

City of Grand Junction Public Works Department 250 North 5<sup>th</sup> Street Grand Junction, CO 81501-2668 Phone: (970) 244-1555

FAX: (970) 256-4022

October 15, 2002

Mr. Chris Haggard, E.I.T. Wolverton & Associates, Inc. 5300 Oakbrook Parkway, STE 150 Norcross, Georgia, 30093

RE: TEDS Exception from Minimum Curve Radius at 25 ½ Road & Cosby Avenue

Dear Chris;

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: Rick Dorris, Development Engineer (256-4034)

\DE#24 02-Cosby&25.5 10-15



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# **DESIGN EXCEPTION #DE24-02**

To:

Mark Relph, Director of Public Works & Utilities

Thru:

Tim Moore, Public Works Manager

Copy to:

Rick Dorris, Development Engineer

From:

Mike McDill, City Engineer

Date:

October 3, 2002

RE:

Exception from Minimum Curve Radius at 25 1/2 Road & Cosby Avenue

### **DESCRIPTION OF THE SITUATION**

Applicant is planning to construct Rimrock Mall. Part of this development includes the construction of 25 ½ Road from the mall to Cosby Avenue. These two streets meet at a forty-five degree angle. The curb, gutter and sidewalk are already constructed along the east side at this location. The radius is about 75-feet at the flowline of this existing curb and gutter. There is an existing building about fifteen feet behind the curb on the inside of this curve. TEDS requires a minimum street centerline radius of 300-feet.

Their current plan proposes to extend the radius across the street to the west flowline and transition the street width to match the fully constructed portion of Cosby Avenue immediately southeast of the match point. This would create a centerline radius of only 95 feet.

The applicant requests exception from Section 5.1.4.2, Curve Radii.

# **Staff Recommendation**

I recommend approval of the requested Design Exceptions to Section 5.1.4.2 to allow a reduced centerline radius at the connection of 25  $\frac{1}{2}$  Road and Cosby Avenue.

Recommended by: Multiple 1988	
Approved as Requested:	
Denied:	
ALPA	Date
E in Bert	10/14/02 Date
Patter Randon	mhulaz

# FACSIMILE TRANSMITTAL FORM

ATTENTION: Rick Dorris	FAX #:FAX =
COMPANY: City of Grand Junction	
FROM: Chris Haggard	
REFERENCE: Rimrock Marketplace – 25 ½	2 Road TEDS Exception
DATE:	W&A PROJECT NO.: 95137
TOTAL NUMBER OF PAGES (INCLUDING	THIS PAGE) 6
MESSAGE:	
Thank You.  Thank You.	the frame has been a least of the second of



October 1, 2002

Mr. Rick Dorris, P.E.
City of Grand Junction Development Engineer
City of Grand Junction
250 North 5<sup>th</sup> Street
Grand Junction, CO 81501

RE:

Traffic Engineering Design Standards (TEDS) Exception Section 5.1.4.2, Curve Radius 25 ½ Road Extension to Crosby Avenue

Dear Mr. Dorris:

Please accept this letter on behalf of the developer (THF Realty) of the proposed project at Rimrock Marketplace. This letter outlines the developer's request for TEDS exception of the minimum curve radius as defined in section 5.1.4.2 of the TEDS manual.

### **Existing Conditions:**

The existing section of 25 ½ road is built for approximately 500' to the north, but does not connect to anything. There is also existing curb and gutter on the east side of the road and the existing connection to Crosby Avenue does not meet section 5.1.4.2 of the TEDS manual.

### Proposed Exception:

Due to the design constraints of providing a 300' radius curve for the transition from 25 ½ Road to Crosby Avenue, Wolverton and Associates proposes a radius of 95' for this intersection. The design constraints which cause this need for a design exception include: Excessive right of way impacts, Impacts to a building located on the property from which right of way would need to be attained, Additional construction costs due to the reconstruction of existing curb, gutter and sidewalk, and the relocation of utilities (sanitary sewer, telephone). See figure 1 for proposed design.

### **Exception Considerations**

According to the Design Exception Process, there are 6 items that must be addressed in the staff review of the exception request. Each item is addressed below.

- If granted, will the exception compromise safety?
   No, safety will not be compromised if the exception is granted. The proposed improvements will increase safety by adding curb and gutter and a wider roadway. The proposed radius is also flatter than the existing radius.
- 2. Have other alternatives been considered that would meet current standards? There were two alternates considered for this intersection.
  - A. The first alternate would be to place a 300' radius curve in at the centerline of the road. This would require right of way from the property owner to the east and could require the purchase of a building located close to the existing right of way as well as utility relocation and reconstruction of existing curb, gutter and sidewalk.
  - B. The second alternative would be to make the intersection a "T" intersection where both movements would have a stop sign and turn at a 90 degree angle. This would require considerable right of way from the property owner to the west and would require much more pavement reconstruction. See figures 2 and 3 for alternates considered.
- 3. Has the proposed design been used in other areas locally, state, or national? Yes, there are many locations which use a tighter curve than the required standard. Many of these curves have signs which indicate a slower speed through the curve.
- Will the exception require CDOT or FHWA coordination?
   No, the exception will not require the involvement of CDOT or FHWA.

Page 2 Mr. Domis October 1, 2002

- 5. Is this a one-time exception based upon unique circumstances location, topography, traffic flow, etc?
  - Yes, this is a one-time exception based upon the constraints surrounding the subject property.
- 6. If not a one-time exception, is a manual revision needed?

  No, a manual revision is not suggested in conjunction with this exception request.

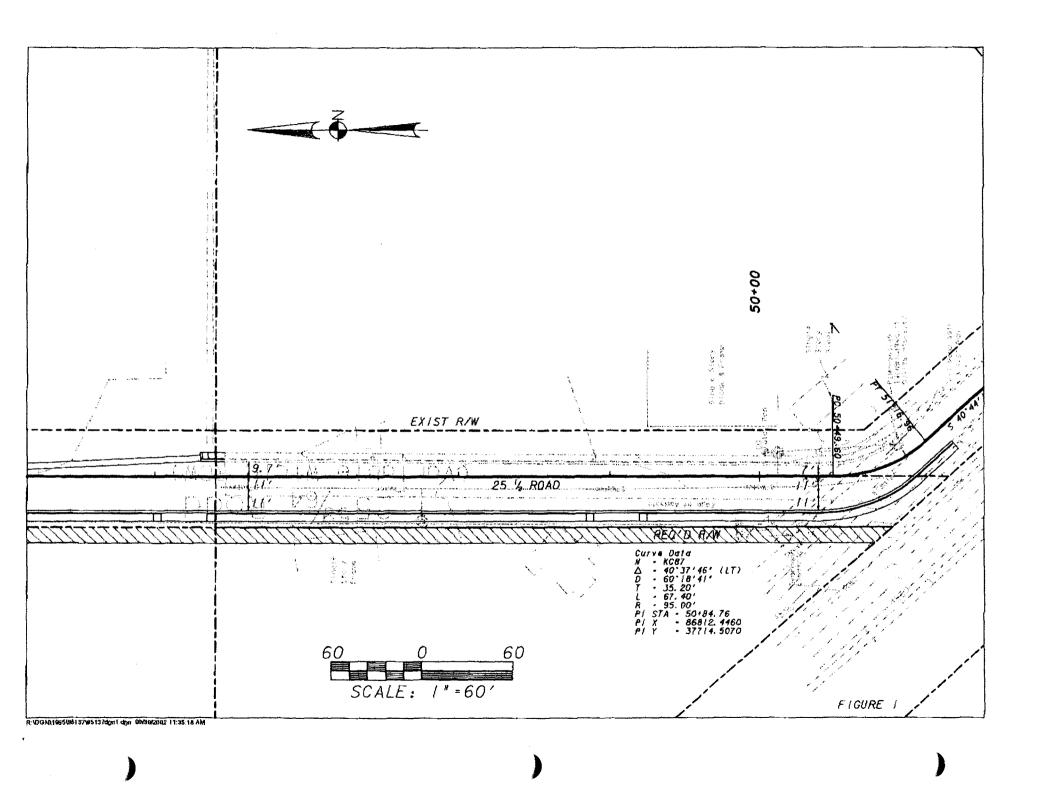
Wolverton and Associates has chosen to provide a design which minimizes right of way impacts and allows for a free flow movement through the intersection. There will be warning signs and required striping added to facilitate the safe movement of traffic through the intersection. The need for new pavement, curb and gutter, and sidewalk has also been minimized. The only change in this design from the existing design is the additional pavement and the extension of 25 ½ Road towards the development. The extra pavement will be striped out so that only two lanes of traffic will remain upon completion of the project.

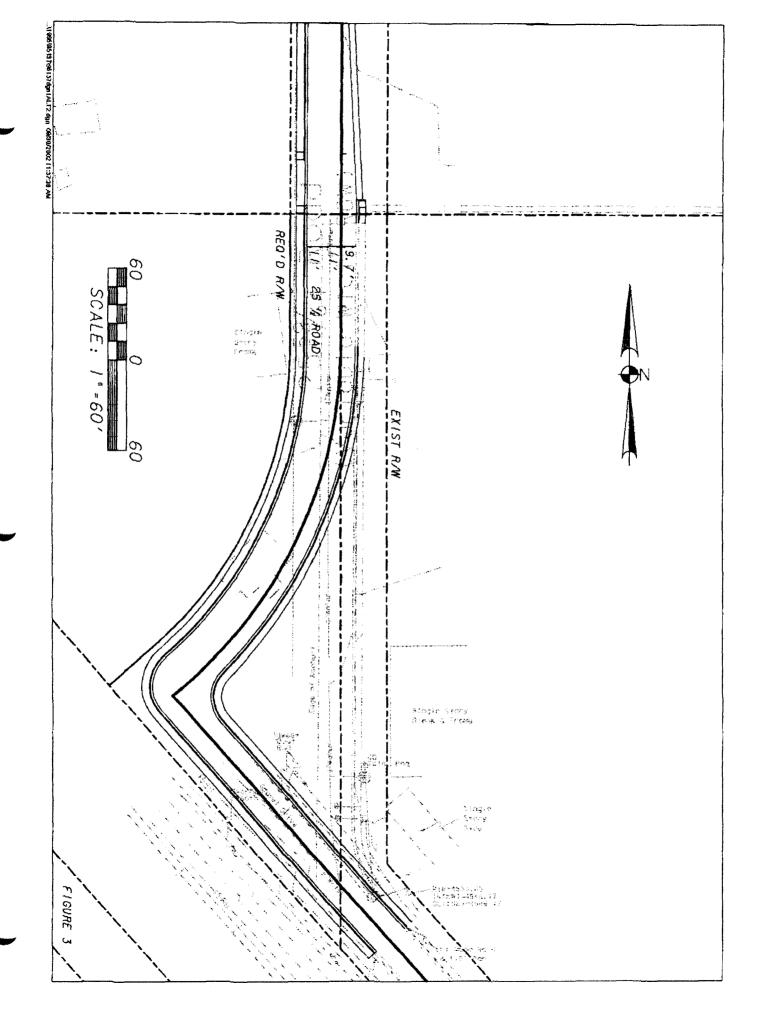
Sincerely

Chris Haggard, E.I.T. Project Engineer

Enclosures

Cc: Kenton Griffin, Wolverton and Associates





From:

Rick Beaty

To:

Bob Blanchard; Mark Relph

Date:

10/8/02 9:10AM

Subject:

Re: TEDS Esception - 25 1/2 Road and Crosby Avenue

The exception meets the requirements for review and I am in support of approval.

Rickb

>>> Bob Blanchard 10/04/02 06:48PM >>>

I support Mike's recommendation of approval for this exception.

CC: Mike McDill; Sandi Nimon

From: Bob Blanchard

To: Mark Relph; Rick Beaty

**Date:** 10/4/02 6:48PM

Subject: TEDS Esception - 25 ½ Road and Crosby Avenue

I support Mike's recommendation of approval for this exception.

CC: Mike McDill; Sandi Nimon

# MEMORANDUM



Date: October 3, 2002

To: Bob Blanchard, Community Development

Rick Beaty, Fire Department

From: Sandi Nimon, Sr. Administrative Assistant

Subj: Design Exception DE24-02 Exception from Minimum

Curve Radius at 25 1/2 Road and Cosby Avenue.

Please review the attached Design Exception, send your recommendations to Mark Relph and copy me no later than Tuesday, October 8, 2002.

Sn

10/14/02

I SUPPORT THE BUSPATION AS RECOMMENDED BY STAFF & SUPPORTED BY KILL BENTY & ROB BLANCHARD,

## **EXCEPTION CONSIDERATIONS**

# 1. Will the exception compromise safety?

Because there are no other streets intersecting at or near the point that these two streets meet, proper signing should eliminate any safety concerns with the proposed configuration.

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

The applicant proposed two other options that would comply with TEDS. The first would require removal of the existing building and acquiring additional right-of-way along the east side. This option would create a long tail of unusable property between the street and the railroad and add no particular benefit.

The second option would curve 25 ½ Road to the southwest until it was perpendicular to the extension of Cosby Avenue. This alignment would require considerably more right-of-way from the property to the west and a similar unusable strip along the east side. It would also require traffic to come to almost a complete stop to make the turn at the new intersection.

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

The same condition exists at the south end of Cosby Avenue, where it meets Main Street. There are many other similar situations along West Independent Avenue, River Road and South Broadway south of Highway 340. Although they are not ideal, these other angled connections do not generally create serious accident sites.

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.