

CITY OF NORTH LAS VEGAS
RESIDENTIAL TRAFFIC CALMING POLICY

INTRODUCTION

For the past several years, the City of North Las Vegas has been named “one of the fastest growing cities in the United States.” This rapid population growth has generated a significant increase in vehicular traffic on area roadways, which resulted in motorists seeking alternative routes to avoid traffic congestion and lengthy delays. Some of these alternative routes include local residential streets, which result in increased traffic-related problems within the affected neighborhoods. Additionally, motorists frequently travel through residential areas at speeds in excess of the posted speed limits. Residents and homeowner associations regularly report their concerns about dangerous traffic conditions to the City. In response, the City Council charged the Fire, Legal, Planning, Police, Public Works, and Utilities departments (hereafter referred to as City staff), and the Traffic and Parking Advisory Committee (TPAC) with developing the Residential Traffic Calming Policy.

Successful traffic calming programs include the planning process, overall community participation through the TPAC, and the local authority support. Developing a policy early on that addresses neighborhood traffic safety and livability concerns on an area-wide basis encourages citizens to become actively involved in the improvement process. In this way, City staff, the residents and the governing body or their representatives can work together to create safer and more livable neighborhoods throughout the City of North Las Vegas.

SECTION 1. OBJECTIVES

The objectives of the Residential Traffic Calming Policy are to improve the residents' safety and quality of life by:

1. Reducing the average speed of traffic on local neighborhood streets,
2. Minimizing the total amount of non-local vehicular traffic on local neighborhood streets,
3. Improving pedestrian and bicyclist safety, and
4. Encouraging citizen involvement in neighborhood traffic management activities.

SECTION 2. TRAFFIC CALMING DEFINED

Traffic calming is the process of minimizing the negative impact associated with neighborhood traffic on residents, pedestrians, and bicyclists. Traffic calming devices can reduce the travel speeds of motorists, and allow the roadway to be shared safely with pedestrians and bicyclists. Traffic calming is sometimes referred to as reverse traffic engineering because, in traffic engineering, the approach is to increase the Level of Service (LOS) of the roadway by adding capacity and reducing the lengths of delay time. In traffic calming, the general approach is to reduce speeds. Traffic calming techniques can be divided into passive and active measures. **Passive traffic calming measures** are those that do not affect road geometry and increase the awareness of the problem. Whereas, **active traffic calming measures** primarily involve geometric changes to the existing roadway.

SECTION 3. POLICIES

The policies governing the intent and application of this document are:

1. This document is intended to be applied to existing local streets serving predominantly single-family residential neighborhoods. Through traffic, i.e., traffic that has no immediate origin or destination in the neighborhood being evaluated, should be routed to the maximum extent possible to the major roadways. The amount of rerouted traffic, as a result of the traffic calming measure, should be defined on a project-by-project basis through the before and after studies. Minor collector streets that run through residential areas may also be considered for limited traffic calming techniques on a case-by-case basis. **Appendix A** provides the typical street cross-section where appropriate traffic calming measures can be applied.

2. Emergency vehicle access within and through neighborhoods will be carefully considered in the evaluation of traffic management and must be preserved. It is recognized that certain traffic management techniques will result in increased emergency response times to certain streets and neighborhoods, and these impacts must be understood, considered and evaluated in developing the traffic calming program. The Fire Department, Police Department and other emergency responders will be actively involved in the design of the traffic calming program and may oppose the use of said traffic management techniques.

3. City staff shall employ a variety of traffic calming strategies and techniques to achieve the Residential Traffic Calming Policy objectives. Such traffic calming strategies and techniques shall be planned and designed in conformance with sound engineering and planning practices. Each location will be studied on an individual basis to determine the most appropriate applications for that situation.

SECTION 4. PROCESSES AND PROCEDURES

The procedure outlined in this section will be used for receiving, responding to and managing requests for traffic claiming measures from property owners and residents. Nothing in this section or this handbook shall limit the City's ability to install traffic calming measures or utilize other methods the City deems appropriate in response to safety concerns within the public right-of-way.

Step 1: Petition for Traffic Study

When a property owner, resident or neighborhood representative believes traffic calming measures are needed in a particular area, they may fill out the Traffic Study Petition Form found in **Appendix B** and submit it to the City Traffic Engineer. Substantial City resources are expended in the course of conducting a traffic study. Therefore, before the City will conduct a traffic study, a majority of the property owners of record in the area must sign the petition favoring the traffic study. The area of impact will be determined by the City's Traffic Engineer in consultation with the property owner or resident submitting the petition. Examples of typical areas of impact are shown in the attached **Appendix C**. Once the City Traffic Engineer confirms that the petition is supported by a majority of the property owners of record in the area of impact, a traffic study will be conducted as outlined in Step 2.

Step 2: Analysis of Traffic Problem

The Public Works Department will collect data for the area of impact related to (a) accident history, (b) traffic volumes and (c) traffic speeds. Points will be awarded for each based on the figures below. Only areas receiving a total of ten points or more will move on to the Plan Development process outlined in Step 4. However, areas receiving less than ten points may be eligible for passive traffic calming measures such as striping or any other appropriate signage. Public Works, Police and Fire will meet and agree upon what type of passive traffic calming

measures may be required and then implemented by the City's Traffic Engineer. Traffic volume and speed data will be collected during times in which the traffic is typical for the area. If an area fails to receive enough points to move to Step 4, the area is not eligible for a traffic study for one year from the date of the initial study.

A. Accident History. Accident history data will be collected for the street segments within the area of impact and adjoining intersections for a three year period. In the traffic study, staff will note both the average accident rate for the three year period as well as the historical trend (an average accident rate for both the street segments and adjacent intersections). The higher of the two average rates will be used in determining the points attributable to accident history as outlined in Figure A below.

Accident History	
Points Awarded	Annual Accident Rate (total accidents in past 3 years/ 3 years)
1	0.1 - 0.875
2	0.876 - 1.250
3	1.251 - 1.625
4	1.626 - 2.000
5	2.001 +

Figure A. Accident History Point System

B. Traffic Volume. Traffic volume data will be collected at mid-block for the area of impact or otherwise as directed by the City's Traffic Engineer. Traffic volumes of 1,501 to 2,000 vehicles per day will be awarded the most points. When volumes exceed 2,000 vehicles per day, traffic flow becomes impeded. Therefore, fewer points will be awarded for traffic volumes greater than 2,000 vehicles per day.

Traffic Volumes (Vehicles per Day – Data to be collected on Tuesday, Wednesday or Thursday)	
Points Awarded	Traffic Volumes
1.0	1-1,000
3.0	1,001-1,500
5.0	1,501-2,000
3.0	2,001-2,500
1.0	2,501 +

Figure B. Traffic Volume Point System

C. Traffic Speeds. Average traffic speeds will be collected by placing traffic counters at locations within the area of impact. Points will be based on average speed over the 85th percentile speed for 25 mph streets as outlined in **Figure C**.

Traffic Speeds (85th Percentile Speed)	
Points Awarded	Traffic Speeds (mph) higher than the 25 mph baseline
1.0	1-3
2.0	4-6
3.0	7-9
4.0	10-12
5.0	13+

Figure C. Traffic Speeds Point System

Step 3: Selection Process

A total summary of 10 points or higher will be considered for plan development. If there are competing projects, a priority ranking based on the total number of points will be used to determine project order. If 10 points are not obtained, the street is then subject to only passive traffic calming measures. Public Works, Police and Fire will meet and agree upon what type of passive traffic calming measures may be required and then implemented by the City's Traffic Engineer. A request for active traffic calming can be reevaluated for a plan development after one (1) year from the date of the initial study.

Step 4: Plan Development

If the traffic study reveals that plan development is warranted as outlined in Step 3, a proposed traffic calming plan is developed by City staff based on staff's professional judgment and expertise. The proposed traffic calming plan must consider:

- Existing conditions, problems and needs;
- plan goals, objectives and evaluation criteria;
- passive and active traffic calming measures;
- impact of the proposed plan on emergency response time; and
- funding sources and alternatives.

After all departments have approved the proposed traffic calming plan, the plan is then placed on a TPAC agenda for the committee's review and consideration. Property owners within the area of impact will be notified by mail of date and time of TPAC's review of the plan. Property owners and residents are encouraged to attend the TPAC meeting so as to share their opinion of the proposed traffic calming plan with the committee. At the conclusion of the public hearing, TPAC shall vote to accept or reject the proposed traffic calming plan. If the plan is rejected, TPAC can either direct City staff to further refine the plan or to terminate the effort. If the plan is accepted, the process is to proceed to Step 5. If TPAC denies the application, the applicant may appeal the decision to the City Council. Appeals shall be made to the City Council in the following manner: Applicants shall state in a letter to the City Clerk the reasons for the appeal and the action sought from City Council. This appeal letter along with two copies of the traffic calming plan previously considered by the Traffic and Parking Advisory Committee shall be filed with the City Clerk. Upon receipt of the completed appeal package, the City Clerk shall set a date at which such appeal will be heard by the City Council.

Step 5: Pre-Implementation Approval Process

Once TPAC has approved a traffic calming plan, at least three-fourths of the property owners of record within the area of impact must consent to the plan by signing in favor of the plan on the Improvement Petition Form attached as **Appendix D**. The petition shall be provided to the City Traffic Engineer for review and verification. If the petition fails to achieve the level of support required above, property owners may work with City staff to evaluate potential revisions to the plan and return to Step 4 of the process.

Step 6: City Council Approval

If the petition criteria are met, City staff will place the item on the City Council meeting agenda for approval.

Step 7: Project Implementation

Once the plan is approved by City Council, projects will be implemented based on funding availability on a first-come, first-served basis. Projects consisting of passive measures, only, will be funded through the annual operating budget. Higher priority will be given to a particular project in case of hazardous conditions as determined by the City's Traffic Engineer including

consideration for contingency funding. Citizens/homeowners associations may elect to fund 100% of their project to by-pass the first-come, first-serve basis protocol. Staff will work within the City's annual Capital Improvement Plan process to fund Council approved projects.

Step 8: Monitoring and Evaluation

All installations will be monitored and evaluated by City staff for desired effectiveness. City staff will evaluate: resident and motorist reaction, field observation, traffic counts, speed studies and other data collection as needed. TPAC will be informed of said results at their regularly scheduled public meeting.

A project may be modified or removed for public health reasons, safety reasons or unacceptable negative impact on emergency response times. An engineering study will be required for this action. From the study, staff will present their findings to TPAC. TPAC will review the study and make a recommendation to City Council for approval of any major modifications or removal of the traffic calming devices.

SECTION 5. PASSIVE VERSUS ACTIVE TRAFFIC CALMING

PASSIVE TRAFFIC CALMING DEVICES

The primary use of passive traffic calming devices is to reduce traffic speeds while raising awareness of the traffic problems in residential areas. These methods are less costly than active devices as they do not affect the geometry of the roadway or require extensive construction.

Advantages of passive traffic calming devices:

- Pose no restrictions for bicycles or pedestrian traffic.
- Do not affect intersection capacity or operation.
- Cost less than active traffic calming devices.
- Raise awareness of drivers to speeding problems.
- Can pose no impacts to transit or emergency services.
- Can be done regardless of the grade of the road.

Disadvantages of passive traffic calming devices:

- Not all of the devices are enforceable by law.
- Not always effective over time.

Passive traffic calming devices will be applied to City streets based on industry practices.

ACTIVE TRAFFIC CALMING

The primary purposes of active traffic calming devices are to reduce vehicular speeds, improve bicyclist and pedestrian safety, and raise awareness of traffic problems in a residential area. These methods are more expensive than passive devices because they often affect the geometry of the roadway, which requires extensive construction and maintenance.

Advantages of active traffic calming devices:

- Effective at solving specific traffic issues, especially speeding.
- Raise awareness of drivers to speeding problems.

Disadvantages of active traffic calming devices:

- May pose restrictions for bicycle traffic.
- Negatively impacts transit and/or emergency services.
- Will have higher costs than passive traffic calming devices.

Active traffic calming devices will be applied to City streets based on industry practices.

SECTION 6. TRAFFIC CALMING FEATURES ON NEW STREETS AND SUBDIVISIONS

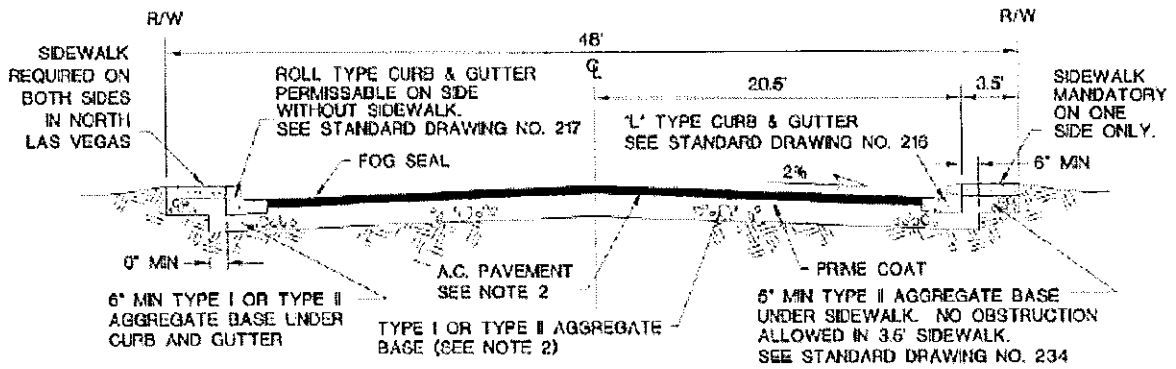
While it should be the goal of street and subdivision design to create streets that do not require special traffic calming techniques to achieve acceptable levels of residential quality of life, it is not always possible to do so. Also, with the emergence of "traditional" and "neo-traditional" community design initiatives, many traffic calming features are inherent in their design parameters.

It is recommended that during the design phase of new subdivisions, each street be examined to determine if potential traffic calming techniques may be introduced as an integral part of the design to reduce potential speeding problems, cut-through traffic volumes, or other safety concerns. The procedure for evaluating a specific street shall follow the same criteria as outlined in this program. The only difference for new streets as opposed to existing streets is that criteria such as speed, volume and cut-through traffic should be based on the projected amount for the new streets compared to existing streets that are similar in characteristics and use. These criteria

can be sufficiently projected by the City's Traffic Engineer based on the location, layout, and design of the proposed street.

APPENDIX A:

Street Cross-Section Eligible for Traffic Calming Measures



APPENDIX B: TRAFFIC PROBLEM PETITION FORM

City of North Las Vegas
Residential Petition Form

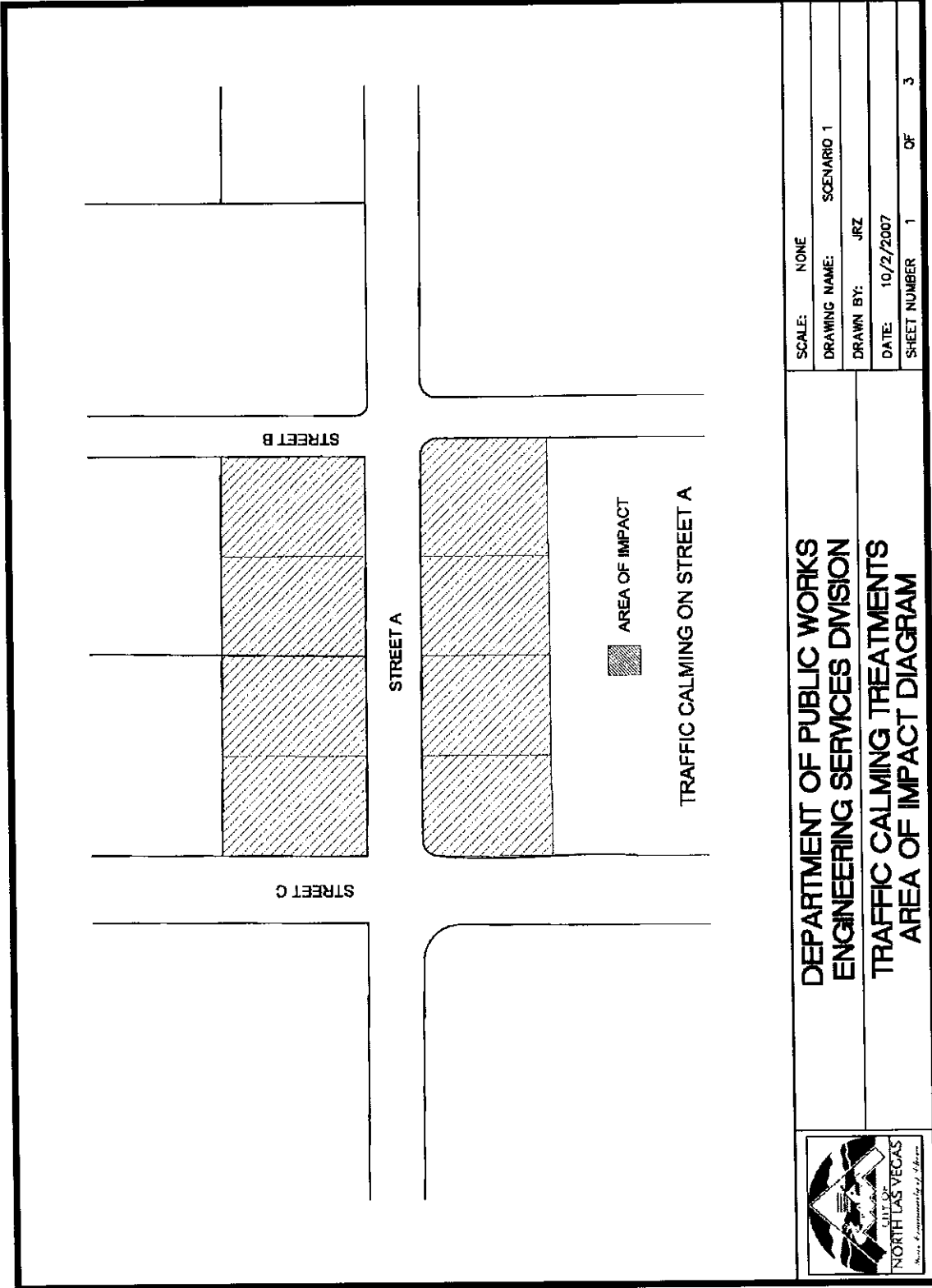
To residents of the _____ neighborhood:
Residents of your neighborhood have requested the evaluation of the traffic problem(s) _____ street(s), the problems being identified on _____ and the possibility of a trial Neighborhood Traffic Management Project to be determined after the evaluation.

Please indicate your opinion of problem described. One signature per household or business. All addresses in the petition area must be listed.

Address	Name (please print)	In Agreement	Opposed	Signature	Date

Page ____ of ____

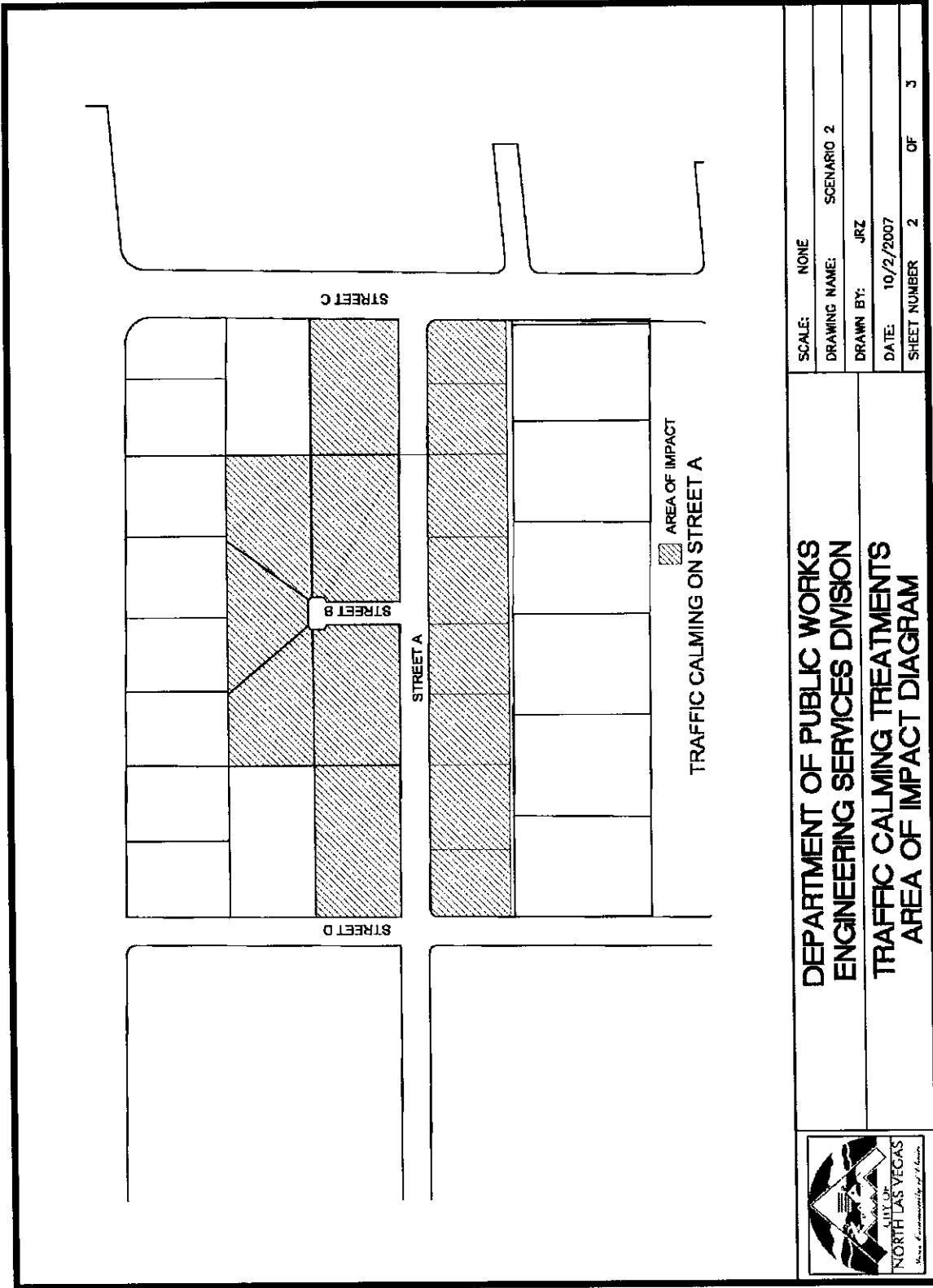
APPENDIX C: AREA OF IMPACT EXAMPLES



SCALE:	NONE
DRAWING NAME:	SCENARIO 1
DRAWN BY:	JRZ
DATE:	10/2/2007
SHEET NUMBER	1 OF 3

DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION
TRAFFIC CALMING TREATMENTS
AREA OF IMPACT DIAGRAM

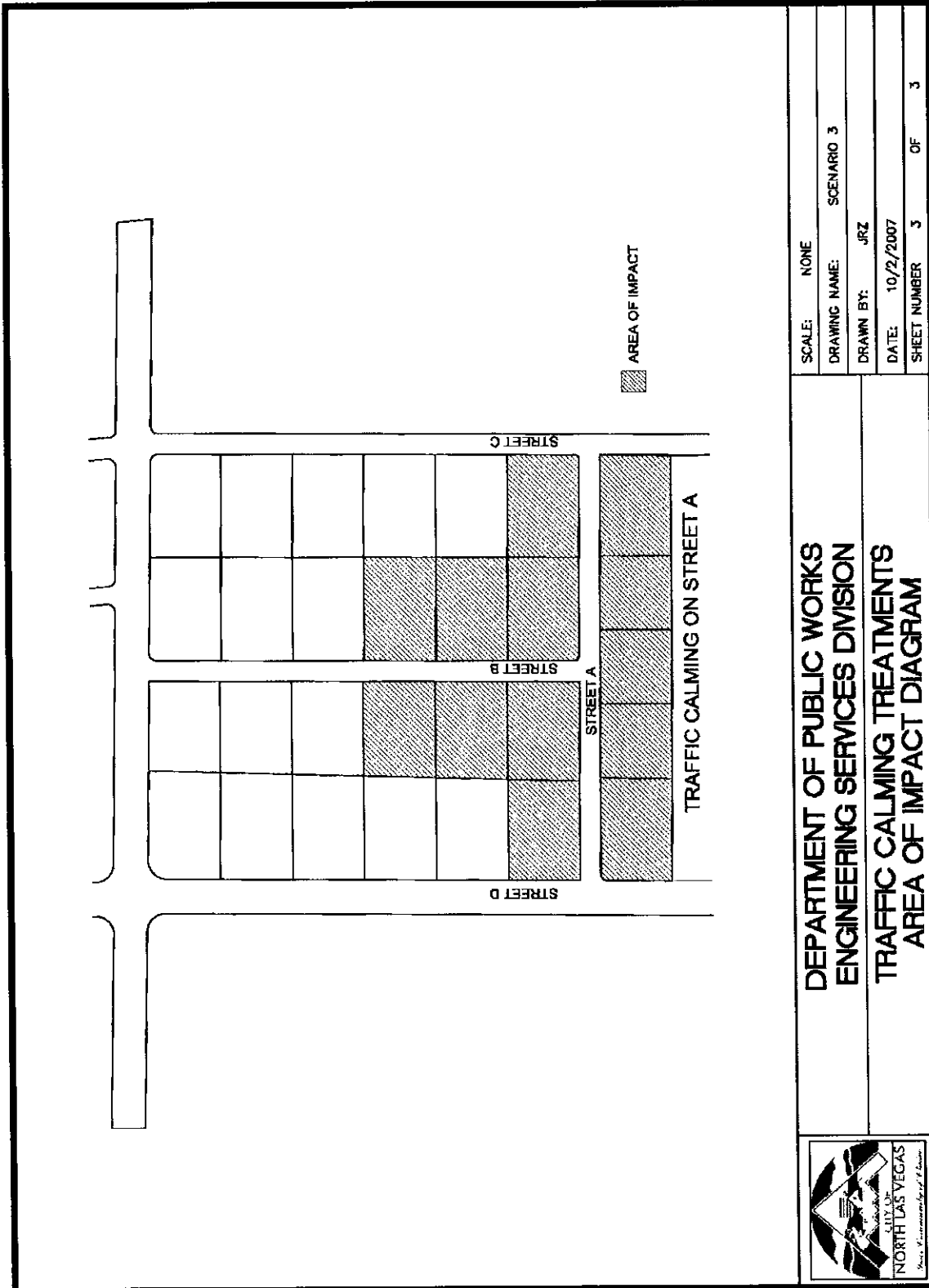




**DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION
TRAFFIC CALMING TREATMENTS
AREA OF IMPACT DIAGRAM**

SCALE:	NONE
DRAWING NAME:	SCENARIO 2
DRAWN BY:	JRZ
DATE:	10/2/2007
SHEET NUMBER	2
OF	3





SCALE: NONE
 DRAWING NAME: SCENARIO 3
 DRAWN BY: JRZ
 DATE: 10/2/2007
 SHEET NUMBER 3 OF 3

**DEPARTMENT OF PUBLIC WORKS
 ENGINEERING SERVICES DIVISION
 TRAFFIC CALMING TREATMENTS
 AREA OF IMPACT DIAGRAM**



APPENDIX D: PETITION FORM FOR IMPROVEMENT PLAN

City of North Las Vegas
 Neighborhood Traffic Management Project Petition Form

To residents of the _____ neighborhood:

Residents of your neighborhood have requested the evaluation of the traffic problem(s) _____ street(s), the problems being identified as _____ and the trial implementation of a Neighborhood Traffic Management Project as described in the attachment.

Please indicate your opinion of the project as described. One signature per household or business. All addresses in the petition area must be listed.

Address	Name (please print)	In Favor	Opposed	Signature	Date

Page ____ of ____

Traffic Calming Process

