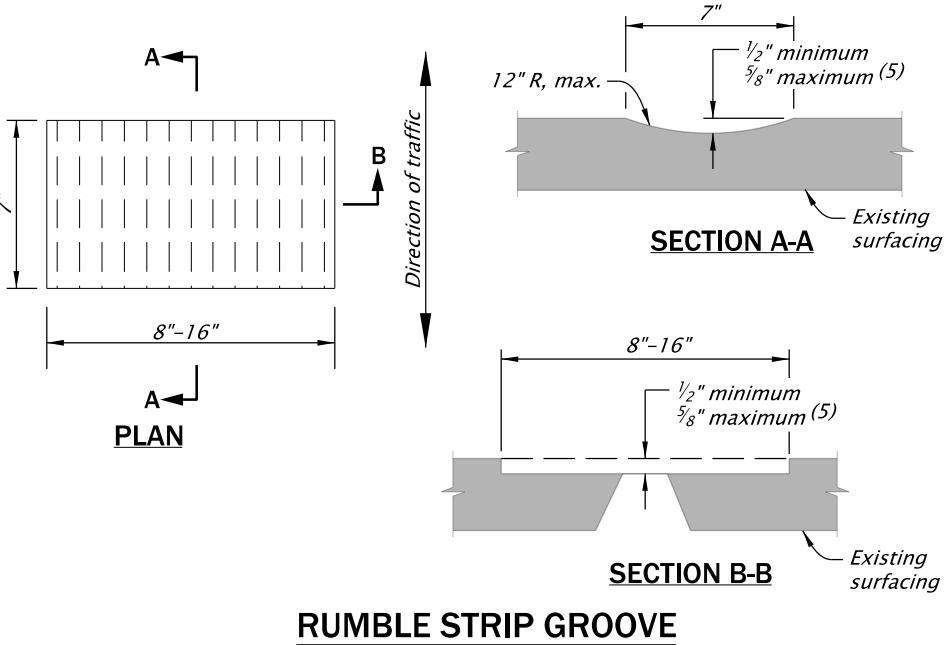
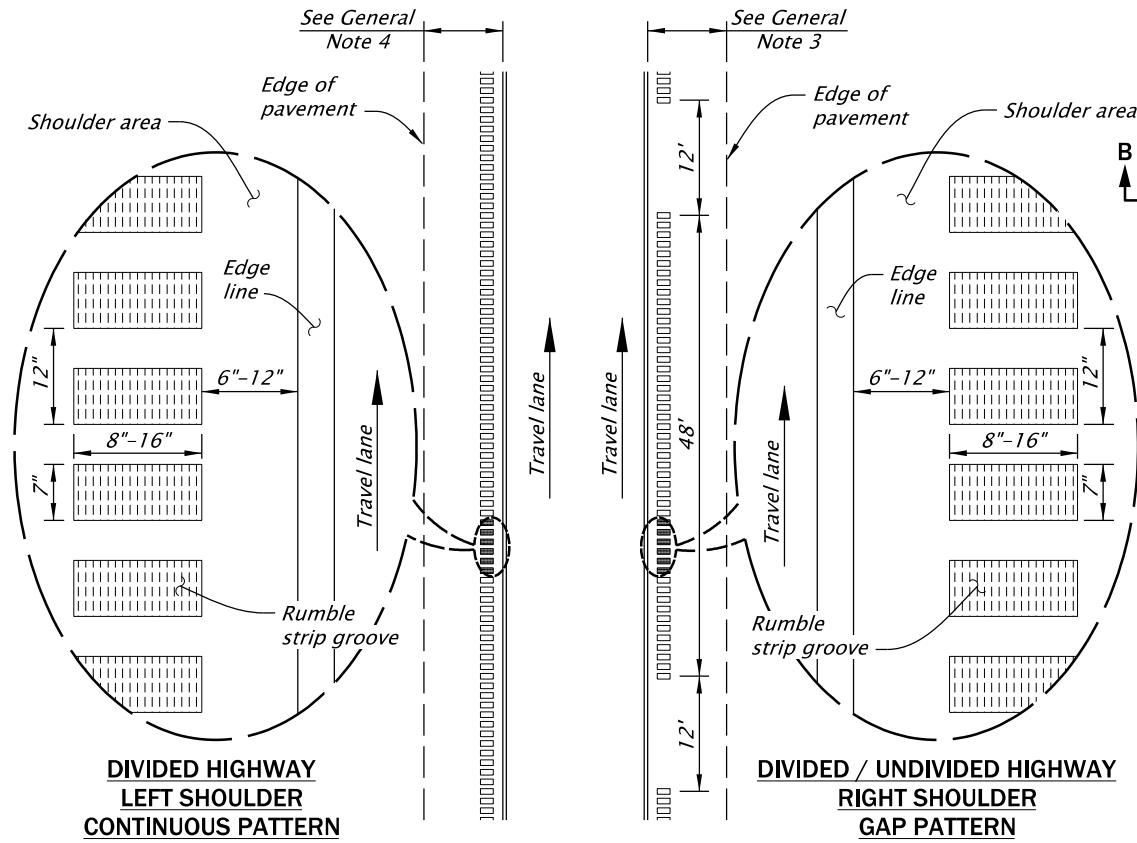
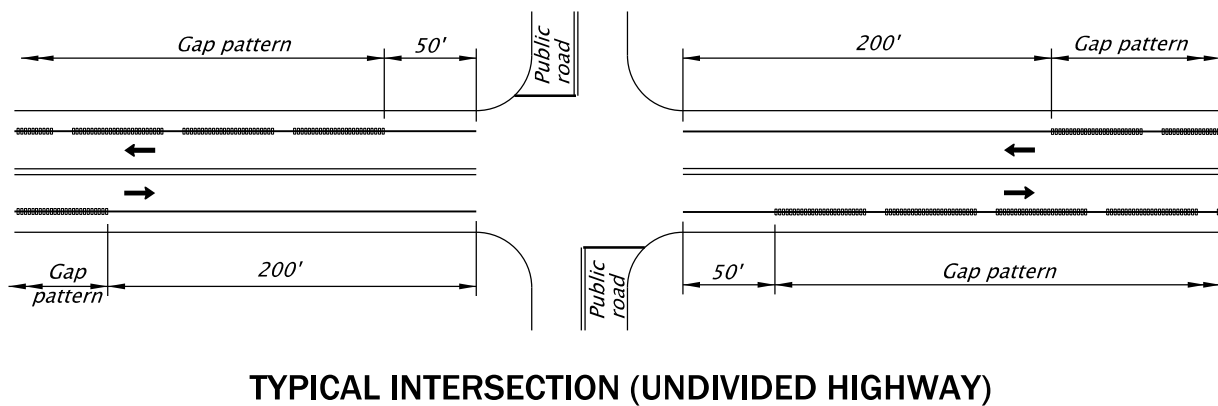
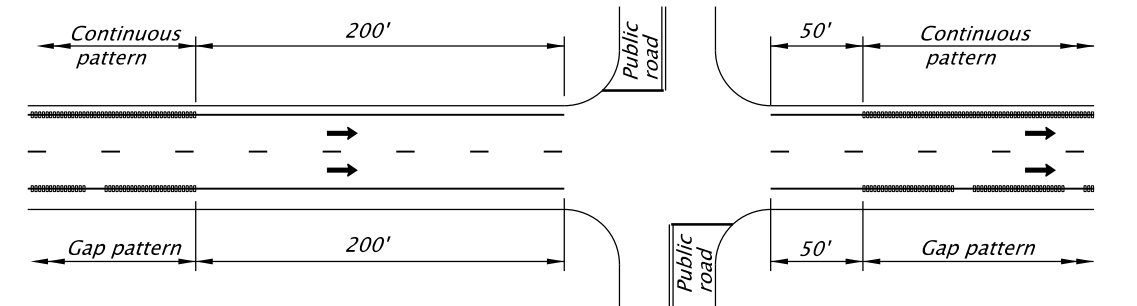
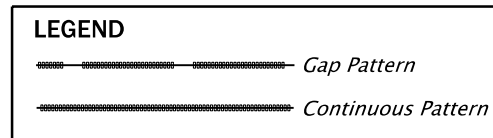
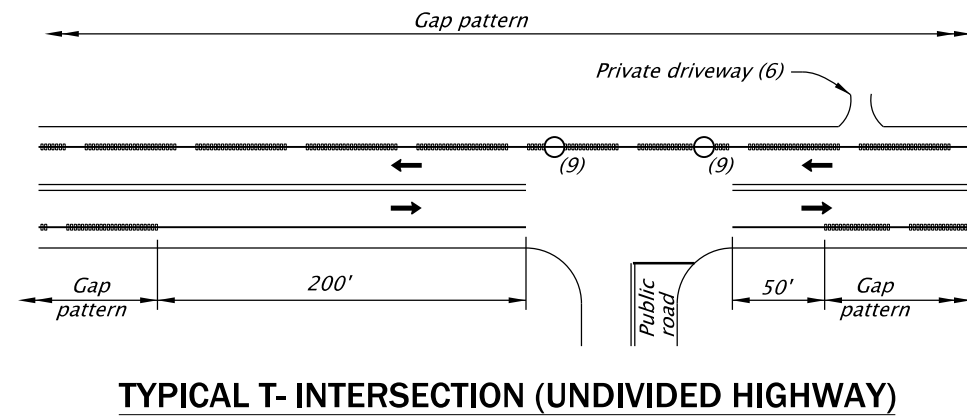
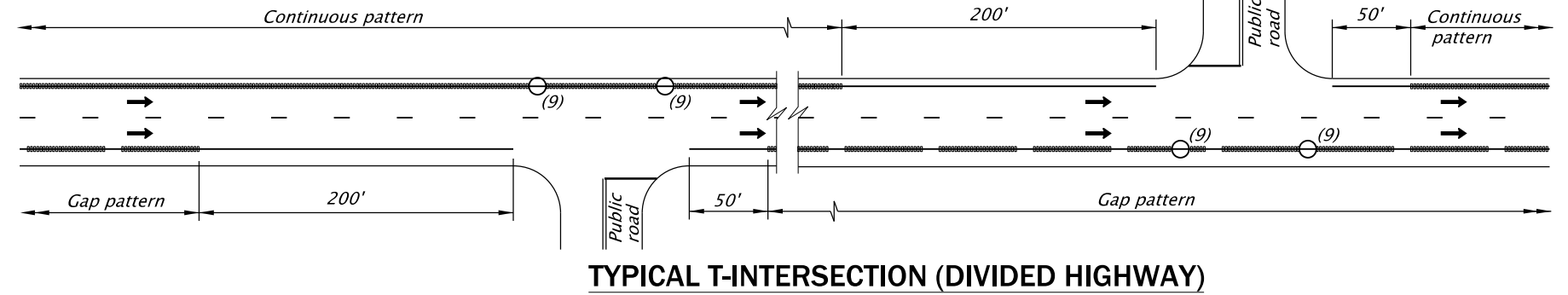




GENERAL NOTES:

1. Install rumble strips on left and right shoulders as shown.
2. Omit rumble strips:
 - on bridge decks,
 - on Portland cement concrete surfaces,
 - at intersections with public roads as shown, and other locations as directed.
3. On right-side shoulders, install gap pattern shoulder rumble strips where the shoulder width is X.X' or greater (X.X' or greater where adjacent to barrier or guardrail).
4. On left-side shoulders of divided highways, install continuous shoulder rumble strips where the shoulder width is X.X' or greater (X.X' or greater where adjacent to barrier or guardrail).
5. Shoulder width is measured from the center of the edge line to the edge of pavement, or face of guardrail or barrier where present.
6. Drawing not to scale.
7. Install "continuous pattern" on left shoulder of divided highways only.
8. Do not break rumble strips at private driveways.
9. Do not install rumble strips across crosswalks, marked or unmarked. Break rumble strip pattern as shown where crosswalks are present.



NOTES TO DESIGNER:

1. Right shoulders - Choose rumble strip width and offset dimensions so a 4-foot minimum clearance is maintained between the right edge of the rumble strips and the edge of pavement, or 5-foot clearance where adjacent to barrier or guardrail.
2. Left shoulders of divided highways - Choose rumble strip width and offset dimensions so a 1-foot minimum clearance is maintained between the left edge of the rumble strips and the edge of pavement, or 3-foot clearance where adjacent to barrier or guardrail.
3. Minimum groove depth for the "Gap Pattern" may be reduced to 3/8-inch.

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

OREGON DEPARTMENT OF TRANSPORTATION

ENGINEERING AND TECHNICAL SERVICES BRANCH

RURAL HIGHWAY SHOULDER RUMBLE STRIPS

DETAIL NO. DET4554