

APPENDIX M

EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS EL PASO COUNTY, COLORADO



DIGITAL CAD/GIS DATA SUBMITTAL TECHNICAL GUIDE

Version 1.0 – January 2019

1.0 Introduction

1.1 Purpose

It is the purpose of this document to outline and describe in detail the standards by which Digital CAD/GIS Data is to be submitted to El Paso County during the subdivision acceptance process and for which contractors who deliver CAD/GIS products to the Department of Public Works should adhere.

1.2 CAD/GIS Background

Two key information technologies the Department of Public Works rely upon are geographic information systems (GIS) technologies used to store, manage, and maintain spatially-related (geographic) data, and computer aided design and drafting (CAD) technologies which are industry standards in the land development, engineering, and surveying communities.⁽¹⁾ Both of these technologies provide the geographic locations of County owned assets in addition to storing detailed attribute data needed for daily operations.

1.3 Asset Management Implications

El Paso County Public Works Department supports community based, informed decision-making and also recognizes the role technology plays in providing efficient use of taxpayer funds. Operational efficiencies are derived from the integration of information technologies such as CAD/GIS into the decision making process, which is commonly known as Asset Management.

The El Paso County Public Works Department relies on an Asset Management System (AMS) to analyze County owned assets and determine the optimal level of service the County can provide for a given budget, facilitate service requests through the Citizen Engagement System, prioritize road improvements, and to ensure regulatory and reporting compliance for items such as bridges, signage, stormwater infrastructure, ADA facilities and road centerlines.

The foundation for a successful Asset Management System is an up-to-date, accurate inventory of assets. For that reason it is now necessary to require any new assets submitted for acceptance by the County be provided in a format which is compatible and easily integrated into the Public Works Department Asset Management System.

GIS and CAD technologies are interrelated in that the use of GIS and CAD provides efficient conversion of data from one format to the other while preserving attribute data associated with individual assets, or features, as long as certain standards are met. Sections 2.x and 3.x of this document describe in detail the formats and structure for CAD/GIS data submitted to the Department of Public Works.

1.4 Digital File Templates

Templates for digital data submittal may be found at: www.elpasoco.com/?????

1.5 Time frame for Submission and Approval

Needs to be completed.

2.0 Digital File Format Standards

2.1 CAD File Format

- 2.1.1 Electronic CAD files shall be in an AutoCAD format (.DWG or .DXF), 2016 or newer;
- 2.1.2 All drawings shall be in true scale (1"=1") in model space;
- 2.1.3 Drawings shall be kept to a single base drawing with all required information included (see Section 3). This file shall include all layers and graphic elements included in the submitted paper document (geography, text, legend, scale, labels, etc.). This file will include features classified in the standard layers defined in Appendix 3.1. If the drawing contains layers that are not included in Appendix 3.1, then a list of these layers shall also be submitted (ASCII text file labeled: 'subdivisionname_filingXX_xlyrspec.txt');
- 2.1.4 The completed CAD drawing file shall contain text in standard fonts that can be read without third-party software;
- 2.1.5 Drawing file shall be named using the development name (i.e. Name_F1.dwg);
- 2.1.6 Horizontal and Vertical data:
 - 2.1.6.a Horizontal Datum – Colorado Coordinate System of 1983 Central Zone (502) in accordance with C.R.S. 38-52-105(2)(b).
 - 2.1.6.b Vertical Datum – NAVD 88
- 2.1.7 Survey ties are required to the plat and CAD drawing from at least two section corners as found in the Colorado Online Land Surveyor Monument Records System;
- 2.1.8 A metadata text file containing information listed in Section 3.3. This file includes submittal information as well as technical parameters that may be necessary to review if problems in data conversion occur. The ASCII text file will be named using the following convention: (subdivisionname_filingXX_meta.txt);
- 2.1.9 An ASCII text file containing elevation points. When submitting plans that include surveyed ground surfaces, a separate ASCII text file containing all elevation points shall be delivered. This file shall be named using the following convention: (subdivisionname_filingXX_elev.txt)
- 2.1.10 All CAD features shall be broken out into individual layers as described in Section 3.1.1;
- 2.1.11 Each CAD feature shall include a minimal set of attributes as described in Section 3.2.1;
- 2.1.12 Detailed CAD attributes may be provided as described in section 3.2.2 but are not required;

2.2 GIS File Format

- 2.2.1 Electronic GIS files shall be in an ESRI ArcGIS 10.4 or lower file geodatabase format;
- 2.2.2 The file geodatabase shall be named using the development name (i.e. Name_F1.gdb);
- 2.2.3 Feature data within the database shall be named according to Section 3.1.2 unless accompanied with metadata descriptions for each layer provided;
- 2.2.4 All GIS features shall be delivered in NAD 1983 State Plane Central Colorado (US Feet) projection;
- 2.2.5 Each GIS feature shall include a minimal set of attributes as described in Section 3.2.1;
- 2.2.6 Detailed GIS attributes may be provided as described in section 3.2.2 but are not required;

3.0 Digital Data Standards

3.1 Data Standards

3.1.1 CAD Layer/Block Names, Types and Descriptions

Layer/Block Name	Data Type	Layer Description
Barricade	point	road barriers, barricades, jersey barriers
Bridge	point	bridges
CattleGrd	point	cattle guards
Channel	polyline	stormwater channels
CrossPan	point	roadway crosspans
Culvert_In	polyline	drainage culverts, one line per culvert
Culvert_pt	point	drainage culverts, one data point per culvert
Curb	polyline	curbs
Fence	polyline	fences, including snow
GuardRail	polyline	roadway guardrails
Inlet	point	stormwater inlets
Junction	point	stormwater junctions, boxes and vaults
Marking	polyline	roadway marking, striping, crosswalks
Median	polyline	roadway medians
MileMarkers	point	CDOT located mile markers
Outfall	point	stormwater outfalls and discharges
ParkNRide	polyline	developed parking areas
PedRamp	point	sidewalk attached pedestrian ramps
Pond	point	stormwater quality ponds or detention ponds
RetWall	polyline	retaining walls
RoadLight	point	roadway lighting
RoadSign	point	roadway signage
ROW	polyline	public right-of-way
SegmentedCenterline	polyline	roadway centerlines split at intersections or subdv bndry
Shelter	point	park and ride shelters
Sidewalk	polyline	sidewalks
Signal	point	traffic signals
SignalCnt	point	roadway signal controllers
StormPipe	polyline	stormwater pipes
Subdv	polyline	subdivision boundaries
Support	point	roadway signage support structure
WthrSens	point	weather sensors

3.1.2 GIS Feature Names, Types and Descriptions

Feature Name	Data Type	Feature Description
Barricade	point	road barriers, barricades, jersey barriers
Bridge	point	bridges
CattleGrd	point	cattle guards
Channel	polyline	stormwater channels
CrossPan	point	roadway crosspans
Culvert_In	polyline	drainage culverts, one line per culvert
Culvert_pt	point	drainage culverts, one data point per culvert
Curb	polyline	curbs
Fence	polyline	fences, including snow
GuardRail	polyline	roadway guardrails
Inlet	point	stormwater inlets
Junction	point	stormwater junctions, boxes and vaults
Marking	polyline	roadway marking, striping, crosswalks
Median	polygon	roadway medians
MileMarkers	point	CDOT located mile markers
Outfall	point	stormwater outfalls and discharges
ParkNRide	polyline	developed parking areas
PedRamp	point	sidewalk attached pedestrian ramps
Pond	point	stormwater quality pond or detention ponds
RetWall	polyline	retaining walls
RoadLight	point	roadway lighting
RoadSign	point	roadway signage
ROW	polygon	public right-of-way
SegmentedCenterline	polyline	roadway centerlines split at intersections or subdv bndry
Shelter	point	park and ride shelters
Sidewalk	polyline	sidewalks
Signal	point	traffic signals
SignalCnt	point	roadway signal controllers
StormPipe	polyline	stormwater pipes
Subdv	polygon	subdivision boundaries
Support	point	roadway signage support structure
WthrSens	point	weather sensors

3.2 CAD/GIS Data Attributes*

* If blocks are not used in CAD drawing, attribute data may be delivered in spreadsheet format with proper feature identification (serial number) corresponding to each row of data.

3.2.1 Core Attributes – minimum required attributes. *

* Point features shall contain longitude (X) and latitude (Y) coordinates for each point. Line and polygon features are not required to supply X/Y coordinates.

Field Name	Type	Length	Description
LONG_DD	Double	8	Longitude (X) in decimal degrees (point file only)
LAT_DD	Double	8	Latitude (Y) in decimal degrees (point file only)
SERIALNUMBER	String	25	Unique identifier (applicant supplied corresponding to CAD labeling) for use in assigning attributes to specific features
DESCRIPTION	String	200	Item description or attributes not contained in other fields
EQUIPMENTSTATUS	String	30	Equipment operational status (planned, under construction, installed and working)
ROADNAME	String	50	Road Name with which item is associated, N/A = none
CONDITIONDESC	String	30	Condition at time of acceptance (unknown, new, good, fair, poor)
ASSETCOST	Double	8	Asset value at time of acceptance

3.2.2 Recommended Additional Attributes

3.2.2.a Barricade Additional Attributes

None

3.2.2.b Bridge Additional Attributes

Field Name	Type	Length	Description
STRUCTURETYPEDESC	String	30	STRUCTURE TYPE DESC
STRUCTUREMATERIALDESC	String	30	STRUCTURE MATERIAL DESC
TYPESERVICEDESC	String	30	TYPE SERVICE DESC
DECKSTRUCTURETYPEDESC	String	30	DECK STRUCTURE TYPE DESC
DECKPROTECTIONDESC	String	30	DECK PROTECTION DESC
CONSTRUCTIONDATE	Date	8	CONSTRUCTION DATE
RECONSTRUCTIONDATE	Date	8	RECONSTRUCTION DATE
NUMBEROFMAINSPANS	Double	8	NUMBER OF MAIN SPANS
BRIDGEROADWAYWIDTH	Double	8	BRIDGE ROADWAY WIDTH
DECKWIDTH	Double	8	DECK WIDTH

3.2.2.c CattleGrd Additional Attributes

None

3.2.2.d Channel Additional Attributes

Field Name	Type	Length	Description
CHANNELTYPEDESC	String	30	CHANNEL TYPE DESC
CHANNELSHAPEDESC	String	30	CHANNEL SHAPE DESC
LININGMATERIALDESC	String	30	LINING MATERIAL DESC
LENGTH	Double	8	LENGTH
BOTTOMWIDTH	Double	8	BOTTOM WIDTH
TOPWIDTH	Double	8	TOP WIDTH
CHANNELDEPTH	Double	8	CHANNEL DEPTH
SIDESLOPE	Double	8	SIDE SLOPE
ENERGYDISSIPATERTYPEDESC	String	30	ENERGY DISSIPATER TYPE DESC
DISSIPATORHEIGHT	Single	4	DISSIPATOR HEIGHT
DISSIPATORWIDTH	Single	4	DISSIPATOR WIDTH
DROPSTRUCTURESCONSTRUCTIONDATE	Date	8	DROP STRUCTURE CONSTRUCTION DATE
DROPSTRUCTURESHORIZONTALLENGTH	Double	8	DROP STRUCTURE HORIZONTAL LENGTH
DROPSTRUCTURESWIDTH	Double	8	DROP STRUCTURE WIDTH
DROPSTRUCTURESCUTOFFWALLDESC	String	30	DROP STRUCTURE CUTOFF WALL DESC
CHECKSTRUCTURECONSTRUCTIONDATE	Date	8	CHECK STRUCTURE CONSTRUCTION DATE
CHECKSTRUCTUREVERTICALHEIGHT	Double	8	CHECK STRUCTURE VERTICAL HEIGHT
CHECKSTRUCTUREHORIZONTALLENGTH	Double	8	CHECK STRUCTURE HORIZONTAL LENGTH
CHECKSTRUCTUREWIDTH	Double	8	CHECK STRUCTURE WIDTH
CHECKSTRUCTURESCUTOFFWALLDESC	String	30	CHECK STRUCTURE CUTOFF WALL DESC

3.2.2.e CrossPan Additional Attributes

Field Name	Type	Length	Description
CROSSPANMATERIALDESC	String	30	CROSSPAN MATERIAL DESC
LENGTH	Double	8	LENGTH
WIDTH	String	2	WIDTH

3.2.2.f Culvert_In (lines) Additional Attributes

Field Name	Type	Length	Description
WIDTH	Single	4	WIDTH OF CULVERT IN INCHES
HEIGHT	Single	4	HEIGHT OF CULVERT IN INCHES
LENGTH	Single	4	LENGTH OF CULVERT IN INCHES
ENDSECTION1A	String	254	END SECTION 1A
ENDSECTION1B	String	254	END SECTION 1B
ENDSECTION2A	String	254	END SECTION 2A
ENDSECTION2B	String	254	END SECTION 2B
ENDSECTION3A	String	254	END SECTION 3A
ENDSECTION3B	String	254	END SECTION 3B
ENDSECTION4A	String	254	END SECTION 4A
ENDSECTION4B	String	254	END SECTION 4B
PIPEMATERIAL	String	254	PIPE MATERIAL

3.2.2.g Culvert_pt (points) Additional Attributes

Field Name	Type	Length	Description
INLET_TYPE	String	40	Simple Culverts inlet type
OUTLET_TYPE	String	40	Simple Culverts outlet type
CULVSHAPE	String	40	Simple Culverts shape
MATERIAL	String	40	Simple Culverts culvert material
COATING	String	40	Simple Culverts culvert material coating
LENGTH_IN	Double	8	Simple Culverts length in inches
SPAN_IN	Double	8	Simple Culverts span in inches
DEPTH_IN	Double	8	Simple Culverts depth in inches
BARREL_NO	String	15	Simple Culverts number of barrels
SKEW	String	40	User entry - skew of culvert
WATERWAY	String	50	Simple Culverts waterway culvert serves
CULVCOMMENTS	String	255	Simple Culverts inspector comments
INSTALL_DATE	Date	8	User entry - culvert installation date

3.2.2.h Curb Additional Attributes

Field Name	Type	Length	Description
CURBTYPEDESC	String	30	CURB TYPE DESC
CURBMATERIALDESC	String	30	CURB MATERIAL DESC
CURBWIDTH	Double	8	CURB WIDTH IN INCHES

3.2.2.i Fence Additional Attributes

Field Name	Type	Length	Description
LENGTH	Double	8	LENGTH
OFFSET	Single	4	OFFSET DISTANCE FROM EDGE OF ROAD
OFFSETDIRECTIONDESC	String	30	OFFSET DIRECTION DESC
POSTTYPEDESC	String	30	POST TYPE DESC
FENCEMATERIALDESC	String	30	FENCE MATERIAL DESC
SNOWFENCEMATERIALDESC	String	30	SNOW FENCE MATERIAL DESC

3.2.2.j GuardRail Additional Attributes

Field Name	Type	Length	Description
GUARDRAILTYPEDESC	String	30	GUARDRAIL TYPE DESC
POSTTYPEDESC	String	30	POST TYPE DESC
BLOCKTYPEDESC	String	30	BLOCK TYPE DESC
ENDTREATMENTTYPEDESC	String	30	END TREATMENT TYPE DESC
LENGTH	Double	8	LENGTH
INSTALLDATE	Date	8	INSTALL DATE

3.2.2.k Inlet Additional Attributes

Field Name	Type	Length	Description
LENGTH	Double	8	LENGTH
WIDTH	Double	8	WIDTH
BASINDEPTH	Double	8	BASIN DEPTH
CONSTRUCTIONDATE	Integer	4	CONSTRUCTION DATE
NUMBERINPIPES	Double	8	NUMBER INLET PIPES
DRAINTYPEDESC	String	30	DRAIN TYPE DESC
DRAINACCESSTYPEDESC	String	30	DRAIN ACCESS TYPE DESC

3.2.2.l Junction Additional Attributes

Field Name	Type	Length	Description
JUNCTIONTYPE	String	2	JUNCTION TYPE
JUNCTIONCONSTRUCTIONDESC	String	30	JUNCTION CONSTRUCTION DESC
MAINTAINEDDESC	String	30	MAINTAINED DESC
CONFINEDSPACEDESC	String	30	CONFINED SPACE DESC
CONSTRUCTIONDATE	Integer	4	CONSTRUCTION DATE

3.2.2.m Marking Additional Attributes

Field Name	Type	Length	Description
INTERSECTIONNAME	String	105	INTERSECTION NAME (ROAD 1 AND ROAD 2)
DURABLESDESC	String	30	DURABLES DESC
PAINTDESC	String	30	PAINT DESC
LASTINSTALLATIONDATE	Date	8	LAST INSTALLATION DATE
DURABLESQUAREFEET	Double	8	DURABLE SQUARE FEET

3.2.2.n Median Additional Attributes

Field Name	Type	Length	Description
MEDIANTYPEDESC	String	30	MEDIAN TYPE DESC
MEDIANCONSTRUCTIONDESC	String	30	MEDIAN CONSTRUCTION DESC
WIDTH	Double	8	WIDTH
MATERIALS	String	30	MATERIALS

3.2.2.o MileMarkers Additional Attributes

Field Name	Type	Length	Description
ROUTE	String	4	STATE ROAD NUMBER
REF_PT	Integer	4	REFERENCE POINT ALONG ROUTE
CALYR	String	4	CALIBRATION YEAR
UPDATEYR	String	4	UPDATE YEAR

3.2.2.p Outfall Additional Attributes

Field Name	Type	Length	Description
CONSTRUCTIONDATE	Integer	4	CONSTRUCTION DATE
OUTFALLTYPEDESC	String	30	OUTFALL TYPE DESC
OUTFALLSHAPEDESC	String	30	OUTFALL SHAPE DESC
PIPEMATERIALDESC	String	30	PIPE MATERIAL DESC
ENDSECTIONTYPE1DESC	String	30	END SECTION TYPE DESC
ENERGYDISSIPATERTYPEDESC	String	30	ENERGY DISSIPATER TYPE DESC
ENERGYDISSIPATERMATERIALDESC	String	30	ENERGY DISSIPATER MATERIAL DESC
PIPEWIDTH	Double	8	PIPE WIDTH
PIPEHEIGHT	Double	8	PIPE HEIGHT
NUMBEROFCELLS	Double	8	NUMBER OF CELLS

3.2.2.q ParnNRide Additional Attributes

None

3.2.2.r PedRamp Additional Attributes

Field Name	Type	Length	Description
INTERSECTIONNAME	String	105	INTERSECTION NAME (ROAD 1 AND ROAD 2)
ADACOMPLIANTDESC	String	30	ADA COMPLIANT DESC

3.2.2.s Pond Additional Attribute (Refer to Appendix H changes for list of additional features)

Field Name	Type	Length	Description
OUTLETTYPEDESC	String	30	OUTLET TYPE
SPILLWAYTYPEDESC	String	30	SPILLWAY TYPE
CONSTRUCTIONDATE	Date	8	CONSTRUCTION DATE
OUTLETHEIGHT	Double	8	OUTLET HEIGHT
OUTLETWIDTH	Double	8	OUTLET WIDTH

3.2.2.t RetWall Additional Attributes

Field Name	Type	Length	Description
PERCENTACCEPTABLE	Double	8	PERCENT ACCEPTABLE
PERCENTUNACCEPTABLE	Double	8	PERCENT UNACCEPTABLE
RETAININGWALLMATERIALDESC	String	30	RETAINING WALL MATERIAL
WIDTH	Double	8	WIDTH
LENGTH	Double	8	LENGTH
HEIGHT	Double	8	HEIGHT

3.2.2.u RoadLight Additional Attributes

Field Name	Type	Length	Description
POLETYPEDESC	String	30	POLE TYPE
POWERSOURCEDESC	String	30	POWER SOURCE
MOUNTINGTYPEDESC	String	30	MOUNTING TYPE

3.2.2.v RoadSign Additional Attributes

Field Name	Type	Length	Description
ORIENT	String	15	SIGN FACE ORIENTATION
POSITION	String	50	SIDE OF ROAD EAST WEST NORTH SOUTH
OFFSET	SmallInteger	2	OFFSET FROM CENTERLINE
MAPOFFSET	SmallInteger	2	OFFSET FROM EDGE OF ROAD
MUTCD	String	20	MUTCD CODE
LEGEND	String	150	TEXT OF SIGN
SIGN_WIDTH	SmallInteger	2	SIGN WIDTH
SIGN_HEIGHT	SmallInteger	2	SIGN HEIGHT
BACK_CLR	String	20	BACKING COLOR
LEGEND_CLR	String	20	TEXT COLOR
THIRD_CLR	String	20	THIRD COLOR
VENDOR	String	40	MATERIAL VENDOR
SHEETING	String	50	TYPE OF MATERIAL
BACKING	String	40	BACKING MATERIAL
POSTS	String	10	NUMBER OF POSTS
POST_TYPE	String	40	TYPE OF POSTS
OWNER	String	50	OWNER
COMMENTS	String	255	COMMENTS
REFLDATE	Date	8	DATE OF LAST RETROREFLECTIVITY TEST
REFLTVTY	Double	8	RETROFEFLECTIVITY READING

3.2.2.w ROW Additional Attributes

Field Name	Type	Length	Description
ACQUISITIONDATE	Date	8	ACQUISITION DATE
ACQUIREDFROM	String	100	ACQUIRED FROM
LOCATION	String	100	LOCATION
WIDTH	Double	8	WIDTH
PURPOSE	String	255	PURPOSE
RECEPTIONNUMBER	String	100	RECEPTION NUMBER
INSTRUMENTDESC	String	30	INSTRUMENT USED
FILING	String	50	FILING
ROWType	SmallInteger	2	ROW TYPE 1=PLATTED/PRESCRIPTIVE 2=DEED 3=EASEMENT 0=UNKNOWN
SOURCE	String	75	SOURCE

3.2.2.x SegmentedCenterline Additional Attributes

Field Name	Type	Length	Description
ROADNAME	String	50	ROAD NAME
FROMROAD	String	50	FROM ROAD
DIR	String	12	DIRECTION
TOROAD	String	50	TO ROAD
MILES	Double	8	LENGTH IN MILES
PAVEWIDTH	String	15	SURFACE WIDTH
LANES	Integer	4	NUMBER OF LANES
ROWWIDTH	String	50	ROW WIDTH
ONEWAY	String	1	ONE WAY=YES TWO WAY=NO
SPEEDLIMIT	SmallInteger	2	SPEED LIMIT
SURFACE	Integer	4	1=PAVED 2=GRAVEL 3=UNIMPROVED
PLATNO	String	12	PLAT NUMBER
PLATNAME	String	125	PLAT NAME
STR	String	10	SECTION-TOWNSHIP-RANGE
NOTES	String	50	NOTES
ASSETCOST	Double	8	ASSET VALUE AT TIME OF ACCEPTANCE

3.2.2.y Shelter Additional Attributes

None

3.2.2.z Sidewalk Additional Attributes

Field Name	Type	Length	Description
YEARBUILT	Date	8	YEAR BUILT
FILING	String	50	FILING
ATTACHEDDESC	String	30	ATTACHED
ADACOMPLIANTDESC	String	30	ADA COMPLIANT
WIDTH	Double	8	WIDTH

3.2.2.aa Signal Additional Attributes

Field Name	Type	Length	Description
SUPPORT1SYSTEMID	String	12	SUPPORT 1 SYSTEM ID
SUPPORT2SYSTEMID	String	12	SUPPORT 2 SYSTEM ID
INTERSECTION1NAME	String	30	INTERSECTION NAME (ROAD 1 AND ROAD 2)
HEADTYPEDESC	String	30	HEAD TYPE
DIRECTIONDESC	String	30	DIRECTION
DISPLAYTYPEDESC	String	30	DISPLAY TYPE
MOUNTINGTYPEDESC	String	30	MOUNTING TYPE

3.2.2.bb SignalCnt Additional Attributes

Field Name	Type	Length	Description
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MODELTYPE	String	30	MODEL TYPE
TIMING	String	100	TIMING
LASTPHASINGDATE	Date	8	LAST PHASING DATE
CONFLICTMONITORDESC	String	30	CONFLICT MONITOR
CURRENTMONITORDESC	String	30	CURRENT MONITOR DESC
LOADSWITCHDESC	String	30	LOAD SWITCH
FLASHERPACKSDESC	String	30	FLASHER PACKS
MODEMDESC	String	30	MODEM
BATTERIESDESC	String	30	BATTERIES
SOLARPANELDESC	String	30	SOLAR PANEL

3.2.2.cc StormPipe Additional Attributes

Field Name	Type	Length	Description
PIPMATERIALDESC	String	30	PIPE MATERIAL DESC
PIPESHAPEDDESC	String	30	PIPE SHAPE DESC
ENERGYDISSIPATERTYPEDESC	String	30	ENERGY DISSIPATER TYPE DESC
ENDTREATMENTDESC	String	30	END TREATMENT DESC
CONSTRUCTIONDATE	Date	8	CONSTRUCTION DATE
WIDTH	Double	8	WIDTH
HEIGHT	Double	8	HEIGHT

3.2.2.dd Subdv Additional Attributes

None

3.2.2.ee Support Additional Attributes

Field Name	Type	Length	Description
POLETYPEDESC	String	30	POLE TYPE DESC
FOUNDATIONTYPEDESC	String	30	FOUNDATION TYPE DESC
ELECTRICALBOXDESC	String	30	ELECTRICAL BOX DESC
BREAKERBOXDESC	String	30	BREAKER BOX DESC
SOLARPANELDESC	String	30	SOLAR PANEL DESC

3.2.2.ff WthrSens Additional Attributes

None

3.3 Metadata Text File ('subdivisionname_phasesXX_meta.txt') Specifications

Subdivision Name:
Submittal Date:
County:
Parent Parcel #:
Number of Lots:
Type of Geodetic Control:
Monument Reference: Y / N

Traverse to Monument

Referenced Monument Name/Number:
Distance to Monument:

GPS

Unit Type:
PDOP of Control Points:
Differentially Corrected: Y / N
Elevation Reference: Y / N

Prepared by/Firm Name:
Engineer of Record:
Drawing/File Name:
Software/Version Used:

Appendix C – Digital File Submittal Checklist