

# **City of Grand Junction**

Department of Public Works and Utilities Engineering Division 250 North Fifth Street Grand Junction, CO 81501-2668 FAX: (970) 256-4011

August 18, 2003

Tierra Vantures, LLC P.O. Box 3347 Grand Junction, CO 81502

RE: TEDS Exception No. 29-03 to Reduce Tangent Lengths & Radii along Woodridge Circle at 2561 G1/2 Road

Dear Sir;

Please find attached the committee's decision on the above request. You may use this decision to proceed through the development review process.

If you have any question concerning this decision, please feel free to contact the Development Engineer in charge of your project or me at (970) 256-4047.

Sincerely,

Michael G. McDill, P.E.

City Engineer

C: Eric Hahn, Development Engineer (244-1443)
Pat Cecil, Development Services Supervisor

\DE#29-03 2561G.508-18



# **City of Grand Junction**

Department of Public Works and Utilities Engineering Division 250 North Fifth Street Grand Junction, CO 81501-2668 FAX: (970) 256-4011

# **DESIGN EXCEPTION #DE29-03**

To:

Mark Relph, Director of Public Works & Utilities

Thru:

Tim Moore, Public Works Manager

Copy to:

Eric Hahn, Development Engineer

Pat Cecil, Development Services Supervisor

From:

Mike McDill, City Engineer

Date:

August 11, 2003

RE:

Request to Reduce Tangent Lengths at 2561 G1/2 Road

#### DESCRIPTION OF THE SITUATION

Applicant is planning to construct a new subdivision along G1/2 Road between Wilson Drive and 26 Road. The project would re-align G1/2 Road to run along the south edge of Interstate 70. Due to the unique shape of the parcel the proposed plan includes centerline radii along Woodridge Circle of only 100 feet instead of 150 feet and an approach tangent on Woodridge Court of only 47 feet instead of 75 feet.

The applicant requests exception from the values on the table in Section 5.1.4.2, *Curve Radii*, for Residential Streets.

#### **EXCEPTION CONSIDERATIONS**

1. Will the exception compromise safety?

Due to the very low traffic volumes on this cul-de-sac, there should be no significant safety issue resulting from the requested exception.

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

Other options were presented. The applicant demonstrated that meeting these criteria were not viable due to the unique shape of the parcel.

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

No. This is a unique solution to a unique problem.

4. Will the exception require CDOT or FHWA coordination?

No.

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

This would be a One-time exception.

# Staff Recommendation

I recommend approval of the requested Design Exceptions to Section 5.1.4.2 to allow the proposed Street layout.

Recommended by: Mulique of Man
Approved as Requested:
Approved as Recommended:
Denied:
Date: 3/18/03
11/10/
Lathem M fortun
3.*

# **TEDS EXCEPTION REQUEST**

**Woodridge Subdivision** 

**July 2003** 

**Submitted By:** 

Tierra Ventures, LLC P. O. Box 3347 Grand Junction, Colorado 81502

# TEDS Exception Request for Woodridge Subdivision

#### Introduction

This document outlines a request for an exception to the 'Alignments – Curve Radii/Approach Tangent at Intersections' defined in Section 5.1.4.2 of the TEDS manual for the proposed Woodridge Subdivision located at 2561 G½ Road.

#### **Background**

The developer submitted a Preliminary Plan application for Woodridge Subdivision in March 2003. The first round of review comments has been received. As a result of lot size and bulk requirement issues, the layout and configuration of Woodridge Subdivision has undergone a change from the original plan that was submitted. Exhibit 1 is the revised preliminary plan that will be submitted for review. The revised layout shown in Exhibit 1 requires a TEDS exception for the approach tangent length where Woodridge Circle meets G½ Road.

#### **Proposed Exception**

The developer is requesting an exception to the 'Alignments – Curve Radii/Approach Tangent at Intersections' defined in Section 5.1.4.2 of the TEDS manual. The revised layout shown in Exhibit 1 utilizes an approach tangent of approximately 47 feet whereas the TEDS Manual requires a minimum length of 75 feet.

#### Alternatives Considered

Obviously, several alternatives are available for layout of the proposed development and for horizontal geometry of Woodridge Circle. For purposes of this request, the alternatives have been grouped into two categories. Following is a listing of each as well as some items to consider.

# Alternative #1 - Approach tangent at intersection of less than 75 feet

- Woodridge Circle is not a through residential street but a culde-sac that will have much less traffic than a through residential street.
- The proposed subdivision layout utilizing an approach tangent of less than 75 feet for Woodridge Circle includes a re-alignment of G½ Road through the project site. This segment of existing G½ Road contains a narrow pavement width as well as a very tight, unsafe curve that does not meet TEDS manual standards. Allowing this development to proceed with a non-standard approach tangent for Woodridge Circle will allow G½ Road to be re-aligned, resulting in greatly increased safety for citizens traveling G½ Road.

### Alternative #2 - Approach tangent at intersection of 75 feet

- Due to the unusual shape and relatively small size of the Woodridge Subdivision property, normal lot and street layout and configuration is extremely difficult. Allowing the Woodridge Circle approach tangent to be less than 75 feet greatly increases the developer's ability to provide a subdivision layout and configuration that is appealing to the residents as well as functional for the general public.
- Due to the high infrastructure cost (primarily re-alignment of G½ Road) associated with developing the property, the development must have the requested number of units in order for it to be an economically viable project. It is not possible to have the required number of units with the Woodridge Circle approach tangent of 75 feet.

## **Proposed Design**

The requested design is Alternative #1 discussed above.

#### Impacts of Change

Granting this exception request is not anticipated to have adverse impacts on traffic flow or public safety.

## **Exception Considerations**

According to the Design Exception Process flowchart, several items must be considered by staff in review of the exception request. Some of the items are discussed below.

- If granted, will the exception compromise safety?
   Safety will not be compromised if the exception is granted.
- Have other alternatives been considered that would meet current standards?
  - Yes, other alternatives have been considered and are discussed above.
- Has the proposed design been used in other areas locally, state or national? Have examples, including data, been provided?
  - There are many existing streets in Grand Junction that do not comply with TEDS 5.1.4.2.
- Will the exception require CDOT or FHWA coordination?
   No coordination is required with CDOT or FHWA.

# **TEDS EXCEPTION REQUEST**

**Woodridge Subdivision** 

**July 2003** 

**Submitted By:** 

Tierra Ventures, LLC P. O. Box 3347 Grand Junction, Colorado 81502

# TEDS Exception Request for Woodridge Subdivision

#### Introduction

This document outlines a request for an exception to the 'Alignments – Curve Radii' defined in Section 5.1.4.2 of the TEDS manual for the proposed Woodridge Subdivision located at 2561 G½ Road.

#### **Background**

The developer submitted a Preliminary Plan application for Woodridge Subdivision in March 2003. The first round of review comments has been received. As a result of lot size and bulk requirement issues, the layout and configuration of Woodridge Subdivision has undergone a change from the original plan that was submitted. Exhibit 1 is the revised preliminary plan that will be submitted for review. The revised layout shown in Exhibit 1 requires a TEDS exception for the centerline curve radius for both curves on Woodridge Circle.

#### **Proposed Exception**

The developer is requesting an exception to the 'Alignments – Curve Radii' defined in Section 5.1.4.2 of the TEDS manual. The revised layout shown in Exhibit 1 utilizes centerline curve radii of 100 feet whereas the TEDS Manual requires a minimum radius of 150 feet.

#### **Alternatives Considered**

Obviously, several alternatives are available for layout of the proposed development and for horizontal geometry of Woodridge Circle. For purposes of this request, the alternatives have been grouped into two categories. Following is a listing of each as well as some items to consider.

#### Alternative #1 - Centerline curve radii < 150'

- According to City staff, the minimum curve radius of 150' for residential streets given in the TEDS manual is being reviewed by the City Traffic Engineer and may be reduced or removed entirely.
- Woodridge Circle is not a through residential street but a culde-sac that will have much less traffic than a through residential street.
- The proposed subdivision layout utilizing curve radii of less than 150' for Woodridge Circle includes a re-alignment of G½ Road through the project site. This segment of existing G½ Road contains a narrow pavement width as well as a very tight, unsafe curve that does not meet TEDS manual standards. Allowing this development to proceed with a non-standard curve radius for Woodridge Court will allow G½ Road to be re-aligned, resulting in greatly increased safety for citizens traveling G½ Road.

#### Alternative #2 - Centerline curve radii 150' or greater

- Due to the unusual shape and relatively small size of the Woodridge Subdivision property, normal lot and street layout and configuration is extremely difficult. Allowing the Woodridge Circle curve radii to be less than 150' greatly increases the developer's ability to provide a subdivision layout and configuration that is appealing to the residents as well as functional for the general public.
- Due to the high infrastructure cost (primarily re-alignment of G½ Road) associated with developing the property, the development must have the requested number of units in order for it to be an economically viable project. It is not possible to have the required number of units with all Woodridge Circle curve radii 150' or greater.

# **Proposed Design**

The requested design is Alternative #1 discussed above.

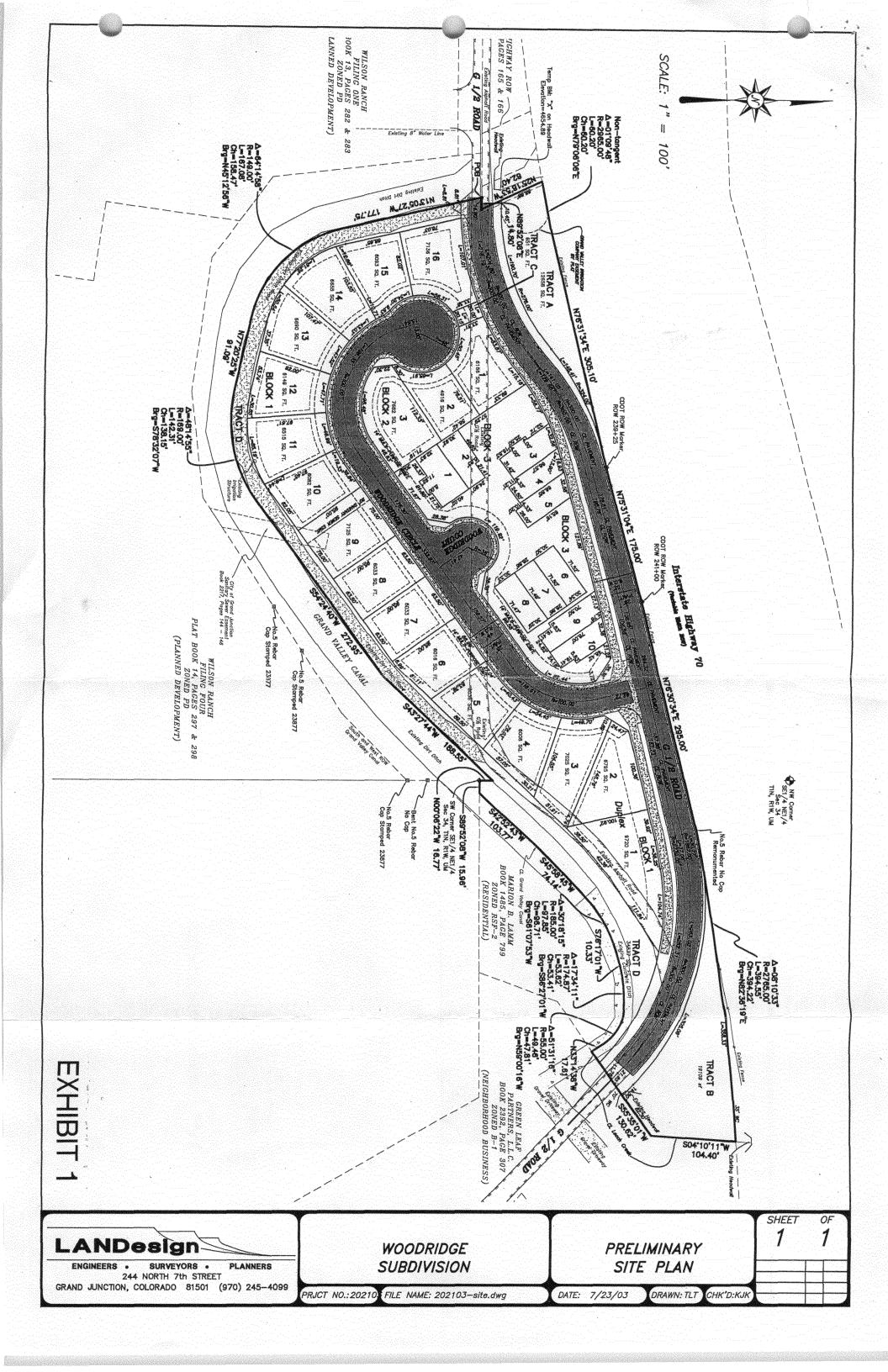
### Impacts of Change

Granting this exception request is not anticipated to have adverse impacts on traffic flow or public safety.

## **Exception Considerations**

According to the Design Exception Process flowchart, several items must be considered by staff in review of the exception request. Some of the items are discussed below.

- If granted, will the exception compromise safety?
   Safety will not be compromised if the exception is granted.
- Have other alternatives been considered that would meet current standards?
  - Yes, other alternatives have been considered and are discussed above.
- Has the proposed design been used in other areas locally, state or national? Have examples, including data, been provided?
  - There are many existing streets in Grand Junction that do not comply with TEDS 5.1.4.2.
- Will the exception require CDOT or FHWA coordination?
  - No coordination is required with CDOT or FHWA.



#### TEDS Exception G.5 Rd 2561 Woodridge Tangent Length 8-8-03 Miller

I am in favor of a waiver of the tangent length, as this will be a low volume approach that will still allow approximately 140' of approach visibility to the required stop sign posting at G ½ Rd. Additionally, the approach alignment at G ½ Rd will allow adequate view of approaching G ½ Rd for both directions.

In a matter aside from this Exception application, however, the submittal does raise other questions of access, however. I have not previously seen this submittal, and am not clear as to how the lots 1, 2, and 3, at the east end of the site, will be accessed. There will be need to clarify access point placement for these lots, with respect to intersection clear zones, access spacing, and access route alternatives.

For clarification of the opening paragraph statement, the Woodridge Cir approach alignment will allow an eastbound vehicle a minimum of 3 seconds to observe and respond to the stop sign at  $G^{1/2}$ . This assumption is based on a "worst case" 30mph (44 / sec.) approach speed. Also, as mentioned in the first paragraph, the Woodridge alignment at the stop sign at  $G^{1/2}$  Rd will provide optimum visibility of both directions of approaching  $G^{1/2}$  Rd traffic.





# **City of Grand Junction**

Department of Public Works and Utilities Engineering Division 250 North Fifth Street Grand Junction, CO 81501-2668 FAX: (970) 256-4011

# **MEMO**

To: Mike McDill

Cc:

From: Eric Hahn

Re: Woodridge Sub - Review of TEDS Exception Requests

Mike,

Here are my comments regarding the TEDS Exception Requests submitted by Landesign, received July 22, 2003:

- (Curve Radii TEDS 5.1.4.2, proposing 100' centerline radii instead of 150' centerline radii) It seems that our default standard at this point is that a developer must demonstrate that fire access can be maintained around a corner assuming parked vehicles on each side of the street (33' min. interior radius, 48' min. exterior radius). A 100' centerline radius easily accomplishes this. I recommend approval of this request.
- (Approach Tangents TEDS 5.1.4.2, proposing 47' tangent instead of 75' tangent) TEDS requires the 75' tangent distance to "provide for adequate sight distance for traffic control devices at the intersection." This distance seems excessive for a dead-end residential street (or any residential street for that matter). Other than that observation, I see no reason to support (or deny) this request. Generally, I don't see any problem with the request. However, if we approve this exception, we should seriously considering a permanent revision to TEDS.

Let me know if you have any questions regarding these comments. If we want to reach some kind of compromise with the applicant, I think we should contact them before issuing an official conditional acceptance or denial.

From:

**Bob Blanchard** 

To:

Mark Relph; Rick Beaty

Date:

8/12/03 1:36PM

Subject:

**TEDS Exceptions** 

#### 25-03 - Commercial Drive

Support approval of the exception to the spacing. However, I'm grappling with the offset issue.......it's true that support of the exception validates the actions of an individual who bought a building (and had it delivered) before having development approval and we are not in the business of varying regulatory standards because of a bad business decision, but I have to wonder if the traffic counts might allow a different look at whether this might be ok or not. Additionally, I'm not inclined to further bad planning practices but it does appear that other businesses along Commercial have less than appropriate spacing or even total access across their lot frontage. Could existing conditions be used to justify?

I guess I'm waffling and will go with the decisions of Rick and Mark on the spacing issue. However, I'm also cc'ing Kathy and will give her the application in case a meeting is appropriate while I'm gone.

#### 26-03 - Linden Avenue

Support approval of the exception

27-03 - Bass Street

Support approval of the exception

29-03 - G 1/2 Road

Support approval of the exception

CC:

Kathy Portner; Mike McDill; Sandi Nimon

From:

Rick Beaty

To:

Sandi Nimon

Date:

8/12/03 3:08PM

Subject:

Re: Design Exceptions

I have reviwed DE29-03 and concur with Mike's recommendation for approval.

#### Rickb

>>> Sandi Nimon 08/12/03 09:58AM >>>

Here's the corrected version. Sue Berry should have picked up the 29-03 this morning, along with your hard copy of 26-03. This should make everything square.

Thanks,

Sandi

From:

Rick Beaty Sandi Nimon

To: Date:

8/12/03 9:29AM

Subject:

Re: DE 26-03

I have reviewed DE 25-03, 26-03, 27-03, and 2\$\mathbb{g}\$-03. I concur with Mike McDill's recommendation for approval on all four of the above listed exceptions. I do have some concern over the steet with for DE27-03; however, after going out and looking at the area it looks like the impact would be minimal on public safety.

#### Rickb

#### >>> Sandi Nimon 08/12/03 08:13AM >>>

Rick, you should not have 28. It has not been sent over yet. 29 was sent over yesterday, so it might not have been picked up yet. Since I accidently gave Bob two 26's, you are the missing link. Just throw the extra 25 away, I've already given Bob his extra copy. (Boy, I can't even make one little mistake without it trickling down). Oh well.

I am e-mailing you the 26 and 29, the exceptions, only. I am hard copying you 26 and you should get 29 today.

#### Sandi

>>> Rick Beaty 08/11/03 04:26PM >>>

Sandi:

I have (2) DE25-03s and one 27-03. I do not have 26-03, 29-03, 28-03.

#### Rickb

#### >>> Sandi Nimon 08/11/03 03:47PM >>>

My humble apologies. I accidently gave Bob two copies of DE26-03 and no copies of DE25-03, which makes me wonder if someone else was shorted a copy of DE26-03, Housing Authority Site. If you are, let me know. Again....I plan not to use the internal mailboxes in the City Clerk's office anymore for the Design Exceptions, given the quick turn around on these. Seems to be a delay in transit and, of course, it doesn't help if I don't give everyone the exceptions they need. You are right, Bob, you can't review them if you don't have them. Sorry.

You all should have the following outstanding exception numbers by now. 25-03, 26-03, 27-03, and 29-03. Mike is working 28-03, so you should have that soon.

#### Sandi

CC: Bob Blanchard; Mark Relph