T.E.D.S. Exception for Minimum Roadway Centerline Radius Kresin Subdivision

Date:

September 13, 2006

Prepared by: Reviewed by:

Brynn Boyd, E.I. John E. Kornfeld, P.E.

Rhino Engineering, Inc. 1229 North 23rd Street, Suite 201

Grand Junction, CO 81501

970-241-6027

Type of Design:

New Residential Subdivision Development

Owner:

Bruce and Teresa Kresin

Property address:

530 South Broadway

Grand Junction, CO 81504

Introduction

Kresin Subdivision is a proposed development of approximately 7.86 acres, lying south of Corral de Terra and east of South Broadway in the Redlands section of Grand Junction, Colorado. The physical address is 530 South Broadway and the parcel tax numbers are 2947-224-00-216 and 2947-224-00-215. The residential subdivision has RMF-2 zoning. The development will include 15 residential single-family homes.

Site Plan

The Site Plan for Kresin Subdivision includes 15 lots to be constructed in a single phase. There will be two accesses into the subdivision. The north access is from Corral de Terra and the west access is from South Broadway. There is also a proposed stub to the east.

According to TEDs, the minimum centerline radius is 150 feet. The west access of Carr Drive is required to match the intersection of Lost Ball Court and South Broadway. Also the east end of Carr Drive requires a suitable alignment to the existing residences to the east of the property. The area between South Broadway and Alkire Street is required to have, according to TEDs (5.1.4.2), a minimum of 75 feet of tangent road between the intersection and the beginning of a curve and a minimum 150' curve radius for the centerline of the road. There is not sufficient distance to comply with both requirements in the area provided. Therefore, the road is designed to meet the 75 foot requirement between the intersection and the beginning of the curve and with 100' radius curves. See the Preliminary Plan included in the packet.

Exception Considerations

1. Will the exception compromise safety?

The proposed 100-foot centerline radius will not compromise roadway and motorist safety. A short linear tangent lies between South Broadway and the roadway curvature and likewise between the roadway curve and Alkire Street. The minimum distance will provide minimum speeds at the curves. In addition, the curves will enhance traffic calming.

2. Have other Alternatives been considered that would meet the standard?

Other alternatives were considered such as shifting the road either north or south to accommodate a 150' radius. However, due to development requirements of matching the South Broadway and Lost Ball Court intersection, these options were not possible.

3. Has the proposed design been used in other areas?

The minimum 100-foot radius curves have been accepted in other locations around recent City's development areas where space constraints occur.

4. Will the exception require CDOT or FHWA coordination?

No.

5. Is this a one-time exception or a manual revision?

Due to its acceptance in other areas, the minimum roadway centerline radius should be a manual revision where space constraints dictate the tighter curve radius. However, this curvature radius should only be used where other alternatives do not provide adequate design.

Conclusion

The streets in this development have been designed to accommodate current City's design standards per TEDs.

Due to the location of this parcel within the Redlands area of Grand Junction, this development appears to be an excellent opportunity to meet community needs in this area.



October 19, 2006

Brynn Boyd, E.I. John K. Kornfield, P.E. Rhino Engineering, Inc. 1229 North 23rd Street, Suite 201 Grand Junction, CO 8l501

Re: Design Exception #33-06 Kresnin Sub. - Centerline Radii Exception

Dear Brynn and John:

Please find attached the committee's decision for the above referenced request. This design exception has been denied.

If you have any questions concerning this decision, please feel free to contact the Development Engineer in charge of your project or Tim Moore, Public Works Manager at (970) 244-1557.

Sincerely,

Sandi Nimon,

Sr. Administrative Assistant

Sande Remon

Xc: Eric Hahn, Development Engineer (244-1443)



DESIGN EXCEPTION #33-06

To: Mark Relph, Director of Public Works & Utilities

Sheryl Trent, Assistant to the City Manager

Jim Bright, Acting Fire Chief

From: Tim Moore, Public Works Manager

Copy to: Eric Hahn

Date: October 5, 2006

RE: Kresin Sub. – Centerline radii exception

DESCRIPTION OF THE SITUATION

The applicant intends to subdivide 7.86 acres into 15 single-family lots. Proposed access to the subdivision will be from South Broadway and from Corral de Terra Drive.

Site Description:

TEDS 5.1.4.2 requires that horizontal curves in a residential street shall have a minimum centerline radius of 150'. The applicant is requesting the allowance to build a reverse curve with 100' centerline radii. They argue that the geometry of the site makes it difficult or impossible to comply with the standard.

EXCEPTION CONSIDERATIONS

1. Will the exception compromise safety?

Staff does not believe the exception will compromise safety.

2. Have other alternatives been considered that would meet the standard?

The applicant claims to have considered alternative lot and street layouts, and they state that such options "were not possible." Staff disagrees with this statement, noting that very small modifications to their proposed layout could be accomplished in order to meet the requirements.

3. Has the proposed design been used in other areas?

Yes, staff believes that other exceptions to this TEDS requirement have been allowed.

4. Will the exception require CDOT or FHWA coordination?

5. Is this a one-time exception or a manual revision?

This would be a one-time exception.

Staff Recommendation

Due to the fact that the minimum TEDS standards could be met on this site, staff is forced to recommend denial of the exception requested. Other than that, staff believes that the requested exception will not cause an unsafe situation, and does not have any specific objections to the proposal.

Recommended by:
Approved as Requested:
Approved as Modified:
Denied
Dated: 10/11/06
Jathun MPortun
15/11

DE# 33-06 530 Broadway- Curve Radii