### 3 Drafting Requirements

#### 3.1 Requirements for Plans Submitted to ODOT

The following are requirements for plans submitted to ODOT:

**3.1.1 Plans Produced for ODOT to be Let and Administered by ODOT**
- Plans must meet all design and drafting criteria in both the ODOT Design and Drafting Manuals for traffic signals.
- Plans must be drafted and submitted in Microstation V8i format. AutoCAD files are not acceptable.
- Plans must be printed on 11”x17” paper or submitted in PDF format for preliminary, advance, and final plan review submittals. Plans for construction must be submitted to ODOT on 11”x17” Mylar. Each sheet shall bear the engineer’s stamp and be wet-signed by the engineer of record.
- Grey shading on ODOT plan sheets is not permitted. (Grey shading will not reproduce with acceptable results when printed on a high-speed printer.)
- Plans must be approved and wet signed by ODOT Traffic Signal Standards personnel.

**3.1.2 Plans Produced for ODOT by Cities, Counties, or Private Developers**
- Plans must meet all design and drafting criteria in both the ODOT Design and Drafting Manuals for traffic signals.
- Plans must be legible. If ODOT will print the plans, grey shading on the plans shall not be used.
- Plans must correctly show ODOT standards such as poles and all other hardware.
- Plans must be printed on 11”x17” paper or submitted in PDF format for preliminary, advance, and final plan review submittals. Plans for construction must be submitted to ODOT on 11”x17” Mylar. Each sheet shall bear the engineer’s stamp and be wet-signed by the engineer of record.
- Plans must be approved and wet signed by ODOT Traffic Signal Standards personnel.
- Plans must be drafted and submitted in Microstation V8i format. AutoCAD files are not acceptable.

#### 3.2 Traffic Signal Tasks and Workflows

All of the current drafting standards are available by using the Microstation Tasks & Workflows. This menu will help you select the correct notes, text styles, symbols, line styles, line weights, levels and cells.
NOTE: It is the user’s responsibility to ensure that the ODOT workspace Tasks & Workflows are the latest version before and during design of all signal projects. ODOT reserves the right to update the workspace and the associated cells at any time. See the links below for access to the ODOT workspace Tasks & Workflows.

http://www.oregon.gov/ODOT/HWY/CONSULTANT/Pages/Consultants-Portal.aspx
ftp://ftp.odot.state.or.us/isb/appeng/Microstation/V8i/
http://www.oregon.gov/ODOT/HWY/CONSULTANT/Pages/Consultants-Portal.aspx#Consultant_Subscription_Email_List

Once the tasks & workflows are opened in Microstation they will look similar to the ones shown below:

**Figure 3-1 | Microstation Tasks & Workflows**

1. Go to Tools on the main menu, Check Tasks, Open the ODOT tab, Open the Traffic tab, Open the General tab. Go to Figure 3-2.
2. You should also open the signal tab (See Figure 3-1), Open the Signal plans tab. Go to Figure 3-3.

3. Open the Symbology tab, Open the Scalable Items tab, Open the Plan Sheet Notes tab.
4. Drill down into each of the tabs to familiarize yourself with the various sheet borders, text, line styles, & cells, used within the traffic signals discipline.

5. The Place Signals Note Tool is located under the Signal Plans tab, Bubble/Notes tab. See Figure 3-4

![Figure 3-4 | Microstation Tasks & Workflows](image1)

6. This tab will give you the Bubble, for Install 332S Controller Cabinet. The bubble by itself is typically used on the signal plan sheet as part of a bubble string.

![Figure 3-5 | Microstation Tasks & Workflows](image2)
7. This tab will give you the Bubble & Note for Install Controller 332S. Bubble & Note is typically used on the Legend sheet.

8. This tab will give you a Bubble with Leader Line. This is typically used on the signal plan sheets. This is typically the first bubble in a string pointing to the item being called out. In this case it is the signal controller.

If you are new to ODOT’s tasks & work flows, take time to familiarize yourself with them before starting any signal plans for ODOT projects. The tasks & workflows have been developed to aid in the design and
drafting of ODOT traffic signal contract plans. Use of these tasks & workflows will help to insure that the drafting quality will comply with ODOT standards.

For additional Microstation V8i information click the following link: Microstation Users Guide.