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# Chapter 11 - SURVEY STANDARDS

## CADD Production Criteria Handbook

### 11.1 GENERAL

This chapter will describe the minimum CADD requirements for Survey operations.

### 11.2 STANDARD FILE NAMES

Florida Department of Transportation (FDOT) utilizes standard naming conventions for all of its files. Some of the automation implemented in various tools provided by FDOT depends on naming conventions being met. More importantly, the naming convention confers information to the downstream customer of the data.

Standard file names should follow this format: AAAABB##.ext

Where **AAA** = *abbreviated file description*, **BB** = *Discipline Denotation*, **##** = *Sequence number*.

*Note* Please see CADD Production Criteria Handbook (CPCH) Chapter 4 for more information.

The following table defines the Survey File Name Standards in regards to FDOT Projects with the understanding that each file name will include sequence numbering. MicroStation design files are typically produced representing the existing objects located during survey operations and for County Mapping operations.

File Type	File Name	Model Name	File Description	Standard Rule	Seed File	Critical File
Project Network Control	CTLSRD.dgn	Default	Survey Project Control Sheet	ctlsrd	\$(MX_SEEDIR)fdotseed2d.dgn	
Existing Drainage	DREXRD.dgn	Default	Graphics design file containing existing drainage features	drexrd	\$(MX_SEEDIR)fdotseed2d.dgn	X
Existing DTM	GDTMRD.dgn	Default	Graphics files of ground surface digital terrain models	dtmrd	\$(MX_SEEDIR)fdotseed3d.dgn	
Existing Topography	TREERD.dgn	Default	Tree Survey Sheet	topord	\$(MX_SEEDIR)fdotseed2d.dgn	
Existing Topography	TOPORD.dgn	Default	Graphics design file containing existing topographic features	topord	\$(MX_SEEDIR)fdotseed2d.dgn	X
Existing Topography for R/W Maps	TOPORW.dgn	Default	Right of Way Mapping file containing existing Topography for mapping purposes only	toporw	\$(MX_SEEDIR)rwseed2d.dgn	
Existing Utilities	UTEXRD.dgn	Default	Graphics design file containing existing utility features	utexrd	\$(MX_SEEDIR)fdotseed2d.dgn	X
Verified Utilities	UTVHRD.dgn	Default	Survey of Verified Utilities (3D Version of UTEXRD.dgn)	utexrd	\$(MX_SEEDIR)fdotseed3d.dgn	

Additional geometry input files may also be created for delivery to design. (Example: files of existing profiles, chains, points, etc.) All data delivered to the Department, including necessary directories and survey files, should be placed under the Survey discipline folder, which the FDOT standard directory structure includes for this purpose. Additional sub-directories may be created under the \Survey discipline folder to segregate and organize data. (Example: the case where a CAiCE project is placed within the project directory structure under the \Survey discipline folder for delivery.)

*Note* See Chapter 4 for requirements in creating additional sub-folders.

## 11.3 RESOURCE FILES

CAiCE and GEOPAK are the two principal applications used for processing survey data into MicroStation graphics files for FDOT. Each of these programs is feature driven for surveying operations. A feature table is utilized to look-up appropriate element symbology for given objects found in the survey.

The feature table provides the current standards data for Roadway Design and is loaded automatically to a default directory named **x:\CAiCE\FTB\**, where “x” is the workstation drive letter where CAiCE is installed, when the FDOT2010 & FDOT Menu options are installed from the FDOT2010 Software Delivery CD. The naming convention for this table includes “E” for English and “10” for the 2010 standards.

### 11.3.1 CAiCE FEATURE TABLE

The Department provides the CAiCE feature table called **FDOTE\_10.ftb** that is required to implement the level numbers (200+ through 9xxx) for the levels corresponding to the MicroStation DGN library file. This table is placed in the \CAiCE\FTB\ directory.

*Note* Earlier year's standards may also be installed.

A corresponding feature table called **FDOTE\_10.ftm** is also loaded to the x:\CAiCE\FTB\ directory to control symbology on alignment chains (Geometry Chains with stationing). This table is used by the *Settings > Object Display > Geometry Chains* command in CAiCE to control the proper symbology of alignment stationing, station tics, and station labels based upon scale.

*Note* The name of the .ftm feature table must match the name of the active .ftb feature table in use during a CAiCE session.

#### 11.3.1.1 LIST FILES

Feature List files, **FDOTTOPO.lis**, **FDOTDran.lis**, and **FDOTUtil.lis**, are also installed into the x:\CAiCE\FTB\ directory to assist the user in creating the CAiCE screen graphics containing the appropriate data for producing the three typical graphics files supplied to design, **TOPORD00.dgn**, **DREXRD00.dgn**, and **UTEXRD00.dgn**. These List files are listings of the feature codes that belong in the respective design files. Consult your CAiCE documentation on the use of List files.

### 11.3.2 CAiCE CELL LIBRARY

MicroStation Cell libraries cannot be used or attached by CAiCE directly. (CAiCE could attach a V7 cell Library). The MicroStation cell library was translated to CAiCE's own version of a cell library (\*.CCL versus \*.CEL, hence **SYENG10.ccl** and **SURVEY10.ccl**). Note the differences in 11.3 for ROW Mapping.

When creating a CTLSRD.dgn file, three MicroStation cells, **CTLDAT**, **CTLDETL**, and **CTLTAB**, have been provided to aid in the insertion of project control data if needed. All three cells can be found in the Right of Way cell library (row.cel).

### 11.3.3 TRANSLATION TABLE

A Translation Table, *Edgntype.tbl*, is another resource file provided for CAiCE that maps CAiCE line styles to MicroStation custom line styles. This table is loaded automatically by the FDOT2010 Software Install routine into the x:\CAiCE\DGN\ subdirectory and is automatically called by CAiCE when screen graphics are saved to MicroStation graphics.

*Note* To have compatibility with MicroStation's long name cells and levels, two files, *DGNCell.TBL* and *DGNLevel.tbl*, were introduced and must reside under your \CAiCE\DGN\V8 directory.

### 11.3.4 ADDITIONAL CAiCE TABLES AND CELL LIBRARIES

Additional CAiCE feature tables and cell libraries are also provided for existing topography files, created for Right-of-Way mapping purposes. Mapping uses additional consolidation of certain monument symbols and has other symbolization requirements. The tables and cell libraries included are:

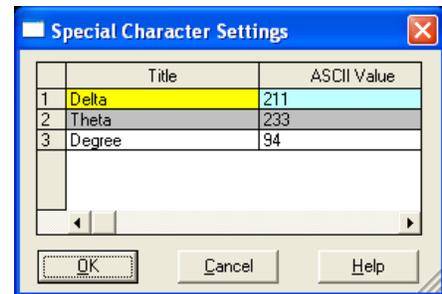
- **FDOTE\_10RW.FTB**  
Feature table containing the topography features used in ROW Mapping
- **FDOTE\_10RW.FTM**  
Corresponding table for controlling alignment / chain symbology and bearing / distance chain labeling (attaches automatically when FDOT\_80RW.FTB is attached)
- **Survey10.CCL**  
CAiCE format of the cell library for use in ROW mapping
- **Survey10.CEL**  
MicroStation format of the topo cell library for use in ROW mapping

### 11.3.5 CAiCE SPECIAL CHARACTERS

*Note* The MicroStation CDG2V8 Macro Utility described in 11.5 does not support True Type Fonts.

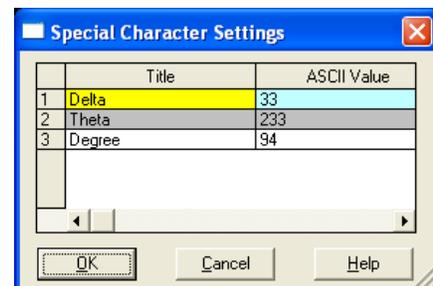
- **FDOT's font library 48 in MicroStation (roadway font)**

This does not use the standard ASCII table for all special characters. In particular, the degree symbol " ° " for MicroStation requires that CAiCE place the hat symbol " ^ " in text strings so MicroStation will look correct when data is translated to MicroStation graphics. To force CAiCE to substitute the " ^ " for " ° ", CAiCE needs to be set by selecting the menu options: *Settings > Special Characters* and set the ASCII value of 94 to represent degrees as shown in the figure to the right.



- **Right of Way project font 58 in MicroStation.**

If exporting to a Right of Way map, CAiCE needs to be set by selecting the menu items: *Settings > Special Characters* and set the ASCII value 33 to the Delta symbol as shown in the figure to the right.



## 11.4 GEOPAK SURVEY

For GEOPAK, the Survey application uses a feature table called *FDOTE\_10.smd*. This feature table is installed into the x:\FDOT2010\geopak\databases\ directory by the FDOT2010 Software Install routine (x is the drive letter where the FDOT2010 software is installed). The *FDOTE\_10.smd* should be used when processing OBS files importing CAiCE KCP files, reading GEOPAK Input files and visualizing features with the Survey Display dialogue box or the Cogo Navigator. The *FDOTE\_10RW.smd* feature table is the Right of Way counter part feature table and should be used when importing or visualizing Right of Way features or products such as the TOPORW.dgn file. Note that older versions of this feature table may also be installed for legacy project compatibility (i.e. *FDOT2004.smd*)

Both GEOPAK and CAiCE use the same cell libraries for survey graphics. The cell library should be referenced from the x:\FDOT2010\RESOURCES\Cell directory and is called *SYENG.cel* for roadway design and *SURVEY.cel* for Right of Way.

## 11.5 SURVEYING DATA

The FDOT Surveying Procedure, Topic 550-030-101A and the Surveying Handbook governs the requirements for survey procedure and data deliverables to the Department. The Surveying Handbook is available at:

<http://www.dot.state.fl.us/surveyingandmapping/Manuals/surveyhandbook.pdf>

## 11.6 LEVEL AND SYMBOLOGY STANDARDS

Symbology Standards that apply to FDOT Projects are set up under a listing of Standard Level Names with specific ByLevel Color, Style and Weight attributes. These levels are grouped under specific Standard Rules which are associated to each valid Standard Filename of each Discipline for the purpose of performing the Quality Control check for FDOT Standard compliancy of each FDOT project design file. Section 11.2 of this chapter provides for the complete Standard File Name listing with associated Standard Rules.

*Note* Refer to Chapter 3 FDOT Resource and Support Files to review the Level names listing for each associated Standard Rule.

- Existing Drainage - DREXRD

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
DREXRD	BoxCulvert_ep	Box Culvert	10	3	1	L	BXC
DREXRD	CrossDrain_ep	Under drains and Cross drains	10	3	1	L	UD
DREXRD	Ditch_ep	Ditch (Top, Bottom and Flow Lines)	7	6	0	L	DTCH
DREXRD	DitchPavt_ep	Ditch Pavement	0	1	0	L	DTCHP
DREXRD	DrainMisc_ep	Catch Basins	10	3	1	L	CB
DREXRD	DrainMisc_ep	Drain Junction Box, Yard/Catch Sp	10	3	1	L	BAS
DREXRD	DrainMisc_ep	Drainage Junction Box	10	3	1	L	JB
DREXRD	DrainMisc_ep	Drainage Pipes and Spouts	10	3	1	L	DRNP
DREXRD	DrainMisc_ep	Special Drainage Feature (Describe)	10	3	1	L	SPD
DREXRD	DrainMisc_ep	Spillways, Flumes or Scuppers	10	3	1	L	SPL
DREXRD	DrainMisc_ep	Yard Drain	10	3	1	L	YD

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
DREXRD	EndTreat_ep	Flared End Section	10	3	1	L	FES
DREXRD	EndTreat_ep	Mitered End Section	10	3	1	L	MES
DREXRD	EndTreat_ep	Special Endwall	10	3	1	L	SPEW
DREXRD	EndTreat_ep	Straight Endwall	10	3	1	L	SEW
DREXRD	EndTreat_ep	U-Type Endwall	10	3	1	L	UEW
DREXRD	EndTreat_ep	Winged End wall	10	3	1	L	WEW
DREXRD	ImageAttachment_dp	Image Attachments	0	0	0		
DREXRD	InletBottom_ep	Drainage Structure Bottoms	10	3	1	L	DRNB
DREXRD	InletCurb_ep	Curb Inlets	10	3	1	L	CINL
DREXRD	InletCurb_ep	Median Inlets	10	3	1	L	MEDI
DREXRD	InletDBI_ep	Ditch Bottom Inlet	10	3	1	L	DTCHI
DREXRD	InletGutter_ep	Gutter Inlets (All Types)	10	3	1	L	GI
DREXRD	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
DREXRD	ManholeCovUnk_ep	Manhole Cover, Unknown	0	1	0	P	MH
DREXRD	ManholeSW_ep	Manhole (Storm Water)	10	1	0	P	MHD
DREXRD	PipeCulvert_ep	Pipe Culvert	10	3	1	L	PCULV
DREXRD	PointLocator_ep	Point Locator Symbol	4	0	0		
DREXRD	StormSewer_ep	Storm Sewer (size?)	10	3	1	L	STS
DREXRD	TextElevLabel	Elevation Labels	4	0	0		
DREXRD	TextMisc	Text - Miscellaneous	0	0	1		
DREXRD	TextNotes	Text - Notes	4	0	1		
DREXRD	TextPtLabel	Point Labels	4	0	0		
DREXRD	TextSurveyLabel	Survey Text Labels	0	0	0		
DREXRD	UnderDrain_ep	Under Drain Box	10	3	0	P	UDBX

- Digital Terrain - DTMRD**

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
DTMRD	DTMTriangles_ep	DTM Triangles (existing ground)	2	0	1		EXIST

- Existing Topography for Roadway - TOPORD**

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	ArchSite_ep	Archeological Site	2	0	1	L	ARST
TOPORD	Attenuator_ep	Attenuation Systems	0	0	1	L	ATTN

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	BaselineSurvey	Baseline Survey	0	0	2		
TOPORD	BankMent_ep	Embankment (Manmade, Top or Bottom)	9	3	0	L	BNK
TOPORD	BarrierWall_ep	Barrier Wall All Types	6	3	0	L	BARW
TOPORD	BarrierWall_ep	Precast Barrier Wall (Temp)	6	3	0	L	TMPW
TOPORD	Beacons_ep	Beacons and Path Illumination	0	0	0	P	BN
TOPORD	BLSurveyCntrl_ep	Baseline Survey Control	0	0	2	L	BLC
TOPORD	BLSurveyField_ep	Baseline Survey (calculated from BLC)	0	0	2	L	BL
TOPORD	BLSurveySymb_ep	Baseline Survey Symbol	0	0	0	P	BL
TOPORD	Bridge_ep	Bridge Approaches and Slabs	0	3	1	L	APRS
TOPORD	BridgeEle_ep	Bridge Elements	0	1	0	L	BRDG
TOPORD	Building_ep	Buildings	1	0	0	L	BLDG
TOPORD	BusStop_ep	Bench, Bus Stop	8	3	0	P	BNCH
TOPORD	CableBarrier_ep	Cable Barrier	0	cable_b arrier	2	L	CBR
TOPORD	Canal_ep	Canal, Lock	7	3	0	L	CAN
TOPORD	CGBack_ep	Curb and Gutter (Back)	4	3	0	L	CGB
TOPORD	CGep_ep	Curb / Curb and Gutter (at EP & FL)	0	3	0	L	CG
TOPORD	CGFace_ep	Face of Curb and Gutter	4	3	0	L	CGF
TOPORD	ConcSlabs_ep	Concrete Slabs	0	1	1	L	CSL
TOPORD	Core_ep	Core Sample or Test Hole	9	0	0	P	CSH
TOPORD	CurbRamp_ep	Curb Cut Ramp	2	3	0	L	CCR
TOPORD	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2		
TOPORD	Deck_ep	Deck / Porch	7	1	0	L	DECK
TOPORD	DelineatorPost_ep	Delineator Post, Flexible and Metal	4	1	1	P	DLP
TOPORD	Ditch_ep	Ditch (Top, Bottom and Flow Lines)	7	6	0	L	DTCH
TOPORD	DitchPavt_ep	Ditch Pavement	0	1	0	L	DTCHP
TOPORD	Docks_ep	Docks and Wharfs	0	1	0	L	DOCK
TOPORD	Driveway_ep	Driveway (Drive, Lane, Turnouts)	7	3	0	L	DWY
TOPORD	DummyChains_ep	Dummy Chains	0	0	1	L	DUMB
TOPORD	Fence_ep	Fence (generic)	6	Fence1	0	L	FNC
TOPORD	FloodLight_ep	Flood Light	3	2	0	P	FLD
TOPORD	Furnace_ep	Incinerator, Boiler, or Furnace	8	1	0	P	INCN
TOPORD	Gates_ep	Cattle Guard	7	3	0	p	CGD
TOPORD	Gates_ep	Gates	7	3	0	L	GT
TOPORD	GlareScrn_ep	Glare Screen & Blinds	0	{Curtain }	0	L	GS
TOPORD	GuardrailDbL_ep	Guardrail Double Face	0	grdbl	0	L	GRDBL
TOPORD	GuardrailLt_ep	Guardrail Left	0	grail1	0	L	GRL
TOPORD	GuardrailRt_ep	Guardrail Right	0	grail2	0	L	GRR
TOPORD	Handrail_ep	Handrails	9	3	0	L	HNDRL

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	Hole_ep	Hole	8	3	0	P	HOLE
TOPORD	ImageAttachment_dp	Image Attachments	0	0	0		
TOPORD	LaneLine_ep	Lane Lines (Paint or Thermoplastic)	0	LaneLine_exist	1	L	LL
TOPORD	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
TOPORD	Mailbox_ep	Mailbox(s)	8	2	0	P	MBX
TOPORD	MiscEquip_ep	Flag Pole	8	0	0	P	FP
TOPORD	MiscEquip_ep	Parking Meter	8	0	0	P	PKGM
TOPORD	Monument_ep	Aerial Targets	4	0	0	P	AT
TOPORD	Monument_ep	Concrete Monument (Cast)	4	0	0	P	CMON
TOPORD	Monument_ep	Drill Hole, Plug (Control Monumentation)	4	0	0	P	DH
TOPORD	Monument_ep	Deep Rod Mark	4	0	0	P	DRM
TOPORD	Monument_ep	5/8 Rod and Cap	4	0	0	P	IRC
TOPORD	Monument_ep	Nail, Spike, Pin (Control Monumentation)	4	0	0	P	NL
TOPORD	Monument_ep	Other Marker? (Control Monumentation)	4	0	0	P	OM
TOPORD	Monument_ep	Metal Pipe, Rod, Bar (Control)	4	0	0	P	PIP
TOPORD	Monument_ep	Concrete Monument (Poured)	4	0	0	P	PMON
TOPORD	Monument_ep	Post, Stake, Staub (Control Monumentation)	4	0	0	P	PST
TOPORD	Monument_ep	Hub and Tac	4	0	0	P	SAT
TOPORD	Monument_ep	Stamped Disk	4	0	0	P	STMD
TOPORD	Monument_ep	Stamped Plate	4	0	0	P	STMP
TOPORD	ParkEquip_ep	Camp stove, Grill, Firepit, BBQ	9	2	0	P	CMPST
TOPORD	ParkEquip_ep	Playground Equipment	9	2	0	P	PLEQ
TOPORD	Patternlines_ep	Cross Section Chain	2	1	0	L	XSC
TOPORD	Pavemk_ep	Handicap Pavement Marking	0	2	0	P	HNDC
TOPORD	Pavemk_ep	Pavement Markings (Other)	0	2	0	L	PMRK
TOPORD	Pavemk_ep	Straight Direction Arrow	0	2	0	P	STAROW
TOPORD	Pavemk_ep	Straight and Turn Arrow	0	2	0	P	STATRN
TOPORD	Pavemk_ep	Turn Arrow	0	2	0	P	TA
TOPORD	PavtAsph_ep	Asphalt Pavement Edge	0	3	1	L	AP
TOPORD	PavtConc_ep	Concrete Pavement (Edges)	0	3	1	L	CPVT
TOPORD	PavtConcJoints_ep	Concrete Pavement (Joints)	1	5	1	L	CPVJ
TOPORD	PavtCrown_ep	Asphalt Pavement (Crown)	0	4	1	L	AC
TOPORD	PavtCrown_ep	Concrete Pavement (Crown)	0	4	1	L	CPVC
TOPORD	PavtMisc_ep	Parking Lot, Guardrail Pavement, Misc Pavement	7	3	0	L	MP
TOPORD	PavtTractorXing_ep	Tractor Crossings	0	3	1	L	TX
TOPORD	PavtXover_ep	Crossovers and Detours (Temporary)	0	3	0	L	XO
TOPORD	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2	0	P	PS
TOPORD	Piling_ep	Piling, Piers, or Column	8	3	0	P	PIL

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	PointLocator_ep	Point Locator Symbol	4	0	0	P	
TOPORD	Pump_ep	Pump Island	7	3	1	L	PMPIS
TOPORD	RailroadMisc_ep	RR Milepost	11	0	0	P	RRMP
TOPORD	RailroadMisc_ep	RR Switch	11	0	0	P	RRS
TOPORD	RailroadMisc_ep	RR Warning Sign	11	0	0	P	RRWS
TOPORD	RailroadMisc_ep	RR Signal with Gate	11	0	0	P	SWG
TOPORD	RailroadTracks_ep	Railroad Tracks (Rail, Bed)	4	3	0	L	RR
TOPORD	RRBaseline	Baseline:Rail Road Centerline	4	0	2	L	RRCL
TOPORD	RailroadXing_ep	RR Crossing (Roadway Platforms)	11	3	0	L	RRX
TOPORD	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1	L	REFL
TOPORD	RefPtText	Annotation:Miscellaneous:Text: Survey Data Reference Point	0	0	1		
TOPORD	RipRap_ep	Rip Rap, Rubble	4	3	1	L	RIP
TOPORD	Scratch1_dp	A scratch level for temporary or informational items	4	0	0		
TOPORD	Scratch2_dp	A scratch level for temporary or informational items	5	0	0		
TOPORD	SeaWalls_ep	Sea Walls	0	1	3	L	SEAW
TOPORD	ShldrPaved_ep	Shoulder Edge, Paved	1	3	0	L	SHLDR
TOPORD	ShldrUnpaved_ep	Unpaved Shoulders	0	3	0	L	UNPS
TOPORD	Shrub_ep	Hedges and Shrubs (Boundary)	2	0	0	L	HED
TOPORD	Shrub_ep	Ornamental Plant	2	0	0	P	OP
TOPORD	Shrub_ep	Shrub, Bush	2	0	0	P	SHR
TOPORD	Shrub_ep	Coniferous Shrub	2	0	0	P	SHRC
TOPORD	Shrub_ep	Deciduous Shrub	2	0	0	P	SHRD
TOPORD	SidewalkBack_ep	Sidewalk (Backs)	2	3	0	L	SWKB
TOPORD	SidewalkFront_ep	Sidewalk (Fronts)	1	3	0	L	SWK
TOPORD	Signal_ep	Signal Head	3	2	0	P	SIG
TOPORD	Signal_ep	Signal on Pedestal	3	2	0	P	SIGP
TOPORD	SignalLoop_ep	Traffic Detector Loops	7	1	2	L	TFD
TOPORD	SignalMisc_ep	Signal Controller	3	2	0	P	SIGC
TOPORD	SignalSupport_ep	Signal Supports including Mast Arm	3	2	0	P	SMA
TOPORD	SignMulti_ep	Multi-column Sign (Large Sign)	0	3	1	L	MS
TOPORD	SignMulti_ep	Multicolumn Sign (Small)	0	3	1	P	SMS
TOPORD	SignSingle_ep	Sign (Single Support)	3	2	0	P	SSS
TOPORD	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3	1	L	SGNT
TOPORD	Silo_ep	Silo	11	2	0	P	SILO
TOPORD	Slopes_ep	Levees, Dikes, or Dams	9	3	0	L	LV
TOPORD	Slopes_ep	Natural Slopes (Top or Bottom)	9	3	0	L	SLP
TOPORD	SpanWire_ep	Signal / Span Wire Pole	3	0	0	P	SSP
TOPORD	Stairs_ep	Stairways, Steps	0	3	1	L	STP

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2		
TOPORD	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2		
TOPORD	Stream_ep	Stream Edge	1	3	0	L	STRM
TOPORD	Stream_ep	Stream Center	1	3	0	L	STRMC
TOPORD	StreamMisc_ep	Buoy	7	0	0	P	BUOY
TOPORD	StreamMisc_ep	Dolphins and Fenders	7	0	0	P	DF
TOPORD	StreamMisc_ep	Stream or Tide Gauge	7	0	0	P	TG
TOPORD	Stump_ep	Stump	2	0	0	P	STM
TOPORD	TankStor_ep	Storage Tank	11	3	0	P	STTK
TOPORD	TankUG_ep	Fill Cap (Underground Tank)	3	0	0	P	FC
TOPORD	TextBLStation	Text - B/L Station and Tics	0	0	2		
TOPORD	TextCurveData	Text - Curve Data Note	0	0	2		
TOPORD	TextElevLabel	Elevation Labels	4	0	0		
TOPORD	TextLabel	Text - Label	0	0	2		
TOPORD	TextMisc	Text - Miscellaneous	0	0	1		
TOPORD	TextNotes	Text - Notes	4	0	1		
TOPORD	TextPtLabel	Point Labels	4	0	0		
TOPORD	TextSurveyLabel	Survey Text Labels (Misc)	0	0	0	P	MISC
TOPORD	TextSurveyLabel	Survey Text Labels (Misc)	0	0	0	P	NOTE
TOPORD	TopoMisc_ep	Miscellaneous Topography	0	3	1	L	MISC
TOPORD	TrafSeparator_ep	Traffic Separator	6	3	0	L	TFSP
TOPORD	Trail_ep	Roadway, Trail (Unpaved)	9	3	1	L	RD
TOPORD	Trash_ep	Dumpster, Trash Bin	9	0	0	P	DMP
TOPORD	Treadle_ep	Treadle	7	1	5	L	TRD
TOPORD	Tree_ep	Tree	2	0	0	P	TREE
TOPORD	Tree_ep	Coniferous Tree	2	0	0	P	TREEC
TOPORD	Tree_ep	Citrus Tree	2	0	0	P	TREECI
TOPORD	Tree_ep	Cypress Tree	2	0	0	P	TREECY
TOPORD	Tree_ep	Deciduous Tree	2	0	0	P	TREED
TOPORD	Tree_ep	Oak Tree	2	0	0	P	TREEOA
TOPORD	Tree_ep	Palm Tree	2	0	0	P	TREEPA
TOPORD	Tree_ep	Palm Tree Cluster	2	0	0	P	TREEPC
TOPORD	Tree_ep	Pine Tree	2	0	0	P	TREEPI
TOPORD	TreeLine_ep	Groves & Orchards (Boundary)	2	woodline	0	L	GRV
TOPORD	TreeLine_ep	Scattered Trees (Boundary)	2	woodline	0	L	SCT
TOPORD	TreeLine_ep	Woods Line	2	woodline	0	L	WDL
TOPORD	Tributary_ep	Spring	1	0	0	P	SPR
TOPORD	Walls_ep	Walls	9	3	1	L	WALL
TOPORD	WaterEdge_ep	Edge of Water	7	3	0	L	WEDG

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORD	Wetland_ep	W.M.D & D.E.P. Wetlands	1	wetland	0	L	DEP
TOPORD	WetlandEdge_ep	CORPS Wetlands (Marsh or Swamp)	2	wetland	0	L	COE
TOPORD	WetlandEdge_ep	Edge of Mangrove	2	wetland	0	L	EM
TOPORD	WetlandEdge_ep	Edge of Wetlands (Marsh or Swamp)	2	wetland	0	L	MAR
TOPORD	WetlandSym_ep	Marsh Symbol, Wetland Point	2	0	0	P	MAR
TOPORD	WetlandSym_ep	Marsh Symbol, Wetland Point	2	0	0	P	WLPT
TOPORD	WindMill_ep	Wind Mill	1	1	0	P	WIM
TOPORD	XSpt_ep	Cross Section Point, Station	2	1	0	P	XS

• Existing Topography for Right of Way - TOPORW

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
TOPORW	BarrierWall_ep	Barrier Wall All Types	6	3	0	L	BARW
TOPORW	Bridge_ep	Bridge Approaches and Slabs	0	3	1	L	APRS
TOPORW	BridgeEle_ep	Bridge Elements	0	1	0	L	BRDG
TOPORW	Building_ep	Buildings	1	0	0	L	BLDG
TOPORW	ConcSlabs_ep	Concrete Slabs	0	1	1	L	CSL
TOPORW	Deck_ep	Deck / Porch	7	1	0	L	DECK
TOPORW	DitchPavt_ep	Ditch Pavement	0	1	0	L	DTCHP
TOPORW	Docks_ep	Docks and Wharfs	0	1	0	L	DOCK
TOPORW	DrainMisc_ep	Drain Junction Box, Yard/Catch Sp	10	3	1	L	BAS
TOPORW	Driveway_ep	Driveway (Drive, Lane, Turnouts)	7	3	0	L	DWY
TOPORW	DummyChains_ep	Dummy Chains	0	0	1	L	DUMB
TOPORW	Fence_ep	Fence (generic)	6	Fence1	0	L	FNC
TOPORW	Gates_ep	Gates	7	3	0	L	GT
TOPORW	ImageAttachment_dp	Image Attachments	0	0	0		
TOPORW	InletDBI_ep	Ditch Bottom Inlet	10	3	1	L	DTCHI
TOPORW	JunctBox_ep	Junct. Box / Service Cabinet (Elec/Tel)	3	1	0	P	SRVC
TOPORW	Luminaire_ep	Street Light / Pole	3	2	0	P	LP
TOPORW	MiscEquip_ep	Flag Pole	8	0	0	P	FP
TOPORW	Piling_ep	Piling, Piers, or Column	8	3	0	P	PIL
TOPORW	PointLocator_ep	Point Locator Symbol	4	0	0	P	N/A (GEOPAK only)
TOPORW	Power_ep	High Voltage Transmission Line	3	e-oe	0	L	HVL
TOPORW	Pump_ep	Pump Island	7	3	1	L	PMPIS
TOPORW	RailroadMisc_ep	RR Milepost	11	0	0	P	RRMP
TOPORW	RRBaseline	Baseline:Rail Road Centerline	0	RR	0	L	RRCL

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
TOPORW	RRTextWt0	Annotation:Text:Railroad (weight = 0)	0	0	0		
TOPORW	SateDish_ep	Satellite Dish Antenna	6	4	0	P	SATD
TOPORW	SeaWalls_ep	Sea Walls	0	1	3	L	SEAW
TOPORW	SidewalkBack_ep	Sidewalk (Backs)	2	3	0	L	SWKB
TOPORW	SidewalkFront_ep	Sidewalk (Fronts)	1	3	0	L	SWK
TOPORW	SignMulti_ep	Multi-column Sign (Large Sign)	0	3	1	L	MS
TOPORW	SignSingle_ep	Sign (Single Support)	3	2	0	P	SSS
TOPORW	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3	1	L	SGNT
TOPORW	Silo_ep	Silo	11	2	0	P	SILO
TOPORW	Stairs_ep	Stairways, Steps	0	3	1	L	STP
TOPORW	Stream_ep	Stream Edge	1	3	0	L	STRM
TOPORW	Stream_ep	Stream Center	1	3	0	L	STRMC
TOPORW	TankStor_ep	Storage Tank	11	3	0	P	STTK
TOPORW	TankUG_ep	Fill Cap (Underground Tank)	3	0	0	P	FC
TOPORW	TextElevLabel	Elevations Labels	4	0	0		
TOPORW	TextMisc	Text - Miscellaneous	0	0	1		
TOPORW	TextPtLabel	Point Labels	4	0	0		
TOPORW	TextSurveyLabel	Survey Text Labels (Misc)	0	0	0	P	MISC
TOPORW	TextSurveyLabel	Survey Text Labels (Misc)	0	0	0	P	NOTE
TOPORW	TopoMisc_ep	Miscellaneous Topography	0	3	1	L	MISC
TOPORW	Tower_ep	Antenna	3	1	0	P	ANT
TOPORW	Tower_ep	Transmission Tower (Single Column)	3	1	0	P	CLMT
TOPORW	Trail_ep	Roadway, Trail (Unpaved)	9	3	1	L	RD
TOPORW	Walls_ep	Walls	9	3	1	L	WALL
TOPORW	WaterEdge_ep	Edge of Water	7	3	0	L	WEDG
TOPORW	WaterMisc_ep	Well (Size Unknown)	1	1	0	P	WELL
TOPORW	Wells_ep	Well Monitoring, Taps	1	1	0	P	MONW
TOPORW	WetlandEdge_ep	Edge of Wetland (Marsh or Swamp)	2	wetland	0	L	MAR
TOPORW	WetlandSym_ep	Marsh Symbol, Wetland Point	2	0	0	P	WLPT

• Existing Utilities - UTEXRD

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
UTEXRD	Beacons_ep	Beacons and Path Illumination.	0	0	0	P	BN
UTEXRD	CATV_ep	Cable TV Line (Aerial)	6	e-otv	0	L	CATV
UTEXRD	CATVBur_ep	Cable TV Line (Buried)	6	e-btv	1	L	BCATV
UTEXRD	CATVCond_ep	Cable TV Conduit System	6	0	1	L	CATVC

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
UTEXRD	CATVMisc_ep	Cable TV Service Box	6	2	0	P	CATVS
UTEXRD	Conduit_ep	Utility Conduit & Encasements	3	e-cas	0	L	DUCT
UTEXRD	FireHydrant_ep	Fire Hydrant	1	2	0	P	FH
UTEXRD	FloodLight_ep	Flood Light	3	2	0	P	FLD
UTEXRD	FOAer_ep	Fiber Optics Cable Overhead (Size Unknown)	6	e-fo	0	L	FOC
UTEXRD	FOBur_ep	Fiber Optics Telephone (Size Unknown)	6	e-bfo	0	L	FO
UTEXRD	FOBur_ep	Fiber Optics Cable (Underground)	6	e-bfo	0	L	FOCU
UTEXRD	FOBur_ep	Fiber Optics Power (Size Unknown)	3	e-bfo	0	L	FOP
UTEXRD	FOBur_ep	Fiber Optics Power (Underground)	3	e-bfo	0	L	FOPU
UTEXRD	FOBur_ep	Fiber Optics Telephone (Underground)	6	e-bfo	0	L	FOU
UTEXRD	Gas_ep	Gas Line, (Size Unknown)	4	e-g	1	L	GAS
UTEXRD	Gas_ep	Gas Test & Miscellaneous	4	e-g	1	L	GTM
UTEXRD	GasReg_ep	Gas Regulator	4	1	0	P	RG
UTEXRD	Gauges_ep	Gauges	0	0	0	P	GA
UTEXRD	Guys_ep	Guy Anchor	3	1	0	P	GYA
UTEXRD	Guys_ep	Guy Pole (Deadman)	3	1	0	P	GYP
UTEXRD	Guys_ep	Span Guys	3	1	0	L	GYS
UTEXRD	ImageAttachment_dp	Image Attachments	0	0	0		
UTEXRD	JunctBox_ep	Junct. Box / Service Cabinet (Elec/Tel)	3	1	0	P	SRVC
UTEXRD	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
UTEXRD	LiteCond_ep	Street Lighting Conductors	3	exlite_cond1	0	L	SLC
UTEXRD	Luminaire_ep	Street Light / Pole	3	2	0	P	LP
UTEXRD	ManholeCover_ep	Manhole Cover (Cable TV)	6	1	0	P	MHCATV
UTEXRD	ManholeCovUnk_ep	Manhole Cover, Unknown	0	1	0	P	MH
UTEXRD	ManholeCovW_ep	Manhole Cover (Water)	1	1	0	P	MHW
UTEXRD	ManholeElec_ep	Manhole (Electric)	3	1	0	P	MHE
UTEXRD	ManholeGas_ep	Manhole (Gas)	4	1	0	P	MHG
UTEXRD	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1	0	P	MHS
UTEXRD	ManholeSW_ep	Manhole (Storm Water)	10	1	0	P	MHD
UTEXRD	ManholeTel_ep	Manhole (Telephone)	6	1	0	P	MHT
UTEXRD	MeterElec_ep	Meter (Electric)	3	1	0	P	ME

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
UTEXRD	MeterElecUG_ep	Meter (Electric) (Underground)	3	1	1	P	MEU
UTEXRD	MeterGas_ep	Meter (Gas)	4	1	0	P	MG
UTEXRD	MeterUnk_ep	Meter (Size Unknown)	0	1	0	P	M
UTEXRD	MeterWater_ep	Meter (Water)	1	1	0	P	MW
UTEXRD	Oil_ep	Oil Line (all sizes)	4	e-pet	1	L	PETRO
UTEXRD	PipeEncase_ep	Pipe Encasements	0	e-cas	1	L	PIPEN
UTEXRD	PointLocator_ep	Point Locator Symbol	4	0	0		
UTEXRD	PolePower_ep	Power Pole	3	1	0	P	PP
UTEXRD	PolePower_ep	Power Pole with Transformer	3	1	0	P	PPT
UTEXRD	PolePower_ep	Shared Pole	3	1	0	P	SHP
UTEXRD	PolePower_ep	Shared Pole with Transformer	3	1	0	P	SHPT
UTEXRD	PoleTel_ep	Telephone Pole	6	1	0	P	TELP
UTEXRD	Power_ep	High Voltage Transmission Lines	3	e-oe	0	L	HVL
UTEXRD	Power_ep	Power Lines (Aerial)	3	e-oe	0	L	PWR
UTEXRD	PowerBur_ep	Buried Power (Unknown Size)	3	e-be	1	L	BPWR
UTEXRD	PowerBur_ep	Buried Conductors (Transmission)	3	e-be	1	L	TRANS
UTEXRD	PowerBurCond_ep	Secondary Conductor Buried	3	e-be	0	L	BSEC
UTEXRD	PowerBurCond_ep	Secondary Conductor Buried	3	e-be	0	L	SEC
UTEXRD	PowerCapcUG_ep	Capacitors (Underground)	3	1	1	L	CAPB
UTEXRD	PowerCond_ep	Conductors (Primary Distribution)	3	e-oe	1	L	PRI
UTEXRD	PowerElecOut_ep	Electrical Outlet	3	1	1	P	ELEO
UTEXRD	PowerMisc_ep	Capacitors (Above Ground)	3	1	0	L	CAPA
UTEXRD	PowerMisc_ep	Electric Service Box (Large)	3	1	0	L	ELECS
UTEXRD	PowerMisc_ep	Fuses (Existing)	3	1	0	L	FUSE
UTEXRD	PowerMisc_ep	Switchgear & Appurtenances	3	1	0	L	SW
UTEXRD	PowerMisc_ep	Transformer	3	1	0	P	TRNF
UTEXRD	PullBox_ep	Wiring Pull Box	3	1	1	P	WPB
UTEXRD	Pump_ep	Pump (Petroleum)	7	3	1	P	PMPF
UTEXRD	Pump_ep	Pump Station	7	3	1	P	PMPST
UTEXRD	PumpNonPet_ep	Pump (Non Petroleum)	1	3	1	P	PMP
UTEXRD	Sanitary_ep	Sanitary Sewer (Size Unknown)	2	e-s	1	L	SS
UTEXRD	SanitaryDumpSta_ep	Dump Station (SS)	2	2	0	P	DMPS

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
UTEXRD	SanitaryFM_ep	Force Main (Size Unknown)	2	e-s	1	L	FM
UTEXRD	SanitaryMisc_ep	Cleanout	2	1	0	P	CLNO
UTEXRD	SanitaryMisc_ep	Sanitary Effluent (Open Channel)	2	1	0	L	SE
UTEXRD	SateDish_ep	Satellite Dish Antenna	6	4	0	P	SATD
UTEXRD	Sprinkler_ep	Sprinkler Head	1	0	0	P	SPH
UTEXRD	Steam_ep	Steam	4	e-stm	1	L	STEAM
UTEXRD	Tele_ep	Telephone Line (Aerial)	6	e-ot	0	L	TEL
UTEXRD	TeleBur_ep	Buried Telephone , Size Unknown)	6	e-bt	1	L	BT
UTEXRD	TeleBur_ep	Buried Telephone, DUCT	6	e-bt	1	L	BTD
UTEXRD	TeleBur_ep	Buried Telephone, TOLL	6	e-bt	1	L	BTT
UTEXRD	TeleMisc_ep	Telephone Booth	6	2	0	P	TB
UTEXRD	TeleMisc_ep	Telephone Service Box (Large)	6	2	0	L	TELS
UTEXRD	TeleMisc_ep	Telephone Pedestal / Service	6	2	0	P	TPD
UTEXRD	TextElevLabel	Text - Elevation Labels	4	0	0		
UTEXRD	TextMisc	Text - Miscellaneous	0	0	1		
UTEXRD	TextNotes	Text - Notes	4	0	1		
UTEXRD	TextPtLabel	Text - Point Labels	4	0	0		
UTEXRD	TextSurveyLabel	Text - Survey Text Labels	0	0	0		
UTEXRD	Tower_ep	Antenna	3	1	0	P	ANT
UTEXRD	Tower_ep	Transmission Tower (Single Column)	3	1	0	P	CLMT
UTEXRD	Tower_ep	High Mast Lighting Poles or	3	1	0	P	HML
UTEXRD	UtilMisc_ep	Miscellaneous Utilities	0	0	0	L	N/A
UTEXRD	Valve_ep	Valve Box (Size Unknown)	0	2	0	P	VB
UTEXRD	Valve_ep	Valve (Size Unknown)	0	2	0	P	VLV
UTEXRD	ValveCover_ep	Valve Cover (Size Unknown)	0	2	0	P	VC
UTEXRD	ValveCvrEff_ep	Valve Cover (Effluent)	5	2	0	P	VCEF
UTEXRD	ValveCvrGas_ep	Valve Cover (Gas)	4	2	0	P	VCG
UTEXRD	ValveCvrSewer_ep	Valve Cover (Sewer)	2	2	0	P	VCS
UTEXRD	ValveCvrWater_ep	Valve Cover (Raw Water)	1	2	0	P	VCRW
UTEXRD	ValveCvrWater_ep	Valve Cover (Water)	1	2	0	P	VCW
UTEXRD	ValveCvrWaterNP_ep	Valve Cover (Non Potable Water)	5	2	0	P	VCNPW
UTEXRD	ValveGas_ep	Valve Box (Gas)	4	2	0	P	VBG
UTEXRD	ValveGas_ep	Valve (Gas)	4	2	0	P	VLVG

File Type	Level Name	Level Description	ByLevel Color	ByLevel Style	ByLevel Weight	Point/Line	Feature
UTEXRD	ValveSewer_ep	Valve Box (Sewer)	2	2	0	P	VBS
UTEXRD	ValveSewer_ep	Valve (Sewer)	2	2	0	P	VLVS
UTEXRD	ValveWater_ep	Valve Box (Water)	1	2	0	P	VBW
UTEXRD	ValveWater_ep	Valve (Water)	1	2	0	P	VLVW
UTEXRD	ValveWaterNP_ep	Valve Box (Non-Potable Water)	5	2	0	P	VBNPW
UTEXRD	ValveWaterNP_ep	Valve (Non-Potable Water)	5	2	0	P	VLVNPW
UTEXRD	Vault_ep	Vaults Above Grade	3	1	0	L	AGV
UTEXRD	Vault_ep	Vaults Below Grade	3	1	0	L	BGV
UTEXRD	Vent_ep	Vent	0	1	0	P	VNT
UTEXRD	VentGas_ep	Vent (Gas)	4	1	0	P	VNTG
UTEXRD	VentSewer_ep	Vent (Sewer)	2	1	0	P	VNTS
UTEXRD	Water_ep	Water Line, (Size Unknown)	1	e-w	1	L	WL
UTEXRD	WaterMisc_ep	Faucet	1	1	0	P	FAU
UTEXRD	WaterMisc_ep	Standpipe	1	1	0	P	SP
UTEXRD	WaterMisc_ep	Well (Size Unknown)	1	1	0	P	WELL
UTEXRD	WaterNP_ep	Non-potable Water Line (all sizes)	5	e-npw	1	L	NPWL
UTEXRD	Wells_ep	Well Monitoring, Taps	1	1	0	P	MONW

## 11.7 COUNTY MAPPING

The production of County Maps is an internal function of the FDOT Surveying and Mapping Office. This document refers to the graphical symbology standards used for the production of those maps for reference. For information regarding file naming conventions and other standards in use during the production of FDOT County maps, contact the Geographic Mapping Office in the FDOT Surveying and Mapping Office at (850) 245-1555.

Files Type	Description	Color	Line Style	Weight	Cell
All	Adjacent County and State Text				
All	Airport Names				
All	Airport Runways			6	
All	Airports Commercial				cscapt
All	Airports Commercial				cap
All	Airports Landing Strip or Private Airport				cslstp
All	Airports Landing Strip or Private Airport				ldarsp
All	Airports Military				csmfld
All	Airports Military				milffad
All	Backdrop	30			
All	Backdrop	60			

Files Type	Description	Color	Line Style	Weight	Cell
All	Bay				2
All	Bay Text				2
All	Bayou and Harbor etc				3
All	Bayou and Harbor etc Text				3
All	Boundary Section Lines (hidden)	31			
All	Bridges			0	
All	Bridges			1	
All	Bridges Interstate	1			
All	Bridges and Drawbridges County Highways	4			
All	Bridges and Drawbridges County Highways Text	8			
All	Bridges and Drawbridges Local Roads				
All	Bridges and Drawbridges Local Roads Text	18			
All	Bridges and Drawbridges State Highways	3			
All	Bridges and Drawbridges State Highways Text	7			
All	Bridges and Drawbridges Toll Roads	5			
All	Bridges and Drawbridges Toll Roads Text	5			
All	Bridges and Drawbridges US Highways	2			
All	Bridges and Drawbridges US Highways Text	6			
All	Bridges Interstate Text	4			
All	Cities Incorporated Area			0	
All	Cities Incorporated Linear Boundaries			1	
All	City Streets			1	
All	Coastal Waterway				csicw
All	Coastal Waterway Text				10
All	College or University	71			
All	College or University Text	30			8
All	Communities and Subdivisions Names without Post Office				3
All	Communities Names with Post Office				2
All	Connecting Roads			2	
All	Coordinate ticks Lat Longs				csotic
All	Coordinate ticks State Plane				csstic
All	County Boundary		7	6	
All	County Parks	70			
All	County Parks Text	148			10
All	County Roads Related Text				
All	County Route Divided Highway Outline and Fill				
All	County Routes Highway Center Lines			3	
All	County Routes Ramps			2	
All	County Seat				cscose
All	County Seat Names			4	

Files Type	Description	Color	Line Style	Weight	Cell
All	County Seat Names			6	
All	Culture			0	
All	Culture			1	
All	Culture			2	
All	Culture Text				1
All	Cut Border				
All	Extended Township Lines	43	3	2	
All	Forbes Purchase		3	3	
All	Forbes Purchase Section lines		3	0	
All	Forbes Purchase Township and Range Lines		3	2	
All	Geographic Features Text			1	
All	Heliports				csheli
All	Intermittent Ponds				1
All	Intermittent Ponds Text				8
All	Interstate Divided Highway Outline and Fill				
All	Interstate Highway Center Lines			3	
All	Interstate Ramps			2	
All	Interstates Related Text				
All	Islands				
All	Islands Text Coastal (Keys etc)			2	
All	Islands Text Inland (Hammocks and Ridges etc)				1
All	Lakes and Ponds				
All	Lakes and Ponds Text				9
All	Land Grant Boundaries		4	0	
All	Legend				
All	Local Roads Divided Highway Outline and Fill				
All	Local Roads Improved	11		1	
All	Local Roads Paved	11		2	
All	Local Roads Related Cells				cslgf0
All	Local Roads Related Cells				cslgf1
All	Local Roads Related Cells				cslgf2
All	Local Roads Related Cells				cslgf3
All	Local Roads Related Cells				cslgf4
All	Local Roads Related Cells				csp1
All	Local Roads Related Cells				csp2
All	Local Roads Related Cells				cspnf1
All	Local Roads Related Cells				cspnf2
All	Local Roads Related Cells				cspsf1
All	Local Roads Related Cells				cspsf2
All	Local Roads Related Text				

Files Type	Description	Color	Line Style	Weight	Cell
All	Local Roads Unimproved	10		1	
All	Mangroves				mg
All	Mangroves				csman1
All	Mangroves				smg
All	Map Border				
All	Map Border Text and Cells				
All	Map Information Text and Cells				
All	Map Information Text and Cells				
All	Masks for Road Features				
All	Masks for Text				
All	Military Bases	66			
All	Military Bases Text	146			7
All	Narrow Canals		5		
All	Narrow Canals		5		
All	Narrow Canals		5		
All	Narrow Canals Text				7
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough Text				6
All	National Forest	65			
All	National Forest Text	44			1
All	National Park	69			
All	National Park Text	44			2
All	National Wildlife Refuge and Preserve	75			
All	National Wildlife Refuge and Preserve Text	144			3
All	Ocean and Gulf				1
All	Ocean and Gulf Text				1
All	Other Incorporated Names			2	
All	Other Incorporated Names			3	
All	Other Survey Related Text				3
All	Planning Number Interstates				cssir1
All	Planning Number Interstates				cssir2
All	Planning Number Interstates				cssir3
All	Planning Number US Highways				cssus1
All	Planning Number US Highways				cssus2
All	Planning Number US Highways				cssus3
All	Planning Number US Highways				cssus1
All	Planning Number US Highways				cssus2
All	Planning Number US Highways				cssus3

Files Type	Description	Color	Line Style	Weight	Cell
All	Populations				1
All	Quad Borders				
All	Railroad Stations				csrsta
All	Railroads	3			
All	Railroads Text				
All	Road shields County Roads				cs1crs
All	Road shields County Roads				cs2crs
All	Road shields County Roads				cs3crs
All	Road shields County Roads				cs4crs
All	Road shields Interstates				cs1irs
All	Road shields Interstates				cs2irs
All	Road shields Interstates				cs3irs
All	Road shields State Highways				cs1srs
All	Road shields State Highways				cs2srs
All	Road shields State Highways				cs3srs
All	Road shields Toll roads				cs1trs
All	Road shields Toll roads				cs2trs
All	Road shields Toll roads				cs3trs
All	Road shields Toll roads				cstps
All	Road shields US Highways				cs1urs
All	Road shields US Highways				cs2urs
All	Road shields US Highways				cs3urs
All	Road shields US Highways Alternate				cs1usa
All	Road shields US Highways Alternate				cs2usa
All	Road shields US Highways Alternate				cs3usa
All	Road shields US Highways Business				cs1usb
All	Road shields US Highways Business				cs2usb
All	Road shields US Highways Business				cs3usb
All	Seaplane facility				csseap
All	Section Lines		0	0	
All	Section Numbers				1
All	State Boundary		6	6	
All	State Capital				cscptl
All	State Forest	67			
All	State Forest Text	145			4
All	State Park	14			
All	State Park Text	145			5
All	State Prisons	124			
All	State Prisons Text	124			9
All	State Roads Related Text				

Files Type	Description	Color	Line Style	Weight	Cell
All	State Route Divided Highway Outline and Fill				
All	State Routes Highway Center Lines			3	
All	State Routes Ramps			2	
All	State Survey Lines		1	1	
All	State Wildlife Refuge and Preserve	72			
All	State Wildlife Refuge and Preserve	74			
All	State Wildlife Refuge and Preserve Text	147			6
All	Street Related Text				
All	Strip Mining Area	117			
All	Survey by Others		2	1	
All	Survey Correction Text within map				4
All	Swamps				sw3
All	Swamps	15			
All	Swamps Text	45			
All	Toll Divided Highway Outline and Fill				
All	Toll Highway Center Lines			3	
All	Toll Ramps			2	
All	Toll roads Related Text				
All	Town Centers				cscctr
All	Township and Range lines		0	2	
All	Township and Range Tics				cssttc
All	Township and Range Text				2
All	Triangulation Station				cstria
All	Triangulation Station				trista
All	Triangulation Station Text	97			2
All	Uninventoried Roads and Features				
All	US Highways Related Text				
All	US Route Divided Highway Outline and Fill				
All	US Routes Highway Center Lines			3	
All	US Routes Ramps			2	
All	Wide Rivers and Canals	12		1	4
All	Wide Rivers and Canals Text				5
All	Wildlife Management Area Text	94			11