



PRIVATE ROADS

Plans and Specifications

The plans and specifications shall furnish, but not limited to, the following:

Private road Type B and C: Design and plans shall be prepared by a professional engineer.

Exception: For Type C roads, this requirement may be waived where road modification is approved by the Fire Marshal.

General Information –

1. Vicinity map shall be provided in the first sheet of the plan set and show the project location in respect to the nearest major intersection.
2. Plans shall be prepared to scale and dimensioned. A north arrow shall be shown on each plan view.
3. Drawing scales shall be 1" = 20', 50', or 100' horizontally and 1" = 2', 4', 5', or 10' vertically.
4. Title sheet shall include a table of design elements used including:
 - a. Road classification
 - b. Design speed
 - c. Road grade.
 - d. Any additional information that the county deems necessary.
5. Index to drawings
6. Typical cross sections
7. Structural design methods shall be provided in accordance with the Cowlitz County "Guidance for Private Road Construction", or as directed by a professional engineer.
8. Note: All road development, including turnarounds and turn-outs, shall be located within the easement established for such use. For final plat approval: a survey plan with a road overlay prepared by a professional surveyor will be required.

Plan View – Plan views shall show the following:

1. Right of way, property, tract and easement lines.
2. Subdivision name, lot numbers, road names and other identifying labels.
3. Horizontal curve information and curb return data.
4. Road grade. Specify grade at 20' intervals (contour lines) or as necessary to express true grade along road development. Maximum grade: 15%. Grades greater than 12% shall be paved.
5. Existing and proposed utilities.
6. Location and size of drainage facilities.
7. Centerline stationing of all intersecting streets.
8. Intersections. The interior angle of intersecting streets centerlines shall be kept as near 90 degrees as possible, and in no case will it be less than 75 degrees.
9. Location and description of existing survey monuments, including section corner, quarter corners, donation land claims and others as appropriate.



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Profile view – Profile view shall show the following:

1. Vertical profile with vertical curve information and slope. Vertical curves shall be established by AASHTO Standards.
2. Road grade. Specify grade at 20' intervals (contour lines) or as necessary to express true grade along road development. Maximum grade: 15%. Grades greater than 12% shall be paved.
3. Road sections. Coordinate sections with road grade.
4. Show existing ground beyond existing roads if necessary.



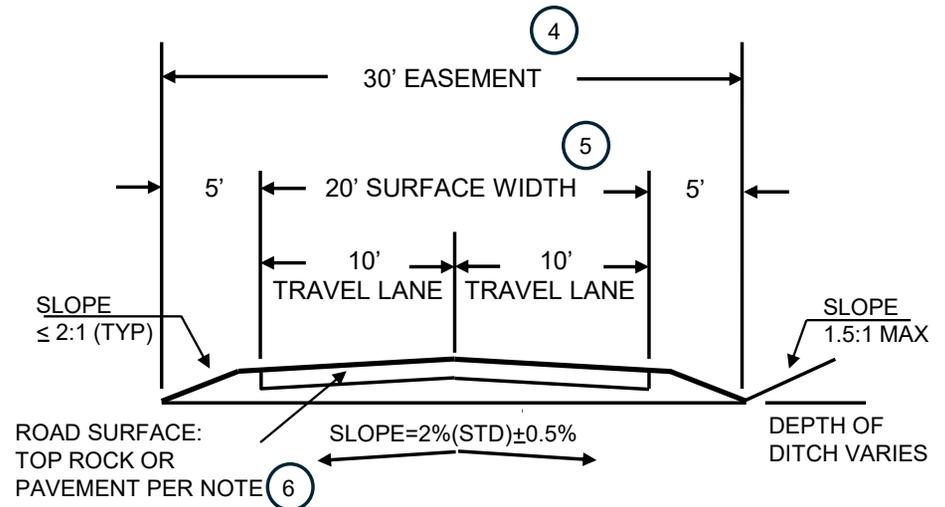
GUIDANCE FOR PRIVATE ROAD CONSTRUCTION

Road Type	Lot Threshold
B	10 - 19
C	5 - 9
D	Up to 4

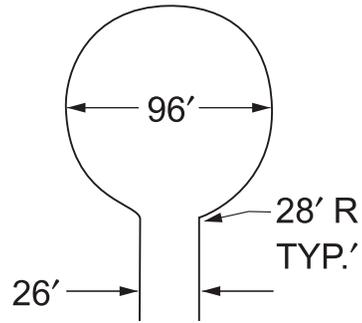
CONVENTIONAL CONSTRUCTION		
AASHTO SOIL TYPE	TOP ROCK	SUBBASE ROCK THICKNESS
A - 1	0.35'	0.00'
A - 2	0.35'	0.00'
A - 3	0.42'	0.00'
A - 4	0.50'	0.00'
A - 5	0.50'	0.55'
A - 6	0.50'	0.67'
A - 7	0.50'	0.80'

NOTES:

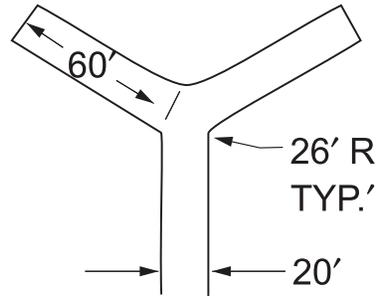
1. SUBGRADE REINFORCEMENT GEOTEXTILES (OR EQUIVALENT) SHALL BE INSTALLED OVER ALL A-6, A-7 SOILS PRIOR TO CONSTRUCTING THE BASE AND SURFACING.
2. THE SUBGRADE AND CRUSHED SURFACING MATERIALS SHALL BE COMPACTED PER WSDOT STANDARDS.
3. APPARATUS ACCESS ROADS SHALL BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING UP TO 75,000 POUNDS. IFC SEC D103.
4. EASEMENT WIDTH 30 FT MINIMUM. INCREASE MAY BE REQUIRED TO ACCOMMODATE GRADING. TYPE D ROADWAY 30 FT MINIMUM.
5. SURFACE WIDTH REDUCABLE TO 14' WHERE MODIFICATION IS APPROVED BY THE FIRE MARSHAL.
6. MAXIMUM ROAD GRADE: 15%. GRADE GREATER THAN 12% SHALL BE PAVED. (2 1/2" HOT MIX ASPHALT C SS 3/8" PG 58H-22)
7. TURNAROUND REQUIRED AT END OF ROAD GREATER THAN 150-FEET IN LENGTH AND AT INTERVALS OF 1000-FEET. IFC SEC D103.
8. VERTICAL CURVES SHALL BE ESTABLISHED BY AASHTO STANDARDS.
9. INTERSECTIONS. THE INTERIOR ANGEL AT INTERSECTING ROADS CENTERLINES SHALL BE KEPT AS NEAR 90 DEGREES AS POSSIBLE, AND IN NO CASE WILL IT BE LESS THAN 75 DEGREES.
10. TYPE B & C ROADWAYS NEED SURVEY AND CENTERLINE PROFILE SUBMITTED, FOR 10 OR MORE LOTS.
11. ROAD MAINTENANCE AGREEMENT RECOMMENDED.



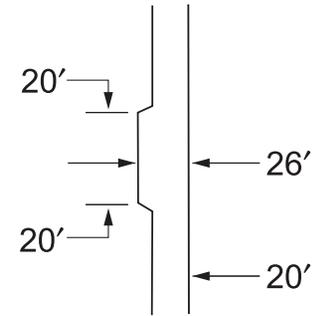
INTERNATIONAL FIRE CODE



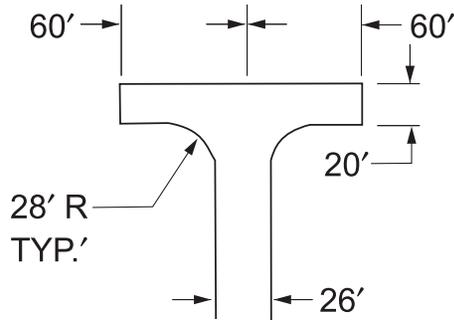
96' DIAMETER
CUL-DE-SAC



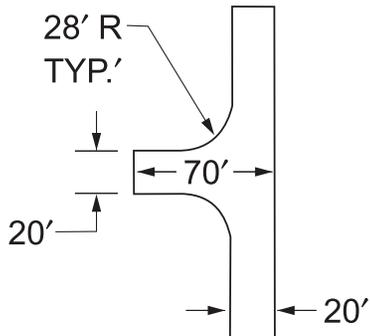
60-FOOT "Y"



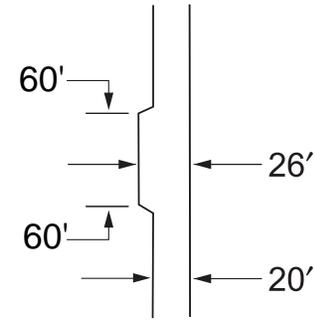
MINIMUM CLEARANCE
AROUND A FIRE
HYDRANT



120' HAMMERHEAD



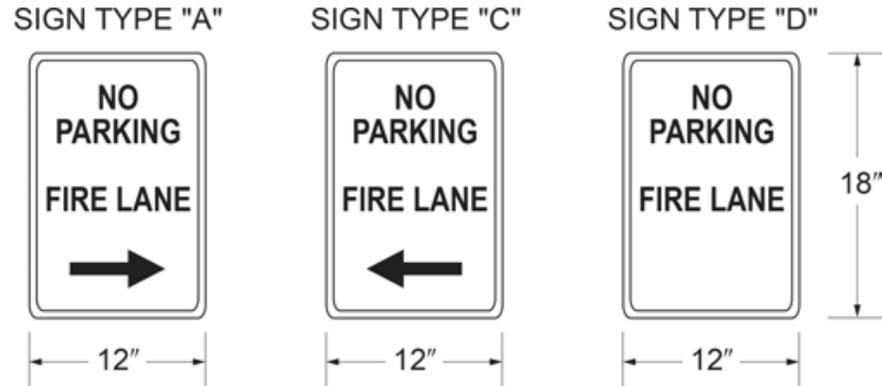
ACCEPTABLE ALTERNATIVE
TO 120' HAMMERHEAD



TURN-OUT
DIMENSIONS

DEAD END, FIRE APPARATUS ACCESS, TURNAROUND AND TURN-OUT EXAMPLES

**INTERNATIONAL FIRE CODE
FIRE APPARATUS ACCESS ROAD - SIGNS**



**FIGURE D103.6 FIRE LANE SIGNS
RED LETTERS ON WHITE REFLECTIVE BACKGROUND**

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent “NO PARKING—FIRE LANE” signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

Cowlitz County Department of Public Works
1600 - 13th Ave. South, Kelso, WA 98626
Phone: (360) 577-3030 - Fax (360) 636-0845
Email: publicworks@cowlitzwa.gov
Internet: www.co.cowlitz.wa.us



APPLICATION FOR APPROACH / ACCESS TO COUNTY ROAD

I. Property Owner / Applicant Information

Name: _____ Phone: _____
Mailing Address: _____ Email: _____
City: _____ State: _____ Zip: _____

II. Location

Site Address / Parcel #: _____

III. Project Description (driveway, extentsion, multi-family, etc.) _____

IV. Number of lots served: _____ Residential Commercial Logging

V. Associated permits: Private Road Building/Planning Subdivision Accela RID# _____

VI. Permittee Signature: (The undersigned has read, understands and accepts the terms and conditions set forth herein)

Name: _____ Signature: _____ Date: _____
(Please Print) **DO NOT WRITE BELOW THIS LINE - See Instructions on Reverse Side**

VII. Permit Conditions (Permittee shall comply with each of the following conditions)

VIII. Agency Approval (The undersigned is authorized by the County Engineer to issue this permit)

Name: _____ Signature: _____ Date: _____

IX. Construction Completed per Conditions

Name: _____ Signature: _____ Date: _____

APPLICATION INSTRUCTIONS:

The applicant shall complete sections I through VI. Under Section III, the applicant should include information on the type of access being installed (residential, multi-family, commercial). Do not write below the designated line under section VI. If additional space or drawings are needed, please attach a separate sheet.

PERMIT PROVISIONS

No exclusive franchise or privilege shall be granted.

CCC 12.55.060 Any party, public or private encroaching upon or using developed or undeveloped county right-of-way not previously authorized by the department shall obtain a permit or license or franchise as applicable for such activities from the department.

CCC 12.55.040 Any person wishing to construct or modify an approach onto any county roadway shall obtain a permit for such work within the right-of-way from the department pursuant to R.C.W. 36.75.130.

R.C.W. 36.75.130. No person, firm or corporation shall be permitted to build or construct any approach to any county road without first obtaining permission therefor from the Board of County Commissioners of said county.

GENERAL PROVISIONS APPLICABLE TO ALL PERMITS

In accepting this permit, the petitioner, his successors and assigns, agree to protect Cowlitz County, Washington, and save it harmless from all claims, actions or damages of every kind and description which may accrue to or be suffered by any person, or persons, corporation or property by reason of the performance of any such work, character of materials used or manner of installation, maintenance and operation or by the improper occupancy of rights of way or public place or public structure and in case of any suit or action is brought against said county for damages arising out of or by reason of any of the above causes, the petitioner, his successors or assigns will upon notice to him or them of commencement of such action, defend the same at his or their own sole cost and expense and will satisfy any judgment after the said suit or action shall have finally been determined if adverse to the said county.

If the work done under this permit interferes in any way with the drainage of the county road, the grantee shall wholly and at his own expense make such provision as the county may direct to take care of said drainage.

On completion of said work herein contemplated, all rubbish and debris shall be immediately removed and the roadway and roadside shall be left neat and presentable and satisfactory to the county.

The party or parties to whom this permit is issued shall maintain at his or their sole expense, the structure or object for which this permit is granted in a condition satisfactory to Cowlitz County, Washington.

During the progress of the work such barriers shall be erected and maintained as may be necessary or as may be directed for the protection of the traveling public; the barriers shall be properly lighted at night.

The County Engineer may revoke, annul, change, amend, amplify, or terminate this permit or any of the conditions herein enumerated if grantee fails to comply with any or all of its provisions, requirements or regulations as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given or if the approach/access herein granted is not installed within 6 months of approval of this permit or operated and maintained in conformity herewith or at all or for any cause or reason whatsoever.