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COMMUNITY DEVELOPMENT
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TEDS EXCEPTION REQUEST

**Orchard Mesa Retail Center
B ½ Road**

August 2006

Submitted By:

DPC Development Company
7000 E. Belleview Avenue, Suite 300
Greenwood Village, CO 80111
303-796-8288

TEDS Exception Request for Orchard Mesa Retail Center

Introduction

This document outlines a request for an exception to "Spacing" defined in Section 4.1.1 of the Transportation Engineering Design Standards (TEDS) Manual, and for "Offsets" defined in Section 4.1.2 of the TEDS Manual, for a proposed commercial project located on the south side of B ½ Road slightly east of the intersection with 27 ½ Road.

Background

DPC Development Company is preparing to submit a site plan application to the City of Grand Junction for developing the site as the Orchard Mesa Retail Center. The property is presently vacant, and would appear to have never been developed. There will be two lots and one tract fronting on B ½ Road and three lots fronting on the Frontage Road to Highway 50.

This property presents site layout and circulation challenges because of the triangular shape of the property and the surrounding roadway system. One major factor in the surrounding roadway system is the potential signalization of Highway 50 and 27 ¾ Road and the probable closure of the North Frontage Road at the intersection with 27 ¾ Road. According to Dan Roussin of the Colorado Department of Transportation the City of Grand Junction's request for traffic signals at this has been approved. He gave no indication when the traffic signals were to be installed. He indicated that he wanted the Frontage Road closed at the northwest side of this intersection. The Frontage Road has already been closed and removed on the Northeast side of the intersection.

B ½ Road is classified (according to the City Map on the internet) as a Major Arterial. In the General Meeting Notes, B ½ Road is indicated as a Minor Arterial Roadway while the North Frontage Road is classified as a Local Commercial roadway.

Proposed Exception

The TEDS Manual requires a 300 ft. offset between accesses on the opposite side of the street and a 300 ft. spacing between driveways on arterial streets. The streets on the opposite side of B 1/2 Road are only approximately 566 feet apart (measured from centerline to centerline), so it is physically impossible to even put one entrance in and comply with the TEDS Manual. Aligning the access points with the roadways on the opposite side of the street is either not possible or feasible. 27 ½ Road is centered, approximately, on the west property line of the development, so it would be impossible to construct an entrance opposite it. Lauralee Ave. is close to the eastern end of the property (and only roughly 238 feet from Allyca Ave to the east). Constructing an entrance opposite Lauralee Ave would also require a TEDS Exception.

The centerline of Lauralee Ave. is also approximately 80 feet from the east property line of this development. If there were an access constructed opposite Lauralee Ave. it would have to tee into an east west driveway almost immediately inside the development, since there isn't enough usable space to the east to construct a building. Nor is there adequate space to the west to construct a building of the size desired to go into this lot. This would create traffic flow problems and stacking problems.

The ideal internal traffic circulation situation is that given on the drawing titled "PROPOSED DRIVEWAYS". With the inevitable closing of the Frontage Road at 27 ¾ Road there will be more traffic into the site from B ½ Road as that will be the easiest route for traffic from the east.

Following is a quote from Section "XIII. Conclusion" of ORCHARD MESA RETAIL CENTER, Highway 50 North Frontage Road and B ½ Road, Grand Junction, Colorado, Traffic Impact Study, June 2006:

The projected queues for the left-turn movements at these intersections are less than one vehicle during the critical peak hours. It is not anticipated that this 30-foot reduction in the 150-foot offset will result in operational or safety problems. This is primarily due to the low volumes on Lauralee Avenue and at the proposed East Access. In addition, the volume of vehicles projected to travel from this access across to Lauralee Avenue and vice-versa is extremely low.

It should be noted that the above statement is based on item number 3 of the General Meeting Notes on this project, which reads:

3) Show the location and width of existing curb cuts on adjacent properties and properties on the opposite side of the street for 300' east and west of the subject parcel. Any new access proposed for this site shall meet spacing and offset requirements included in TEDS, Chapter 4 (four-legged intersections and commercial driveways off Minor Arterial roadways shall be spaced at least 300 feet apart, tee intersections shall be offset a minimum of 150 feet and be 150 feet from the nearest four-legged intersection.

This seems to come more from Chapter 6.2.8.2 of the TEDS Manual, which reads:

6.2.8.2

Minor Arterials and Collectors Signalized intersections shall be spaced at 1/4 mile intervals. Unsignalized four legged intersections must be spaced at least 300 feet apart. When T-intersections are used, the centerlines of streets not in alignment shall be offset a minimum of 150 feet and be 150 feet from the nearest four legged

intersection. If the left turn storage requirements for adjacent intersections overlap, the minimum spacing must be increased to provide adequate left turn storage in both directions.

Alternatives Considered

A layout with only one entrance onto B 1/2 Road was not considered as an alternate. In an e-mail on July 20th the traffic engineer, Ann Bowers, writes:

If the frontage road is closed, more traffic will utilize the access points to B 1/2 Road. If all of this traffic were concentrated to one access, congestion would likely occur both inbound and outbound. As it is now, we don't have any delay problems for vehicles accessing the driveways on B 1/2 Road - especially the left-turns in. If this were concentrated to one access plus compounded by the closure of the frontage road, there could be congestion for inbound vehicles... With the frontage road closure, the volume of left-turn traffic into the site via B 1/2 Road will increase as that will be the easiest option for vehicles approaching from the east and southeast. I think it is better to spread this volume out over 2 access points than concentrate it to one access. There will be congestion on-site, as well...

The commercial center is designed so that it faces, and is very visible, from Highway 50. Most stores in the retail center will be first noticed by someone in an automobile on Highway 50. With this in mind we didn't consider an alternate where the storefronts and parking faced B 1/2 Road.

With the closing of the Frontage Road at 27 3/4 Road, traffic will decrease from that side of the site, and the only way to have any reasonable traffic circulation within the site is with two entrances on B 1/2 Road.

Alternate Number 1 is to have an access opposite Lauralee Avenue. Of course, the internal layout could vary from what is shown in this sketch, however whatever layout is sketched, the entrance across from Lauralee Avenue will have to end in an east-west drive fairly close to B 1/2 Road. This creates problems with internal traffic circulation and with traffic stacking on B 1/2 Road.

In Alternate Number 1a, the building was moved as far to the west as possible. The drive then only has a small offset to it, but there are major safety disadvantages. These are noted on the drawing.

Proposed Design

The proposed design has two access drives onto B 1/2 Road. The drives themselves are approximately 282 feet apart (centerline to centerline). The eastern drive is roughly

117 feet from Lauralee Avenue and 369 feet from the next access on the south side of B ½ Road. The western drive is roughly 167 feet from 27 ½ Road to the north and over 300 feet east of 27 ½ Road to the south.

Impacts of Change

Due to the difficulty of developing this site with the odd shape and surrounding roadway system, we believe that the proposed design provides for the best access design and site circulation.

The introduction to Section 4.3 of the TEDS Manual reads:

On-site circulation shall be given the same attention as is given to the design of public street systems. Poor site design and circulation is detrimental to both the public investment in the street system and the private investment in the property. Access locations, building location, site circulation, and parking are highly inter-related as each one has a dramatic effect on the others. The design of the on-site circulation system shall be an integral part of the overall site and access design process.

The two proposed access points to B 1/2 Road plus the proposed access to the North Frontage Road are necessary for this development for on-site circulation as well as to provide adequate ingress and egress to this commercial parcel. The probable future closure of the North Frontage Road at 27 3/4 Road further compounds the need for these two access points to B 1/2 Road.

The proposed plan will provide for good on-site circulation, public safety within the site, and the integrity of the public roadway system will be protected.

TEDS Manual:

4.1.1 Spacing

On local residential streets, single-family residential driveways shall be spaced a minimum of 5' measured from property line to allow for maneuvering to occur without trespass. In locations where the 5' minimum spacing cannot be met due to limited lot frontage or other field constraint, the Development Engineer may permit a variance from the spacing standard. On local commercial and industrial streets, driveways shall be spaced a minimum of 50 feet, measured from edge of access to edge of access. On collector streets, driveways shall be spaced a minimum of 150 feet apart. On arterial streets where no other access to lower order streets is available, commercial driveways may be allowed where spaced a minimum of 300 feet and may be restricted to right-in, right-out movements. No new residential driveways shall be allowed on arterial streets.

4.1.2 Offsets

Where properties are not large enough to allow accesses on opposite sides of the street to be aligned, the center of accesses and intersections not in alignment shall be offset a minimum of 50 feet on local commercial streets, offset 150 feet or greater on all collector streets and offset 300 feet or greater on all arterial streets. Greater distances may be required for left turn storage lanes. Shared accesses shall be encouraged wherever possible to minimize the number of access points along a street. Shared access provides for safer and more efficient operation of the flow of traffic on the street and shall meet the above requirements.

4.1.3 Corner Clearance

Corner clearances are defined as the distance between a driveway and the the nearest intersecting street. The clearance is necessary so that accesses do not interfere with street intersection operations and should provide drivers with adequate perception-reaction time to avoid potential conflicts. On corner lots, the access location shall be on the street of lowest functional classification.

Minimum Corner Clearance (ft)
Measured from Flowline to Near Edge of Access

Street Classification	Clearance From Unsignalized Intersections	Clearance From Signalized Intersections	Single Family Residential Driveways
Local	50'	150'	50'
Collector	150'	150'	100'
Minor Arterial	150' *	300' *	100' *
Major Arterial	300' *	300' *	150' * *

May be restricted to right-in, right-out only access. Single family access to arterial streets is not acceptable practice and will be permitted only in extreme hardship cases.

ENGINEERS • SURVEYORS • PLANNERS
326 MAIN STREET, SUITE 100
GRAND JUNCTION, COLORADO 81501 (970) 245-4099

LANDesign

ORCHARD MESA RETAIL CENTER
EXISTING CONDITIONS

PRJ # 206034 FILE NAME:
DATE: 8/3/06 DRAWN:
CHK'D:

TEDS EXCEPTION

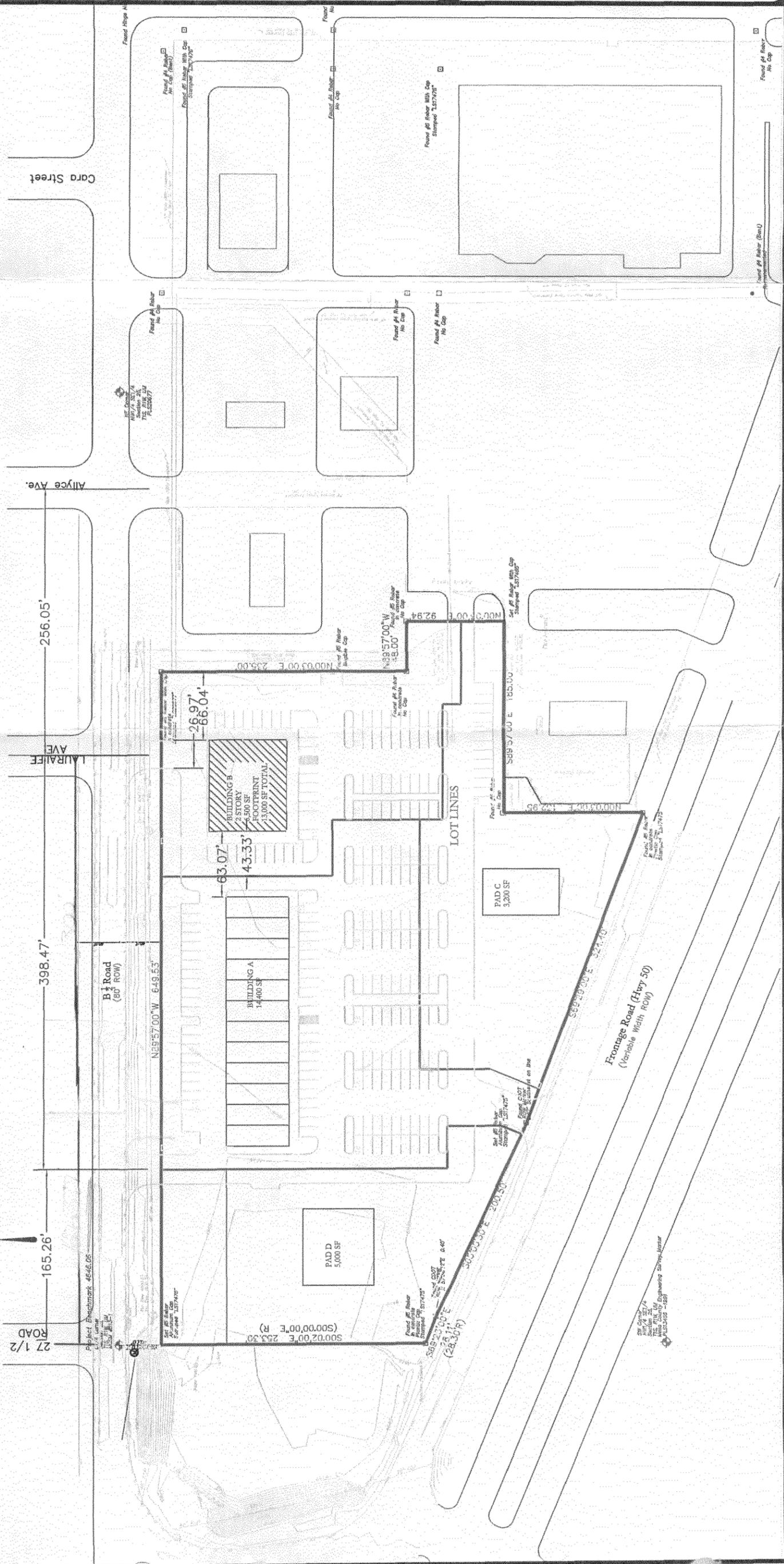
DATE NO. BY
SHEET 1 OF 1



EXISTING CONDITIONS

ALTERNATE 1

PROBLEMS:
 DRIVEWAY OPPOSITE LAURALEE AVE. DEADENDS INTO A EAST-WEST DRIVEWAY IMMEDIATELY ADJACENT TO ROAD. THIS FORCES INCOMING TRAFFIC TO TURN IMMEDIATELY AND FOLLOW AN AWKWARD DRIVE CONFIGURATION.
 THROAT LENGTH TOO SHORT - NO STACKING DISTANCE AT STREET.
 ON-SITE TRAFFIC CIRCULATION IS POOR.



TEDS EXCEPTION REQUEST

ORCHARD MESA RETAIL CENTER
 ALTERNATE 1

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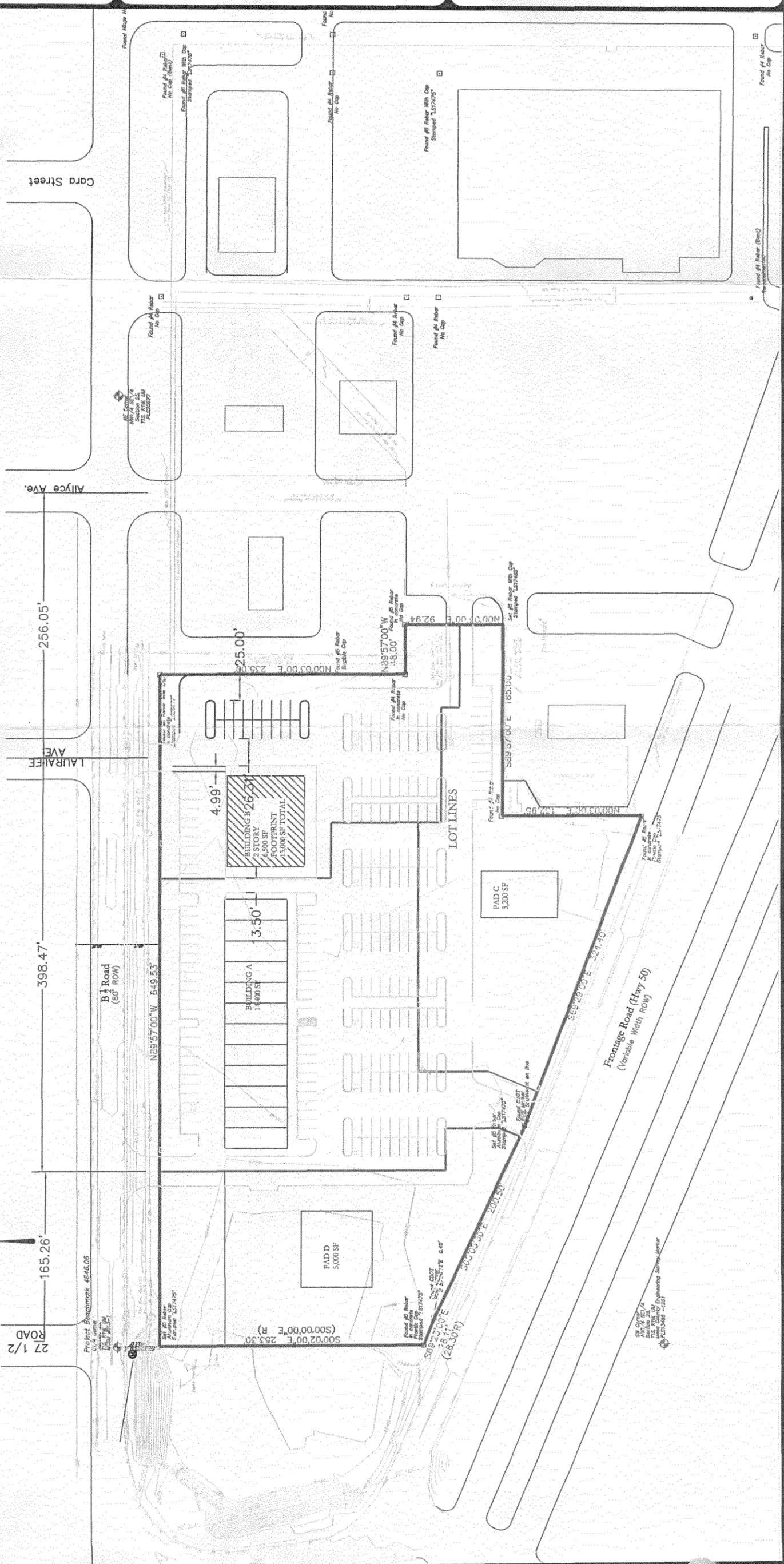
PRJ # 206034 FILE NAME:
 DATE: 8/3/06 DRAWN:
 CHK'D:

DATE NO. BY
 SHEET 1 OF 1

ALTERNATE 1a

PROBLEMS:

- No parking adjacent to Building B
- Parking to right of Building B (in Red) does not work.
- Too much driveway for parking spaces in Lot for Building B.
- Dangerous conditions with traffic adjacent to Building B.
- No room for curve radius at sidewalk around Building B.
- Drive to East of Building B is offset.
- Not enough space between Buildings A & B for drive lane.



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ORCHARD MESA RETAIL CENTER
 ALTERNATE 1a

TDS EXCEPTION
 REQUEST

PRJ # 206034 FILE NAME:
 DATE: 8/3/06 DRAWN:
 CHK'D:

DATE	NO.	BY
1	1	1

SHEET 1 OF 1

Memorandum

TO: Tim Moore
FROM: Rick Dorris 
DATE: August 16, 2006
SUBJECT: Orchard Mesa Retail Center TEDS Exception Request

This is the parcel west of Burger King and the car wash in Orchard Mesa. They are proposing 12,000 SF of office, 14,400 SF of retail, 3200 SF bank, and a site down restaurant. They have submitted a TIS with this request.

The request is to reduce the access spacing from the required 150' to 117'. The TIS demonstrates that the queues for the left turn movements at the east entrance and Laura Lee are less than 1 vehicle for each movement. From this standpoint the exception appears to be safe due to the low traffic volumes.

The site is several acres in size and has considerable flexibility with the layout. It appears they don't want to significantly change the building arrangement. Building B and the parking south of it could be flipped (north to south) providing the ability to align the east entrance with Laura Lee.

There is also a general problem with their site layout. Section 4.2.5.1 of the TEDS manual requires 50' of storage between the through lane on B 1/2 Road and an internal drive. The site plan proposed provides 50' based on the current location of B 1/2 Road but doesn't when the ultimate width of B 1/2 is considered. This will cause the buildings and parking to shift south 10 to 20 feet and will require new site design.

My recommendation is to deny the request since there is plenty of flexibility within the site to rearrange buildings and parking to meet the standard.

I kept the TIS

Grand Junction

August 28, 2006

Landesign Consulting Engineers
336 Main Street, Suite 203
Grand Junction, CO 81501

Re: Design Exception 28-06 – Orchard Mesa Retail Center (B ½ Road) – Access Spacing/Offsets

To Whom It May Concern:

Please find attached the committee's decision for the above referenced request. This design exception has been approved as modified. Staff recommends approval of Alternate A. You may use this decision to proceed through the development review process for this exception.

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

Xc: Rick Dorris, Development Engineer (256-4034)
DPC Development Company
File

DESIGN EXCEPTION # 28-06

To: Mark Relph, Director of Public Works & Utilities
Sheryl Trent, Acting Director of Community Development
Jim Bright, Acting Fire Chief

From: Tim Moore, Assistant Public Works & Utilities Director

Copy to: Rick Dorris

Date: August 22, 2006

RE: Orchard Mesa Retail Center (B ½ Road) – Access Spacing/Offsets

DESCRIPTION OF THE SITUATION

The applicant desires to develop a vacant property on Orchard Mesa shown on the attached map and located on B ½ Road slightly east of the intersection with 27 ½ Road. The use of the property will likely be retail in nature and the property is bordered on two sides by existing roadways and triangular shaped.

Site Description:

The TEDS Manual requires a 300 foot offset between accesses on the opposite side of the street and 300 foot spacing between driveways on arterial streets. B ½ Road is classified as a minor arterial street. The property presents site layout challenges due to the configuration of perimeter roadways, the location of Lauralee Ave. and 27 ½ Road.

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?**
Yes. The applicant explored aligning the east access point on B ½ Road with Lauralee Ave.
- 3. Has the proposed design been used in other areas?**

Yes, access spacing on local, commercial and arterial streets are probably the most commonly approved TEDS exception.

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

Staff recommends approval of the Alternative #1 as presented and described as follows:
Align the east entrance to the Retail Center on B 1/2 Road with existing Lauralee Ave.
Grant a TEDS Exception for the Offset Distance from 27 1/2 Road to the western access point into the Retail Center of approximately 165.26.

Recommended by: _____

Approved as Requested: _____

Approved as Modified: - PER STAFF RECOMMENDATION

Denied _____

Dated: 8/23/06

Light

DE# 28-06 O.M. Retail Center access spacing

Orchard Mesa Retail Center

