

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

ORDINANCE

NO. 94 - 27

**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 12.30 and 12.90 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:

Re-number Chapter 12.32 Road-Sanding Policy to Chapter 12.05

Sections:

12.05.010 **Emergency and nonemergency.**

Re-number Chapter 12.36 Work on Rights-of-Way to Chapter 12.06

Sections:

12.06.010 **Bond requirement waived for municipal corporations.**

NEW CHAPTER 12.30

DRIVEWAYS, ACCESSES, WALKS AND TRAILS

Sections:

12.30.010 **Driveways and Accesses.**
12.30.020 **Concrete Sidewalks.**
12.30.030 **Subgrade Compaction and Concrete for Curbs, Gutters and Sidewalks.**
12.30.040 **Expansion and Dummy Joints.**
12.30.050 **Curb (Pedestrian) Ramps.**
12.30.060 **Concrete Steps and Metal Handrail and Disabled Access Ramps.**
12.30.070 **Asphalt Shoulders.**
12.30.080 **Separated Walkways, Bikeways and Trails.**
12.30.090 **School Access.**
12.30.100 **Bikeways.**
12.30.110 **Equestrian Facilities.**

12.30.010 **Driveways and Accesses.**

A. **General.**

Driveway and Access uses shall be defined as follows:

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| 1. | Driveway: | Serves a single residential or commercial unit. |
| 2. | Joint-Use Driveway: | Serves two residential or commercial units. |
| 3. | Common Access: | Serves three or four residential units. Only allowed in rural areas. |
| 4. | Private Road: | Serves a maximum of eight residential units. Only allowed in rural areas. |
| 5. | Agriculture Access | Serves fields or outbuildings, not for residential or commercial access. Only allowed in rural areas. |

Dimensions, slope and detail shall be as indicated on Kittitas County Standard Drawings, and as further specified in the following subsections. See Section 12.20.150 for Entering Sight Distance requirements.

All new or revised accesses onto a County road require an approved County Access Permit.

B. Conditions for Approval of New Driveways:

- 1. Driveways directly giving access onto arterials may be denied if alternate access is available.
- 2. All abandoned driveway areas on the same frontage shall be removed and the curbing and sidewalk, or shoulder and ditch section, shall be properly installed.
- 3. Maintenance of driveway approaches shall be the responsibility of the owner whose property they serve. The County will not maintain accesses.
- 4. For driveways crossing an open ditch section, culverts shall be 15 inches in diameter or larger, with tapered ends, if so required to carry anticipated storm water flows. The culvert type, diameter and length shall be as required by the County and noted on the Access Permit.

C. Access Requirements.

- 1. All new or revised accesses to County roads shall meet the following minimum requirements:

Type of Access	Potential Residential Units ^(a)	Minimum Surfacing Requirements	Timing of Requirements
Driveway	1	12' gravel	Prior to issuance of building occupancy permit
Joint-Use Driveway	2	20' easement; 12' gravel surface	Prior to issuance of building occupancy permit
Common Access	3 to 4	40' easement; 22' gravel surface with paved apron to County road	Must be constructed within 12 months of final plat approval or acceptable guarantee
Private Road ^{(b)(c)}	5 to 8	40' right-of-way or easement; 22' pavement to edge of County road	Must be constructed within 12 months of final plat approval or acceptable guarantee
Agriculture Access	--	Follow requirements of "Driveway" shown above	--

Notes:

- (a) Potential Residential Units is the maximum number of units permitted by zoning. If a proposal results in less than the maximum number of units allowed under current zoning, provisions must be made for future expansion of the access to potential lots.
 - (b) See requirements in Section 12.20.080. A 60 foot right-of-way may be required if a private road can be extended in the future.
 - (c) When a new development proposes the use of an existing private road to serve more than 8 lots, the private road must be brought to County standards by the developer.
- 2. On frontages of 75' or less, no more than one driveway per lot shall be constructed; on frontages over 75' and on local access roads, two or more driveways per lot may be permitted, subject to the approval of the Engineer.
 - 3. No portion of the driveway width shall be allowed within 5' of property lines in residential areas or 9' in commercial areas except for Joint-Use Driveways, Common Accesses and on cul-de-sacs bulbs as necessary for proposed residential access.
 - 4. Grade transitions, including the tie to the roadway, shall be constructed as smooth vertical curves. The maximum change in driveway grade, within the right-of-way, shall be 8% within any 10 feet of distance on a crest and 12% within any 10 feet of distance in a sag vertical curve. The driveway shall be graded so as to match into possible future widened road section without encroachment into the graded shoulder or sidewalk. The design engineer for proposed developments shall consider the access driveway profile when designing the serving road to ensure that required grade transitions can be complied with considering building set back and lot terrain conditions.

D. Existing driveways may be reconstructed as they exist provided such reconstruction is compatible with the adjacent road.

- E. For commercial or industrial driveways with heavy traffic volumes or significant number of trucks, the Engineer may require construction of the access as a road intersection. This requirement will be based on traffic engineering analysis submitted by the applicant that considers, among other factors, intersection spacing, sight distances and traffic volumes.
- F. Notwithstanding any other provisions, driveways will not be allowed where they are prohibited by separate County Commissioner's action or where they are determined by the Engineer to create a hazard or impede the operation of traffic on the roadway.

12.30.020 Concrete Sidewalks.

- A. Concrete sidewalks shall be required on all urban classified, curb and gutter type streets or as required as a condition of approval by the County. See Section 12.20.030 Roadways by Classification - Class 14, 16, 17 and 19.
- B. Concrete sidewalks shall be constructed:
 - 1. Next to the curb unless planting strips are approved by the Engineer as part of a landscaping plan.
 - 2. At least five feet wide on residential and commercial access streets.. This means five feet clear of mailboxes or other obstructions, except where approved as variance. Width shall be a minimum of 6.5 feet if the curb is next to a traveled lane (but not necessary next to parking or bike lanes). The additional width, one and one-half feet or more, may be finished to match the sidewalk or may be finished with contrasting texture, asphalt concrete, brick, or paving blocks as approved by the Engineer.
 - 3. At least eight feet wide
 - a. In business /commercial districts where most store frontage is within 80 feet of the street right-of-way.
 - b. Within the curb radius returns of all arterial intersections where curb ramps are required.
 - c. Within designated bus-zones to provide a landing area for wheel chair access to transit services.
 - 4. With specified width greater than eight feet where the Engineer determines this is warranted by expected pedestrian traffic volume.
 - 5. With portland cement concrete as provided in Sections 12.30.030 and 12.40.010. See specifications for joints in Section 12.30.040 and Standard Drawings.

12.30.030 Subgrade Compaction and Concrete for Curbs, Gutters and Sidewalks.

- A. Subgrade compaction for curbs gutters and sidewalks shall meet a minimum 90% maximum density.
- B. Concrete for curbs, gutters and sidewalks shall be Class 3000, furnished and placed in accordance with WSDOT Standard Specifications, Sections 6-02, 8-04 and 8-14. Cold weather precautions as set forth in WSDOT Sections 5-05.3(14) and 6-02.3(6)A shall apply.

12.30.040 Expansion and Dummy Joints.

- A. An expansion joint consisting of 3/8" or 1/4" x full depth of pre-molded joint material shall be placed around fire hydrants, poles, posts, utility castings and along walls and structures in paved areas. As an alternative to expansion joints around structures, reinforcing bars may be imbedded in concrete on four sides of structures.
- B. A dummy joint consisting of 1/8" or 3/16" x 2" of pre-molded joint material shall be placed in curbs and sidewalks at not over 15-foot intervals and at sides of drainage inlets. When curbs and/or sidewalks are placed by slip-forming, a pre-molded strip up to 1/2" thick and up to full depth may be used.
- C. Dummy joints in sidewalks shall be located so as to match the joints in the curb when the sidewalk is adjacent to the curb.
- D. Tool marks consisting of 1/4" V-grooves shall be made in the sidewalk at five foot intervals, intermediate to the dummy joints.
- E. Interface between curb and adjacent sidewalk shall be formed with 1/4" radius edging tool. An expansion joint consisting of 3/8" or 1/4" x full depth of pre-molded joint material shall be placed between all other curb and adjacent sidewalk.

12.30.050 Curb (Pedestrian) Ramps.

On all streets with curbing, ramped sections to facilitate passage of disabled persons shall be constructed through the curb and sidewalk at street intersections and other crosswalk locations. Where a ramp is constructed on one side of the street, a

ramp shall also be provided at a corresponding location on the opposite side of the street. Curb ramps shall be positioned so that a ramp opening is situated within the marked crosswalk or crossing area.

12.30.060 Concrete Steps and Metal Handrail and Disabled Access Ramps.

- A. Steps shall only be used where acceptable alternative access is available for disabled access and there is a need for a separate stairway. Where used, concrete steps shall be constructed in accordance with the Uniform Building Code. Handrails whether for steps or other applications, shall be provided consistent with the Uniform Building Code.
- B. Ramps used to provide disabled access shall have a maximum slope of 12:1 with a maximum rise of 30 inches between landings. Landings shall have a minimum length of five feet and should be of sufficient width to allow wheelchairs to maneuver, generally five feet for two way traffic.

12.30.070 Asphalt Shoulders.

- A. In Urban areas asphalt shoulders may be used, where approved by the Engineer, on existing roads to provide for bicycle and pedestrian use and to provide continuity of design.
- B. In Rural Areas, asphalt paved shoulders which serve as walkways and bikeways, shall be provided on both sides of any arterials and other roads designated in the Kittitas County Non-motorized Transportation Plan or as directed by the Engineer.
- C. Where existing road shoulders are paved on one side only, they shall be delineated for walkway use by an eight-inch white edge line as approved by the Engineer.

12.30.080 Separated Walkways, Bikeways and Trails.

Separated pedestrian, bicycle and equestrian trails shall be provided where designated in the Kittitas County Non-Motorized Transportation Plan or where required by the County because of anticipated significant public usage. Separated facilities are typically located on an easement or within the right-of-way when separated from the roadway by a drainage ditch or barrier. Where separate walkways, bikeways or equestrian trails intersect with motorized traffic, sight distance, marking and signalization (if warranted) shall be as provided in the Manual on Uniform Traffic Control Devices (MUTCD). Facilities shall be designed as follows:

- A. Separated asphalt walkways are designed primarily for pedestrians and are typically located within the right-of-way or easement. Minimum width shall be six feet with asphalt surfacing as indicated in Section 12.40.010 D.
- B. Neighborhood pathways are soft surface facilities designed for pedestrians and equestrians. Such pathways shall be a minimum of six feet wide with at least one and one-half foot clearance to obstructions on both sides and 10 foot vertical clearance. Pathways shall be designed and located so as to avoid drainage and erosion problems. Pathways shall be constructed of two and one-half inches of crushed surfacing top course or wood chips over native material as approved by the County.
- C. Multipurpose trails are typically designated for bicycle and pedestrian use and generally follow a right-of-way independent from any road. Multipurpose Trails shall be designed to bicycle path standards as described in Section 12.30.100.

12.30.090 School Access.

School access required as part of development approval shall be provided by an asphalt walkway, concrete sidewalk or full width, delineated shoulder unless another alternative is available and approved by the Engineer through a road variance request.

12.30.100 Bikeways.

- A. Bikeways are generally shared with other transportation modes, although they may be provided exclusively for bicycle use. Bikeways are categorized based on degree of separation from motor vehicles and other transportation modes. This classification does not denote preference of one type over another. Bikeways are categorized as follows:
 - 1. Bike Path (Class I): A separate paved multipurpose trail for the principal use of bicycles and other non-motorized modes. Bike paths are 10 feet wide except in high usage areas where they should be 12 feet wide.
 - 2. Bike Lane (Class II): A portion of the road that is designated by striping for exclusive bicycle use. Bicycle lanes may be signed as part of a directional route system. Bicycle lanes are a minimum six feet wide.
 - 3. Wide Curb Lane (Class III): A road that provides a widened paved outer curb lane to accommodate bicycles in the same lane as motor vehicles. Lane width shall be increased at least three feet.
 - 4. Shoulder: A lane contiguous to the traveled way but separated by a stripe. Most common in rural areas. Typically shared with pedestrian and occasional emergency vehicle access.

5. Shared Roadway: All roads not categorized above where bicycles share the roadway with motorized vehicles.
- B. A bikeway shall be provided:
1. Whenever called for in the Kittitas County Non-motorized Transportation Plan, Kittitas County Transportation Plan, Kittitas County Comprehensive Plan or community plan, or identified in the Capital Improvement Program or Transportation Needs Report.
 2. When substantial bike usage is expected which would benefit from construction of a bicycle facility.
- C. Striping and signing shall be implemented as follows:
1. Pavement markings shall be used on bike lanes and paths according to MUTCD.
 2. The design of all signalized intersections shall consider bicycle usage and the need for bicyclists to actuate the signal.
- D. The planning and design of bikeways in any category shall meet or exceed Section 1020 of the WSDOT Design Manual and the AASHTO Guide for the Development of Bicycle Facilities, current edition.

12.30.110 Equestrian Facilities.

- A. Equestrian lanes adjacent to the traveled way shall be provided where proposed by the Kittitas County Non-Motorized Transportation Plan or as required as a condition of approval by the County. Facilities shall be provided as follows:
1. In addition to the normal shoulder, areas adjacent to the traveled way intended for equestrian use shall be surfaced full-width, minimum of four feet with eight feet desirable. Surface shall be 2-1/2 inches of crushed surfacing, base course, and 1-1/2 inches of crushed surfacing, top course.
 2. A separated equestrian trail shall be constructed with an 18% maximum grade, 10 foot vertical clearance and a five foot wide pathway zone. The trail shall be constructed of native soil or, where drainage or erosion problems are present, a minimum of two inches crushed surfacing top course on graded and compacted native soil. Native soil which is not free draining shall be removed and replaced with free draining soil. Additional crushed surfacing, cinders or other stabilizing materials shall be required if heavy usage is anticipated or if there is any evidence of instability in the subgrade; including free water, swamp conditions, fine-grained or organic soils, slides or uneven trails.
 3. Proposals for other configurations or surfacing materials will be considered in accordance with Section 12.10.090.

New Chapter 12.90

CONSTRUCTION CONTROL AND INSPECTION

Sections:

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| 12.90.010 | Basis for Control of the Work. |
| 12.90.020 | Subdivision, Commercial and Right-of-Way Development Inspection. |
| 12.90.030 | Penalties for Failure to Notify for Development Inspection. |
| 12.90.040 | Embankment Construction Control in Developments. |
| 12.90.050 | Traffic control in Development Construction. |
| 12.90.060 | County Forces and County Contract Road Inspection. |
| 12.90.070 | Call Before You Dig. |
| 12.09.010 | Basis for Control of the Work. |
| 12.90.010 | Basis for Control of the Work. |

- A. Work performed in the construction or improvement of County roads, whether by or for a private developer, by County forces, by County Contractor or by private contractor, shall be done in accordance with Standards and approved plans (Section 12.10.080). **IT IS EMPHASIZED THAT NO WORK MAY BE STARTED UNTIL SUCH PLANS ARE APPROVED.** Any revision to such plans shall be approved by the Director before being implemented.
- B. The Director will have authority to enforce the Standards as well as other referenced or pertinent specifications. He will appoint project engineers, assistants and inspectors as necessary to inspect work and they will exercise authority as the Director may delegate.
- C. Provisions of Section 1-05 of the WSDOT Standard Specifications shall apply, with the term "Engineer" therein construed to be the Director of Public Works as defined in Section 12.10.110 of these Standards.

12.90.020**Subdivision, Commercial and Right-of-Way Development Inspection.**

On all road and drainage facility construction, proposed or in progress, which relates to subdivision, commercial and right-of-way development, control and inspection will be done by the Department of Public Works. Unless otherwise instructed by the Director, construction events which require monitoring or inspection are identified as follows, with prior notification to the Department of Public Works office (**Telephone 962-7523**):

- A. Preconstruction Conference: Three working days prior notice. Conference must precede the beginning of construction and include contractor, designing engineer, utilities and other parties affected. Plan approvals and permits must be in hand prior to the conference.
- B. Clearing and Temporary Erosion/Sedimentation Control: One working day notice prior to initial site work involving drainage and installation of temporary water retention/detention and siltation control. Such work to be in accordance with Section 12.70.090D and the approved plans.
- C. Utility and Storm-Drainage Installation: One working day notice prior to trenching and placing of storm sewers and underground utilities such as sanitary, water, gas, power, telephone and TV lines. For utilities also see Section 12.80.030E.
- D. Utility and Storm-Drainage Backfill and Compaction: One working day notice before backfill and compaction of storm sewers and underground utilities.
- E. Subgrade Completion: One working day notice at stage that underground utilities and roadway grading are complete, to include placement of gravel base if required. Inspection to include compaction tests and certifications described in Section 12.90.040.
- F. Curb and Sidewalk Forming: One working day notice to verify proper forming and preparation prior to pouring concrete.
- G. Curb and Sidewalk Placement: One working day notice to check placement of concrete.
- H. Crushed Surfacing Placement: One working day notice to check placement and compaction of crushed surfacing base course and top course.
- I. Paving: Three working days notice in advance of paving with asphalt or portland cement concrete.
- J. Structural: Three working days notice prior to each of critical stages such as placing foundation piling or footings, placement and assembly of major components, and completion of structure and approaches. Tests and certification requirements will be as directed by the Director.
- K. Final Inspection: Five working days prior to overall check of roadway or drainage project site, to include completion of paving and associated appurtenances and improvements, cleaning of drainage system and all necessary clean-up. Prior to approval of construction work, acceptance for maintenance and release of construction performance bonds, the developer/contractor shall pay any required fees, submit any required maintenance and defect financial guarantees, provide certification of monumentation and submit one photo mylar or ink-on-mylar set or sets of blue line final, corrected plans (as-built) reflecting all minor and design plan changes of the roadway and drainage systems. The Department of Public Works shall specify the number of blue line sets as warranted by the type of improvement. Mylars and blue line drawings shall not have any shading or adhesive addition in any areas. If original plans were completed on a CADD system, the developer/contractor shall submit, in addition to mylars, a copy of the CADD drawing files in DOS/DXF format.
- L. Final Maintenance Inspection: 30 days prior to the end of the maintenance period. Prior to release of the maintenance guarantee, there shall be successful completion of the maintenance period as described in Section 12.10.100, repair of any failed facilities and the payment of any outstanding fees.

12.90.030**Penalties for Failure to Notify for Development Inspection.**

Timely notification by the developer as noted is essential for the County to verify through inspection that the work meets the standard. Failure to notify in time may oblige the County to arrange appropriate sampling and testing after-the-fact, with certification, either by a qualified private engineer or by the County personnel. Costs of such testing and certification shall be borne by the developer. If the Director requires further sampling, testing or certification, further work on the development may be prohibited or limited until all directed tests have been completed and corrections made to the satisfaction of the Director. If necessary the County may take further legal actions.

12.90.040**Embankment Construction Control in Developments.**

The provisions of Section 2-03 of the WSDOT Standard Specifications apply in all respects to development construction unless otherwise instructed by the Director. The following elements are cited for clarification and emphasis:

A. Embankment and Cut-Section Compaction: Compaction of the top two feet of fill subgrade and the top six inches of cut subgrade shall meet a minimum 95% of maximum density in accordance with WSDOT Standard Specifications Section 2-03.3(14)C - Method B. Subgrade fill below the top two feet shall be compacted to 90% of maximum density.

B. Testing for Density:

1. Prior to placing any surfacing material on the roadway, it will be the responsibility of the developer or contractor to provide density test reports certified by a professional engineer registered in the State of Washington. Optimum moisture content and maximum density shall be determined by methods cited in Section 2-03.3(14)D of WSDOT Standard Specifications or by other tests approved by the Director. In fill sections a minimum of one test shall be taken every 1,000 cubic yards or fraction thereof and on each lift of embankment. In cut sections the interval shall be every 100 feet of roadway. For work to be accepted, tests must show consistent uniform density as required by the tests referenced above.
2. In cases where tests do not meet the minimum standard, corrective action shall be taken such as adding water, aerating, replacing material or applying more compactive effort as directed by the developer's engineer. Retests shall show passing densities prior to placing the next lift of subgrade fill.
3. For trenching in existing road embankment, see Section 12.80.030.

C. Finishing Subgrade

After subgrade preparation has been completed, it shall be thoroughly checked by the developer or contractor using a level, string line, crown board or other means to determine that the subgrade conforms to the typical section or special plan conditions prior to placing any surfacing material.

12.90.050 Traffic Control in Development Construction.

A. Interim Traffic Control:

The developer's contractor shall be responsible for interim traffic control during construction on or along traveled County roadways. When roadway or drainage work is to be performed on County roadways that are open to traffic, the contractor will be required to submit a traffic control plan for approval by the Director prior to beginning the work. Traffic control shall follow the guidelines of Section 1-07.23 of the WSDOT Standard Specifications. All barricades, signs and flagging shall conform to the requirements of the MUTCD Manual. Signs must be legible and visible and should be removed at the end of each work day if not applicable after construction hours.

B. Temporary Road Closures and Detours:

When temporary road closures cannot be avoided the contractor shall post "To Be Closed" signs a minimum of five days prior to the closing. The types and locations of the signs shall be shown on a detour plan. A detour plan must be prepared and submitted to the Department of Public Works at least ten working days in advance of the proposed closure, and approved prior to closing any County roadway. In addition, the contractor must notify, in writing, local fire, school, law enforcement authorities, postal service and any other affected persons as directed by the Director at least five days prior to the closing.

C. Haul Routes: If the construction of a proposed development is determined by the Director to require special routing of large trucks or heavy construction equipment to prevent impacts to surrounding roads, residences or business, the contractor shall be required to develop and use an approved haul route.

When required, the haul route plan must be prepared and submitted to the Director and approved prior to beginning or continuing construction. The haul route plan shall address routing, hours of operation, signing, flagging and daily maintenance.

If the contractor's equipment or suppliers fail to use the designated haul route, the Director may prohibit or limit further work on the development until such time as the requirements of the haul route are complied with.

D. Haul Road Agreement: When identified as a need by the SEPA review process or by the Director, a haul road agreement shall be obtained by the Franchised Utility, Developer or Property Owner establishing restoration procedures to be performed upon completion of the haul operation.

12.90.060 County Forces and County Contract Road Inspection.

Road construction performed by County forces or by contract for the County will be inspected under supervision of the Director.

Developers and contractors are responsible for notification of utilities a minimum of 24 hours in advance of any construction in right-of-way or utility easements. The utility One-Call Center phone number **1-800-553-4344** should be prominently displayed at the work site.

ADOPTED this 4th day of October, 1994.

**BOARD OF COUNTY COMMISSIONERS
KITITITAS COUNTY, WASHINGTON**

Donald E. Sorenson
Donald E. Sorenson, Chairperson



Mary Seubert, Vice-Chairperson

Ray Owens
Ray Owens, Commissioner

Approved as to Form:

David A. Pitts
David Pitts, Prosecuting Attorney