



# KITITITAS COUNTY DEPARTMENT OF PUBLIC WORKS

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## MEMORANDUM

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TO: Dan Valoff, Staff Planner, Community Development Services

FROM: Randy Carbary, Planner II

DATE: November 15, 2007

SUBJECT: Starlite Heights Performance Based Cluster Plat

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Our department has reviewed the Short Plat application and has the following comments:

- "Preliminary Approval" has been granted, based on the information provided.
- "Conditional Preliminary Approval" has is recommended, based on the information provided, see below for conditions of preliminary approval:
- "Preliminary Approval" has not been granted. **Our department requests additional information is submitted/ obtained for further review.** See below for requested information.
  - A. Results of the Traffic Impact Analysis (TIA): Per the memo from Kittitas County Public Works Transportation Manager, Jan Ollivier, dated 10/23/07; The TIA, submitted by Brent Turley, P.E., Senior Transportation Engineer for The Transpo Group, Inc., indicates that a right turn pocket is warranted from Westside Road, eastbound into the development site access. In addition to this requirement, an area for mailbox placement and a school bus turn-around are needed. All of these items need to be incorporated into the road design and approved by our department prior to the start of construction.
  - B. Main Road - Public Road Standards: Per the memo from Kittitas County Public Works Transportation Manager, Jan Ollivier, dated 10/23/07; Current Kittitas County Road Standards requires the main road, from Westside Road, south to Pasco Road to be constructed to a Rural Local Access Public Road Standard for roads that have Average Daily Traffic (ADT) over 750. See item #13, (page 6 of 11) for detailed information.
  - C. Pending Bonneville Power Administration (BPA) Mitigation: BPA has not received a land use application from the applicant, as required by BPA, in order to make an assessment of the project's impacts on the future maintenance and operation of their facilities.

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In a letter from Mari Rosales, BPA Field Realty Specialist, dated 11/9/07, BPA requires the applicant to submit a land use application for review by the agency. The letter states that this process typically takes 8 – 10 weeks to complete. Upon review and approval of this application process, BPA will identify any conditions or requirements and respond to any issues through a Land Use Agreement.

It is unclear as to whether the BPA would require any changes to the configuration of the lots or the road network. This will not be known until the completion of the BPA's land use application process.

**Prior to Final Plat Approval:**

1. Required on Preliminary Plat and Required on Final Plat: Submit preliminary Performance Based Cluster Plat map in conformance with requirements in K.C.C Title 16.12 Preliminary Plats The Final Plat submittal shall meet all requirements listed in section 16.20 of the Subdivision Code; including content, format, etc. This pertains to the following items:

- a. Adjacent Property Owners: The adjacent property owners and surrounding properties shall be on the face of the final short plat. (K.C.C.16.20.040, 10, Plat drawing, Adjacent Owners).
- b. Surrounding Area: All surrounding property shall be shown in dotted lines and letters with names of plats, roads, adjoining lots, canals, and etc., and if unplatted shall be so indicated. (K.C.C.16.20.040, 11, Plat drawing, Surrounding Area).
- c. Receiving Number(s): The Receiving Number(s) are required on each page of the Final Plat Submittal.
- d. Plat Approvals: All plats must show the acceptance signature of the County Engineer. The acceptance block shall be as follows (per KCC 16.24.170):

EXAMINED AND APPROVED

This \_\_\_\_ day of \_\_\_\_, A.D., 20\_\_.

\_\_\_\_\_  
Kittitas County Engineer

- e. Legal Description: The legal description on the plat does not match the legal description provided in the Subdivision Guarantee. The legal description on the plat shall match the legal description provided in the Subdivision Guarantee.
- f. 16.12.020 Preliminary Plat General Information:  
Unless otherwise specified, information required below may be placed on either sheet one or subsequent sheets or on all sheets as necessary.

All preliminary plat drawings shall be submitted on eighteen by twenty-four inch sheets. When required by the county public works director, proposed road plans and profiles prepared by a licensed civil engineer shall be submitted on standard 22" x 36" sheets for review. The scale shall be 1" = 100' horizontal and 1" = 10' vertical, sheet one.

Names of proposed subdivision, all sheets.

Location of subdivision by section, township, range, county and state, all sheets.

Legal description of land contained within the subdivision.

Name(s) and address of the owner(s), subdivider(s), surveyor, engineer and date of survey.

Scale (1" = 200', or greater) north arrow and date, sheet one.

Vicinity map showing the boundary lines of all adjacent subdivisions, roads, streets, rivers, streams, canals, or any other information that will assist the planning commission in considering the plat, sheet one.

Proposed platted boundary lines, lot and road dimensions, and gross acreage, sheet one.

A statement regarding the contemplated sewage disposal, potable water supply, and drainage improvements for the proposed subdivision.

Names and addresses of all abutting property owners.

All access easements.

All irrigation ditch easements or historical ditch locations. (Ord. 2005-31, 2005)

2. Private Road – Spur Road Improvements:

Private Road Certification: Private roads serving any of the lots within this development shall be inspected and certified by a licensed professional engineer for conformance with current Kittitas County Road Standards, 9/6/05 edition. Kittitas County Public Works shall require this road certification to be completed prior to the issuance of a building permit for any of the structures within the proposed plat.

Private Road Improvements: Spur roads shall be constructed as a High-Density Private Road and serve no more than 40 tax parcels. See current Kittitas County Road Standards, 9/6/05 edition.

- a. Access easements shall be a minimum of 60' wide. The roadway shall have a minimum width of 22', with 1' shoulders, for a total width of 24'.
- b. Minimum centerline radius shall be 60'.
- c. Surface requirement BST/ACP.
- d. Maximum grade is 12%.
- e. Stopping site distance, reference AASHTO.

- f. Entering site distance, reference AASHTO.
  - g. Maintenance of driveway approaches shall be the responsibility of the owner whose property they serve. The County will not maintain accesses.
  - h. Any further subdivision or lots to be served by proposed access may result in further access requirements.
  - i. All roads located within this development or roads that provide access to this development shall be constructed to current county road standards unless any other maintenance agreements, forest service road easements or state easements require higher road standards. The higher of the road standards shall apply.
  - j. All easements shall provide for AASHTO radius at the intersection with a county road.
  - k. A paved apron shall be constructed at the intersection of the proposed private intersection and the county road right-of-way.
3. Cul-de-Sac: Permanent dead-end streets shall have a turn-around having an outside right-of-way easement diameter of at least 110' (55' radius) at the closed end. See Kittitas County Road Standards, 9/6/05 edition.
- a. Cul-de-sac design, reference AASHTO.
  - b. Contact the Fire Marshall regarding any additional cul-de-sac requirements.
4. Joint-Use Driveway: A joint-use access shall serve no more than two tax parcels. See Kittitas County Road Standards, 9/6/05 edition.
- a. Access easements shall be a minimum of 20' wide. The roadway width shall have a minimum width of 12'.
  - b. The surface requirement is for a minimum gravel surface depth of 6".
  - c. Maintenance of driveway approaches shall be the responsibility of the owner whose property they serve. The County will not maintain accesses.
  - d. Any further subdivision or lots to be served by proposed access may result in further access requirements.
- Single-Use Driveway: A single-use access shall serve no more than one lot. See Kittitas County Road Standards, 9/6/05 edition.
- a. The roadway shall be a minimum of 8' wide with gravel surface.
  - b. Maintenance of driveway approaches shall be the responsibility of the owner whose property they serve. The County will not maintain accesses.
  - c. Any further subdivision or lots to be served by proposed access may result in further access requirements.
5. Plat Notes: Plat notes shall reflect the following:

- a. Entire private road shall achieve 95% compaction and shall be inspected and certified by a licensed engineer in the State of Washington specifying that the road meets current Kittitas County Road Standards prior to the issuance of building permit for this plat.
  - b. Kittitas County will not accept private roads for maintenance as public streets or roads until such streets or roads are brought into conformance with current County Road Standards. This requirement will include the hard surface paving of any street or road surfaced originally with gravel.
  - c. Maintenance of the access is the responsibility of the property owners who benefit from its use.
  - d. An approved access permit will be required from the Department of Public Works prior to creating any new driveway access or performing work within the county road right-of-way.
  - e. Any further subdivision or lots to be served by proposed access may result in further access requirements. See Kittitas County Road Standards.
  - f. A public utility easement 10 feet in width is reserved along all lot lines. The 10 foot easement shall abut the exterior plat boundary and shall be divided 5 feet on each side of interior lot lines. Said easement shall also be used for irrigation.
6. Private Road Maintenance Agreement: The applicant shall meet all applicable conditions of any pre-established or required Private Road Maintenance Agreements.
  7. Lot Closure: It is the responsibility of the Professional Licensed Surveyor (PLS) to ensure the lot closures are correct and accurate.
  8. Access Permit: An approved access permit shall be required from the Department of Public Works prior to creating any new driveway access or performing work within the county road right of way.
  9. Addressing: Contact the Kittitas County Rural Addressing Coordinator at (509) 962-7523 to obtain addresses prior to obtaining a building permit. A parcel cannot receive a building permit or utilities until such parcel is identified with a 911 address.
  10. Fire Protection: Contact the Kittitas County Fire Marshall regarding any additional access requirements for Emergency Response.
  11. Mailbox Placement: The U.S. Postal Service requires that private roads with 6 or more residences install USPS approved Cluster Box Units (CBUs) at a safe location at the mouth of the private road. Contact your local Post Office for location and additional design requirements before beginning construction.

Current Kittitas County Road Standards, as adopted 9/6/05.

*Chapter 12 – PRIVATE ROADS*

12.12.010 General

Private roads shall meet the following conditions:

1. Private roads shall meet the minimum access requirements of the International Fire Code as adopted by the County, and
2. Shall be designed and constructed in conformance with AASHTO Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT < 400) 2001, as now exists or hereafter amended, and
3. Shall be inspected and certified by a licensed professional engineer for conformance with the above referenced standards. In the alternative, an applicant may request the private roadway to be inspected and subject to the approval of the Public Works Director. If certification by the public Works Director/County Engineer is desired, submission of road plans and necessary testing documentation that confirms compliance with Kittitas County Road Standards is required, and services will be performed on a reimbursable basis, and
4. Permanently established by an easement recorded with the Kittitas County Auditor or right-of-way, providing legal access to each affected lot, dwelling unit, or business, and
5. Will not result in land locking of existing or proposed parcels, and
6. Maintained by the developer or legally responsible owner or homeowners' association or other legal entity made up of all benefited property owners, under the provisions of an acceptable and recorded "Private Road Maintenance Agreement", and
7. Clearly described on the face of the plat, short plat, or other development authorization and clearly signed at street location as a private street or road, for the maintenance of which Kittitas County is not responsible and a disclosure statement of the same is filed with the County Auditor, and
8. The following note shall be placed on the face of the plat, short plat, or other development authorization:

"Kittitas County will not accept private roads for maintenance as public streets or roads until such streets or roads are brought into conformance with current County Road Standards. This requirement will include the hard surface paving of any street or road surfaced originally with gravel."

12. **Main Road - Public Road Standards:** Per the memo from Kittitas County Public Works Transportation Manager, Jan Ollivier, dated 10/23/07; Current Kittitas County Road Standards requires the main road, from Westside Road, south to Pasco Road to be constructed to a Rural Local Access Public Road Standard for roads that have Average Daily Traffic (ADT) over 750. The criterion for construction of public road improvements is described below.

09 Residential- Internal roads not including cul-de-sac shall be constructed to KCC 12.20.50 as follows:

- a. Road shall be constructed to a total paved width of 28' with a minimum of 22' traveled way.
- b. Access shall be constructed within a 60' wide right-of-way dedicated to the public.

13. Cul-de-sacs: (See Kittitas County Road Standards 12.20.100)

- a. Minimum right-of-way diameter across bulb section: 110 feet in a permanent cul-de-sac; 90 feet in a temporary cul-de-sac, with bulb area lying outside straight-street right-of-way provided as temporary easement pending forward extension of the street.
- b. Minimum diameter of surfacing across bulb: 90 feet of paving to curb or shoulder.
- c. A permanent cul-de-sac shall not be longer than 600 feet measured from the centerline of intersecting street to the center of the bulb section. The cul-de-sac length may extend to 1,000 feet if 25 or fewer potential lots are to be served and there is provision for emergency turnaround near mid-length.

14. Road Names: KCC 16.12.065 Road names. No road names shall be used, which will duplicate or be confused with the names of existing roads. Road names shall be subject to the approval of the department of public works.

15. Road Plans: According to KCC 16.16.020 developer shall submit road plans as follows: Plan and profile drawings for all roads shall be submitted to the county engineer on film or linen sheets twenty-two inches by thirty-six inches in size, and receive his approval before proceeding with construction. The drawing standards used in preparing the drawings shall conform to the current drawing standards employed by the department of public works. All plans for roads, drainage, and utility construction are to be designed and prepared by a licensed professional engineer. Staking for road construction and adequate survey control for utility construction shall be provided at the subdivider's expense.

16. Grade: The grade of some portions of the proposed road range from 6 percent to roughly 15 percent. The internal roads shall not exceed 12 percent grade according to KCC 12.20.050. To meet this standard developer will have to make appropriate cuts to obtain no more than a 12 percent grade. Developer should also take into mind that due to possible cuts a 60-foot right-of-way may not be adequate to meet side slopes and may require additional right-of-way.

17. Side Slopes: Side slopes shall generally be constructed no steeper than 2:1 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 shall be stabilized by grass sod, hydroseeding, or by planting or surfacing materials acceptable

to the engineer. 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. Side slopes higher than fifteen feet shall be terraced.

18. Inspection: KCC 16.16.030, Inspection. All roads proposed for dedication within a subdivision shall be inspected by the director or his designee during the following construction stages:

- a. Clearing and grubbing;
- b. Road system drainage;
- c. Road subgrade;
- d. Road ballast grade;
- e. Completion of road surfacing.
- f. The platlor shall pay all costs involved in said inspection services. The plat bond will not be released or the final plat approved until inspection costs are paid in full.
- g. It shall be the responsibility of the developer to notify the public works director in advance of the required inspections. All materials used and all work performed must be to the satisfaction of the public works director prior to acceptance by the county.

19. Test Results: KCC 16.16.035 Certified test reports.

- a. Prior to construction, the subdivider's engineer shall provide certified test reports for gravel base, Class "B" and crushed surfacing top course from a reputable testing firm for approval.
- b. The following information will be provided, along with each type of material: Gradation Los Angeles wear, 500 REV Degradation factor Sand equivalent Source of material.
- c. Upon gaining the director of public work's approval of the road and utility plans and the board of county commissioners approval to proceed with the final plat, the subdivider may request the director of public works to call for a preconstruction conference in accordance with subsection (d) of this section and proceed with construction of the utilities and roads or file an approved bond in accordance with Section 16.16.073 of the platting and subdivision regulations.
- d. Subdivider shall select his contractor to undertake the road construction. The contractor shall be capable of supplying the minimum equipment specified.



The subdivider shall notify the director of public works of his selection and the director shall in turn call a preconstruction conference, at which conference, staking, construction details, coordination with utilities, county inspection, and time schedule will be discussed and decided upon such as to assure meeting the approved plans and time for completion. Those expected to attend the conference include:

1. Subdivider, his engineer and contractor;
  2. Representative of all involved utilities;
  3. County director of public works or his representative.
- e. Following successful completion of the preconstruction conference, utility and road construction may proceed.
- f. Once final road plans have been approved and the preconstruction conference has been held, road construction inspection costs incurred by Kittitas County shall be charged to the developer on a reimbursable basis. The costs shall be paid prior to final acceptance of the road. (Ord. 84-6 (part), 1984).

20. Bond: According to KCC 12.10.100 developer shall submit a bond to the Department of Public Works as follows: Failure to comply with these standards may result in denial of plan or development permit approval, revocation of prior approvals, legal action for forfeiture of performance guarantee bond, code enforcement and/or other penalties as provided by law and Section 16.40.010 of this code.

- a. Construction Performance Guarantees. In lieu of the completion of any required public improvements prior to approval of a final plat, short plat or the issuance of building permits, the director may accept a performance guarantee in an amount and with satisfactory surety and conditions providing for and securing to Kittitas County the actual construction and installation of such improvements within a period specified by the director. The director will enforce the guarantee through appropriate legal and equitable remedies. If a surety bond is provided, the amount of the bond shall equal one hundred and fifteen percent of the estimated construction cost. When a letter of escrow or cash is used, the amount covered shall be for one hundred percent of the estimated construction cost. The minimum performance guarantee shall be one thousand dollars. Cash guarantees will be placed in an interest bearing account credited to the developer. The amount of the financial guarantee may be reduced during construction, as determined by the public works director. At no time will the financial guarantee amount be reduced to less than thirty percent of the original amount or one thousand dollars, whichever is greater.

- b. Maintenance Performance Guarantees. The successful performance of the public improvements shall be guaranteed for a period of not less than two years from the date of acceptance or final construction approval (whichever is last). The amount of the guarantee shall be ten percent of the construction cost and form of the maintenance financial guarantee shall be approved by the public works director. The minimum maintenance guarantee shall be one thousand dollars. Maintenance guarantees will not be required when the required performance guarantee is one thousand dollars or less. (Ord. 94-18 (part), 1994).

21. Storm Water: Developer shall provide a storm water plan for surface water flows entering, flowing within and leaving the subject property. The plan is to conform to the following standards and requirements:

- a. The Kittitas County director of public works may require plans for storm drainage and detention facilities to be prepared by a registered civil engineer currently licensed by the state of Washington and qualified by experience and education in the field of hydraulics, hydrology, or a closely related field. Storm water plans or revisions to any approved plan shall be reviewed and approved by the public works department prior to any construction.
- b. On-site storm water improvements must be sufficient to mitigate impacts due to flooding, erosion, sedimentation or pollution.
- c. All drainage system elements must provide for adequate maintenance and accessibility at all times. Storm water facilities shall be designed to eliminate interference from underground utilities and from conditions, which exceed design loads for any pipe or other structural element.
- d. The designer of any storm water element shall consider system reliability in terms of layout, specifications of materials and methods of installation.
- e. The impact of a system failure should be analyzed both in terms of on- site and off-site effects. The impacts may be to adjacent properties or to elements of the public drainage system or other private systems.
- f. No drainage originating inside of a building or structure shall be connected to the storm water or surface water systems.
- g. Developer shall meet all other applicable laws for water quality prior to discharge to any wetland, stream, or lake.
- h. Developers are encouraged to be innovative and give high priority to fish, wildlife, plant materials and related total resource management systems. (Ord. 95-2 (part), 1995).

22. Approaches: All approaches to county roads shall be constructed as follows:

- a. An approved access permit will be required from the Department of Public Works, prior to creating any new driveway access, or performing any work within the county road right-of-way.
- b. Approaches serving three or more residential units shall be paved from the edge of the county road to the furthest extent of the county road right-of-way. (Sec 12.
- c. Maintenance of driveway approaches shall be the responsibility of the owner(s) whose property they serve. Kittitas County will not maintain accesses. (Sec 12.30.010)
- d. On sloping approaches at an intersection, landings shall be provided with grade not to exceed one foot difference in elevation for a distance of thirty feet approaching an arterial or twenty feet approaching a local access street, measured from the future right-of-way line (extended) of intersecting street as provided in Section 12.20.040, 12.20.050 or 12.20.060.

23. Roadside Features: (See Kittitas County Road Standards 12.50.010)

- a. Mailbox supports shall be of a “break-away” design.

24. Addressing:

- a. I recommend contacting the Kittitas County Rural Addressing Coordinator at (509) 962-7523 to obtain addresses prior to obtaining a building permit. A parcel cannot receive a building permit or utilities until such parcel is identified with a 911 address.

25. Fire Protection:

- a. Contact the Kittitas County Fire Marshall, regarding any additional access requirements for Emergency Response.

26. Plat Comments:

- a. Irrigation water will need to comply with irrigation district requirements and continued in front of and through the site to any downstream users. No irrigation water or tail water will be conveyed in the county right of way along the projects county road frontage.
- b. Wellhead buffers will not encroach within county maintained right of way.

**In addition to the above-mentioned conditions, all applicable Kittitas County Road Standards apply to this proposal.**

Please let me know if you have any questions or need further information. In addition, Public Works would request supplemental information regarding this matter as such information is relayed to the Planning Commission, Board of Adjustment or additionally involved entities.

