

Roadway Plan & Profile Drafting Conventions

Text

Standard proposed drawing text should be 5/32" ODOT height text @ WT=1

General

Drawing Titles should show: Plan & Profile, Street Name, Stations covered.

Sheet orientation generally with north up and/or to the right.

Use Match Lines at any 50' station interval for continuation of the road plan on next sheet. Match text goes outside of the plan area, using 1/4" height LW=3 text. Clip and show no plan overlap for ODOT plans. Other plans may have overlap at your discretion.

Align plan and profile view stations if horizontal alignment is all tangent. If horizontal alignment contains curves, align one end of the plan with the profile with the opposite end floating. Orient the main tangent of the alignment parallel to the sheet.

Standard centerline station and out callout format:

For points-

STA. XX+XX.XX,
XX.XX' RT/ LT.

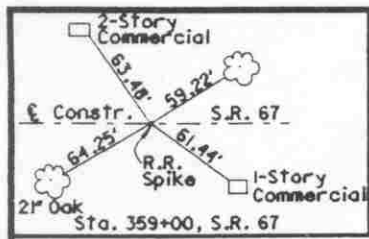


For station location only-

(Where out is apparent)

+XX.XX

Show centerline monument/control point witness information and nearest benchmark information in empty areas near border around plan.



BENCH MARK #5 ELEV. 835.29
"□" N.W. CORNER OF NORTH
HEADWALL, STA. 172+05, 28' LT.

SEE SHEET 137 FOR RAMP "Q" & "S"

For Estimated Quantities See Sheet 27
For Centerline References See Sheet 3
For Drive Details & Quantities See Sheet 65

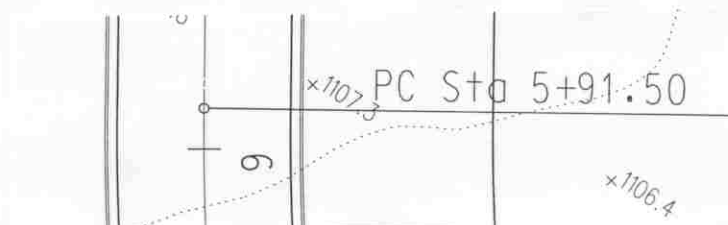
Provide reference notes to other plan drawing numbers for ease of plan set navigation in order to more easily find information related to the plan.

Plan View

Show centerline with ticks at stations. Number each station (usually without the +).

Label the bearing of the centerline.

Label PC, PT, PCC locations using a leader to a small circle at the point. Attempt to place leader to the inside of the curve, however this is not always possible.



Show curve data on plan view in empty area near border. Label curves with consecutive numbers if multiple curves exist on project.

Dimension road, lane and shoulder widths. Dimension and label tapers.

ODOT plans make use of Reference Bubbles to identify pay item quantity assemblies, which may either be summarized in a schedule on the plan or separately.

Profile View

Usually use a 1'=5' vertical scale to yield vertical exaggeration of 4:1 (20 scale), 8:1 (40 scale) or 10:1 (50 scale).

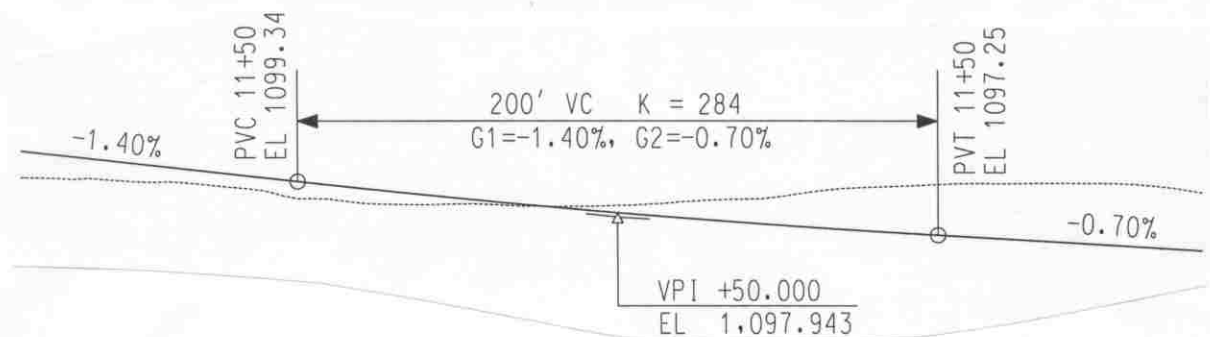
Show Profile Grade Line as a thick solid line with triangles for the PVI's with tangent grade extensions at the vertical curves. Show existing profile along centerline as a light, dashed line. Label both as proposed or existing grade.

Label grid: horizontal with stations and vertical on the major elevations (5').

Existing and proposed profile grades are shown on the grid at 50' intervals (25' for proposed in curves). Proposed elevations are shown at the top of the grid with existing elevations shown at the bottom of the grid.

Dimension the vertical curves with standard extension and dimension lines. Callout length, K-value, PVI station and elevation, and entrance and exit grades (0.01%).

The PVI can also be identified separately with a leader to the PVI triangle.



Vertical curves that continue to the next sheet should receive a double arrow on the continuing end of the dimension line.

Label PVC and PVT of curve using a small circle at the end of the extension lines on the profile grade line and text along the extension lines.

Add additional profiles for roadside swale lines.

Utilities

Show all utilities in profile view. Utilize the previously discussed symbology methodology for utilities except for the following:

Underdrains are shown only as a single line at the invert elevation in the profile.

Plan view pipes in ODOT plans are shown as a solid line with only a pipe size and pipe class callout.

Transverse (cross-over) pipes in profile usually do not show much detail in profile.

Additional profile detail information is usually shown on individual culvert plans or cross-section sheets. Provide a reference note if this is the case.