

**BOARD OF COUNTY COMMISSIONERS
COUNTY OF KITTITAS
STATE OF WASHINGTON**

ORDINANCE

NO. 94 - 32

**ADOPTING KITTITAS COUNTY ROAD STANDARDS AND
AMENDING CHAPTER 12 OF THE KITTITAS COUNTY CODE**

WHEREAS: The Kittitas County Code does not adequately provide standards for road construction, and

WHEREAS: The Board of Kittitas County Commissioners did hold public hearings to hear public testimony regarding adopting new Kittitas County Road Standards and adding Chapters 12.50 and 12.60 to the Kittitas County Code.

NOW, THEREFORE BE IT ORDAINED That the Board of County Commissioners after due deliberation and in the best interest of the public, does hereby approve amending the Kittitas County Code as follows:

Delete Chapter 12.52 Mailbox Locations.

NEW CHAPTER 12.50

ROADSIDE FEATURES

Sections:

12.50.010 Retaining walls.
12.50.020 Side slopes.
12.50.030 Mailboxes.
12.50.040 Survey monuments.
12.50.050 Roadway barricades.
12.50.060 Bollards.
12.50.070 Guardrail.
12.50.080 Roadside obstacles.
12.50.090 Medians.
12.50.100 Roadway illumination.
12.50.110 Roadway signing.

12.50 .010 Retaining Walls.

- A. Retaining walls on public roads shall be designed and constructed to meet the minimum requirements of the AASHTO Bridge Specifications. Retaining walls with a height of four feet or greater shall be designed by a registered civil engineer licensed in the State of Washington, and shall be submitted by the applicant for approval by the Director.
- B. Rock walls, or rockeries, are a protective system which helps retard the weathering and erosion process on a exposed cut or fill soil faces. While by its nature (the mass, size and shape of the rocks) it will provide some degree of retention, it is not a designed or engineered system in the same sense a reinforced concrete retaining wall would be considered designed or engineered.
1. To provide a competent and adequate rockery structure, rock walls intended for cut sections over eight feet in height and fill sections over four feet in height shall require and engineered design by a geotechnical engineer or other professional engineer qualified in rock wall design.
 2. A geotechnical engineer shall be retained to monitor rockery construction and to verify, in writing, that the rockery was constructed in accordance with standard specifications and the recommendations made by the designer.
 3. Where rockeries cannot be constructed without significant foundation settlement or outward thrust upon the rockery, a structural wall of acceptable design shall be used.

12.50.020 Side Slopes.

- A. Side slopes shall generally be constructed no steeper than 2 to 1 on both fill slopes and cut slopes. Steeper slopes may be approved by the Engineer upon showing that steeper slopes, based on soils

analysis, will be stable. Side slopes on projects funded by federal grants shall be in accordance with Local Agency Guidelines.

- B. Side slopes shall be stabilized by grass sod, hydroseeding, or by planting or surfacing materials acceptable to the Engineer.
- C. Side slopes may also require flattening to accommodate utility placement. Placement of utilities outside of their standard location as per other adopted standards due to steep side slopes will not be permitted.
- D. Side slopes higher than 15 feet shall be terraced.

12.50.030 Mailboxes.

Mailboxes shall be set in accordance with Kittitas County Standard Drawings and as follows:

- A. U.S. Postal Service approval is required.
- B. Mailbox supports shall be of a "break-away" design.
- C. The developer shall coordinate with the U.S. Postal Service where construction requires mail boxes to be relocated or rearranged.

12.50.040 Survey Monuments.

- A. All existing survey control monuments which are disturbed, lost or destroyed during surveying or construction shall be replaced by a land surveyor registered in the State Of Washington at the expense of the responsible developer.
- B. Survey control monuments shall be placed or replaced by a licensed land surveyor as shown on the approved construction plans in accordance with recognized good practice in land surveying, and in accordance with the approved details for survey monuments.
- C. Survey monuments are required at all road intersections, points of horizontal curvature (PC's), points of horizontal tangency (PT's), centers of cul-de-sacs and other appropriate locations as determined necessary by the County. Monuments at PC's and PT's may be eliminated and replaced with a monument at the Point of Intersection (PI), if the PI falls within the paved roadway surface.
- D. A signed and sealed statement from the developer's land surveyor that all monuments and corners indicated on the plat or construction plans have been set and are in good condition will be required before final acceptance of the road by the County.
- E. Record of the monumentation shall be made in accordance with the Survey Recording Act.

12.50.050 Roadway Barricades.

Temporary and permanent barricades shall conform to the standards described in Section 6C-8 of the Manual on Uniform Traffic Control Devices (MUTCD) and these standards.

- A. Type I or Type II barricades may be used when traffic is maintained through the area being constructed or reconstructed. They may be used singly or in groups to mark a specific hazard or they may be used in a series for channelizing traffic.
- B. Type III barricades may be used when roadways and/or proposed future roadways are closed to traffic. Type III barricades may extend completely across a roadway and its shoulder (as a fence) or from curb to curb. Where provision must be made for access of equipment and authorized vehicles, the Type III barricades may be provided with movable sections that can be closed when work is not in progress, or with indirect openings that will discourage public entry. Where job site access is provided through Type III barricades, the developer/contractor shall assure proper closure at the end of each working day.
- C. In the general case, Type III permanent barricades shall be installed to close arterial roadways or other through streets hazardous to traffic. They shall also be used to close off lanes where tapers are not sufficiently delineated.
- D. Type I barricades may be used at the end of a local access street terminating abruptly without a cul-de-sac bulb. Each such barricade shall be used together with an end-of-road marker.
- E. Signs may be erected on barricades, particularly those of fixed type. The ROAD CLOSED and detour arrow signs, and the large arrow warning signs can be mounted effectively on or above the barricade that closes the roadway.

- F. For night time use, it is desirable to add flashing warning lights when barricades are used singly and steady-burn lights when barricades are used in series for channelization.

12.50.060 Bollards.

When necessary to deny motor vehicle access to an easement, tract or trail, except for maintenance or emergency vehicles, the point of access shall be closed by a line of bollards. These shall include one or more fixed bollards on each side of the traveled way and removable, locking bollards across the traveled way. Spacing shall provide one bollard on centerline of the trail and the other bollards spaced at minimum of 50 inches on center on trails 10 feet wide or less. Spacing of 60 inches on center on trails wider than 10 feet. Bollard design shall be in accordance with Kittitas County Standard Drawings or other design acceptable to the Engineer. No fire apparatus access roads shall be blocked in this manner without concurrence of the Fire Marshall. Bollards shall be located at least 10 feet laterally from the paved edge of roadway.

12.50.070 Guardrail/Embankment Heights.

- A. Evaluation of embankments for guardrail installations shall be in accordance with Chapter 710 of the WSDOT Design Manual or the AASHTO Roadside Design Guide.
- B. Guardrail installations shall conform to WSDOT Standard Plan C-1, Beam Guardrail Type 1 and C-2 Guardrail Placement. End anchors shall conform to WSDOT Standard Plan C-6, Beam Guardrail Anchor Type 1.

12.50.080 Roadside Obstacles.

- A. WSDOT Clear Zone distance shall be used as a guide for evaluation and placement of roadside features within the County right-of-way. Placement of utility poles and appurtenances are covered in Section 12.80.
- B. In general, existing or new roadside features which could present a hazard to the public should be placed outside of clear zone areas unless justified to the Director's satisfaction by suitable engineering studies considering traffic safety, or where shielded by a barrier, placed in an area normally inaccessible to vehicles or utilize a break-away design.
- C. Locations of poles shall be compatible with driveways, intersections and other roadway features (i.e., they shall not interfere with sight distance, roadway signing, traffic signals, culverts, etc.). To the greatest extent possible, installation of poles and other above ground appurtenances will not be permitted in sidewalks or walkways.
- D. Costs of relocating poles or obstacles to achieve these standards are the responsibility of the developer. This is not intended to prevent the developer from making financial arrangements with the appropriate utility or other owner of the obstacle to accomplish removal of the pole or obstacle.

12.50.090 Medians.

Where required for traffic control or landscape planters, medians shall be in addition to, not part of the specified roadway width. Medians shall be designed so as not to limit turning radii or sight distance at intersections. Median edges may be either standard curb or shoulder and ditch. Medians with shoulder and ditch edges shall be a minimum four feet in width. Medians may be grassed, landscaped, or surfaced with aggregate or pavement.

12.50.100 Roadway Illumination.

Roadway illumination is not normally required as part of a project unless a project road intersects an arterial. If illumination is required, the developer's engineer should contact the County for installation details. All work shall be done in accordance with applicable local and state standards.

12.50.110 Roadway Signing.

The developer shall reimburse the County for the installation of all necessary street name signs, warning signs and regulatory signs. The cost of all signs will be \$80.00 per sign, including installation. The County will assume maintenance of all signs after installation, except private road name signs.

Delete Chapter 12.08 in its entirety.

Renumber Chapter 12.60 to Chapter 12.08

VACATION OF COUNTY ROADS

Sections:

- 12.08.010 Vacation.**
12.08.020 Resolution.

12.08.030	Freeholder's petition.
12.08.040	Director's report.
12.08.050	Notice of hearing.
12.08.060	Hearing.
12.08.070	Expense of proceeding.
12.08.080	Compensation to county as condition to vacation.
12.08.090	Vacation of roads abutting bodies of water prohibited, exception.
12.08.100	Retention of easement for public utilities and services.
12.08.110	Sale to adjacent land owners.

NEW CHAPTER 12.60

BRIDGES

Sections:

12.60.010	Principle references.
12.60.020	Bridge geometrics.
12.60.030	Bridge design criteria.
12.60.040	Special permits.

12.60.010 Principle References.

Except as specified below, Kittitas County bridges, whether on public roads or on private roads serving subdivided land, shall be designed and constructed to meet the minimum requirements set forth in the latest edition, including interim addenda, of "Standard Specifications for Highway Bridges," adopted by AASHTO and in accordance with WSDOT Standard Specifications. Bridge and approach railings shall be provided in accordance with those reference or with WSDOT Standard Plans. All new bridges shall be designed to carry an AASHTO HS 25 live load or greater. Bridges that may carry military traffic in the vicinity of the Yakima Training Center will require special consideration. All bridge work shall comply with any and all Special Control Areas and Flood Hazard Areas for streams and wetland protection and flooding concerns and with the Shoreline Management Act when crossing a shoreline of the state.

12.60.020 Bridge Geometrics.

- A. In the general case, the bridge roadway shall comprise the full width and configuration of the road being served -- traveled way plus curb, sidewalks, walkway, bike lane, equestrian lane and/or shoulder on one or both sides. Requirements of utilities shall be duly considered. Bridge roadway width shall be measured between curbs or between faces of rails, whichever is less, but shall, in no case be less than 28 feet.
- B. Where typical speed is 35 MPH or higher and significant pedestrian, bike and/or horseback traffic can be expected, the Engineer may require that the lanes for these other modes of traffic be separated from motor vehicle traffic by use of a bridge traffic rail and further protected by a rail at the outer edge. On designated bike routes, combination traffic and bicycle railings shall be used.
- C. Approach railings shall be made structurally continuous with the bridge railings and shall meet AASHTO specifications as cited in Section 12.60.010 above.
- D. Overhead vertical clearances for motor traffic on the traveled roadway or under overpasses shall be 16.5 feet minimum. Vertical clearance of structures above a walkway or sidewalk shall be eight feet minimum and shall be 10 feet on designated equestrian routes.

12.60.030 Bridge Design Criteria.

- A. Approach slabs will be required for all bridges and new bridge plans shall provide pavement seats for approach slabs unless otherwise approved by the Engineer. Waiver or modification of the requirement for approach slabs will be considered only on the basis of adequate geotechnical analysis. Approach slabs shall be constructed in accordance with WSDOT Standard Plan A-2.
- B. New bridge decks and approach slabs shall be designed with a protective system to prevent corrosion of the reinforcing steel.
- C. Criteria under other recognized road and bridge project classifications, such as those of 3-R projects, set forth in WSDOT Local Agency Guidelines, may be applied under conditions deemed appropriate by the Director.

12.60.040 Special Permits

Permit requirements for construction or reconstruction of bridges include but are not limited to the following:

- A. Bridges over navigable waters require U. S. Coast Guard permits.

- B. Bridges involving deposition of material in waters of the United States or their adjacent wetlands require a U. S. Army Corp of Engineers Permit.
- C. Any work involving alteration of flow or bed materials below ordinary high water line of any water body or water course requires a Hydraulic Project approval from the State Department of Fisheries and Wildlife.
- D. Any work within waters of the State requires Water Quality Certification Waiver from the State Department of Ecology.
- E. Where bridge structures lie on or over submerged lands a lease from the Washington State Department of Natural Resources may be necessary.
- F. Structures located on shorelines zones require a substantial development permit from Kittitas County Planning Department, subject to concurrence of the State Department of Ecology.
- G. Structures located within areas of special flood hazard (100 year flood plain) require a Flood Permit from the Kittitas County Planning Department.
- H. Bridges over waterways require the Engineer's approval of the size and shape of the hydraulic opening, the height of the superstructure over high water, the location of piers, channel improvements, and other hydraulic considerations.

ADOPTED this 15th day of November, 1994.

BOARD OF COUNTY COMMISSIONERS
KITITITAS COUNTY, WASHINGTON

ATTEST:

Anita J. Karez, Clerk of the Board

Approved as to Form:

David Pitts, Prosecuting Attorney

Donald E. Sorenson, Chairperson

Mary Seubert, Vice-Chairperson

Ray Owens, Commissioner