

# Memorandum

TO:

**Tim Moore** 

FROM:

Rick Dorris Kui

DATE:

May 11, 2005

**SUBJECT: Redlands Loco Car Wash TEDS Exception Request** 

The TEDS manual requires 500' of sight distance for 40 mph which is the posted speed for this stretch of Broadway. Rob states in his request that the sight distance is 400'. Based on Rob's plot, which he surveyed, it is more approximately 250' when the proper eye height and object height are used. Rob and I visited the site about 4:45 one day to determine what the actual vehicle speed is. Ironically, it was almost exactly 40 mph.

Rob uses the ITE trip generation codes correctly in his analysis and the car wash will apparently add a very small percentage of traffic. However, the ITE number seems artificially high for the convenience store and artificially low for the car wash. If my observation is correct, the percentage of car wash traffic would be significantly more (although still not very high) than the 0.50% shown in the request.

In my opinion the car wash won't add a large percentage of traffic to the site but the existing intersection with Broadway is already sub-standard and is uncomfortable to exit. I recommend denial of this request.



### **DESIGN EXCEPTION #DE 13-05**

To: Mark Relph, Director of Public Works & Utilities

Bob Blanchard, Director of Community Development

Rick Beaty, Fire Chief

From: Tim Moore, Public Works Manager

Copy to: Rick Dorris, Development Engineer

Date: May 24, 2005

RE: Redlands Loco Car Wash - Sight Distance

#### DESCRIPTION OF THE SITUATION

Section 6.2.3 of TEDS requires 500' of sight distance for access points onto streets with speeds of 40 mph. The owners of the property at 2247 ½ Broadway currently operate a convenience store and gas station at this location and would like to construct and operate a 3-bay self service car wash on the site. The applicant has completed a survey of the site that indicates a sight distance of approximately 400' exists at their access point.

This property currently has access onto State Highway 340 with uses including a convenience store, gas pump canopy with 4 fueling positions, a pizza pick-up business and an ATM machine. A vehicle trip generation study for the addition of a car wash indicates that only a slight increase in new trips would be generated by a 3-bay car wash. CDOT is currently reviewing this information.

The Transportation Division researched our accident data base and found one crash at the driveway since 2000. The applicant did not contact Mesa County or State Patrol to review any data those agencies may have related to accidents.

#### **EXCEPTION CONSIDERATIONS**

1. Will the exception compromise safety?

The existing access point to S.H. 340 does not meet the cu

The existing access point to S.H. 340 does not meet the current TEDS requirements.

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

The applicant indicates that there are no other alternatives, other than a TEDS Exception feasible for this site due to topography and site conditions.

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

The applicant did not identify other locations with similar limitations. Staff is unaware of other areas with a similar situation.

4. Will the exception require CDOT or FHWA coordination?

The request may require a CDOT access permit.

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

This would be a one-time exception.

#### **Staff Recommendation**

Staff concurs with the applicants' analysis of the trip generation that indicates a small increase in trips would likely be generated by the addition of a self serve car wash at the location. However, staff does not believe the current standard in TEDS is excessive and would recommend denial of the request.

Recommended by:	
Approved as Requested:	
Approved as Modified:	
Denied	
Dated: 5/25/05	
De Beer	
7/14-51	

\DE#13-05 Redlands SH340 Sight Distance 5-25-05



APR 1 1 2005

COMMUNITY DEVELOPMEN

DEPT.

Je Petichina is

RE: Car Wash April 11, 2005

Grand Junction Community Development 250 North 5<sup>th</sup> Street Grand Junction, CO 81501

ATT: Rick Dorris

SUBJECT: TEDS Exception for Proposed Car Wash located

at 2247 1/2 Broadway

Dear Rick:

On behalf of our client, Rob Lipson, LOCO, we are requesting a TEDS exception for this Project.

Proposed Exception - We are requesting an exception from City Standards 6.2.3 - Sight Distance. Street intersections and private access to public streets shall be planned and located to provide as much sight distance as possible....

Our client has owned this property for many years and at one time received approval from the County to place the proposed 3-bay Self-service Car Wash on this site. It was never built and the property was then annexed into the City. A few years back, the State Dept. of Transportation made improvments to the highway in front of this site by wideing the highway and adding a sepraate right turn in lane into this site (see attached highway plan). The owner now wishes to place this car wash on the site. However, it has been determined that the required 500' sight distance for the present 40 mph posted speed limit cannot be met. A survey was performed to determine just how much sight distance could be obtained from the present site access point (see attached highway section). From this survey, a vehicle will come into view at approximately 400' from the present site access point.

The site presently contains a Convience Market, a Gas Pump Canopy with 4 fueling Positions, a Domino's Pizza, and a ATM machine room. A Trip Generation Study was completed for CDOT to determine if an Access Permit would be required for this site (see attached study). This study indicated only a slight increase in traffic would be generated as a result of the proposed Car Wash. In addition, a traffic accident investigation was performed throught the Grand Junction Police Department which shows that no vehicle accidents have occurred at this site (see attached).

<u>Alternatives Considered</u> –There are no other alternatives, other than a TEDS exception, that is feasible for this site due to the existing topography and site conditions.



June 3, 2005

Design Specialists Architects and Planners 917 Main Street Grand Junction, CO 8l501

Re: Design Exception #DE13-05 - Redlands Loco Car Wash - Sight Distance

Dear Mr. Rowlands:

Please find attached the committee's decision for the above referenced request. This design exception has been approved, as requested. 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)

<u>Proposed Design</u> – The proposed design is to reduce the existing 54' wide access to the site to the maximum width of 40' per TEDS manual, and request a TEDS exception. Attached is a copy of a Site Plan of the proposed design for this property.

<u>Impacts of Change</u> – Only a slight increase in traffic (probably less than 0.5 %) will be realized as a result of the proposed Car Wash.

We would appreciate your consideration of our request in a timely manner, and are available to respond to any other data required in support of this exception.

Sincerely,

Robert D. Rowlands, Architect Design Specialists, P.C.

**Attachments** 



State of Colorado
Dept. of Transportation
Region 3, Traffic and Safety
222 South 6<sup>th</sup> Street, Room 100
Grand Junction, CO 81501

Attn: Mr. Dan Roussin

Permitting Unit Manager

Subject: Trip Generation Study for a Proposed Self-Service Car Wash Located at: 2247 ½ Broadway (Highway 340)

Dear Dan.

Per our telephone conversation of February 8, 2005, I have performed a vehicle trip generation study for the above subject property. The property presently contains a Convenience Market with Gasoline Pumps, a Domino's Pizza pick-up and delivery store, and a room which houses an ATM Machine. The owner of this Site proposes to add a 3-Bay, Self-Service Car Wash (see attached Exhibit 'A' for an Arial photo of the Site).

No trip generation data was available from the Institute of Transportation Engineers for a pizza pick-up and delivery store or a stand alone ATM. Therefore, trip generation for this study are based on a convenience market with gasoline pumps only. The proposed car wash would provide a 0.8% increase in vehicle trips to the Convenience Market with Gas Pumps. This percentage would be lower were trip generation data (which is not available) included the pizza delivery and pick-up, and ATM Machine. (See attached table 1, Exhibit 'B' for a summary of the study).

I am requesting that CDOT approve the placement of this car wash, and not require an access permit on the subject property as the CDOT 20% Rule applies. Please contact me if I can offer any further assistance.

Sincerely,

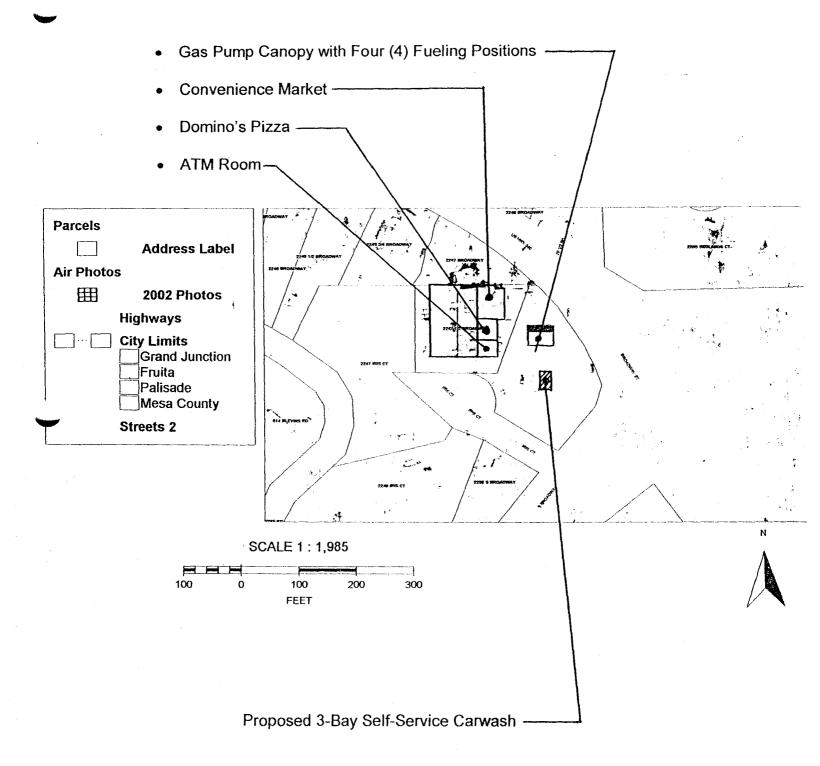
Robert D. Rowlands, Architect Design Specialists, P.C.

Attachments: Exhibits 'A', and 'B' cc: Rob Lipson: Lipson Oil Company

# EXHIBIT 'A'

Areial Photo of Site showing Car Wash Location

# City of Grand Junction GIS City Map ©



# EXHIBIT 'B'

- Table 1, Vehicle Trip Generation
- Cut Sheets for Trip Generation, Institute of Transportation Engineers

#### TABLE 1 - AVERAGE VEHICLE TRIPS

#### Convenience Market with Gasoline Pumps (4 fueling positions):

Average Vehicle Trips = 542.6 per fueling position Distribution = 50 % entering, 50 % existing

542.6 x 4 = 2170.4 = 1085.2 entering = 1085.2 exiting

of which 542.6 are right-turns in and 542.6 are left-turns in.

#### Self Service Car Wash (3 Wash Stalls):

Average Vehicle Trips = 5.79 per wash stall Distribution = 50% entering, 50 % exiting

Average Vehicle Trips =  $5.79 \times 3 = 17.37$ 

17.37/ 2 = 8.7 Entering 8.7 Exiting of which 4.34 are right-turns in, and 4.34 are left-turns in

CDOT 20% Rule =  $2170.4 \times 20 \% = 434.08$ . Therefore, Car Wash generation of 17.37 Vehicle Trips or a 0.8% increase falls well within the CDOT 20% Rule.

# **Convenience Market with Gasoline Pumps**

(853)

Average Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday

Number of Studies: 10

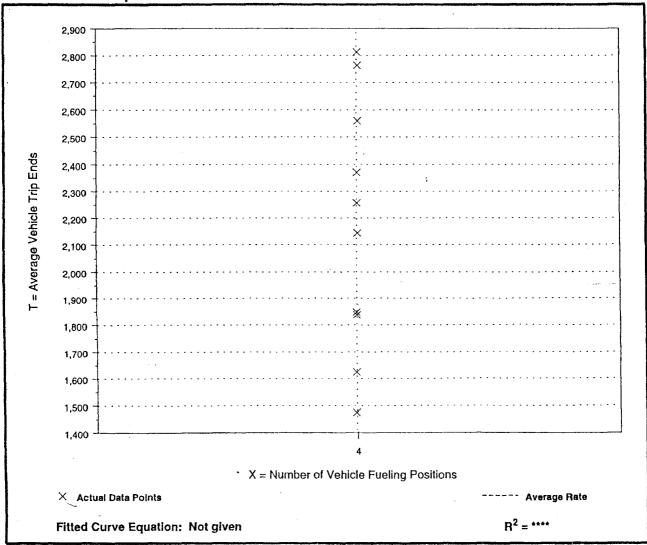
Average Vehicle Fueling Positions:

Directional Distribution: 50% entering, 50% exiting

# **Trip Generation per Vehicle Fueling Position**

Average Rate	Range of Rates	Standard Deviation
542.60	370.25 - 701.00	113.52





# Self-Service Car Wash

(847)

Average Vehicle Trip Ends vs: Wash Stalls

On a: Weekday,

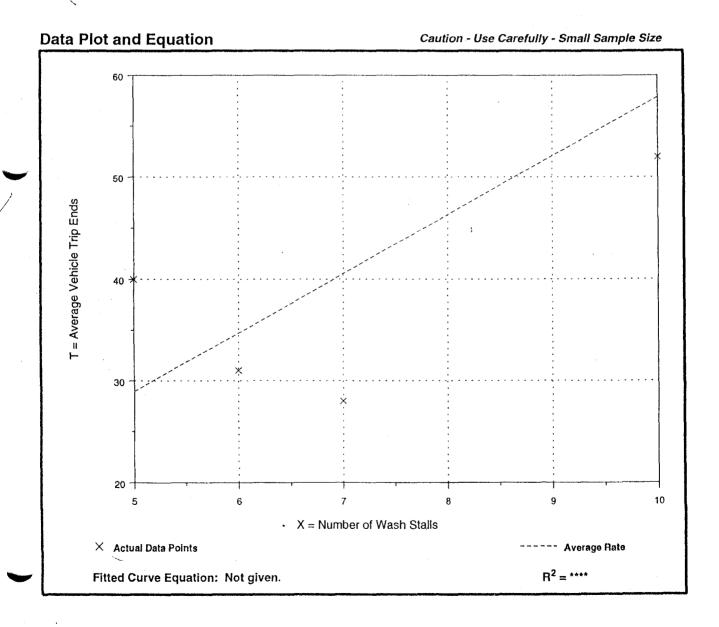
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Number of Studies: 5
Average Num. of Wash Stalls: 7

Directional Distribution: 52% entering, 48% exiting

# **Trip Generation per Wash Stall**

Average Rate	Range of Rates	Standard Deviation
5.79	4.00 - 8.00	2.73





POLICE

March 30, 2005

RE: 2247 1/2 BROADWAY

TO WHOM IT MAY CONCERN:

The above listed address has no record of any traffic accidents with this agency.

Sincerely, GRAND JUNGTION POLICE DEPT

Records Technician