

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION DESIGN DIVISION

NASHVILLE, TENNESSEE 37243-0348

INSTRUCTIONAL BULLETIN NO. 12-09

Regarding Natural Stream Design Sheets

Effective Immediately, Sections 4-138.00 and 4-139.00 are added to the Design Guidelines and Figure 1-1 and Figure 4-2 is revised as attached.

Carolyn Stonecipher, P.E.,

Civil Engineering Director

Design Division

June 8, 2012 CAS:ARH:MWC Attachment

Section 4-138.00 Addition of SWPPP Sheets to Construction Plans

For a project with disturbed acreage of 1 acre or greater a SWPPP will be required. The Environmental Division, Natural Resources Office will create the SWPPP sheets.

The Designer will be responsible for adding the SWPPP sheets to the index.

• Sheet No. S-1 through S-x will be used for the SWPPP Sheets.

The Environmental Division, Natural Resources Office will submit the final SWPPP sheets onto FileNet under the file name: nnnnn-nn-SWPPP.pdf and a notification shall be sent to Eplans.turnin.TDOT@tn.gov.

Section 4-139.00 Addition of Natural Stream Design Sheets to Construction Plans

For a project involving stream relocation the Environmental Division, Natural Resources Office will determine if a Natural Stream Design is required, and will notify the designer in the Permit Assessment.

The Designer will be responsible for adding the Estimated Natural Stream Design Quantity Sheet and the Natural Stream Design Plan to the index.

- Sheet No. 2C (2C1, 2C2, etc., if needed) will be used for the Natural Stream Design Quantity Sheet.
- Sheet NS-1 through NS-x will be used for the Natural Stream Design Plan.

The Environmental Division, Natural Resources Office will submit the final Natural Stream Design Plan onto FileNet under the file name: nnnnnn-nn-NSD.pdf and a notification shall be sent to Eplans.turnin.TDOT@tn.gov.

TABLE 1-1 – FileNet Project Deliverables and Plans Sets

Deliverable / Plan Set	File Format	File Naming Convention (nnnnnn-nn is the project PIN)	Comments	PPRM Activity
Structural Grade Approval Plans	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn- StructuralGradeApproval.pdf nnnnnn-nn- StructuralGradeApproval.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4.	340
Preliminary Field Review Plans	*.pdf Only	nnnnn-nn- PreliminaryFieldReview.pdf	Include a copy of the Field Review Notification Memorandum in the pdf document.	375
Preliminary Plans	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn-Preliminary.pdf nnnnnn-nn-Preliminary.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4.	390
Soils and Geological Report	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn- GeologicalReportRequest.pdf nnnnnn-nn- GeologicalReportRequest.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4.	445

Deliverable / Plan Set	File Format	File Naming Convention (nnnnnn-nn is the project PIN)	Comments	PPRM Activity
Right-of-Way Field Review Plans	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn-ROWFieldReview.pdf nnnnnn-nn-ROWFieldReview.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4. Include a copy of the Field Review Notification Memorandum in the pdf document.	540
Incidentals	*.pdf Only	nnnnnn-nn-Incidentals.pdf	See Design Guidelines Section 3-400.00	425
Preliminary Estimate	*.xls Only	nnnnn-nn-PreliminaryEstimate.xls or nnnnnn-nn-PreliminaryEstimate- Rev-mm-dd-yy.xls	See Design Guidelines Section 3-400.15	585
Right-of-Way Plans	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn-ROW.pdf nnnnnn-nn-ROW.exe nnnnnn-nn-ROW-Rev-mm-dd- yy.pdf nnnnnn-nn-ROW-Rev-mm-dd- yy.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4. ROW Plans revisions, if any, will necessitate another uploaded plan set in entirety. (See naming conventions for revisions.) The revision letter should be included as the first page of the pdf document.	600
Permit Sketches	*.pdf Only	nnnnn-nn-PermitSketches.pdf	See Design Guidelines Section 3-410.00	575

Deliverable / Plan Set	File Format	File Naming Convention (nnnnnn-nn is the project PIN)	Comments	PPRM Activity
Permit Application Plan Set	*.pdf Only	nnnnn-nn-ROW.pdf or nnnnnn-nn-ROW-Rev-mm-dd- yy.pdf	This will be either the original or as revised ROW plans which have incorporated the ecology and permit assessment.	575
Construction Field Review Plans	*.pdf Only	nnnnn-nn- ConstructionFieldReview.pdf	Include a copy of the Field Review Notification Memorandum in the pdf document. This plans set will be used for NPDES application and for NEPA Reevaluation.	710
Construction Plans	*.pdf and *.exe (Includes: *.dgn, *.sht, *.tin, *.gpk)	nnnnn-nn-Construction.pdf nnnnnn-nn-Construction.exe nnnnnn-nn-Construction-Rev-mm- dd-yy.pdf nnnnnn-nn-Construction-Rev-mm- dd-yy.exe The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website.	See Footnotes 1, 2, 3 and 4. These plans will be the final sealed plans set, including the ROW Title Sheet. Construction Plans revisions, if any, will necessitate another uploaded plan set in entirety. See naming convention for revisions. The revision letter should be included as the first page of the pdf document. Signal and Signing Sheets developed for roadway projects should be submitted to the Design Manager for inclusion in this deliverable.	715

Deliverable / Plan Set	File Format	File Naming Convention (nnnnnn-nn is the project PIN)	Comments	PPRM Activity
Construction Estimate	*.xls Only	nnnnn-nn- ConstructionEstimate.xls or nnnnnn-nn-ConstructionEstimate- Rev-mm-dd-yy. xls	See Design Guidelines Section 4-140.05	715
	*.pdf Only	nnnnn-nn-Utility.pdf nnnnnn-nn-Utility-Rev-mm-dd- yy.pdf	See Footnotes 1, 2, 3 and 4.	
Utility Plans	*.exe (Includes: *.dgn, *.sht,	nnnnn-nn-Utility.exe nnnnnn-nn-Utility-Rev-mm-dd- yy.exe	These plans will be the final sealed plans set. Utility Plans revisions, if any, will necessitate another	
	*.tin, *.gpk)	The file naming convention for the Bentley MicroStation and Geopak files are defined in the TDOT CADD Standards document entitled "CADDV8.pdf" at the Design Division website	uploaded plan set in entirety. See naming convention for revisions.	
Utility Rainbow Plans	*.pdf Only	nnnnn-nn-UtilityRainbows.pdf or		755
Utility Specifications	*.pdf	nnnnn-nn-UtilityRainbows-Rev- mm-dd-yy.pdf	Utility Plans, CADD, Specifications, and Estimate Files Will Be Loaded onto FileNet by the Utility	
	Only	nnnnn-nn-UtilitySpecs.pdf or nnnnnn-nn-UtilitySpecs-Rev-mm- dd-yy.pdf	Section of the Right- of-Way Division. The Design Division will be responsible for	
Utility Estimate	* xls Only		loading Estimated Utility Quantity Sheets developed by the Design Division and included in the	
		nnnnn-nn-UtilityEstimate.xls or nnnnn-nn-UtilityEstimate-Rev- mm-dd-yy.xls	Construction Plans.	
SWPPP	*.pdf	nnnnn-nn-SWPPP.pdf	Final Signed SWPPP submitted by Environmental Division	681

Deliverable / Plan Set	File Format	File Naming Convention (nnnnnn-nn is the project PIN)	Comments	PPRM Activity
Natural Stream Design Plan	*.pdf	nnnnn-nn-NSD.pdf	Final sealed plan set submitted by Environmental Division	570
Initial Work Zone Significance Determination & Transportation Management Plan	*.pdf Only	nnnnn-nn-InitialTMP.pdf	Signed copy. See TDOT Work Zone Safety and Mobility manual and Transportation Management Plan Workbook.	n/a
Secondary Work Zone Significance Determination & Transportation Management Plan	*.pdf Only	nnnnn-nn-SecondaryTMP.pdf	Signed copy. See TDOT Work Zone Safety and Mobility manual and Transportation Management Plan Workbook.	n/a
Approved Design Exceptions (if any)	*.pdf Only	nnnnnn-nn-DesignExceptions.pdf	Signed copy. See Design Guideline section 3-110.02	n/a

Footnotes:

- 1 The Bentley MicroStation files required for placement on the FileNet Server are all sheet files (*.sht) that make up a plan set and all reference files to those sheet files including, but not limited to, the *Survey.dgn, *Alignments.dgn, *Proposed.dgn, and *MainlineXSections.dgn files.
- 2 The Bentley Geopak *.gpk file required for placement on the FileNet Server is the project *.gpk file containing all project geometry including, but not limited to, all existing and proposed alignments, existing and proposed profiles, and proposed ROW and easements. Documentation concerning how to create proposed ROW and easements in Bentley's Geopak software can be found at the following link:

 http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_design/v8/ProposedROW.pdf
- **3** The Bentley Geopak *.tin files required for placement on the FileNet Server are the existing ground surface, and all proposed surfaces for the project.
- **4** The ROW Acquisition Excel file should be included in the executable file.

SHEET NAME	SHEET NO.
Title Sheet	1
Roadway Index and Standard Drawings Index	1A
Project Commitments	1B
Estimated Bridge Quantities and Bridge Index	2
Estimated Roadway Quantities	2A - 2A1
Estimated Utilities Quantities	2B – 2B1
Estimated Natural Stream Design Quantities	2C – 2C1
Typical Sections and Paving Schedule	2D - 2F
General Notes and Special Notes	2G
Tabulated Quantities	2H - 2J
Detail Sheets	2K - 2L
Property Maps and Right-of-Way Acquisition Tables	3, 3A - 3B
Present Layouts	4 - 14
Proposed Layouts	4A - 14A
Proposed Profiles (if needed)	4B - 14B
Public Side Roads and Ramp Profiles	15 - 17
Private Drive and Field Ramp Profiles	18 - 21
Interchange Grading Plans	22 - 24
Drainage Maps	25 - 27
Culvert Sections	28 - 30
Erosion Prevention and Sediment Control (EPSC) Plans	31 - 33
Environmental Mitigation Plans	34-37
Traffic Control Plans with Construction Phasing Notes	38, 38A - 38Z
Signing and Pavement Marking Plans	39, 39A - 39Z
Sign Schedule Sheets	40, 40A - 40Z
Miscellaneous Signing Details	41, 41A - 41Z
Signal Layouts	42, 42A - 42Z
Lighting Layouts	43, 43A - 43Z
Soils Sheets	44, 44A - 44Z
Roadway Cross-Sections	45 - 191
Side Road Cross-Sections	192 - 200
Utilities Index, Utility Owners, and Utility Sheets	U1-1 - U1-xx
Storm Water Pollution Prevention Plan (SWPPP)	S-1 – S-x
Natural Stream Design Plan	NS-1 – NS-X

Figure 4-2 Typical Index of Sheets