 3, although specifics will vary between data sets and projects. If any data set fails an acceptance test, it will be returned to the contractor with a description of the reasons for failure. When correcting data, data providers should not just correct the specific errors found but should review the entire data set for similar errors that may be present but not individually caught, given the random sampling procedures used. Corrected data sets should be re-examined (i.e., QA) and resubmitted to MAA for a second round of acceptance testing. After three rounds of failed acceptance tests, MAA may decide to engage a third party to correct the situation. Extreme cases may warrant re-creating the data set. In these circumstances, the cost of correcting the data may be subtracted from the original submitter's payment.

4.4. Automated Checking Before Loading into Production Database

A data set that has passed acceptance testing will be provided to AEIS database administrators for loading into the production (i.e., accessible to end users) instance of the database. Before or as data are loaded, the data will undergo a series of automated tests to ensure conformity with certain specifications. Spatial data will be checked for proper geometry (e.g., closed polygons) and in some cases proper location. Attribute and metadata values bound by domains will be checked for valid values. The specific details of these tests and how they are carried out are defined in the AEIS Database Administrator Procedures.

4.5. Ongoing Checking and Updates of AEIS Data

After a data set is loaded into the AEIS database, it will be subject to constant scrutiny by end users and periodic evaluations performed as part of the AEIS Data Quality Program. As data errors are identified or periodic updates are performed, data in the AEIS database will be replaced as appropriate. The specific details of these actions are described in the AEIS Data Maintenance and Update Procedures.

5. RECORDING QUALITY

Since data quality (as explained in Section 2) is a relative term, it is important for data providers to convey information about data quality to MAA. Likewise, it is important for the AEIS system to convey information about the quality of the data delivered to end users. Information about data quality is part of metadata (information about the data). The following sections provide additional detail on the types of information that is to be conveyed in metadata.

5.1. Data Quality Metadata Elements

In general, the quality of data submitted to the AEIS program and provided by the AEIS database can be assumed to be compliant with AEIS data standards. Statements to this effect, as well as statements explaining any areas where data fail to meet or where data exceed AEIS specifications, should be included in the metadata that accompanies the data. AEIS metadata can be applied to an entire collection of data (e.g., an updated Airport Layout Plan) to individual feature types submitted (e.g., the Runways layer of a CADD drawing) or to a specific feature instance (e.g., Runway 15L/33R). Following are the AEIS metadata elements that can be used to convey quality.

Figure 4
Metadata Elements Related to Data Quality
(excerpt from AEIS GIS Data Standard)

Metadata Elements Used to Convey Positional Accuracy

- horizontalAccuracy
- verticalAccuracy
- evaluationMethodName
- evaluationMethodDescription
- pass
- groundSampleDistance

Metadata Elements Used to Convey Temporal Accuracy

- BegusageDateTime
- EndUsageDateTime

Metadata Elements Used to Convey Completeness

- status
- geometricObjectCount

Metadata Elements Used to Identify the Source

- individualName
- organizationName

Metadata Elements to Convey Other Statements Concerning Data Quality

- abstract
- statement

5.2. Statements of Positional Accuracy

The Federal Geographic Data Committee (FGDC's) Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy (NSSDA), requires that statements about horizontal and vertical positional accuracy be made as shown in Figure 5.

Figure 5
Statements of Positional Accuracy

For data that has been tested in order to determine its accuracy:

Tested X feet horizontal accuracy at 95% confidence level

For data that has been compiled to obtain a certain level of accuracy:

Compiled to meet X feet vertical accuracy at 95% confidence level

5.3. Quality of Data Collected in the Field

When data are collected in the field (either on the ground, in the air, or by satellite) relevant information often exists about the way the data were collected that directly relates to quality. For example, dilution of precision statistics contain information about the relative absolute positional accuracy of the coordinates provided by Global Positioning System (GPS) receivers. The location, accuracy, and class of photo control points used to orthorectify images contain information about the quality of orthophotos. The degrees off-nadir and sun-angle can convey information about the quality of data derived from satellite imagery.

This type of information is typically provided and should be required as a part of all data deliverables of this type. While much of this information will not be included in the metadata fields in the AEIS database, it should be retained and offered to anyone using the raw data.

5.4. Quality Audit and Acceptance Testing Results

The output of all quality audits (QA) performed on AEIS data (as described in Section 4.2) should be recorded and provided to MAA. This information should describe the type of test performed and the data tested, provide an indication of lot and sample size if random sampling is used, and include a count of all failed data items and specific details that will allow data developers to identify and correct failed items. Typically, a spreadsheet is the best way to convey such information, as it is numeric and list-oriented. As circumstances warrant, Microsoft Word documents can also be submitted. Adobe Portable Document Format (PDF) versions of the files can be submitted as a substitute.