ORD File Exchange and Workflow – *Traffic Design /*Signal and Lighting Design

During project development and delivery of an ORD project, it is anticipated that multiple disciplines will work on a project which will result in project file(s) being exchanged via the project team. The tables noted below detail the .dgn file names and types for the interaction between Roadway Design and Traffic Design / Signal and Lighting Design. For example, scenarios where this would occur is during the development of ITS Sheets (ITS-Sheets), Lighting Sheets (L-Sheets) and/or Signal Sheets (SIG-Sheets), as referenced in the ITS Project Development Guidelines and TDOT Traffic Design Manual. For a PDN project, ITS-Sheets, L-Sheets, and SIG-Sheets are typically created during Stage 2 – Footprint Established.

A single workset with a single sheet index will be turned-in as part of the Construction Planset submittal (or PS&E for a PDN project). This single workset and associated sheet index will include the design files and sheet models of all applicable disciplines to complete a project's design. The **Roadway Design** Workset will be the master workset that all other disciplines' work will be added to. During the development of plans, the **Roadway Design** Workset should be provided via zip file, which includes the files noted in the tables below, as part of the handoff and interaction between **Roadway Design** and **Traffic Design / Signal and Lighting Design**.

The file naming convention information noted in these tables references the <u>TDOT ORD</u> <u>File Naming Convention Standards</u> document. (**Note:** For example, SR-1 in Cheatham County would be **11S001-SHT-Proposed Layout.dgn**. This file will contain all proposed sheet models along with the motif model and drawing model(s).)



ROADWAY DESIGN >> TRAFFIC DESIGN / SIGNAL AND LIGHTING DESIGN

As a reminder, the **Roadway Design** Workset will be provided. The files below will be most useful to the **Traffic Design Lead / Signal and Lighting Design Leads** to complete their design.

Document Description	File Naming Convention	Notes
Horizontal and Vertical Alignments	PRJ NAME-SUR-Alignment	Survey preliminary centerline horizontal alignment with profile, existing ROW, property lines, parcel lines, property owners, tract numbers, and projected existing drainage and utilities (profile only).
Field Survey Data	PRJ NAME-SUR-Model	Existing graphics imported from the original Field Book(s).
Existing Terrain	PRJ NAME-SUR-Terrain	Combined field survey TIN and aerial survey TIN, if applicable.
Roadway Alignments / Profiles	PRJ NAME-DES-Alignments-Master	All Horizontal and Vertical Alignment(s).
Roadway Corridor	PRJ NAME-DES-Corridor-Master	All Corridor Models Including Roadways and Structures in the Project Area.
Drainage Model	PRJ NAME-DES-Drainage-Hydraulic Model	All Drainage models including size, and placement of drainage structures and devices.
2D Pavement Marking Design File	PRJ NAME-DES-Pavement Markings	
Proposed ROW Linework, Patterning and Text	PRJ NAME-DES-ROW	
All Proposed Terrain Files merged with the Existing Terrain	PRJ NAME-DES-Terrain-Merged	Required Terrain type.
Present Layout Sheets	PRJ NAME-SHT-Present Layout	File containing the motif model, drawing model(s), and sheet model(s) for all Present Layout Sheets.
Roadway Layout Sheets	PRJ NAME-SHT-Proposed Layout	File containing the motif model, drawing model(s), and sheet model(s) for all Proposed Layout Sheets.
Roadway XS Sheets	PRJ NAME-SHT-XS-Road Name	File containing the motif model, End-Area Calcs, drawing model(s), and sheet model(s) for all Roadway XS Sheets.
Side Road XS Sheets	PRJ NAME-SHT-XS-Side Road	File containing the motif model, End-Area Calcs, drawing model(s), and sheet model(s) for all Side Road XS Sheets. (Each Side Road gets its own file.)



TRAFFIC DESIGN (TSMO/ITS) >> ROADWAY DESIGN

The **Traffic Design Lead** should provide the files listed below to the **Roadway Design Lead**.

Document Description	File Naming Convention	Notes
TSMO/ITS Design File	PRJ NAME-DES-ITS	File containing all necessary TSMO/ITS plan information that will be referenced into the TSMO / ITS sheet models.
Signature Sheet	PRJ NAME-SHT-ITS Signature	Add the TSMO/ITS signature(s) and applicable sheets.
TSMO/ITS Index Sheet(s)	PRJ NAME-SHT-ITS Index	File containing the sheet model(s) for all TSMO/ITS Indexes.
TSMO/ITS Notes Sheet(s)	PRJ NAME-SHT-ITS Notes	File containing the sheet model(s) for all TSMO/ITS Notes.
TSMO/ITS Layout Sheets	PRJ NAME-SHT-ITS	File containing the motif model, drawing model(s), and sheet model(s) for all TSMO/ITS Layout Sheets.
TSMO/ITS Present Layout Sheets	PRJ NAME-SHT-Present Layout-ITS	File containing all references needed for all TSMO/ITS present layouts.
TSMO/ITS Proposed Layout Sheets	PRJ NAME-SHT-Proposed Layout-	File containing all references needed for all TSMO/ITS proposed layouts.

RED TEXT = New file or new portion of file name.

SIGNAL DESIGN >> ROADWAY DESIGN

The **Signal Design Lead** should provide the files listed below to the **Roadway Design Lead**.

Document Description	File Naming Convention	Notes
Signalization Design File	PRJ NAME-DES-Signals	File containing all necessary Signal plan information that will be referenced into the Signal sheet models.
Signature Sheet	PRJ NAME-SHT-Signal Signature	Add the Signal signature(s) and applicable sheets.
Signal Index Sheet(s)	PRJ NAME-SHT-Signal Index	File containing the sheet model(s) for all Signal Indexes.
Signal Notes Sheet(s)	PRJ NAME-SHT-Signal Notes	File containing the sheet model(s) for all Signal Notes.
Signal Layout Sheets	PRJ NAME-SHT-Signal Layouts	File containing the motif model, drawing model(s), and sheet model(s) for all Signal Layout Sheets.

RED TEXT = New file or new portion of file name.



LIGHTING DESIGN >> ROADWAY DESIGN

The **Lighting Design Lead** should provide the files listed below to the **Roadway Design Lead**.

Document Description	File Naming Convention	Notes
Lighting Design File	PRJ NAME-DES-Lighting	File containing all necessary Lighting plan information that will be referenced into the Lighting sheet models.
Signature Sheet	PRJ NAME-SHT- <i>Lighting</i> Signature	Add the Lighting signature(s) and applicable sheets.
Lighting Index Sheet(s)	PRJ NAME-SHT-Lighting Index	File containing the sheet model(s) for all Lighting Indexes.
Lighting Notes Sheet(s)	PRJ NAME-SHT-Lighting Notes	File containing the sheet model(s) for all Lighting Notes.
Lighting Layout Sheets	PRJ NAME-SHT-Lighting	File containing the motif model, drawing model(s), and sheet model(s) for all Lighting Layout Sheets.
Lighting Present Layout Sheets	PRJ NAME-SHT-Present Layout- Lighting	File containing all references needed for all lighting present layouts.
Lighting Proposed Layout Sheets	PRJ NAME-SHT-Proposed Layout- Lighting	File containing all references needed for all lighting proposed layouts.

RED TEXT = New file or new portion of file name.

