



July 19, 2018

Kelly Mullin, AICP
Washoe County Building and Planning Division
1001 East Ninth Street
Reno, Nevada 89512

Re: The Estates at Calle de la Plata

Dear Kelly,

As we discussed in our telephone conversation, this letter outlines some additional considerations in support of the Master Plan Amendment and Regulatory Zone Amendment requests being sought for the Estates at Calle de la Plata project. We would like these considerations to be contemplated by County staff/reviewing agencies in addition to those provided in the previously submitted materials.

Washoe County recently approved two new residential subdivisions directly north of the project site on Calle de la Plata. These projects are moving forward through the final map process and are expected to commence construction this summer. The current Industrial designation assigned to the Estates at Calle de la Plata site has the potential to create truck traffic that conflicts with residential projects that directly adjoin the site. Furthermore, Industrial use will generate truck traffic at the Pyramid Highway/Calle de la Plata intersection. Although this intersection is set to be improved and signalized in the coming months, residents in the area have been very vocal in raising concerns over the existing truck traffic at the intersection. Retention of Industrial zoning on East Calle de la Plata would only exacerbate these concerns.

As noted in the previously submitted materials, Industrial use has the potential for far greater impacts to residential uses to the north, south, and east in terms of noise, lighting, truck traffic, and overall site design. The Industrial designation would allow for large warehouse buildings that are out of scale with surrounding homes and have the potential to block views, include idling trucks, 24-hour operation, etc. The Suburban Residential and MDS designations proposed are far more in character with the surrounding area(s).

The requested residential land use can help to address the current housing crisis faced in Washoe County by diversifying single family residential options in the area. Additionally, infrastructure exists to serve a future project and the densities proposed will serve to maximize infrastructure efficiency (without over burdening it), providing Washoe County with a better overall return on investment.

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The project applicant, Blackstone Development Group, has reached out to the adjoining property owner to determine if he would like to add his 10-acre parcel to this request. Through the owner's representative, it was indicated that the property was purchased as an investment and there "are no plans to develop an industrial use." It was also stated that there is no interest at this time to pursue any changes to the property over current conditions.

A letter from the owner of the subject parcel has also been submitted to Washoe County stating that there is no intention to ever develop the property for industrial use, citing numerous circumstances that make industrial development at the site unviable. We respectfully request that this letter be included with any public materials, staff reports, etc.

Rubicon did solicit input from all adjoining property owners. Of the 20+ letters sent, we have received 3 responses to date. Two of these were from owners within the Bridle Path subdivision to the south. One owner indicated they were unaware of the existing Industrial zoning and stated that they would much prefer to back up to residential use than industrial use. The second owner simply stated that they would prefer residential use over industrial buildings. The third response was from an owner that wished to reserve any comment for future meetings/hearings once they had ample time to review the pending applications.

A notification letter of the proposed amendments was also sent to the Bridle Path Homeowners Association (subdivision to the south). We received a letter from the HOA attorney stating that they were opposed to any trail connections between the Estates at Calle de la Plata and Bridle Path. While this, in our opinion, is unfortunate, it can be addressed with a future tentative map application. Rubicon offered to meet with HOA representatives but was informed by their attorney that any discussions would be premature at this point.

Future trails within the Estates at Calle de la Plata are planned for public use. Thus, residents of Bridle Path could connect through the site, connecting with the regional trail system that provides access to Sugarloaf Peak. This pedestrian and equestrian access could not occur if Industrial use was retained. This would not necessarily mean that public access from the Estates at Calle de la Plata to the Bridle Path trail system would be permitted.

A community meeting to discuss the MPA and RZA requests is scheduled for July 31, 2018 at 6:00 pm at Spanish Springs Elementary School. At that time additional community input will be gathered and additional comments and considerations can be provided, as necessary. As we discussed, Blackstone Development Group wishes to pursue a hearing before the Planning Commission in September. If significant issues are raised at the community meeting, the applicant will consult with Washoe County staff to determine if adjustments to the schedule are necessary.

Thank you for your ongoing assistance with the Estates at Calle de la Plata project. We look forward to working with you as the project progresses. In the meantime, please do not hesitate to contact me with any questions or concerns. I can be reached at (775) 425-4800 or mrailey@rubicondesigngroup.com.

Sincerely,



Michael Railey
Partner

cc: Blackstone Development Group

STN 375 CALLE GROUP, LLC
a Nevada limited liability company

May 15, 2018

VIA EMAIL: tloyd@washoecounty.us

Mr. Trevor Lloyd

Dear Mr. Lloyd:

STN 375 Calle Group, LLC is currently under contract to sell 39.121 acres of real property located at 375 Calle De La Plata, Sparks, Nevada 89441, APN 534-561-10 to Blackstone Development Group, Inc. I understand you are aware of the application Blackstone is making on behalf of STN 375 Calle Group to remove this property from the Village Green Commerce Center specific plan. The sale is contingent on the parcel being removed from the plan. As you may recall, I worked with you four years ago to accomplish the same type of removal from that plan for the property located at 365 Calle De La Plata, and that removal from the plan was successful, allowing the property to be sold.

As you know, there are currently two parcels that are encumbered by the Village Green Commerce Center specific plan. It includes the property owned by STN 375 Calle Group along with the property located at 0 Dykes Court, Sparks, Nevada 89441, APN 534-561-08 which is approximately 10 acres. Our LLC acquired the 39 acre parcel via foreclosure several years ago. The specific plan was placed on the property by the former owner on whom our group foreclosed. There was no consent from the first deed of trust holder on the property, at the time Lorrainer Weikel, who subsequently conveyed the foreclosed real property to STN 375 Calle Group, LLC, as to encumbering the property with the plan. As we reviewed the specific use plan, the detailed design/build standards in the document for an industrial project are, in our opinion, so specific and cumbersome that no project will ever be built on either parcel encumbered by the plan under those guidelines. As you are likely aware, the industrial development in the area of these parcels is all occurring on the other side of the Pyramid Highway, with the east side of the highway off of Calle De La Plata rapidly turning into residential use. On the corner of the Pyramid Highway and Calle De La Plata, I also manage five LLC's which own four three-acre parcels on the southeast corner and an additional 12 acres just south of those parcels. While commercial uses are the allowed uses there, those parcels are listed for sale and the only interest we are receiving on those parcels is relative to residential development, and I suspect at some point a developer will tie up those parcels and come to the county to adjust the zoning, which would be compatible with the other residential uses on the east side of the highway.

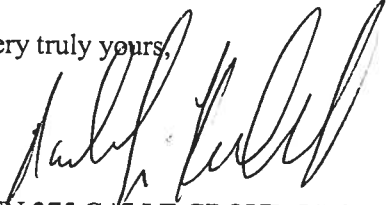
I can assert to you that STN 375 Calle Group, LLC has absolutely no relationship with the new owner of the Dykes Court parcel, the Narayan Living Trust, and we have no intention to ever build this industrial project under the specific use plan. We also believe the property is unsaleable with the plan encumbering what can be built on the property, because the western theme with very specific guidelines and materials is simply an unfordable build for a developer to make money. I understand there is resistance at the county level for removing our 39 acre parcel from the specific use plan unless the owner of the 10 acre parcel agrees to be removed from the plan as well. In our view, that allows the minority to control the majority for a project that will, quite honestly, never be built and effectively the county would be causing our ownership group and the owner of the 10 acre parcel to be forever an open space.

Mr. Trevor Lloyd
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On behalf of the owners of STN 375 Calle Group, LLC, we strongly urge Washoe County staff to support the withdrawal of our parcel from the Village Green Commerce Center. The Narayan Trust can choose to join or remain the plan; however, the likelihood of them building a 10 acre industrial parcel for which they have no reasonable access to their property is unlikely if not impossible. I know Blackstone is attempting to acquire that 10 acre parcel which would make the process far easier; however, at this point, that has not occurred and very well may not occur. The county allowed a 10 acre parcel to be removed and now, if our 39 acre parcel is not allowed to be removed, our property owners are not being afforded the same rights and consideration as the parcel owners next door were a few years ago.

Please let me know if you would like to discuss this more. We definitely want staff approval; however, without it, I am urging Blackstone to move forward with the application and we will vigorously testify relative to our property rights along with the fact that our original note holder never consented to this encumbrance being placed on the property, which effectively violated the rights of Mrs. Weikel at the time. Thank you for your considerations, and, if you have any questions, please call.

Very truly yours,



STN 375 CALLE GROUP, LLC
Randal S. Kuckenmeister, Manager

THE ESTATES AT CALLE DE LA PLATA

Master Plan Amendment

Regulatory Zone Amendment



Prepared by:



January 16, 2018

Job # 237-09

THE ESTATES AT CALLE DE LA PLATA

MASTER PLAN AMENDMENT AND REGULATORY ZONE AMENEMENT APPLICATION

Prepared for:

Blackstone Development Group

439 W. Plumb Lane

Reno, Nevada 89509

Prepared by:

Rubicon Design Group, LLC

1610 Montclair Avenue, Suite B

Reno, Nevada 89509

(775) 425-4800

January 16, 2018

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Washoe County Development Application
Owner Affidavits
Master Plan Amendment Application
Regulatory Zone Amendment Application
Property Tax Verification
Traffic Impact Study
Preliminary Title Report (Original Only)

THE ESTATES AT CALLE DE LA PLATA

Introduction

This application includes the following requests:

- A **Master Plan Amendment** to re-designate 39.12± acres of property from Industrial to Suburban Residential.
- A **Regulatory Zone Amendment** to rezone 39.12± acres from Industrial to Medium Density Suburban.

Project Location

The Estates at Calle de la Plata (APN 534-561-10) consists of 39.12± acres located at 375 Calle de la Plata in northern Spanish Springs. Specifically, the property is located on the south side of Calle de la Plata, east of Pyramid Highway. Figure 1 (below) depicts the project location.



Figure 1 – Vicinity Map

THE ESTATES AT CALLE DE LA PLATA

Existing Conditions

Currently, the project site is vacant. Surrounding land use includes vacant land and single-family residence to the west, the recently approved Sugarloaf Estates project to the north, and single family residential to the east and south.

The Estates at Calle de la Plata property contains generally flat terrain and is accessed from Calle de la Plata on the north side. Figures 2 (below) and 3 (following page) depict the existing onsite conditions.

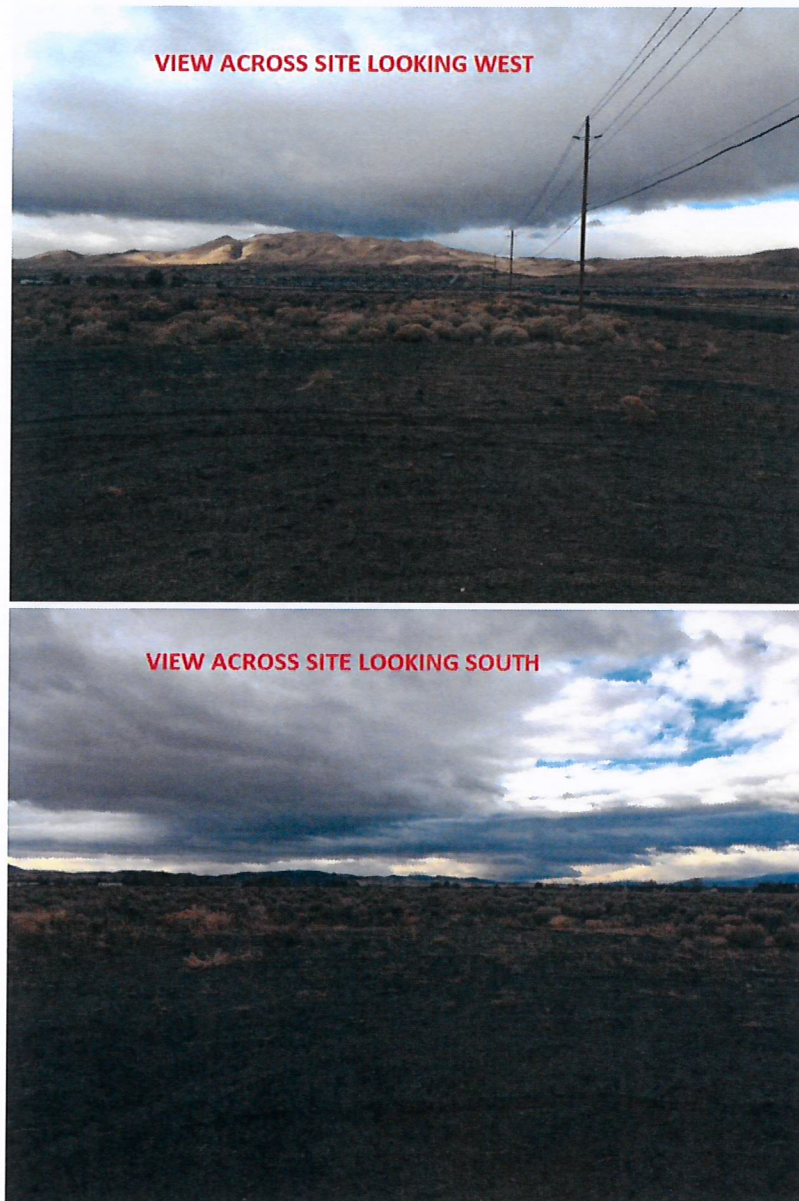


Figure 2 – Existing Conditions

THE ESTATES AT CALLE DE LA PLATA

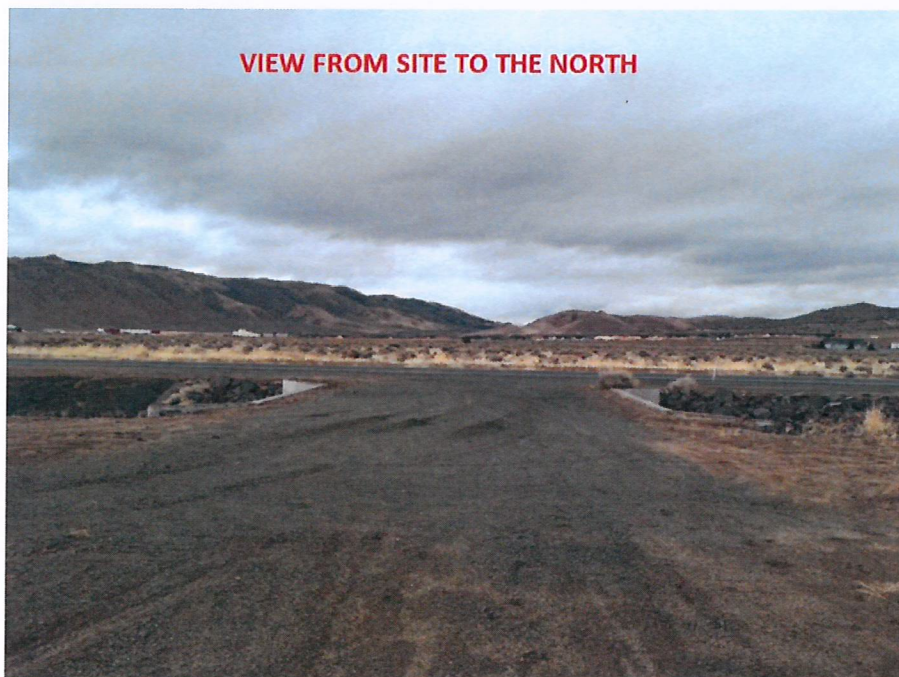
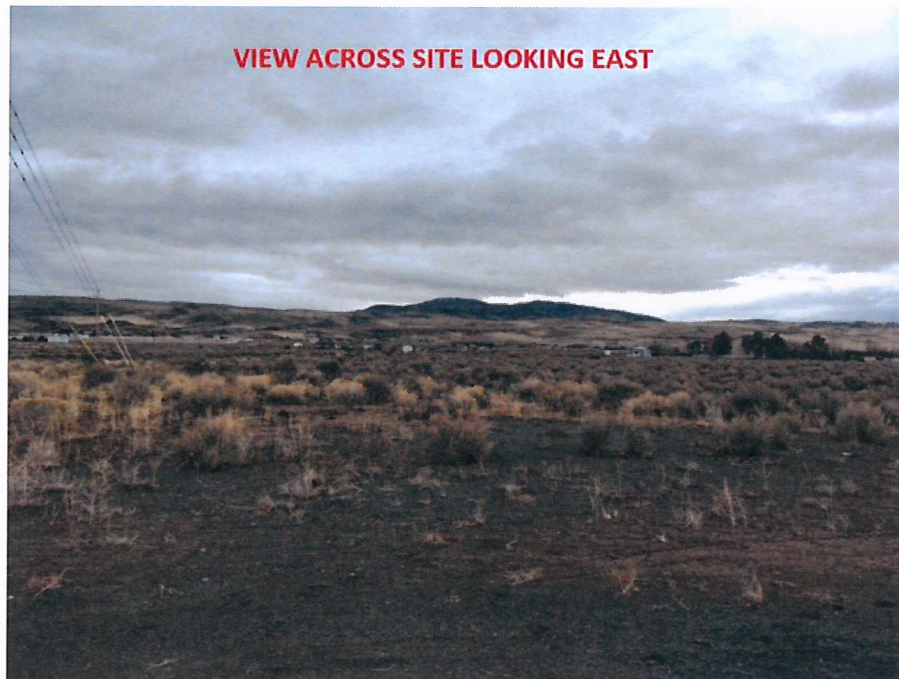


Figure 3 – Existing Conditions

THE ESTATES AT CALLE DE LA PLATA

The Estates at Calle de la Plata is located within the Spanish Springs Area Plan and is identified within the Suburban Character Management Area as defined in the Spanish Springs Character Management Plan. The Spanish Springs Area Plan states that the Suburban Character Management Area (SCMA) “will be the designated growth area in the Spanish Springs Valley.” Figure 4 (below) depicts the project site in context with the SCMA.

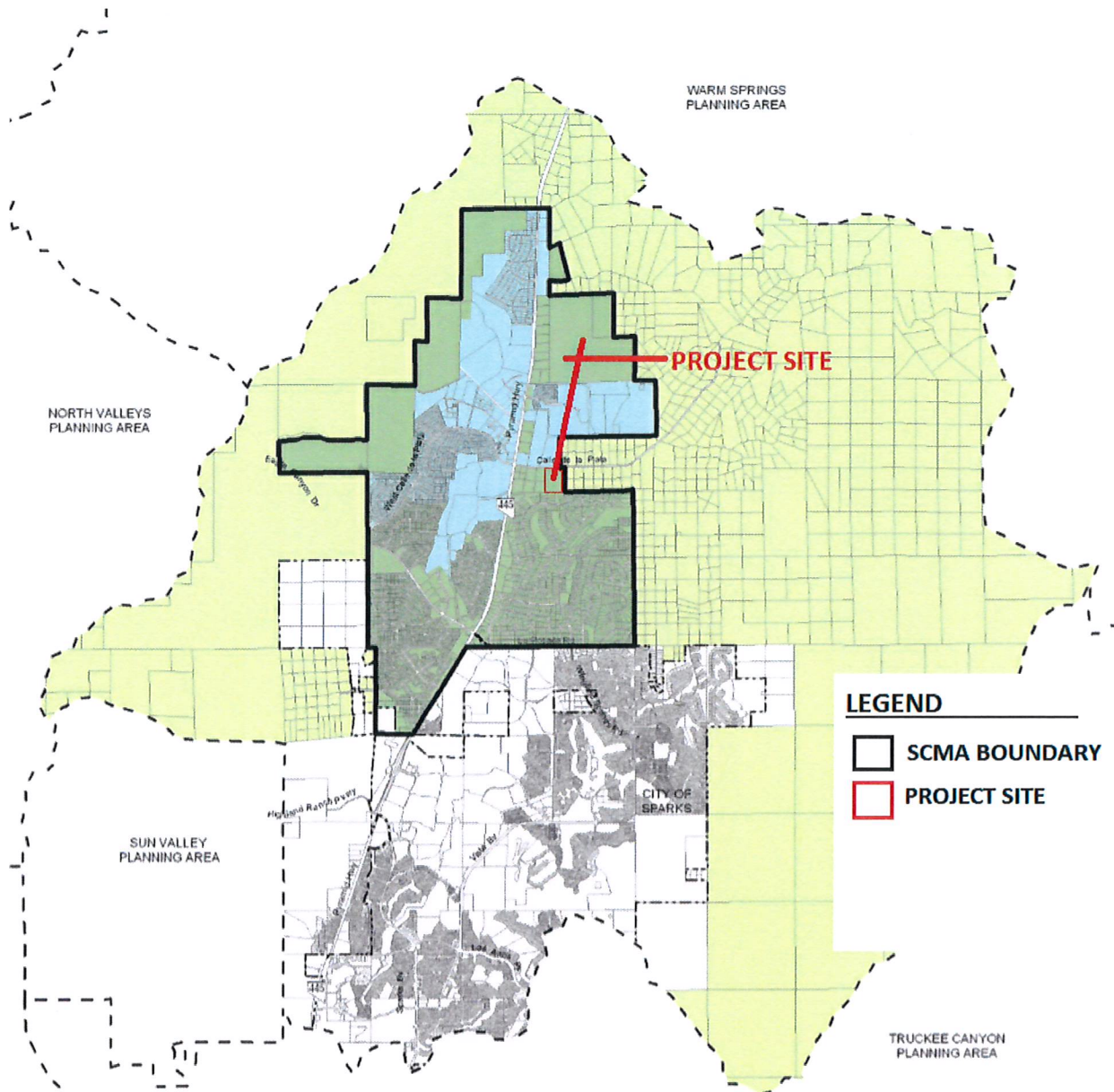


Figure 4 – Suburban Character Management Area

THE ESTATES AT CALLE DE LA PLATA

Request Summary

This application includes two land use requests in order to establish Medium Density Suburban (MDS) zoning at the project site. The site is designated as Industrial in the Spanish Springs Area Plan and includes Industrial zoning. The subject parcel is included in the Village Green Commerce Center Specific Plan. This application proposes to remove the project from the Specific Plan and apply conventional Washoe County Master Plan and zoning designations.

The first component of this application is a Master Plan Amendment (MPA) from the current Industrial designation within the Village Green Commerce Center Specific Plan. The MPA requests that the 39.12± acre parcel be removed from the Specific Plan boundary and redesignated as Suburban Residential. The second request is a Regulatory Zone Amendment (RZA) from Industrial designation to MDS, consistent with the proposed Suburban Residential Master Plan designation.

It is the intent of the project applicant to establish the necessary Master Plan and zoning designations to position the site for development of a common open space subdivision (described in subsequent sections of this report). It is important to note that this application is essentially the first step in establishing the proper zoning at the project site. It is planned to submit a tentative subdivision map (with common open space) at a future date.

Each request is summarized below:

- **Master Plan Amendment**

Currently, the project site is designated Industrial within the Village Green Commerce Center. As noted previously, it is proposed to change the Master Plan designation for the site to Suburban Residential. Given the fact that the property adjoins residential uses on all sides, single-family residential development is a much more appropriate use for the property than industrial.

Per the Washoe County Master Plan Land Use and Transportation Element, the intent of the Suburban Residential designation is *“to provide for a predominantly residential lifestyle with supporting mixed-use nonresidential and residential uses, including commercial, public and semi-public facilities; parks and open space. A further goal of this group is to protect the stability of existing unincorporated neighborhoods and to encourage compatible smart growth development, while allowing diversity in lifestyle that is manifested in a variety of lot sizes, density, levels of mixed-use and land use patterns.”*

In contrast, the Land Use and Transportation Element states that the intent of the Industrial Master Plan category is *“to provide for activities such as manufacturing, warehousing, mining and construction. The industrial designation is intended to create an environment in which industrial operations may be conducted with minimal impact on the natural environment and surrounding land uses.”*

THE ESTATES AT CALLE DE LA PLATA

The Suburban Residential designation and its associated intent is highly logical for the Estates at Calle de la Plata site and surrounding area. However, the Industrial designation is out of place and has the potential to accommodate uses that could result in negative impacts to surrounding properties and single-family residences. In fact, the Industrial designation is one of the most intense designations in terms of land use permitted in Washoe County. The County’s own land use compatibility matrix identifies that the Industrial designation has a “low compatibility” with the designations that currently surround the site. This is illustrated in Figure 5 (below) which is taken directly from the Washoe County Master Plan and clearly shows that Industrial land use has a “Low Compatibility” with all single-family land uses such as those that surround the project site.

	LDR	MDR	HDR	LDS/ LDS 2	MDS/ MDS 4	HDS	LDU	MDU	HDU	PR	PSP	GC	NC	TC	I	GR/ GRR	OS
LDR	H	H	M	M	M	L	L	L	H	M	L	L	L	L	L	H	H
MDR		H	H	M	M	M	L	L	H	M	L	L	L	L	L	M	H
HDR			H	H	M	M	M	L	H	M	L	L	L	L	L	M	H
LDS/ LDS 2				H	H	M	M	M	H	M	L	L	L	L	L	M	H
MDS/ MDS 4					H	H	M	M	H	M	L	L	L	L	L	M	H
HDS						H	H	M	H	M	L	M	M	L	M	M	H
LDU							H	H	H	H	M	M	L	L	M	M	H
MDU								H	H	H	M	M	L	M	L	M	H
HDU									H	H	M	M	M	M	L	M	H
PR										H	H	H	H	M	H	M	H
PSP											H	H	H	H	M	M	H
GC												H	H	M	L	M	H
NC													H	M	L	M	H
TC														H	M	L	H
I															L	M	H
GR/ GRR																L	M
OS																	L

H - High Compatibility: Little or no screening or buffering necessary.
M - Medium Compatibility: Some screening and buffering necessary.
L - Low Compatibility: Significant screening and buffering necessary.

Regulatory Zones

Residential

- LDR - Low Density Rural
- MDR - Medium Density Rural
- HDR - High Density Rural
- LDS/LDS 2 - Low Density Suburban
- MDS/MDS 4 - Medium Density Suburban
- HDS - High Density Suburban
- LDU - Low Density Urban
- MDU - Medium Density Urban
- HDU - High Density Urban

Non-Residential

- PR - Parks and Recreation
- PSP - Public and Semi-Public Facilities
- GC - General Commercial
- NC - Neighborhood Commercial/Office
- TC - Tourist Commercial
- I - Industrial
- GR - General Rural
- GRR - General Rural Residential
- OS - Open Space

Note: Plans for the amount of screening and buffering shall be made to the satisfaction of Washoe County Department of Community Development staff before completion of project review.

Source: Washoe County Department of Community Development

Figure 5 – Washoe County Land Use Compatibility Matrix

THE ESTATES AT CALLE DE LA PLATA

As noted previously, and described in the following section of this report, a zone change to Medium Density Suburban (MDS) is also included with this request. As the table included in Figure 5 illustrates, the MDS zoning provides for “High Compatibility” with all surrounding residential designations.

By redesignating the entire site as Suburban Residential (SR), a high land use compatibility with surrounding properties will be achieved. Additionally, the SR designation is a logical extension of existing SR land use to the north and south of the project site.

As previously depicted in Figure 4, the site is located within the Suburban Character Management Area (SCMA). The SCMA defines the anticipated growth area within the Spanish Springs Area Plan. Given recent changes to the north (also within the SCMA), the requested SR Master Plan is logical and complements properties to the north and south. The subject site lies at the eastern edge of the SCMA. As such, this property is one of the few remaining parcels available for development and is consistent with the character management statement included in the Area Plan. Properties to the east are outside of the SCMA. Thus, redesignation of the Estates at Calle de la Plata site does not set a precedent for additional changes within the area as they would not be consistent with the SCMA.

The Washoe County Master Plan establishes guidelines to gauge whether a land use is appropriate for any given parcel. In the case of the Estates at Calle de la Plata, the site meets or exceeds all criteria outlined for the SR designation on pages 48 and 49 of the Land Use and Transportation Element. This includes:

- A. **Housing** – The Estates at Calle de la Plata is planned for single family development at approximately 3 units per acre (additional details included in subsequent sections of this report). This is in direct compliance with the Master Plan standard for SR which states that *“detached and attached homes are the predominant housing type.”*
- B. **Conservation** – The Master Plan calls for the preservation of natural terrain and scenic qualities. As stated previously, the subject property is flat and will not result in grading of steep slopes or any type of development that results in visual scarring, etc. Additionally, by incorporating a common open space development plan (future application), open space is preserved that will include equestrian trail linkages as well as connections to the regional trail network.
- C. **Land Use and Transportation** – The Land Use and Transportation Element lists Medium Density Suburban (MDS) as an allowable zoning designation within the SR category. This application also includes a Regulatory Zone Amendment to rezone the site from Industrial to MDS, consistent with the Washoe County Master Plan criteria.
- D. **Public Services and Facilities** – The Estates at Calle de la Plata meets or exceeds the standards for fire, EMS, and police response times, will be developed with municipal water and sewer, and is consistent with distances from public schools, as outlined in the Master Plan.

In comparison, the project site does not meet the criteria for the Industrial designation outlined in the Land Use and Transportation Element, including standards related to access, traffic management, and public transit.

THE ESTATES AT CALLE DE LA PLATA

Figure 6 (below) depicts the existing Master Plan designations for the project site, while Figure 7 (following page) depicts the proposed land use changes.

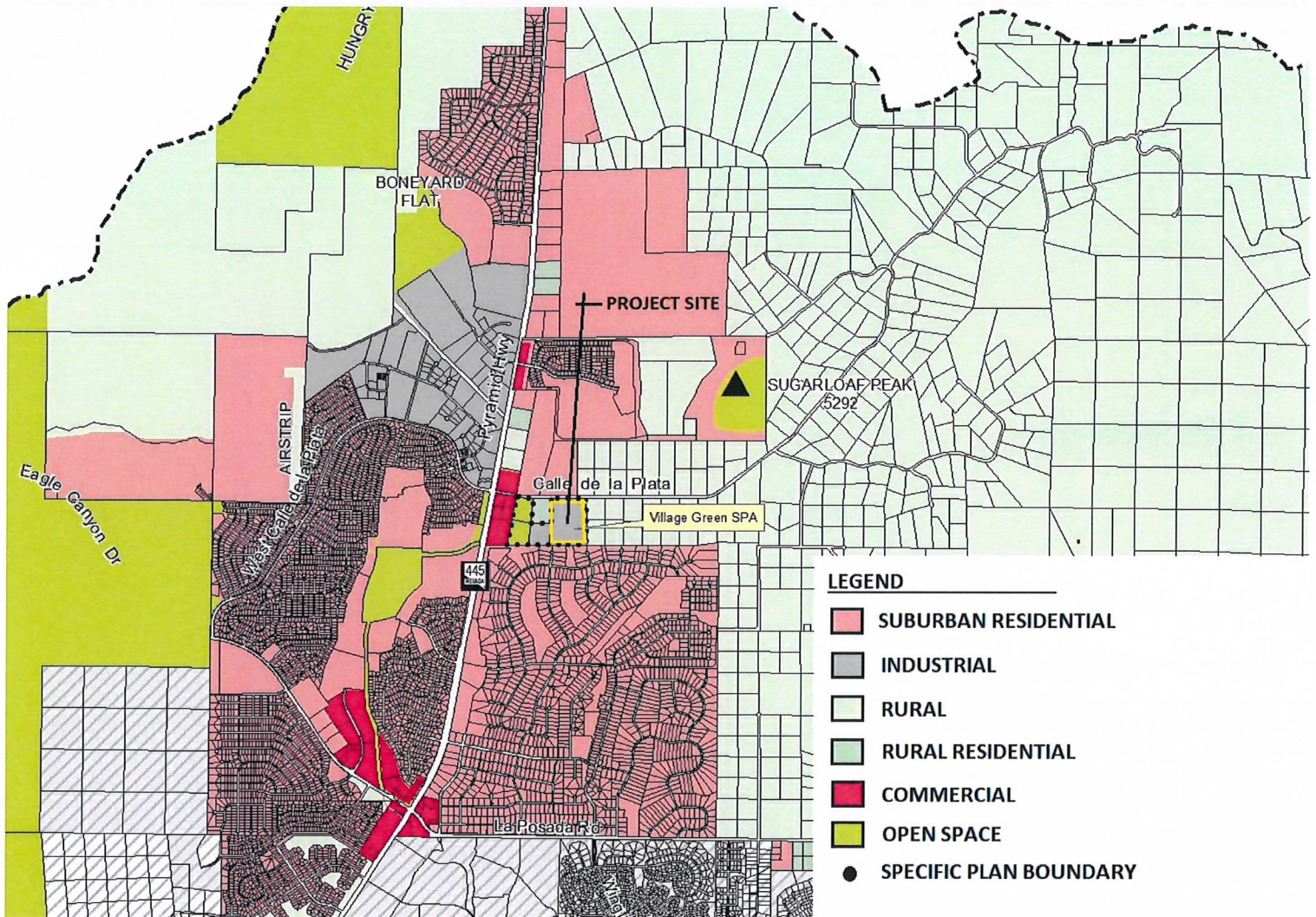


Figure 6 – Existing Master Plan Designations

THE ESTATES AT CALLE DE LA PLATA

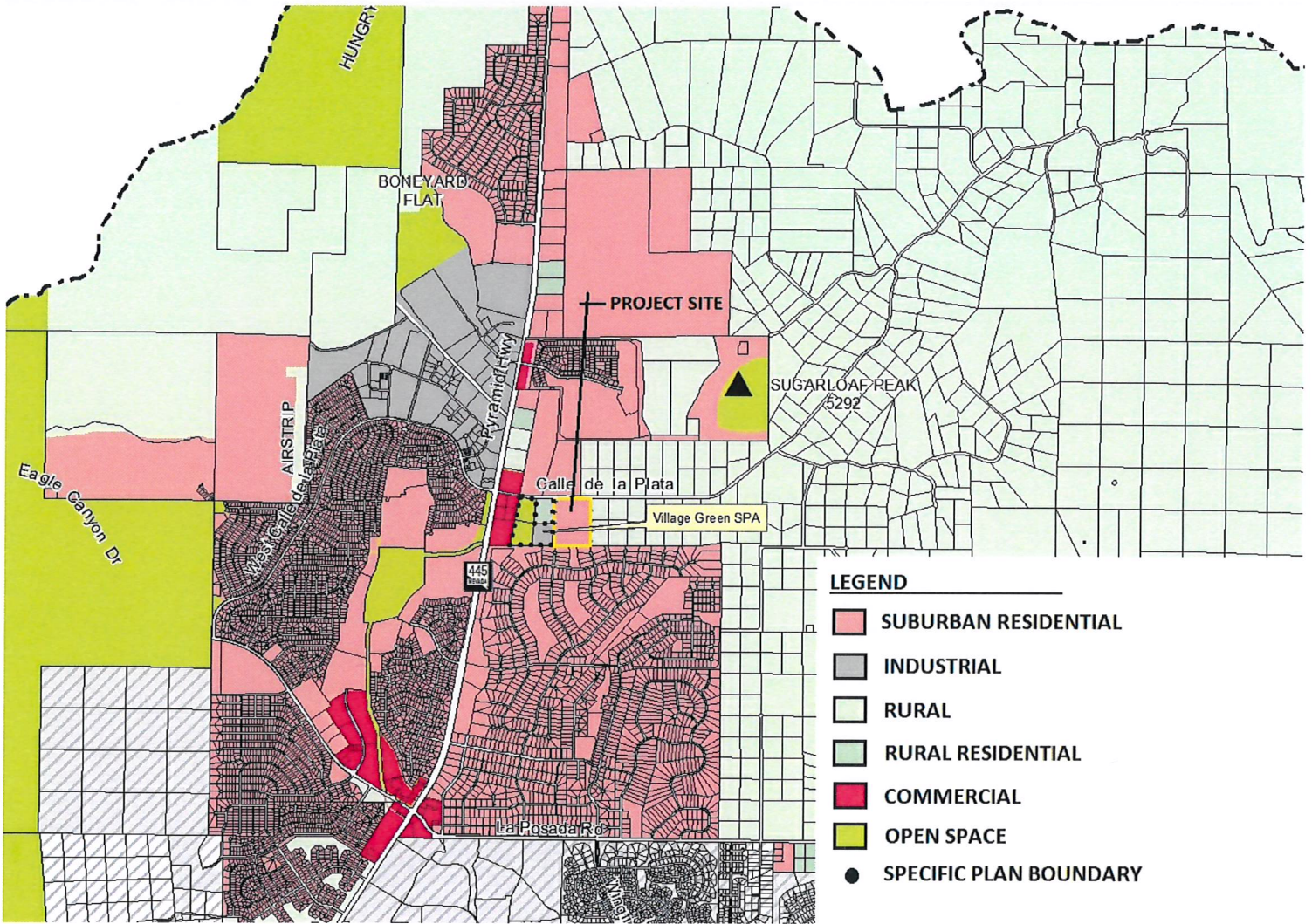


Figure 7 – Proposed Master Plan Designations

THE ESTATES AT CALLE DE LA PLATA

There are a variety of considerations when evaluating the requested Master Plan Amendment. As previously indicated, the criteria included within the Washoe County Master Plan for the placement of the Industrial designation is not fully met under current conditions. Additionally, it is very important to consider the impacts that could result from the current Industrial land use. Locating an “island of industrial use” at the project site does not represent comprehensive planning. Instead, it has the potential to develop highly intense operations that would not be compatible with adjoining single family uses in terms of intensity, noise, hours of operation, allowable building heights, traffic (especially truck traffic), etc.

The Planning Policy Analysis section of this report provides further analysis of applicable Washoe County Master Plan Goals and Policies and demonstrates how the proposed amendment serves to implement them along with goals and policies of the Spanish Springs Area Plan and Truckee Meadows Regional Plan.

- **Regulatory Zone Amendment**

The second component of this request is a Regulatory Zone Amendment (RZA). Currently, the project site is zoned Industrial. Consistent with the requested SR Master Plan designation, it is requested that the zoning for the site be amended to Medium Density Suburban (MDS). The MDS designation will allow for single family residential development at a maximum density of 3 units per acre.

Existing zoning patterns in the area include a mix of residential densities. An exception to this is the Village Green Commerce Center Specific Plan which generally seems out of place given the residential character of the area. Industrial and business park uses east of Pyramid Highway are not logical given existing roadways and infrastructure, not to the potential impacts to existing and planned single family uses to the north, south, and east. The zoning designations included within the Specific Plan can easily be construed as a “spot zoning” condition and do not properly relate to the built or planned environment. Non-residential uses at this location would not have visibility from an arterial roadway (i.e. Pyramid Highway) and have the very real potential to generate significant truck traffic, noise, 24-hour operation, etc. all of which is incompatible with residential uses. By way of comparison, industrial uses to the west of Pyramid Highway (Spanish Springs Business Park) were comprehensively planned and infrastructure such as a divided arterial roadway, high capacity water and sewer services, etc. is in place to accommodate industrial users, trucks/additional traffic, etc. There is simply no realistic opportunity for this along Calle de la Plata east of Pyramid Highway.

The parcel to the west is zoned Medium Density Rural. Based on information provided by Washoe County, this parcel was rezoned to reflect the existing onsite single-family dwelling. The property was zoned Industrial within the Specific Plan but the party that acquired the parcel did not wish to pursue an industrial use. Thus, in order to “legalize” the residential use, the site was rezoned to MDR. The MDR zoning was strictly based on the existing parcel size. Regardless, this change provides further support for the change requested with this application.

Figure 8 (following page) depicts the existing site zoning while Figure 9 (page 11) depicts the proposed zoning for the Estates at Calle de la Plata.

THE ESTATES AT CALLE DE LA PLATA

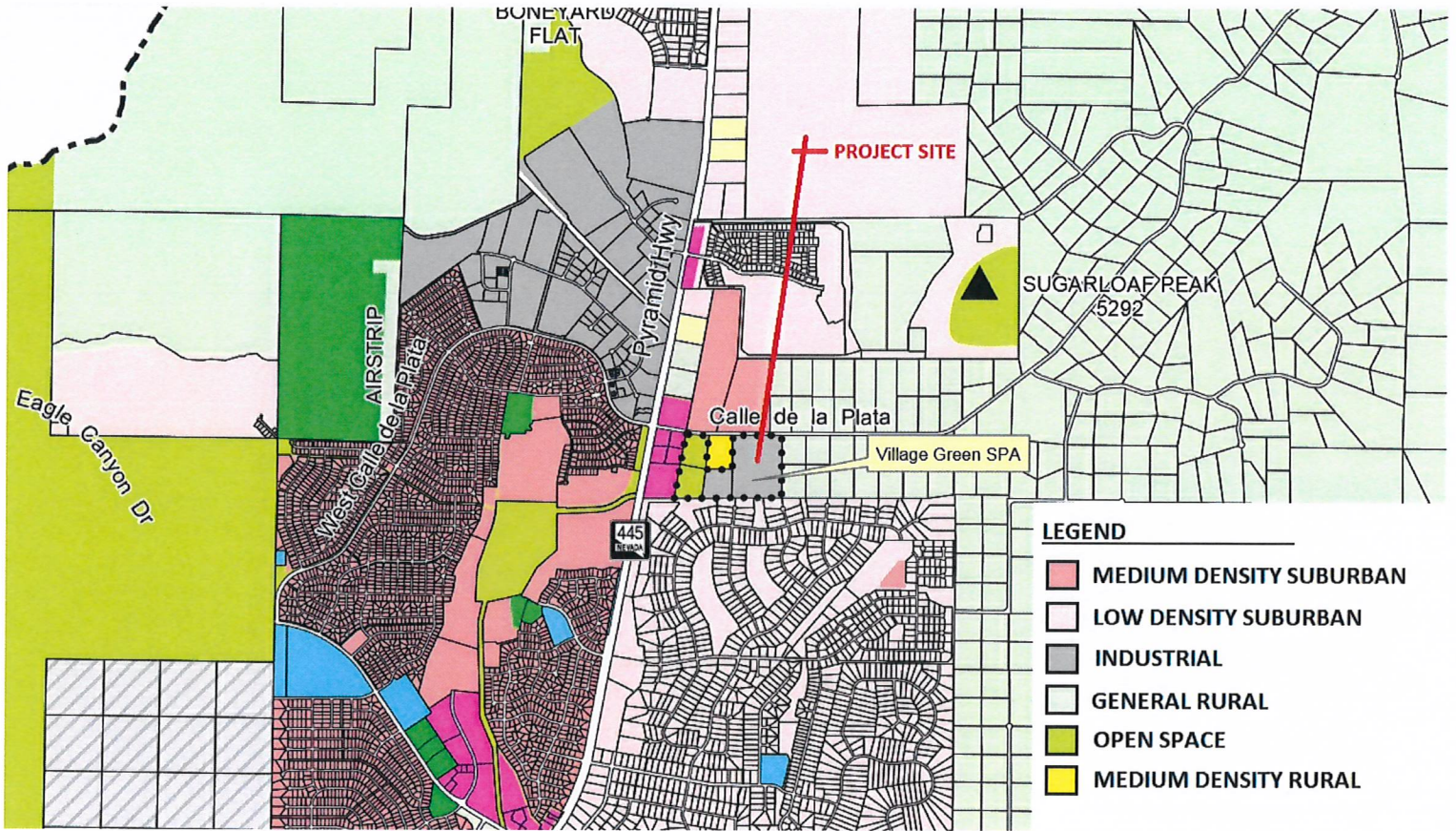


Figure 8 – Proposed Zoning

THE ESTATES AT CALLE DE LA PLATA

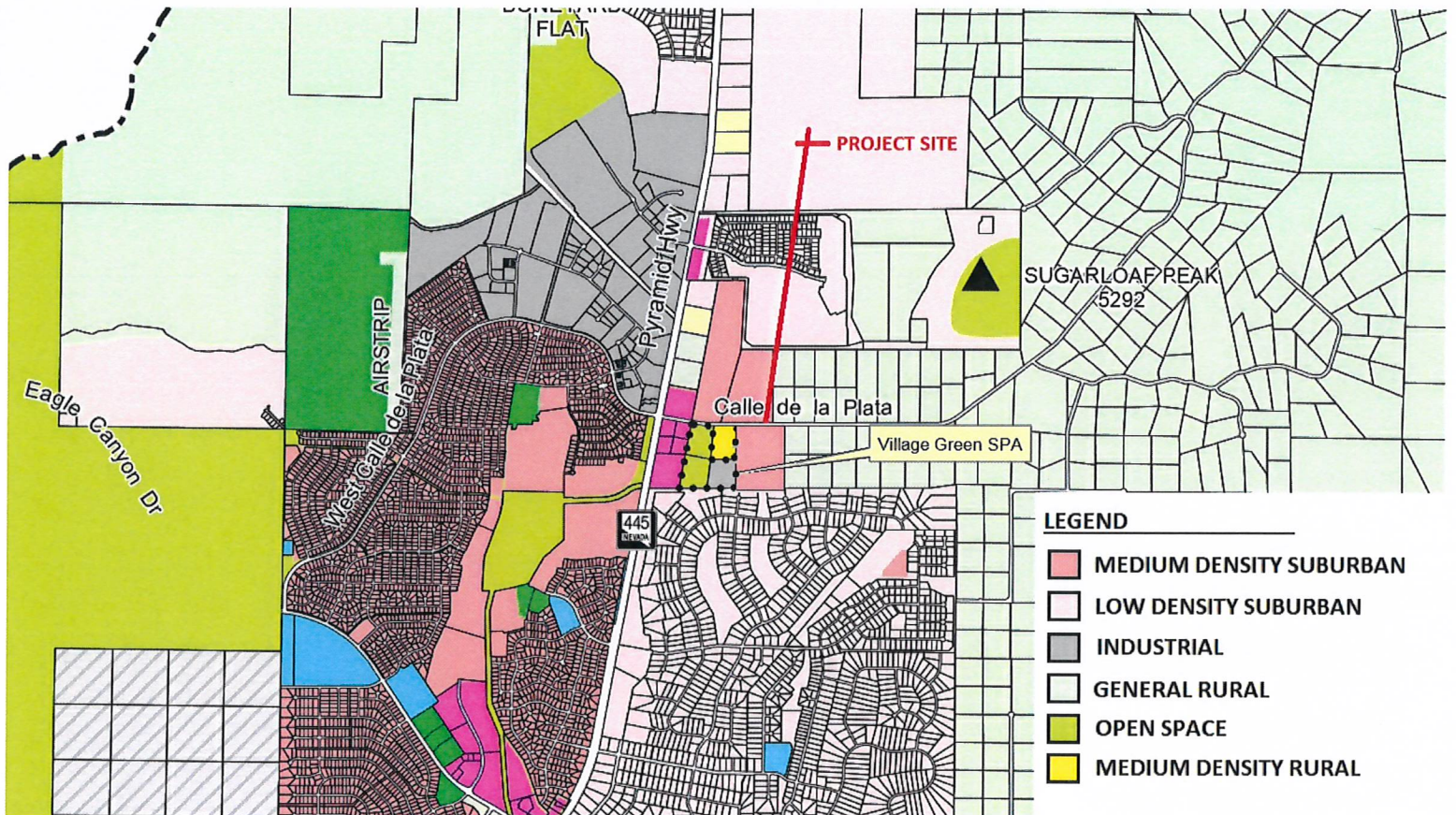


Figure 9 – Proposed Zoning

THE ESTATES AT CALLE DE LA PLATA

The Calle de la Plata/Pyramid Highway intersection has been a longtime concern of residents in regard to safety. The current Industrial designations certainly have the potential to increase traffic on Calle de la Plata above and beyond what would result with the proposed MDS zoning, especially in terms of truck traffic and peak hour trips.

The proposed MDS zoning is consistent with the proposed SR Master Plan designation and will provide for single family use that is complementary to adjoining residential development to the north and south, is much more compatible with existing development to the east, and likely reduces the potential for impacts to the single-family home to the west. Establishment of MDS densities at the site can serve to diversify the housing options within Spanish Springs and meet the high market demand while still retaining the overall community character and feel of the area.

The proposed MDS zoning also serves to implement goals and policies of the Truckee Meadows Regional Plan which encourages a variety of densities and housing types. The proposed 3 dwelling units per acre maximum density is well within the parameters permitted within the Regional Plan for unincorporated Washoe County and is compatible with the Suburban Character Management Plan included within the Spanish Springs Area Plan.

This report later contains a section entitled “Planning Policy Analysis”, and provides a thorough review and analysis of the Washoe County Master Plan and Spanish Springs Area Plan. In that section, specific items are noted that support the requested change in zoning. These include policies and goals ranging from community character to infrastructure and development regulations.

Future Development

As noted previously, it is intended to follow this MPA/RZA request with a tentative subdivision map request, to be submitted at a later date. It is recognized that a future development plan must provide compatibility with surrounding conditions. The review process included with these applications will include presentation before the Spanish Springs Citizens Advisory Board, as well as a noticed community meeting. These meetings will allow the applicant to gather community input and incorporate those ideas and concerns into a future development plan. Additionally, it is planned to coordinate individually with adjoining property owners during the tentative map process in order to provide specific mitigation measures, project amenities, etc. The project applicant, Blackstone Development Group, completed an identical process with the Blackstone Estates project to the north and was successful in garnering neighbor support and was even commended by the Washoe County Planning Commission.

The future tentative map is envisioned to carry forth many of the same features and amenities that Blackstone Estates included. These include elements that residents have identified as being important to the community such as preservation of open space, trail connections, equestrian access, etc. It is the intent to design the Estates at Calle de la Plata with significant community input in order to create a new neighborhood that retains the character of the area and provides amenities that can be used/enjoyed by the entire community, not just Estates at Calle de la Plata residents.

THE ESTATES AT CALLE DE LA PLATA

With provision for open space, trails, etc. a common open space development is envisioned. As such, covenants, conditions, and restrictions (CC&R's) will be recorded and a homeowners' association (HOA) will be created to maintain common areas and open space. With the subsequent tentative map application, specific details will be provided in regard to landscaping, fencing, etc. The project will provide constancy with the theming and development standards included in the Spanish Springs Area Plan. Furthermore, by clustering units, conservation of natural resources, especially water, will be achieved. It is envisioned that significant attention will be given to xeriscaping and drought tolerant plantings within common areas and within individual yards.

The forthcoming tentative map process will include a complete public review process including presentation to the Citizens Advisory Board, Planning Commission, etc. This MPA and RZA application is simply the first step in a lengthy entitlement process and only serves to establish the underlying land use for the project.

A comprehensive traffic impact analysis will also be included with the tentative map. It is recognized that the Pyramid Highway/Calle de la Plata intersection is a long-standing concern with area residents in terms of safety and operations. NDOT and Washoe County will review the traffic impacts of this project and the adjoining proposed project(s) to determine what improvements can and will occur.

Although improvements to the intersection have been slow to come, new deceleration lanes are in process. Additionally, the recently approved Blackstone Estates and Sugarloaf Estates projects include conditions related to intersection improvements. The project applicant is committed to working with NDOT, Washoe County, and adjoining property owners/developers to investigate potential improvements to the intersection, with the ultimate goal of signalization. The traffic impact analysis completed for the project is included as an attachment to this report.

Potential Impacts

It is very important to note that the MPA and RZA requests included with this application **do not** grant an entitlement to construct a new subdivision at the site. Rather, this is simply the first step in establishing the appropriate underlying land use designations for a future project. Therefore, a tentative subdivision map must be filed and approved in order to implement any new development. This tentative map application (to be filed in the future), will provide highly specific project details, impact analysis, infrastructure review, hydrology reports, etc. and is subject to review and approval through a publicly noticed hearing process.

This section aims to provide a cursory impact analysis based on the maximum potential unit yield permitted under the MDS zoning – 117 single family units.

- **Traffic**

Traffic is a measurable impact that will result no matter what is developed at the site. As part of this application and consistent with the Plan Maintenance section of the Spanish Springs Area Plan, a comprehensive traffic impact study, prepared by Solaegui Engineers, is attached within the appendices of this report.

THE ESTATES AT CALLE DE LA PLATA

As noted in the attached traffic report, the intersection of Calle de la Plata and Pyramid Highway was highly analyzed. Currently, the intersection operates at level of service (LOS) F which does not meet service criteria established within the Area Plan or by the Regional Transportation Commission (RTC). However, with planned RTC improvements, including the signalization of the intersection (which is slated to occur prior to construction), the intersection will operate at LOS B for both the AM and PM peak hours, not to mention it will be much safer. Details of this analysis are included in the attached traffic impact analysis.

With approval of the Estates at Calle de la Plata, it is conceivable that roadway improvements listed on the RTP will be accelerated, especially considering that regional projects are re-evaluated and prioritized every 2 years. As part of the forthcoming tentative map review process, Solaegui Engineers will be meeting with NDOT and representatives of the adjoining projects to suggest planned intersection improvements at Calle de la Plata and Pyramid Highway.

Overall, the Estates at Calle de la Plata is anticipated to generate 88 am peak hour trips, 117 pm peak hour trips, and 1,114 average daily trips. It is important to note that the number of trips generated by the proposed residential use is a decrease from the number of trips that would likely occur under the current zoning (by as much as 55%). The site area (39.12± acres) would conservatively allow for 350,000 square feet of light industrial space. For comparison purposes, the industrial use would generate 2,440 average daily trips with 322 am peak trips and 340 pm peak hour trips. Not to mention that a significant number of these trips would be large trucks.

The Estates at Calle de la Plata can help spearhead long anticipated improvements, including improvements at Calle de la Plata/Pyramid Highway that have been a desire of the community for well over a decade. Additionally, the project developer will be required to make a significant contribution in terms of traffic impact fees paid to RTC with final map approval.

Additional details and analysis are attached in the full traffic impact study. Also, more in-depth traffic discussion will be relevant with the forthcoming tentative map.

- **Schools**

As part of this MPA/RZA process, the Washoe County School District was consulted as to the current capacities of schools that serve the project area. It was determined that the project site is zoned for the following schools:

- Spanish Springs Elementary School
- Yvonne Shaw Middle School
- Spanish Springs High School

THE ESTATES AT CALLE DE LA PLATA

Mike Boster, Washoe County School District Planner, provided the School District's accepted student generation formulas along with the 2016/2017 enrollments and capacities for each school (2015/2016 enrollments have not been finalized as of the filing date of this application). Mr. Boster also indicated that capacities can be misleading based on special programs that may be occurring within the school facility. For example, elementary schools often have special education classes, gifted and talented programs, autism specialty programs, etc. which are capped by law on maximum classroom size. This can therefore skew actual capacity levels. Regardless, Mr. Boster concurred that the School District could provide refined enrollment and capacity numbers as part of this and a future public review process.

Once again, for the sake of this analysis, a density yield of 117 units was assumed. The following table summarizes potential school impacts.

School	Current Enrollment ¹	Capacity ¹	Generation Rate ¹	Number of New Students
Spanish Springs ES	864 students	912 students ²	0.277/unit	33 students
Shaw MS	955 students	1,072 students	0.064/unit	8 students
Spanish Springs HS	2,364 students	2,160 students	0.136/unit	16 students

1 – provided by the Washoe County School District.

2 – Based on current multi-track schedule.

It is important to note that this analysis does not consider the potential for children to attend charter schools, private institutions, or home schooling and is therefore a worst-case scenario in terms of student generation projections. Also, with the recent approval of a sales tax increase to fund new capital improvements within the school district, several projects are underway that will alleviate crowding conditions such as the new middle school under construction in Kiley Ranch. This will significantly increase capacity at both Shaw Middle School, as well as Spanish Springs Elementary (based on a new 6th-8th grade middle school concept). Based on the School District's construction schedule, these changes will be in place prior to completion of any new homes within the Estates at Calle de la Plata.

- **Public Facilities/Infrastructure**

The project site is located in an area of existing infrastructure. All municipal services (i.e. water, sewer, storm drain, etc.) are either in place or can easily be extended (at the developer's expense) to serve the Estates at Calle de la Plata. Consistent with the policies of the Spanish Springs Area Plan and requirements of the Washoe County Development Code, all new lots within the project will be served by municipal water and sewer. In fact, these policies (detailed later in this report) further support the MDS zoning/density requested as it is not feasible to supply large lot residential units with these municipal services. Thus, if the property were to develop with lower density, individual well and septic systems would likely occur as they do in the immediate area. This is viewed as highly undesirable by Washoe County and area residents. Power, natural gas, cable television, and high-speed internet service all exist at or adjacent to the project site.

THE ESTATES AT CALLE DE LA PLATA

Another noteworthy point is that the proposed clustering of units (through a common open space subdivision) will result in resource conservation, reduction in water use, etc. All of the applicable infrastructure will be analyzed and compliance will be demonstrated with the forthcoming tentative map request. For the purpose of the land use requests included with this application, the property meets or exceeds all criteria for the designations being requested.

- **Site Suitability**

As noted previously in this report, the site is well suited for the type of density potential associated with the requested designations. This is based on the fact that the site is flat and the availability of existing site services and infrastructure. In fact, the requested MDS zoning represents a down zoning in terms of intensity from which is permitted under the existing Industrial designation. Furthermore, the site is not encumbered by geologic, cultural, historical, or flood concerns that would preclude development.

- **Public Services**

The property is within an acceptable response time of the Truckee Meadows Fire Protection District station located on La Posada Drive to the south. Also, the Washoe County Sherriff's Office has existing patrols within the project area.

Planning Policy Analysis

The proposed requests must be reviewed for consistency with the goals and policies of the Washoe County Master Plan, Sun Valley Area Plan, and Truckee Meadows Regional Plan. Each of these planning documents is addressed below:

- **Spanish Springs Area Plan**

The Spanish Springs Area Plan is an element of the Washoe County Master Plan that establishes the overall theme and vision that the community has in terms of how they wish to see Spanish Springs develop over the next 20 years. Last updated in 2010, there was very little change in the area up until the last two to three years. As the region's economy continues to recover, there is now opportunity to implement change within the plan area, consistent with the goals and policies of the Area Plan.

THE ESTATES AT CALLE DE LA PLATA

The Introduction section of the Area Plan states that the *“Spanish Springs community will maintain and apply objective standards and criteria that serve to manage growth and development in Spanish Springs in a manner that:*

- *Respects the rural heritage of the area by encouraging a rustic appearance and preserving scenic quality;*
- *Respects private property rights;*
- *Provides open space and recreational opportunities;*
- *Provides local services and employment opportunities;*
- *Ensures that growth is kept in balance with resources and infrastructure.*

This amendment request is entirely consistent with this intent of the Area Plan. The current Master Plan and zoning designations are in direct conflict with the first bullet point noted above. An Industrial designation, located well east of Pyramid Highway will certainly not contribute to the rustic appearance and scenic character of the area. In contrast, the Estates at Calle de la Plata will provide residential uses that will complement existing development patterns in the area as well as provide significant open space and linkages to regional trails. This is consistent with the first and third bullet point outlined in the Introduction of the Area Plan.

In terms of resources and infrastructure, amending the land use categories to residential is in actuality a down-zone in terms of intensity and will serve to better manage available resources and infrastructure. The residential use proposed is far less intense than what could be developed under the existing zoning and will better complement the area as a whole.

The Vision of the Spanish Springs Area Plan is to *“manage growth in Spanish Springs, focusing on a rustic appearance in keeping with the rural character of the area, while respecting private property rights.”* It can be logically argued that the current industrial designation conflicts with the *“rustic appearance”* of the area, especially on the east side of Pyramid Highway. The residential use and density proposed, along with the planned open space, park, and trail facilities, are far more in line with the Area Plan vision.

The Area Plan also establishes an overall Character Statement. The first paragraph of the Character Statement states that *“over the next 20 years, the community will provide a range of employment opportunities and a more limited, but still mixed, range of residential opportunities. Over this period, the distribution of land uses and the provision of public facilities and infrastructure will preserve and facilitate a community character that merges Spanish Springs’ scenic, low-density, rural and western heritage with suburban residential, employment, and commercial opportunities.”* The Character Statement recognizes that a transition to more suburban densities will occur within Spanish Springs. The 3 du/ac density proposed with this amendment is directly compatible with suburban lot sizes to the north, complementary to those to the south, and far less intense than what could be constructed under the existing designation. There has been significant change in the area over the past 20 years and this application is reflective of proper planning and density given available infrastructure and developing land use patterns. The current industrial designation is simply not logical and out of place.

THE ESTATES AT CALLE DE LA PLATA

As noted previously and depicted in Figure 4, the project site is located within the Suburban Character Management Area defined in the Area Plan. This “suburban core” as discussed in the Character Statement includes “residential densities of up to three dwelling units per acre.” The Character Statement goes on to state that “suburban land uses are located predominantly, **but not exclusively**, on the west side of Pyramid Highway.” As part of this discussion, the Character Statement discusses transitions between the suburban core and more rural areas. The SR Master Plan designation and MDS zoning are consistent with the 3 du/ac suburban character identified in the plan and most definitely provide for a better transition to more rural areas to the east than the current industrial designation.

It is noteworthy that by Washoe County’s own definition of “suburban,” density is up to 7 units per acre (reflected in High Density Suburban zoning). The 3 du/ac density proposed with the Estates at Calle de la Plata is less than half of this. Furthermore, Washoe County staff has agreed that the proposed density meets the suburban definition and character identified in the Area Plan and has determined that an amendment to the Character Statement is not needed as part of this Master Plan Amendment request.

Another noteworthy excerpt from the Character Statement is that “the Suburban Character Management Area will be the designated growth area in the Spanish Springs Valley.” Given the fact that the project site is flat, easily developed, and in an area where infrastructure exists or can easily be extended, this request serves to implement the character and vision expressed in the Area Plan. The Character Statement goes on to note that “an integrated trail system that provides access to regional and local open space” is a community desire along with a “desire for resource conservation in the community.” The plan for the Estates at Calle de la Plata is directly compatible with this and provides trail linkages and open space connections to the regional network. Also, the clustering of units promotes resource conservation and greatly reduces water usage, etc. than if developed with larger lots.

The Area Plan also contains goals and policies that are applicable to this particular MPA and RZA requests. These policies are listed below and are addressed in **bold face** type. It is important to note that many of the policies are not applicable at this time but will be addressed with the forthcoming tentative map (i.e. policies related to grading, utilities, etc.).

Goal One: The pattern of land use designations in the Spanish Springs Area Plan will implement and preserve the community character described in the Character Statement.

As described in the previous section, this request conforms to the Character Statement in terms of location within the Suburban Character Management Area, allowable suburban densities, preservation of open space, trail connections, and resource conservation.

THE ESTATES AT CALLE DE LA PLATA

SS1.2 *The Policy Growth Level for the Spanish Springs Suburban Character Management Area is 1,500 new residential units of land use capacity. Land use intensifications will not add more than 1,500 new units of Land Use Capacity through 2025. The Washoe County Department of Community Development will be responsible for tracking increasing land use potential to ensure this growth level is not exceeded.*

If approved with forthcoming tentative map, the Estates at Calle de la Plata, at build out, represents 117 new residential units. Land use intensifications since the Plan adoption in 2010 have been only recent with approximately 750 units. Therefore, there is capacity remaining of which 117 can be absorbed. The recent economic growth in the region has created a new demand for housing. It is clearly envisioned in the Spanish Springs Area Plan that new residential growth was anticipated in the area. This request is consistent with this anticipated growth as well as the Vision and Character Statement included in the Area Plan and is much better suited to meet community needs than the existing industrial designation.

SS.1.3 *The following Regulatory Zones are permitted within the Spanish Springs Suburban Character Management Area:*

c. Medium Density Suburban (MDS – Three units per acre).

Note: Additional zoning categories listed in policy SS.1.3 are omitted as they are irrelevant to this request.

The requested SR Master Plan designation and MDS zoning are in direct compliance with this policy.

SS.1.6 *Staff will review any proposed Master Plan Amendment against the findings identified in the Plan Maintenance section of this plan and make a recommendation to the Planning Commission. As a minimum, the Planning Commission must make each of these findings in order to recommend approval of the amendment to the Board of County Commissioners.*

The findings included under the Plan Maintenance section are addressed later in this report. This request is consistent with all of the findings.

SS.3.1 *Washoe County’s policy level of service (LOS) for local transportation facilities in the Spanish Springs planning area is LOS “C.”*

A detailed traffic impact analysis is included in the attached appendices. The report concludes that with planned improvements, all adjoining roadways/intersections will operate at appropriate levels of service. It is also important to note that overall traffic impacts are reduced with MDS zoning, as compared to the existing Industrial designation.

THE ESTATES AT CALLE DE LA PLATA

SS.3.3 *Washoe County will strongly advocate the prioritization of improvements to Pyramid Highway and qualified regional roads and arterials within the boundaries of this area plan in the Regional Transportation Improvement Program in order to achieve and maintain established levels of service.*

This project can serve to expedite improvements to the Calle de la Plata/Pyramid Highway intersection, including widening of Pyramid Highway, lane improvements to Calle de la Plata and upgrades to the Calle de la Plata/Pyramid Highway intersection. These have been long standing community concerns that the Estates at Calle de la Plata can help to solve and fund.

SS.3.5 *Washoe County will be an advocate for restricted access to Pyramid Highway pursuant to the provisions of the Pyramid Highway Corridor Management Plan.*

Consistent with this policy, no direct access to Pyramid Highway will occur with a future project. Instead, the project (and the adjoining developments to the north) can serve to address long standing concerns with the Calle de la Plata/Pyramid Highway intersection to the benefit of the community as a whole.

Goal Four: Maintain open vistas of the surrounding ridges and more distant mountain ranges, and minimize the visual impact of hillside development.

The project site is ideal for development at the densities permitted under MDS. The property is flat and development will have zero impact to hillsides, sensitive areas, etc. and will not obstruct views to Sugarloaf Peak or other surrounding ranges.

Goal Five: The built environment will implement and preserve the community character as described in the Spanish Springs Vision and Character Statement.

The project can serve to implement the Character Statement by providing a more appropriate transition between suburban uses and rural areas further east. The current industrial designation is contradictory to the Vision and Character statement and has the potential to generate much greater impacts upon the surrounding area.

Goal Six: Public and private development will respect the value of cultural and historic resources in the community.

There are no believed or known cultural or historical resources located on the project site, ensuring consistency with this goal.

THE ESTATES AT CALLE DE LA PLATA

Goal Seven: The Spanish Springs planning area will contain an extensive system of parks and trails that provides the community and region with a broad range of recreational opportunities; provides connections between major developments, recreational facilities, the Regional Trail System, public lands and schools; and contributes to the preservation and implementation of the community character.

As discussed previously, the Estates at Calle de la Plata will be developed in a clustered fashion that will provide for public trail connections from the site to the regional network, equestrian connections, etc.

SS.7.2 New trails will be designed to accommodate equestrian, pedestrian and off-road bicycle traffic, unless technical or severe economic hardships warrant consideration of a more limited use.

All of the trails within the Estates at Calle de la Plata will be public and will support the users listed within this policy. Additional details and specifications will be included with the forthcoming tentative map request.

SS.7.4 As new residential and commercial properties develop in the Spanish Springs Valley, the Washoe County Department of Parks and Recreation will review development proposals for potential trail connections.

The project applicant will work directly with the parks department to determine final design of trail facilities along with determining connection points to the regional network, etc.

SS.7.6 Access to existing trails will be protected and improved wherever possible. During the process of development review, the Washoe County Departments of Community Development and Parks and Recreation will request dedication of property and/or easements when appropriate trail alignments have been identified that link significant nodes with the Spanish Springs planning area or connect existing trails.

The Estates at Calle de la Plata will be in direct voluntary compliance with this policy and fully recognizes the importance of trail connectivity within the community.

Goal Nine: The built environment will minimize the destructive potential of any identified geological hazard.

There are no geological conditions that would preclude development of the site.

THE ESTATES AT CALLE DE LA PLATA

- SS.12.1 *Residential and commercial development must utilize one or a combination of the following reliable water resources that are replenished in quantities to meet the needs of the area without reliance upon groundwater mining or recharge from agricultural uses:*
- a. *Decreed Truckee River water rights or other approved imported surface water rights when used with an appropriate drought yield discount as determined by the water purveyor and approved by the State Engineer.*
 - b. *Imported groundwater from a source that is replenished in sufficient quantity to meet the demands placed upon a source without groundwater mining.*
 - c. *Certificated groundwater rights or permitted quasi-municipal groundwater rights (that existed as of May 22, 1990) matched by imported, decreed surface water from a source such as the Truckee River.*
 - i. *For residential developments, the quantity of imported water or decreed surface water shall be equal to 50 percent of the groundwater demand.*
 - ii. *For developments other than residential (commercial, industrial, recreational, etc.), the quantity of the matching imported or decreed surface water rights shall be equal to 100 percent of the calculated demand.*
 - iii. *The Truckee River surface water dedicated must be capable of diversion to the Orr Ditch.*

It is premature to evaluate specific water rights at this time, but the forthcoming tentative map will provide specifics on water demands and service.

SS.12.5 *New residential subdivisions (e.g. tentative parcel map, tentative subdivision map) utilizing Medium Density Suburban land use densities (MDS: 1 du/ac to max. 3 du/1 ac) or greater densities approved after January 1, 1996 shall be required to use an imported water source, except subdivisions approved on land designated Medium Density Suburban prior to October 1, 1995.*

The project will comply with the requirements of this policy. Further details will be provided with the forthcoming tentative map and are not directly relevant to the requests included with this application.

SS.12.7 *The creation of parcels and lots in the Spanish Springs planning area shall require the dedication of water rights to Washoe County in quantities that are consistent with the water use standards set by the State Engineer and/or Washoe County.*

The project will comply with the requirements of this policy. Further details will be provided with the forthcoming tentative map and are not directly relevant to the requests included with this application.

THE ESTATES AT CALLE DE LA PLATA

Goal Fifteen: Water resources will be provided to residential and non-residential uses in a manner that implements and preserves the community character as described in the Spanish Springs Vision and Character Statement.

As previously detailed, the project is indirect compliance with the Vision and Character Statement included in the Area Plan. This will include the manner in which water service is provided to the site and will be detailed with the forthcoming tentative map request.

SS.15.1 Whenever applicable, all development within the Spanish Springs Suburban Character Management Area will connect to a community water service.

The Estates at Calle de la Plata will be served by a community water system. Individual wells are not proposed.

Goal Sixteen: Wastewater treatment and disposal will be provided to residential and nonresidential uses in a manner that implements and preserves the community character as described in the Spanish Springs Vision and Character Statement.

Future homes will be served by sanitary sewer and not septic systems, serving to implement not only this goal, but numerous policies as well. It is also important to note that in order to make community water and sewer service available on a large scale (as encouraged in the Area Plan), additional density is needed in order to make it financially viable. Thus, services within the project could benefit adjoining parcels through the ability to hook up with municipal services that would not otherwise be available.

SS.16.1 Whenever applicable, all development within the Spanish Springs Suburban Character Management Area will connect to a community sewer service.

The project will connect with a community sewer system, consistent with this policy and a suburban development form.

Goal Seventeen: Amendments to the Spanish Springs Area Plan will be for the purpose of further implementing the Vision and Character Statement, or to respond to new or changing circumstances. Amendments must conform to the Spanish Springs Vision and Character Statement. Amendments will be reviewed against a set of criteria and thresholds that are measures of the impact on, or progress toward, the Vision and Character Statement.

As detailed throughout this report, the Estates at Calle de la Plata is consistent with, and in many instances, serves to implement the Vision and Character Statement of the Spanish Springs Area Plan. The project site is identified within the Suburban Character Management Area which clearly allows for the density being proposed. Also, consistent with goals and policies of the Plan, the requested SR and MDS designations better serve to protect the character of the area and will have far less impact as compared to the existing designation for the site.

THE ESTATES AT CALLE DE LA PLATA

SS.17.1 *In order for the Washoe County Planning Commission to recommend the approval of ANY amendment to the Spanish Springs Area Plan, the following findings must be made:*

- a. *The amendment will further implement and preserve the Vision and Character Statement.*

The project fits directly within the framework of the goals and policies of the Area Plan and serves to implement the Vision of the Plan and preserve the character of the area, far more than what could occur at the site today under the existing designation. The project can serve to fulfill long term community needs such as a trail connectivity, and roadway/intersection improvements and the designations being proposed are much more logical given the site location and character of surrounding properties.

- b. *The amendment conforms to all applicable policies of the Spanish Springs Area Plan and the Washoe County Master Plan.*

This report contains detailed policy analysis from the Area Plan and Master Plan, demonstrating compliance.

- c. *The amendment will not conflict with the public's health, safety or welfare.*

The project will promote the community's health, safety, and welfare by providing for more appropriate land use and improvements that will benefit the entire community, as detailed herein.

SS.17.2 *In order for the Washoe County Planning Commission to recommend approval of any amendment involving a change of land use, the following findings must be made:*

- a. *A feasibility study has been conducted, commissioned and paid for by the applicant, relative to municipal water, sewer and storm water that clearly identifies the improvements likely to be required to support the intensification, and those improvements have been determined to be in substantial compliance with all applicable existing facilities and resource plans for Spanish Springs by the Department of Water Resources. The Department of Water Resources will establish and maintain the standards and methodologies for these feasibility studies.*

This request does not represent an intensification to the area. In fact, it will result in development far less intense than what is permitted under the current designation. As such, Washoe County has already determined the site to be appropriate for development based on the current designation and the fact that the site is included within the boundaries of the Suburban Character Management Area. A forthcoming tentative map request will provide highly detailed specifics. Granting of this Master Plan Amendment and zone change does not grant an underlying entitlement to develop (that must come in the form of a tentative map approval).

THE ESTATES AT CALLE DE LA PLATA

- b. *A traffic analysis has been conducted that clearly identifies the impact to the adopted level of service within the [unincorporated] Spanish Springs Hydrographic Basin and the improvements likely to be required to maintain/achieve the adopted level of service. This finding may be waived by the Department of Public Works for projects that are determined to have minimal impacts. The Department of Public Works may request any information it deems necessary to make this determination.*

As noted previously, a highly detailed traffic impact analysis is included in the attached appendices and identifies no significant impacts occurring from the development of the Estates at Calle de la Plata.

- c. *For commercial and industrial land use intensifications, the overall percentage of commercial and industrial regulatory zone acreage will not exceed 9.86 percent of the Suburban Character Management Area.*

Not applicable.

- d. *For residential land use intensifications, the potential increase in residential units will not exceed Washoe County's policy growth level for the Spanish Springs Area Plan, as established in Policy SS.1.2.*

With only 117 potential units, the project does not increase units above the 1,500 cap established in policy SS.1.2, as previously addressed.

- e. *If the proposed intensification will result in a drop below the established policy level of service for transportation (as established by the Regional Transportation Commission and Washoe County) within the Spanish Springs Hydrographic Basin, the necessary improvements required to maintain the established level of service are scheduled in either the Washoe County Capital Improvements Program or Regional Transportation Improvement Program within three years of approval of the intensification. For impacts to regional roads, this finding may be waived by the Washoe County Planning Commission upon written request from the Regional Transportation Commission.*

The attached traffic impact analysis identifies the need for improvements triggered by development of the project along with the applicable mechanisms for completing them. These can then be conditioned with the forthcoming tentative map.

THE ESTATES AT CALLE DE LA PLATA

- f. *If roadways impacted by the proposed intensification are currently operating below adopted levels of service, the intensification will not require infrastructure improvements beyond those articulated in Washoe County and Regional transportation plans AND the necessary improvements are scheduled in either the Washoe County Capital Improvements Program or Regional Transportation Improvement Program within three years of approval of the intensification.*

The attached traffic impact analysis provides specific details that speak directly to this finding.

- g. *Washoe County will work to ensure that the long range plans of facilities providers for transportation, water resources, schools and parks reflect the policy growth level established in Policy SS.1.2.*

As detailed previously in this section under policy SS.1.2, the project provides for consistency with all applicable requirements and polices.

- h. *If the proposed intensification results in existing facilities exceeding design capacity and compromises the Washoe County School District's ability to implement the neighborhood school philosophy for elementary facilities, then there must be a current capital improvement plan or rezoning plan in place that would enable the District to absorb the additional enrollment. This finding may be waived by the Washoe County Planning Commission upon request of the Washoe County Board of Trustees.*

The Washoe County School District has provided enrollment numbers and student projections which are included in a previous section of this report. School District staff has indicated that they will provide specific comments and conditions (if applicable) at the tentative map stage of the project.

- i. *Any existing development in the Spanish Springs planning area, the Sun Valley planning area, the Warm Springs planning area, or the City of Sparks, which is subject to the conditions of a special use permit will not experience undue hardship in the ability to continue to comply with the conditions of the special use permit or otherwise to continue operation of its permitted activities.*

Not applicable.

THE ESTATES AT CALLE DE LA PLATA

- **Washoe County Master Plan**

The Washoe County Master Plan contains numerous goals and policies that support the requested Master Plan and Regulatory Zone Amendments included with this application. These policies are listed and addressed below:

Conservation Element:

C.2.1 The Washoe County Department of Community Development shall maintain maps depicting valuable scenic areas, including but not limited to, prominent ridgelines, playas, and other unique scenic features. These maps shall be used to determine, in part, the land use and public services and facilities appropriate for each planning area. These maps, which may be specific to and contained within each Area Plan, shall also be used during development review to identify areas where scenic resource assessment and possible mitigation measures may be required.

The project site does not contain any significant natural features or resources and is identified in the Spanish Springs Area Plan.

C.2.3 Each development proposal shall be evaluated with the intent to preserve visually prominent ridges and escarpments. Evaluation shall address mitigation of the affects on visual appearance, scarring of hillsides, and the impact of increasing access in roadless areas.

The project site is ideal in that development will not result in the grading of hillsides, visual scarring or grading of roadways through undeveloped parcels.

Goal Three: Regulate or mitigate development to protect environmentally sensitive and/or critical land, water and wildlife resources that present development hazards or serve highly valuable ecological functions.

Once again, development of the site will not result in any threat to protected resources, cultural sites, sensitive lands, etc. The project site is flat and well suited for development.

THE ESTATES AT CALLE DE LA PLATA

- C.3.1 *The Washoe County Department of Community Development shall adequately consult with other agencies while maintaining Development Suitability maps that depict valuable and/or critical land, water and wildlife resources or features which shall include, but not be limited to, the following:*
- a. *Geothermal and mining areas.*
 - b. *Landslide, avalanche and rockfall areas.*
 - c. *Active and potentially active faults, and areas of potential ground shaking.*
 - d. *Slopes greater than 15 percent.*
 - e. *Sensitive soils.*
 - f. *Key wildlife habitats and migration routes.*
 - g. *Wild fire hazard areas (as specified by the respective fire agency).*
 - h. *One hundred year flood plains.*
 - i. *Perennial and intermittent streams, and wetlands.*

This map series shall be used to determine the land use and public services and facilities appropriate for each planning area. These maps shall also be used during development review to identify areas where more detailed land and water resource information is needed. Where the information indicates a need, measures to protect these resources shall be required. The maps depicting development constraint areas and areas of biodiversity should be used as a reference tool only in reviewing development applications.

Previous flooding concerns were alleviated with the construction of the regional detention facility located west of the project site. There are no known natural constraints that would preclude development of the site. The forthcoming tentative map will provide even further analysis including a geotechnical study, etc.

Goal Ten: Incorporate technical information on geologic hazards into the land use planning and development processes.

A review of record data indicates no known geologic hazards. A detailed geotechnical analysis will be included with the forthcoming tentative map request.

- C.16.1 *Through the adoption of the Open Space and Natural Resource Management Plan and implementation of the policies contained in the Land Use and Transportation Element, Washoe County will promote and facilitate recreational use of green space by pedestrians and bicyclists, and provide access to public facilities, recreation, public transportation and open space.*

The planned trails, trail connections, and open space within the future project will serve to implement this policy.

THE ESTATES AT CALLE DE LA PLATA

Housing Element:

Policy 1.5: Encourage development at higher densities where appropriate.

As explained throughout this document, the MDS zoning and associated 3 du/ac density is highly appropriate given the site characteristics, location, and the policies contained in the Area Plan. The MDS use will serve to better transition between more intense uses planned along Pyramid Highway and residential areas to the east and is much more suited to the site than industrial use types.

Program 1.5: The County will utilize its higher density zoning designations to allow for the most efficient use of land that has infrastructure in place or where the installation of infrastructure is planned. The County will consider installing minimum density requirements in mixed-use and/or high density areas.

Land Use and Transportation Element:

Goal One: Influence future development to abide by sustainable growth practices.

Clustering of lots, such as that proposed with the Estates at Calle de la Plata, will reduce overall resource impacts, reduce water consumption, and serve to implement this goal.

LUT.1.1: Washoe County should define smaller areas where more intense suburban developments permitted (parallel with the Area Plan Suburban Character Management Area, or SCMA), and larger areas outside the suburban areas where development is strictly limited to retain the existing rural character (parallel with the Area Plan Rural Character Management Area, or RCMA).

The project site lies within the identified Suburban Character Management Area of the Spanish Springs Area Plan which allows for densities up to 3 units per acre, as proposed.

THE ESTATES AT CALLE DE LA PLATA

LUT.2.1: Allow flexibility in development proposals to vary lot sizes, cluster dwelling units, and use innovative approaches to site planning providing that the resulting design is compatible with adjacent development and consistent with the purposes and intent of the policies of the Area Plan. Development applications shall be evaluated with the intent to satisfy the minimum following criteria:

- a. Directs development away from hazardous and sensitive lands.*
- b. Preserves areas of scenic and historic value.*
- c. Provides access to public land.*
- d. Retains agricultural uses, fire and windbreaks, wildlife habitat, wetlands, streams, springs and other natural resources. An adequate amount of prime resources must be retained in order to sustain a functioning ecosystem.*
- e. Accommodates the extension and connection of trail systems and other active and passive recreational uses.*
- f. Furthers the purposes and intent of the respective Area Plan.*
- g. Prevents soil erosion.*
- h. Encourages a minimum distance from residential dwellings to active recreation in parks.*

Although more specific details will be provided in the forthcoming tentative map application, the Estates at Calle de la Plata will implement this policy through a common open space design concept that provides for open space, recreational opportunities, trails, trail connection, and overall consistency with the Vision and Character of the Spanish Springs Area Plan.

Goal Three: The majority of growth and development occurs in existing or planned communities, utilizing smart growth practices.

Increasing residential densities and clustering units, as proposed with the Estates at Calle de la Plata, is an accepted and well known smart growth practice.

LUT.3.1: Require timely, orderly, and fiscally responsible growth that is directed to existing suburban character management areas (SCMAs) within the Area Plans as well as to growth areas delineated within the Truckee Meadows Service Area (TMSA).

The project site is located within an identified Suburban Character Management Area as well as within the TMSA.

THE ESTATES AT CALLE DE LA PLATA

LUT.3.2: In order to provide a sufficient supply of developable land to meet the needs of the population, Area Plans shall establish growth policies that provide for a sufficient supply of developable land throughout the planning horizon of the next 20 years, with considerations to phase future growth and development based on the carrying capacity of the infrastructure and environment.

As discussed previously, the 117 units (maximum) proposed with the Estates at Calle de la Plata fits within the growth policies established in the Spanish Springs Area Plan.

LUT.3.3: Single family detached residential development shall be limited to a maximum of five (5) dwelling units per acre.

At a proposed density of 3 du/ac, the project is in direct compliance with this policy.

LUT.3.5 Area Plans shall identify adequate land, in locations that support the regional form and pattern, for the residential, commercial, civic and industrial development needs for the next 20 years, taking into account land use potential within the cities and existing unincorporated centers, existing vacant lots, and resource and infrastructure constraints.

The site has no known natural constraints and is one of the few remaining larger (40 acre) undeveloped parcels in the Suburban Character Management Area. As such, it is well suited to meet the future housing needs of Spanish Springs and the region.

LUT.4.1 Maintain a balanced distribution of land use patterns to:

- a. Provide opportunities for a variety of land uses, facilities and services that serve present and future population;*
- b. Promote integrated communities with opportunities for employment, housing, schools, park civic facilities, and services essential to the daily life of the residents; and*
- c. Allow housing opportunities or a broad socio-economic population.*

The proposed residential use is much more logical from a land use perspective than the existing industrial designation. It provides for a much more appropriate transition to residential areas surrounding the site and will still locate residential uses within walking distance of planned commercial services located at Pyramid Highway and Calle de la Plata.

LUT.4.3 Encourage suburban development to provide a mix of residential densities and housing types in close proximity to retail/commercial.

There is a significant amount of planned commercial use within walking distance of the site that is planned at the Pyramid Highway/Calle de la Plata intersection.

THE ESTATES AT CALLE DE LA PLATA

LUT.4.4 Encourage new suburban developments to provide interconnected street networks (Photo 6) to improve fluidity between different land uses and encourage walking and cycling as viable and safe modes of transportation.

This policy will be addressed with the forthcoming tentative map request.

LUT.5.2 Proposed development plans shall be required to provide the minimum service standards as described in the Land Use and Transportation Plan.

As detailed previously under the Area Plan analysis, the project meets or exceeds all of the applicable standards.

LUT.5.3 New development shall not reduce the quality of service for existing residents and businesses nor reduce the ability of public agencies to provide quality service.

The site is located in an area of existing services and patrols and can easily be absorbed into the existing service framework. Any upgrades or improvements can be conditioned with the tentative map at the expense of the project developer.

LUT.6.1 Acknowledge the importance of Washoe County (including the incorporated cities of Reno and Sparks) in the continuing development of Northern Nevada's regional economic base.

- a. Strengthen and support the identity of the region by encouraging land uses that both contribute to the character of the community and enable the area to sustain a viable economic base. Encourage land uses that preserve a quality of life and define a sense of place within the region*

The Estates at Calle de la Plata is consistent with the Vision of the Spanish Springs Area Plan and will promote a high quality of life through careful planning that will allow residents easy access to open space, trails, and recreational opportunities.

THE ESTATES AT CALLE DE LA PLATA

LUT.9.1 Create, maintain, and connect usable open space for aesthetic, recreational purposes and natural resource protection.

a. Development assurances shall provide that the open space will be used as intended and will be adequately maintained. The following measures shall be used as applicable:

- i. Designate open space areas to a classification consistent with the intended use.*
- ii. Record Conditions, Covenants and Restrictions (with the County as an interested party) or other contractual agreement with specification of the intended use and prohibition of future sale of the property without consent of the County.*
- iii. Specify use of the property (e.g. common area) on recorded maps.*
- iv. Dedicate easements (with the County as an interested party) that specify the intended use.*
- v. Provide financial assurances for any proposed improvements within the open space.*
- vi. Provide mechanisms to assure perpetual maintenance of the open space.*
- vii. When a density bonus or density transfer is proposed, the parcel that is proposed to be use-restricted should be included as part of the tentative map.*

The project will dedicate new public trails that serve not only the project, but provide connections to the regional trail network. This will benefit the entire community and help perpetuate the regional trail system in Spanish Springs.

LUT.9.5 Require the connection of open space; trail access and bikeway systems with regard to a multitude of different trail uses.

As noted above, new trails within the project will provide for connectivity with and continuance of the regional trail network within the community.

Goal Ten: The public has access to open space resources.

All open space areas, trails, and public facilities within the Estates at Calle de la Plata will be dedicated to Washoe County or maintained by the HOA for public use.

LUT.10.6 Promote an interconnected open space system that accommodates and provides efficient access to all reasonable trail uses.

Once again, the project will provide logical and thoughtful connections to the regional trail system throughout the planned community.

THE ESTATES AT CALLE DE LA PLATA

Goal Twelve: Washoe County should implement policy to acquire and preserve open space.

The project will preserve a significant amount of open space which will ensure proper land use relationships with adjoining properties, buffering, and community recreational opportunities and amenities.

LUT.12.2 In reviewing development or other land use applications, the County shall consider open space values and other characteristics, which contribute to the open and rural character or unincorporated Washoe County.

The planned open space will serve to implement the Vision and Community Character sections of the Spanish Springs Area Plan. These components can be further conditioned with the forthcoming tentative map.

Goal Fourteen: Washoe County will, to the extent possible, create a cohesive interconnected trail network.

This project can serve to fill in a key gap in the regional trail network by providing a connection from the trail to the north to County facilities on the south side of Calle de la Plata. Such a connection across private land does not currently exist, eliminating the need for the County to acquire land or negotiate easements.

LUT.14.3 The County shall acquire trail right-of-way through purchase, lease, donation or dedication from any public or private entity. When appropriate and beneficial, existing roads and rights-of-way will be used.

With the proposed trail improvements, the project developer will directly implement this policy.

LUT.14.4 Trails shall be interconnected and provide for pedestrian, equestrian, bicycle, and motorized uses, where each use is warranted. Incompatible uses shall be appropriately separated.

Consistent with the policies of the Area Plan, the trails will accommodate pedestrians, off-road cyclists, and equestrian users. Further details and specifications will be provided with the forthcoming tentative map.

LUT.17.2 Suburban neighborhoods should be created with a discernible center. This is often a square, green space, or memorable center. A transit station can be located at this center.

This policy will be addressed with the site design of the forthcoming tentative map.

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LUT.21.1 The design of new public facilities shall create a sense of community and connectivity among those who live, work and recreate within the community.

- a. Neighborhoods should be planned to provide emphasis on land uses such as parks, schools and other civic uses that are centralized and act as a community center and promote community interaction.*
- b. Where needed, expand existing public facility links such as trails, paths, open space, and streets to create connectivity between communities.*
- c. Enhance the long-term attractiveness and economic viability through architectural and other man-made features.*
- d. Encourage developers to use varying design strategies to begin to establish a sense of community.*

As explained throughout this report, the Estates at Calle de la Plata will provide trails, open space, and amenities that implement not only this policy but numerous policies from the Area Plan, along with the community vision.

LUT.25.1 Ensure that development proposals are in conformance with appropriate Master Plan policies and the relevant Area Plan policies.

The Planning Policy Analysis included in this report clearly demonstrates the project's conformance.

Population Element:

Goal Three: Plan for a balanced development pattern that includes employment and housing opportunities, public services and open spaces.

Establishment of suburban residential at the site is logical from a land use perspective as it provides for appropriate transitions to adjoining properties, offers recreational opportunities and amenities to residents, and is within a short distance of employment centers and planned commercial uses.

- **Truckee Meadows Regional Plan**

Master Plan Amendment applications in Washoe County are required to complete a review by the Truckee Meadows Regional Planning Agency. This project advances many of the goals and policies of the *2012 Truckee Meadows Regional Plan*. In general, this application seeks to provide suburban residential development within an area already included within the Truckee Meadows Service Area (TMSA) boundary. Densities of up to 5 units per acre are allowed in unincorporated areas within the TMSA per the Regional Plan. The Estates at Calle de la Plata fits well within these parameters.

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More specifically, the project conforms to the goals and policies of the *Regional Plan*, as outlined below.

GOAL 1.1 *Between 2007 and 2030, at least 99% of the region's population growth and 99% of the region's jobs growth will be located in the Truckee Meadows Service Areas (TMSA).*

The project site is within the existing TMSA and serves to better respect natural resources and provide more efficient use of infrastructure as encouraged within the Regional Plan, Washoe County Master Plan, and Spanish Springs Area Plan.

Policy 1.1.3 *or Reno, Sparks, and Washoe County the Regional Plan defines Truckee Meadows Service Areas (TMSA) and Future Service Areas (FSA) that avoid environmental degradation, optimize infrastructure, and maintain a compact form while providing for a variety of living and working situations.*

The project site is well suited for development and will not result in environmental degradation. Smaller lots and clustering ensures better optimization of infrastructure and less impact on resources, especially water.

Policy 1.1.8 *The Regional Plan defines the Development Constraints Area (DCA) as an overlay upon the Truckee Meadows Service Areas and the Rural Development Area (see Map 3). The Development Constraints Area consists of playas, jurisdictional water/wetland in accordance with Section 404 of the Clean Water Act, designated FEMA floodway areas within the floodplain Zone AE floodways, significant water bodies, natural slopes over 30%, publicly-owned open space, and properties that are deed restricted to prevent development.*

The site is not located within a Development Constraints Area.

GOAL 1.3 *Unincorporated Washoe County within the TMSA will support Module #1 by providing a development pattern that includes a range of residential densities appropriate to the location and typified by medium density, and shall include appropriate neighborhood or local serving retail uses, and employment opportunities designed to reduce trips, enhance housing affordability and promote jobs-housing balance.*

The medium density proposed with the project directly complies with this policy. Furthermore, its close proximity to existing employment centers within Spanish Springs and planned commercial uses make it even more complementary to this policy.

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Policy 3.5.1 To be in conformance with the Regional Plan, the master plans, facilities plans, and other similar plans of local governments and affected entities must ensure that necessary public facilities and services to support new development are or will be available and adequate, based on adopted levels of services (LOS) at the time the impacts of new development occur.

Infrastructure is already in place around the site and can be easily extended to serve future development. Therefore, the concurrency requirements are met. A traffic analysis is included and provides mitigation measures that will be implemented to ensure LOS standards are met.

Request Findings

The Washoe County Development Code establishes legal findings that must be made by the Planning Commission and Board of County Commissioners in order to approve Master Plan Amendment and Regulatory Zone Amendment requests. These findings are listed below and are addressed in **bold face** type.

- **Master Plan Amendment**

When adopting an amendment, the Commission shall make all required findings contained in the area plan for the planning area in which the property that is the subject of the Master Plan amendment is located and, at a minimum, make at least three of the following findings of fact unless a military installation is required to be noticed, then in addition to the above, a finding of fact pursuant to subsection (6) shall also be made:

- (1) Consistency with Master Plan. The proposed amendment is in substantial compliance with the policies and action programs of the Master Plan.

The requested Suburban Residential designation will allow for the establishment of Medium Density Suburban (MDS) zoning. The MDS zoning is consistent with the site's location within the Suburban Character Management Area and is consistent with the goals, policies, vision, and character statement of the Spanish Springs Area Plan, as detailed previously within this report.

- (2) Compatible Land Uses. The proposed amendment will provide for land uses compatible with (existing or planned) adjacent land uses, and will not adversely impact the public health, safety or welfare.

The requested amendment represents a decrease in intensification over what currently exists. This will provide for a much more appropriate transition between land uses and is far better suited for the property given surrounding land use patterns. Industrial uses would be inappropriate for the site and have the potential to create significant negative impacts within the area in terms of traffic, noise, buffering, etc.

THE ESTATES AT CALLE DE LA PLATA

- (3) Response to Change Conditions. The proposed amendment responds to changed conditions or further studies that have occurred since the plan was adopted by the Board of County Commissioners, and the requested amendment represents a more desirable utilization of land.

The current Industrial designation could be considered “spot” zoning which is highly discouraged in modern planning practice. The proposed SR and MDS designations are much more logical, provide for proper land use transitions, and are consistent with the goals, policies, vision, and character statement of the Spanish Springs Area Plan. Additionally, the project can serve to meet the increased demand for housing within the region sparked by a large influx of new economic growth that has occurred, and continues to occur, within Washoe County and the surrounding region.

- (4) Availability of Facilities. There are or are planned to be adequate transportation, recreation, utility, and other facilities to accommodate the uses and densities permitted by the proposed Master Plan designation.

As detailed throughout this report all facilities, services, and infrastructure needed to serve the site are existing or can be easily extended to serve the project site. The project meets the requirements of the Area Plan in terms of services and infrastructure and will serve to better optimize facilities over larger lot alternatives.

- (5) Desired Pattern of Growth. The proposed amendment will promote the desired pattern for the orderly physical growth of the County and guides development of the County based on the projected population growth with the least amount of natural resource impairment and the efficient expenditure of funds for public services.

The site is located within the Suburban Character Management Area. Therefore, it has already been determined that development of this property represents orderly growth and is located within an area where new growth has long been anticipated.

- (6) Effect on a Military Installation. The proposed amendment will not affect the location, purpose and mission of the military installation.

Not applicable.

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- **Regulatory Zone Amendment**

- (1) Consistency with Master Plan. The proposed amendment is in substantial compliance with the policies and action programs of the Master Plan.

As detailed in the Planning Policy Analysis section of this report the request RZA serves to implement numerous goals and policies of the Washoe County Master Plan and the Spanish Springs Area Plan.

- (2) Compatible Land Uses. The proposed amendment will provide for land uses compatible with (existing or planned) adjacent land uses, and will not adversely impact the public health, safety or welfare.

This request does not grant the absolute right to develop the parcel. Instead, it establishes the land use framework that will allow for future consideration of a common open space tentative map. At that time, project specific impacts can be evaluated during a public review process and appropriate conditions can be added or changes made. From a pure land use perspective, suburban use at 3 du/ac is appropriate with the surrounding residential uses and is far more compatible than the existing industrial and commercial designations. This is further reinforced through the County's own land use compatibility matrix.

- (3) Response to Change Conditions.; more desirable use. The proposed amendment responds to changed conditions or further studies that have occurred since the plan was adopted by the Board of County Commissioners, and the requested amendment represents a more desirable utilization of land.

The proposed MDS zoning is more complementary to surrounding development patterns and will serve to reduce project impacts when compared with what could be developed under the existing zoning. The property is well suited for development given its physical characteristics and location.

- (4) Availability of Facilities. There are or are planned to be adequate transportation, recreation, utility, and other facilities to accommodate the uses and densities permitted by the proposed amendment.

As noted under the Master Plan Amendment findings, all facilities, services, and infrastructure needed to serve the site are existing or can be easily extended to serve the project site. The project meets the requirements of the Area Plan in terms of services and infrastructure and will serve to better optimize facilities over larger lot alternatives.

- (5) No Adverse Affects. The proposed amendment will not adversely affect the implementation of the policies and action programs of the Washoe County Master Plan.

As detailed in the Planning Policy Analysis section of this report, the project actually serves to implement goals and policies of the Master Plan and Area Plan. In fact, it is almost certain that additional goals and policies will be implemented with future development of a common open space subdivision at the site.

THE ESTATES AT CALLE DE LA PLATA

- (6) Desired Pattern of Growth. The proposed amendment will promote the desired pattern for the orderly physical growth of the County and guides development of the County based on the projected population growth with the least amount of natural resource impairment and the efficient expenditure of funds for public services.

The subject site is identified as most suitable for development within the Area Plan and can serve to better meet the housing needs of the community. No environmental or other conditions exist that would preclude development of the property at the densities permitted within the MDS zone. The project can better maximize infrastructure usage providing for smart growth from both a planning and fiscal perspective.

- (7) Effect on a Military Installation When a Military Installation is Required to be Noticed. The proposed amendment will not affect the location, purpose and mission of the military installation.

Not applicable.

APPENDICES

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information		Staff Assigned Case No.: _____	
Project Name: The Estates at Calle de la Plata			
Project Description: A Master Plan Amendment and Regulatory Zone Amendment to amend the designations on 39.12 acres from Industrial to Suburban Residential (Master Plan) and MDS (zoning).			
Project Address: 375 Calle de la Plata, Spanish Springs			
Project Area (acres or square feet): 39.12 acres			
Project Location (with point of reference to major cross streets AND area locator): South side of Calle de la Plata, east of Pyramid Highway.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
534-561-10	39.12 acres		
Section(s)/Township/Range: Section 24, T21N, R20E			
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: STN 375 Calle Group, LLC		Name: Rubicon Design Group, LLC	
Address: 3860 GS Richards Blvd.		Address: 1610 Montclair Ave., Suite B	
Carson City, NV	Zip: 89703	Reno, NV	Zip: 89509
Phone: 775-885-8847	Fax:	Phone: 775-425-4800	Fax:
Email: rkuckenmeister@kbcallc.com		Email: mrailey@rubicondesigngroup.com	
Cell:	Other:	Cell: 775-250-3455	Other:
Contact Person: Randy Kuckenmeister		Contact Person: Mike Railey	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Blackstone Development Group		Name:	
Address: 439 W. Plumb Ln.		Address:	
Reno, NV	Zip: 89509		Zip:
Phone: 520-400-	Fax:	Phone:	Fax:
Email: jgm@blackstonedevelopmentgroup.com		Email:	
Cell: Same as above	Other:	Cell:	Other:
Contact Person: Josh Myers		Contact Person:	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Property Owner Affidavit

Applicant Name: Blackstone Development Group, INC.

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
)
COUNTY OF WASHOE)

I, Randal S. Kuckenmeister, Manager STN 375 Calle, Group, LLC
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 534-561-10

Printed Name Randal S Kuckenmeister

Signed [Signature]

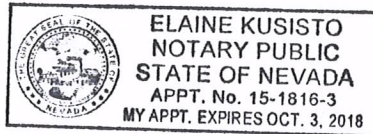
Address 3860 GS Richards BL
CARRIS CITY, NV 89703

Subscribed and sworn to before me this 8th day of JANUARY, 2018.

Elaine Kusisto

Notary Public in and for said county and state

My commission expires: 10-3-2018



(Notary Stamp)

*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

Community Services Department
Planning and Building
MASTER PLAN AMENDMENT
APPLICATION



Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89520

Telephone: 775.328.6100

Master Plan Amendment Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to Master Plan amendments may be found in Article 820, Amendment of Master Plan.

The Washoe County Master Plan describes how the physical character of the County exists today and is planned for the future. The plan is adopted by the community and contains information, policies and a series of land use maps. The Master Plan provides the essential framework for creating a healthy community system and helps guide decisions about growth and development in the County. The following are general types of requests the County receives to amend the Master Plan. Please identify which type of amendment you are requesting:

<input checked="" type="checkbox"/> A request to change a master plan designation(s) from the adopted master plan and/or area plan maps
<input type="checkbox"/> A request to add, amend, modify or delete any of the adopted policies found in the elements of the Master Plan
<input type="checkbox"/> A request to add, amend, modify or delete any of the adopted policies in the area plans
<input type="checkbox"/> A request to add, amend, modify or delete specific language found in the area plans
<input type="checkbox"/> Other (please identify):

Please complete this questionnaire to ensure consistent review of your request to amend the Washoe County Master Plan. Staff will review the application to determine if the amendment request is in conformance with the policies and language within the elements and area plans of the Master Plan or if the information provided supports a change to the plan. Please provide a brief explanation to all questions.

1. What is the Master Plan amendment being requested at this time?

This application includes a request to amend the Master Plan designation from Industrial to Suburban Residential on a 39.12 acre parcel located within the Spanish Springs Area Plan. Refer to attached report for a detailed project description.
--

2. What conditions have changed and/or new studies have occurred since the adoption of the Washoe County Master Plan that supports the need for the amendment request?

The current Industrial designation is completely out of character with the surrounding residential uses and has the potential to generate significantly higher impacts. Additionally, the proposed SR designation is consistent with the adjoining designations and matches that of recently changed designations to the north.

Refer to the attached report for a detailed description and analysis.

3. Please provide the following specific information.
- a. What is the location (address or distance and direction from nearest intersection)? Please attach a legal description.

The project site is located at 375 Calle de la Plata which is east of Pyramid Highway on the south side of the road. The attached preliminary title report includes a legal description of the property.

- b. Please list the following (attach additional sheet if necessary):

APN of Parcel	Master Plan Designation	Existing Acres	Proposed Master Plan Designation	Proposed Acres
534-561-10	Industrial	39.12	Suburban Residential	39.12

c. What are the adopted land use designations of adjacent parcels?

North	Suburban Residential
South	Suburban Residential
East	Rural
West	Industrial and Rural

4. Describe the existing conditions and uses located at the site or in the vicinity (i.e. vacant land, roadways, buildings, etc.):

The project site is currently vacant and includes flat terrain that includes native brush and grasses. The site is currently accessed via a single connection to Calle de la Plata. Refer to attached report for additional details and site photos.

5. Describe the natural resources associated with the site under consideration. Your description should include resource characteristics such as water bodies, vegetation, topography, minerals, soils and wildlife habitat.

The project site is generally flat and contains native vegetation. There are no known natural constraints or resources onsite that would preclude development of the property. Refer to attached report for additional details.

6. Describe whether any of the following natural resources or systems are related to the proposed amendment:

a. Is property located in the 100-year floodplain? (If yes, please attach documentation of the extent of the floodplain and any proposed floodplain map revisions in compliance with Washoe County Development Code, Article 416, Flood Hazards, and consultation with the Washoe County Engineering.)

<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Explanation:

b. Does property contain wetlands? (If yes, please attach a preliminary delineation map and describe the impact the proposal will have on the wetlands. Impacts to the wetlands may require a permit issued from the U.S. Army Corps of Engineers.)

<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Explanation:

c. Does property contain slopes or hillsides in excess of 15 percent and/or significant ridgelines? (If yes, please note the slope analysis requirements contained in Article 424, Hillside Development of the Washoe County Development Code.)

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

Explanation:

d. Does property contain geologic hazards such as active faults; hillside or mountainous areas; is subject to avalanches, landslides, or flash floods; is near a stream or riparian area such as the Truckee River, and/or an area of groundwater recharge?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

Explanation:

e. Does property contain prime farmland; is within a wildfire hazard area, geothermal or mining area, and/or wildlife mitigation route?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

Explanation:

7. Please describe whether any archaeological, historic, cultural, or scenic resources are in the vicinity or associated with the proposed amendment:

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

Explanation:

8. Do you own sufficient water rights to accommodate the proposed amendment? (Amendment requests in some groundwater hydrographic basins [e.g. Cold Springs, Warm Springs, etc.] require proof of water rights be submitted with applications. Please provide copies of all water rights documents, including chain of title to the original water right holder.)

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If yes, please identify the following quantities and documentation numbers relative to the water rights:

a. Permit #		acre-feet per year	
b. Certificate #		acre-feet per year	
c. Surface Claim #		acre-feet per year	
d. Other #		acre-feet per year	

- e. Please attach a copy(s) of the water rights title (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources):

Water rights will be dedicated through TMWA at the time of development. No development is being requested at this time.

- f. If the proposed amendment involves an intensification of land use, please identify how sufficient water rights will be available to serve the additional development.

The land use requested is far less intense than the existing Industrial designation. Refer to attached report for a detailed analysis.
--

9. Please describe the source and timing of the water facilities necessary to serve the amendment:

a. System Type:

<input type="checkbox"/> Individual wells		
<input type="checkbox"/> Private water	Provider:	
<input checked="" type="checkbox"/> Public water	Provider:	TMWA

b. Available:

<input checked="" type="checkbox"/> Now	<input type="checkbox"/> 1-3 years	<input type="checkbox"/> 3-5 years	<input type="checkbox"/> 5+ years
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c. Washoe County Capital Improvements Program project?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of water service:

Not applicable at this time.

10. What is the nature and timing of sewer services necessary to accommodate the proposed amendment?

a. System Type:

<input type="checkbox"/> Individual septic		
<input checked="" type="checkbox"/> Public system	Provider:	Washoe County

b. Available:

<input checked="" type="checkbox"/> Now	<input type="checkbox"/> 1-3 years	<input type="checkbox"/> 3-5 years	<input type="checkbox"/> 5+ years
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c. Washoe County Capital Improvements Program project?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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- d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of sewer service. If a private system is proposed, please describe the system and the recommended location(s) for the proposed facility.

Not applicable at this time.

11. Please identify the street names and highways near the proposed amendment that will carry traffic to the regional freeway system.

Traffic generated by a future project would access Pyramid Highway via Calle de la Plata.

12. Will the proposed amendment impact existing or planned transportation systems? (If yes, a traffic report will be required. See attached Traffic Impact Report Guidelines.)

Yes No

13. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Protection District - La Posada Drive
b. Health Care Facility	Renown Health or St. Mary's Urgent Care - Los Altos Parkway
c. Elementary School	Spanish Springs Elementary
d. Middle School	Shaw Middle School
e. High School	Spanish Springs High School
f. Parks	Lazy 5 Regional Park
g. Library	Washoe County - Spanish Springs branch
h. Citifare Bus Stop	Pyramid Way @ McCarran Boulevard

14. Describe how the proposed amendment fosters, promotes or complies with the policies of the adopted area plans and elements of the Washoe County Master Plan:

a. Population Element:

Policies from the Washoe County Master Plan/Spanish Springs Area Plan are analyzed in depth in the attached report.

b. Conservation Element:

Policies from the Washoe County Master Plan/Spanish Springs Area Plan are analyzed in depth in the attached report.

c. Housing Element:

Policies from the Washoe County Master Plan/Spanish Springs Area Plan are analyzed in depth in the attached report.

d. Land Use and Transportation Element:

Policies from the Washoe County Master Plan/Spanish Springs Area Plan are analyzed in depth in the attached report.

e. Public Services and Facilities Element:

Policies from the Washoe County Master Plan/Spanish Springs Area Plan are analyzed in depth in the attached report.

f. Adopted area plan(s):

The attached report includes a detailed analysis of the Spanish Springs Area Plan, including its policies, exhibits, etc.

15. If the area plan includes a Plan Maintenance component, address all policies and attach all studies and analysis required by the Plan Maintenance criteria.

The attached report includes a detailed analysis of the Spanish Springs Area Plan, including the Plan Maintenance section.

Applicant Comments

This page can be used by the applicant to support the regulatory zone amendment request and should address, at a minimum, how one or more of the findings for an amendment are satisfied. (Please refer to Article 820 of the Washoe County Development Code for the list of Findings.)

A detailed report that fully explains the project request, analyzes land use relationships and potential impacts, and fully addresses all applicable policies of the Master Plan is attached. Analysis of Master Plan Amendment findings (from Article 820) is also included in the report.

A detailed traffic impact analysis completed by Solaegui Engineers, is included as an appendix to the attached report.

Community Services Department
Planning and Building
REGULATORY ZONE AMENDMENT
APPLICATION



Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89520

Telephone: 775.328.6100

Regulatory Zone Amendment Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to Regulatory Zone amendments may be found in Article 821, Amendment of Regulatory Zone.

Please complete this questionnaire to ensure consistent review of your request to amend the Washoe County Zoning Map. Please provide a brief explanation to all questions answered in the affirmative.

1. Please describe the Regulatory Zone amendment request:

This application includes a RZA request to rezone 39.12 acres from Industrial to Medium Density Suburban within the Spanish Springs Area Plan. Refer to attached report for a detailed description.

2. List the Following information regarding the property subject to the Regulatory Zone Amendment.
 - a. What is the location (address, assessor's parcel number or distance and direction from nearest intersection)?

The project site (APN 534-561-10) is located on the south side of Calle de la Plata (375 Calle de la Plata) east of Pyramid Highway.

b. Please list the following (attach additional sheet if necessary):

APN of Parcel	Master Plan Designation	Current Zoning	Existing Acres	Proposed Zoning	Proposed Acres
534-561-10	Industrial	Industrial	36.12	Medium Density Suburban	39.12

c. What are the regulatory zone designations of adjacent parcels?

	Zoning	Use (residential, vacant, commercial, etc.)
North	MDS	Vacant (approved tentative maps)
South	LDS	Single Family
East	GR	SingleFamily
West	I and HDR	Vacant/Single Family

3. Describe the existing conditions and uses located at the site or in the vicinity (i.e. vacant land, roadways, easements, buildings, etc.):

The project site is vacant and contains natural brush and grasses. Refer to attached report for a detailed site analysis and site photos.

4. Describe the natural resources associated with the site under consideration. Your description should include resource characteristics such as water bodies, vegetation, topography, minerals, soils and wildlife habitat.

The project site is undeveloped and contains native vegetation. Terrain is generally flat and there are no known natural constraints or significant resources. Refer to attached report for additional details.

5. Does the property contain development constraints such as floodplain or floodways, wetlands, slopes or hillsides in excess of 15%, geologic hazards such as active faults, significant hydrologic resources or major drainages or prime farmland?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

Explanation:

--

6. Please describe whether any archaeological, historic, cultural, or scenic resources are in the vicinity or associated with the proposed amendment:

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

Explanation:

--

7. Do you own sufficient water rights to accommodate the proposed amendment? (Amendment requests in some groundwater hydrographic basins [e.g. Cold Springs, Warm Springs, etc.] require proof of water rights be submitted with applications. Please provide copies of all water rights documents, including chain of title to the original water right holder.)

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
---	-----------------------------

If yes, please identify the following quantities and documentation numbers relative to the water rights:

a. Permit #		acre-feet per year	
b. Certificate #		acre-feet per year	
c. Surface Claim #		acre-feet per year	
d. Other #		acre-feet per year	

- e. Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources):

Water rights will be dedicated at the time of development. No new development is proposed at this time.

- f. If the proposed amendment involves an intensification of land use, please identify how sufficient water rights will be available to serve the additional development.

The requested RZA is a down-zone from the current Industrial zoning. Refer to the attached report for a detailed analysis.

8. Please describe the source and timing of the water facilities necessary to serve the amendment:

a. System Type:

<input type="checkbox"/> Individual wells		
<input type="checkbox"/> Private water	Provider:	
<input checked="" type="checkbox"/> Public water	Provider:	TMWA

b. Available:

<input checked="" type="checkbox"/> Now	<input type="checkbox"/> 1-3 years	<input type="checkbox"/> 3-5 years	<input type="checkbox"/> 5+ years
---	------------------------------------	------------------------------------	-----------------------------------

c. Is this part of a Washoe County Capital Improvements Program project?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of water service:

Not applicable at this time.

9. What is the nature and timing of sewer services necessary to accommodate the proposed amendment?

a. System Type:

<input type="checkbox"/> Individual septic		
<input checked="" type="checkbox"/> Public system	Provider:	Washoe County

b. Available:

<input checked="" type="checkbox"/> Now	<input type="checkbox"/> 1-3 years	<input type="checkbox"/> 3-5 years	<input type="checkbox"/> 5+ years
---	------------------------------------	------------------------------------	-----------------------------------

c. Is this part of a Washoe County Capital Improvements Program project?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

- d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of sewer service. If a private system is proposed, please describe the system and the recommended location(s) for the proposed facility.

Not applicable at this time.

10. Please identify the street names and highways near the proposed amendment that will carry traffic to the regional freeway system.

Although no development is proposed at this time, a future project would access Pyramid Highway to the west via Calle de la Plata.

11. Will the proposed amendment impact existing or planned transportation systems? (If yes, a traffic report will be required. See attached Traffic Impact Report Guidelines.)

Yes No

12. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Protection District - La Posada Drive
b. Health Care Facility	Renown and St. Mary's Urgent Care - Los Altos Parkway
c. Elementary School	Spanish Springs Elementary
d. Middle School	Shaw Middle School
e. High School	Spanish Springs High School
f. Parks	Lazy 5 Regional Park
g. Library	Washoe County - Spanish Springs Branch
h. Citifare Bus Stop	Pyramid Way @ McCarran Boulevard

Projects of Regional Significance Information – for Regulatory Zone Amendments

Nevada Revised Statutes 278.026 defines "Projects of Regional Significance". Regulatory Zone amendment requests for properties within the jurisdiction of the Truckee Meadows Regional Planning Commission (TMRPC) must respond to the following questions. A "Yes" answer to any of the following questions may result in the application being referred first to the Truckee Meadows Regional Planning Agency for submission as a project of regional significance. Applicants should consult with County or Regional Planning staff if uncertain about the meaning or applicability of these questions.

1. Will the full development potential of the Regulatory Zone amendment increase employment by not less than 938 employees?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

2. Will the full development potential of the Regulatory Zone amendment increase housing by 625 or more units?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

3. Will the full development potential of the Regulatory Zone amendment increase hotel accommodations by 625 or more rooms?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

4. Will the full development potential of the Regulatory Zone amendment increase sewage by 187,500 gallons or more per day?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

5. Will the full development potential of the Regulatory Zone amendment increase water usage by 625 acre-feet or more per year?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

6. Will the full development potential of the Regulatory Zone amendment increase traffic by 6,250 or more average daily trips?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

7. Will the full development potential of the Regulatory Zone amendment increase the student population from kindergarten to 12th grade by 325 students or more?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

Applicant Comments

This page can be used by the applicant to support the regulatory zone amendment request and should address, at a minimum, how one or more of the findings for an amendment is satisfied. (Please refer to Article 821 of the Washoe County Development Code for the list of Findings.)

The attached report provides a detailed project description, analysis of applicable policies and findings, site photographs, mapping, etc. and provides significant project details.

Account Detail

[Back to Account Detail](#)
[Change of Address](#)
[Print this Page](#)

Washoe County Parcel Information		
Parcel ID	Status	Last Update
53456110	Active	1/10/2018 2:06:23 AM
Current Owner: STN 375 CALLE GROUP LLC C/O RANDAL S KUCKENMEISTER MGR 3860 GS RICHARDS BLVD CARSON CITY, NV 89703		SITUS: 375 CALLE DE LA PLATA WCTY NV
Taxing District	Geo CD:	
Legal Description		
SubdivisionName _UNSPECIFIED Section 24 Township 21 Range 20		

Tax Bill (Click on desired tax year for due dates and further details)					
Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2017	\$698.44	\$698.44	\$0.00	\$0.00	\$0.00
2016	\$680.61	\$680.61	\$0.00	\$0.00	\$0.00
2015	\$680.44	\$680.44	\$0.00	\$0.00	\$0.00
2014	\$680.46	\$680.46	\$0.00	\$0.00	\$0.00
2013	\$680.44	\$680.44	\$0.00	\$0.00	\$0.00
Total					\$0.00

Important Payment Information

- ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See Payment Information for details.

Pay Online

No payment due for this account.


\$0.00


Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER


Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

 **Payment Information**

 **Special Assessment District**


 **Installment Date Information**

 **Assessment Information**

375 CALLE DE LA PLATA

TRAFFIC STUDY

JANUARY 2018

Solaegui

1-9-18
EXP 6-30-18

Prepared by:
Solaegui Engineers, Ltd.
715 H Street
Sparks, Nevada 89431
(775) 358-1004

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375 CALLE DE LA PLATA

TRAFFIC STUDY

EXECUTIVE SUMMARY

The proposed 375 Calle De La Plata development is located in Washoe County, Nevada. The project site is located east of Pyramid Highway on the south side of Calle De La Plata. The project site is currently undeveloped land. The purpose of this study is to address the project's impact upon the adjacent street network. The Pyramid Highway/Calle De La Plata intersection and the two proposed accesses on Calle De La Plata have been identified for AM and PM peak hour intersection capacity analysis for the existing, existing plus project, 2028 base, and 2028 base plus project scenarios.

The proposed 375 Calle De La Plata development will consist of the construction of 117 single family dwelling units. Project access will be provided from two accesses on Calle De La Plata. The project is anticipated to generate 1,114 average daily trips with 88 trips occurring during the AM peak hour and 117 trips occurring during the PM peak hour.

Traffic generated by the 375 Calle De La Plata development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with Nevada Department of Transportation and Washoe County requirements.

It is recommended that the Calle De La Plata/West Access intersection be constructed per Washoe County standards and contain a stop sign at the south approach.

It is recommended that the Calle De La Plata/East Access intersection be constructed per Washoe County standards and contain a stop sign at the south approach.

INTRODUCTION

STUDY AREA

The proposed 375 Calle De La Plata development is located in Washoe County, Nevada. The project site is located east of Pyramid Highway and south of Calle De La Plata. Figure 1 shows the approximate location of the site. The purpose of this study is to address the project's impact upon the adjacent street network. The Pyramid Highway/Calle De La Plata intersection and the two proposed accesses on Calle De La Plata have been identified for AM and PM peak hour intersection capacity analysis for the existing, existing plus project, 2028 base, and 2028 base plus project scenarios.

EXISTING AND PROPOSED LAND USES

The project site is currently undeveloped land. Adjacent properties generally include undeveloped land and scattered single family residential units to the north, south, east, and west. The proposed 375 Calle De La Plata development will include the construction of 117 single family dwelling units. Project access will be provided from two accesses on Calle De La Plata.

EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

Pyramid Highway is a two-lane roadway with one through lane in each direction in the vicinity of the site. The speed limit is posted for 55 miles per hour south of Sha Neva Road and 65 miles per hour north of Sha Neva Road. Roadway improvements generally include striped white edgelines and graded shoulders on both sides of the roadway and a striped yellow centerline with striped left turn pockets at intersections.

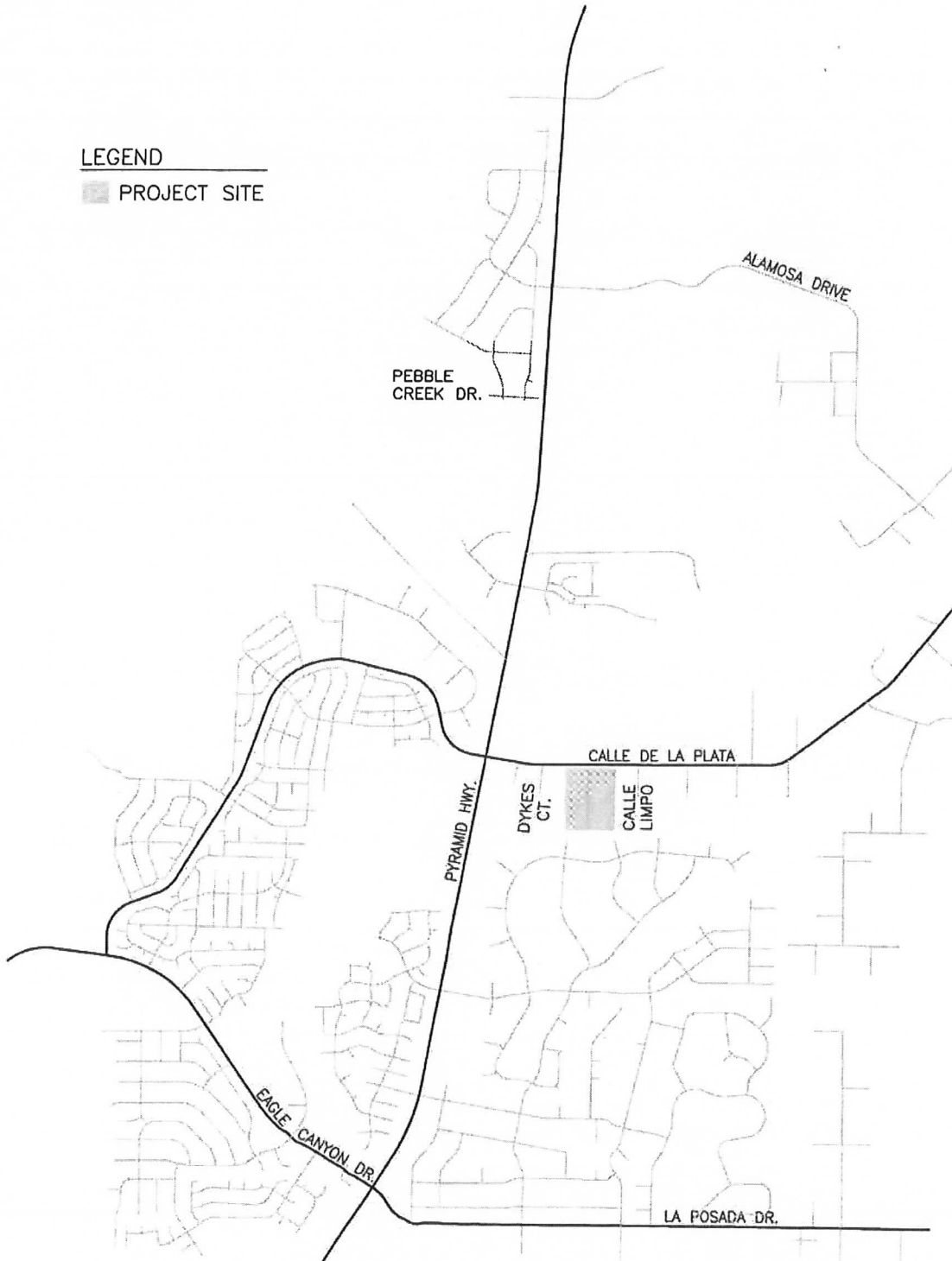
Calle De La Plata is a four-lane roadway with two through lanes in each direction west of Pyramid Highway and a two-lane roadway with one through lane in each direction east of Pyramid Highway. The speed limit is posted for 40 miles per hour west of Pyramid Highway and 50 miles per hour east of Pyramid Highway. Roadway improvements on the four-lane section include curb, gutter, sidewalk and bike lanes on both sides of the street with a raised center median. Roadway improvements on the two-lane section include white edgelines and a yellow centerline.

The Pyramid Highway/Calle De La Plata intersection is an unsignalized four-leg intersection with stop sign control at the east and west approaches. The north and south approaches each contain one left turn lane, one through lane, and one right turn lane. The west approach contains one shared left turn-through lane and one free right turn lane with a southbound acceleration lane. The west approach contains width for a future through lane. The east approach contains one shared left turn-through-right turn lane.

The project access intersections with Calle De La Plata are each anticipated to be unsignalized three-leg intersections with stop control at the south approaches. At a minimum, the intersections will contain one shared left turn-through lane at the east approaches, one shared through-right turn lane at the west approaches, and one shared left turn-right turn lane at the south approaches.

LEGEND

PROJECT SITE



375 CALLE DE LA PLATA
VICINITY MAP
FIGURE 1

TRIP GENERATION

In order to assess the magnitude of traffic impacts of the proposed project on the key intersections, trip generation rates and peak hours had to be determined. Trip generation was calculated based on rates obtained from the Ninth Edition of *ITE Trip Generation* (2012) for Land Use 210: Single Family Detached Housing. The proposed 375 Calle De La Plata development will include the construction of 117 single family dwelling units. Trips generated by the project were calculated for the peak hours occurring between 7:00 and 9:00 AM and 4:00 and 6:00 PM, which correspond to the peak hours of adjacent street traffic. Table 1 shows a summary of the average daily traffic (ADT) volumes and peak hour volumes generated by the project. The trip generation worksheet is included in the Appendix.

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing (117 D.U.)	1,114	22	66	88	74	43	117

TRIP DISTRIBUTION AND ASSIGNMENT

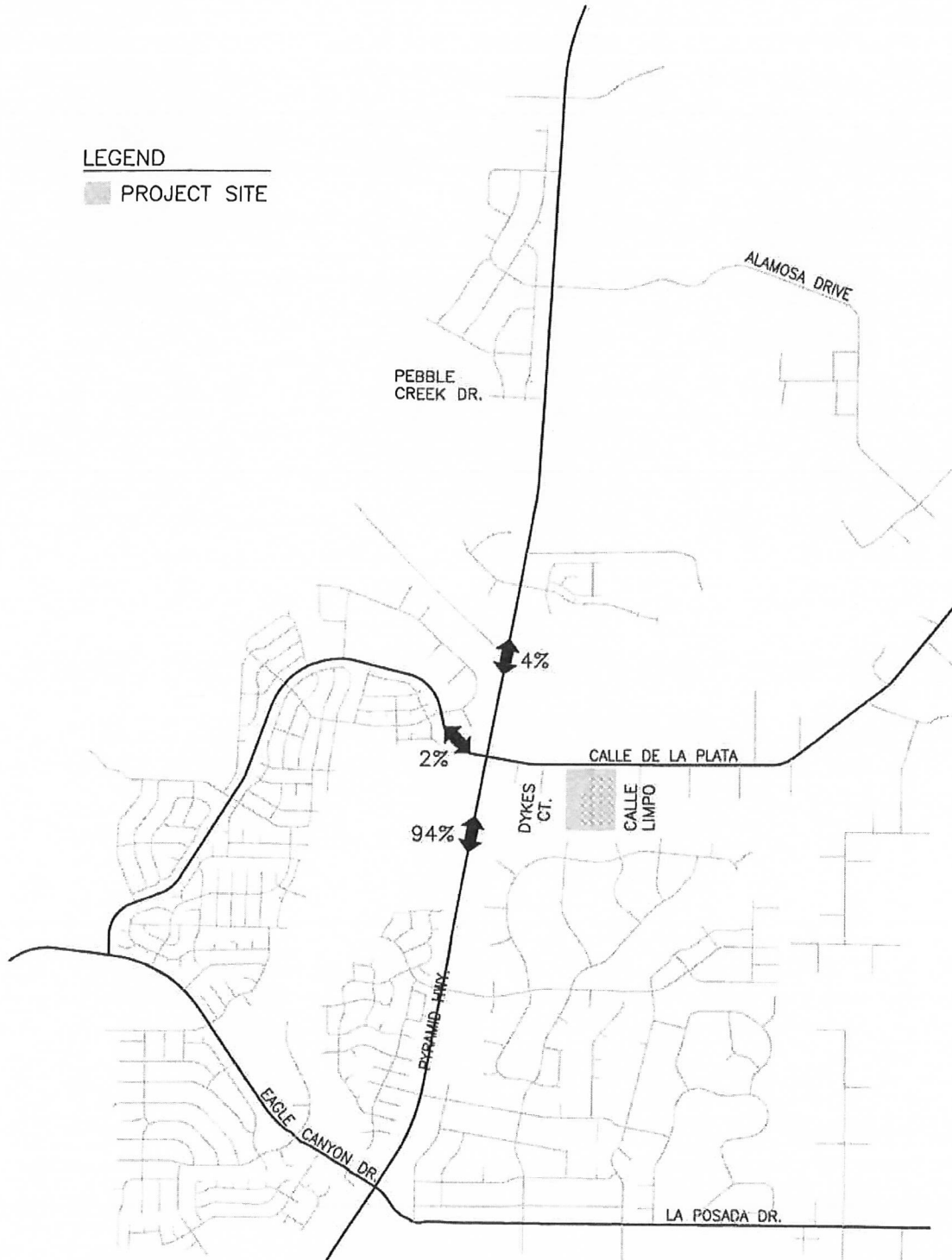
The distribution of the project trips to the key intersections was based on existing peak hour traffic patterns and the locations of attractions and productions in the area. The anticipated trip distribution is shown on Figure 2. The peak hour project trips shown in Table 1 were subsequently assigned to the key intersections based on the trip distribution. Figure 3 shows the project trip assignment at the key intersections during the AM and PM peak hours.

EXISTING AND PROJECTED TRAFFIC VOLUMES

Figure 4 shows the existing traffic volumes at the key intersections for the AM and PM peak hours. The existing traffic volumes were obtained from traffic counts taken in December of 2018. Figure 5 shows the existing plus project traffic volumes at the key intersections for the AM and PM peak hours. The existing plus project traffic volumes were obtained by adding the trip assignment volumes shown on Figure 3 to the existing traffic volumes shown on Figure 4. Figure 6 shows the 2028 base traffic volumes at the key intersections during the AM and PM peak hours. The 2028 base turning movements were estimated by applying a 1.4% average annual growth rate to the existing traffic volumes. The growth rate was calculated based on 10-year historic traffic count data on Pyramid Highway obtained from the Nevada Department of Transportation's (NDOT) Annual Traffic Report. Figure 7 shows the 2028 base plus project traffic volumes at the key intersections during the AM and PM peak hours. The 2028 base plus project volumes were obtained by adding the trip assignment volumes shown on Figure 3 to the 2028 base traffic volumes shown on Figure 6.

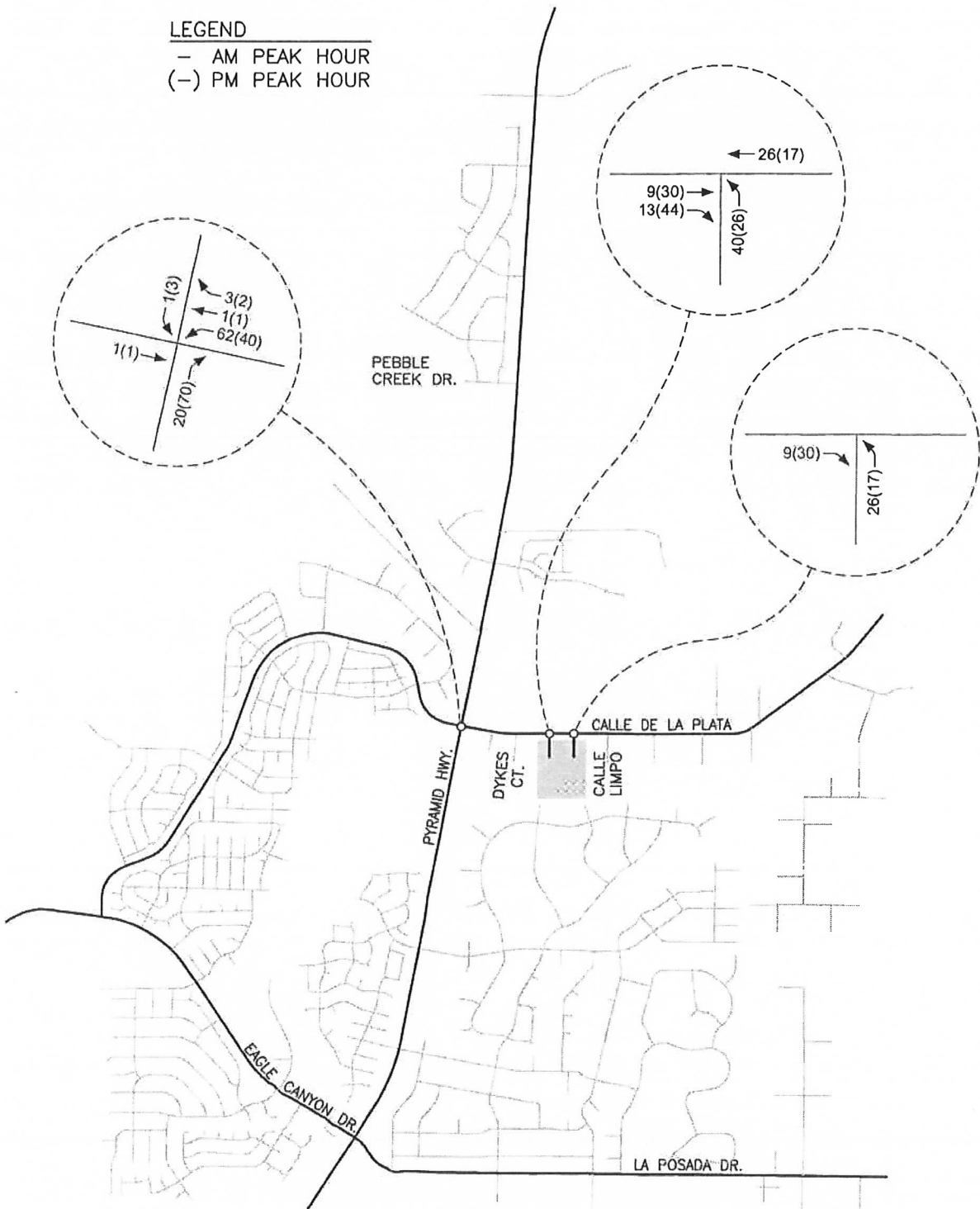
LEGEND

■ PROJECT SITE



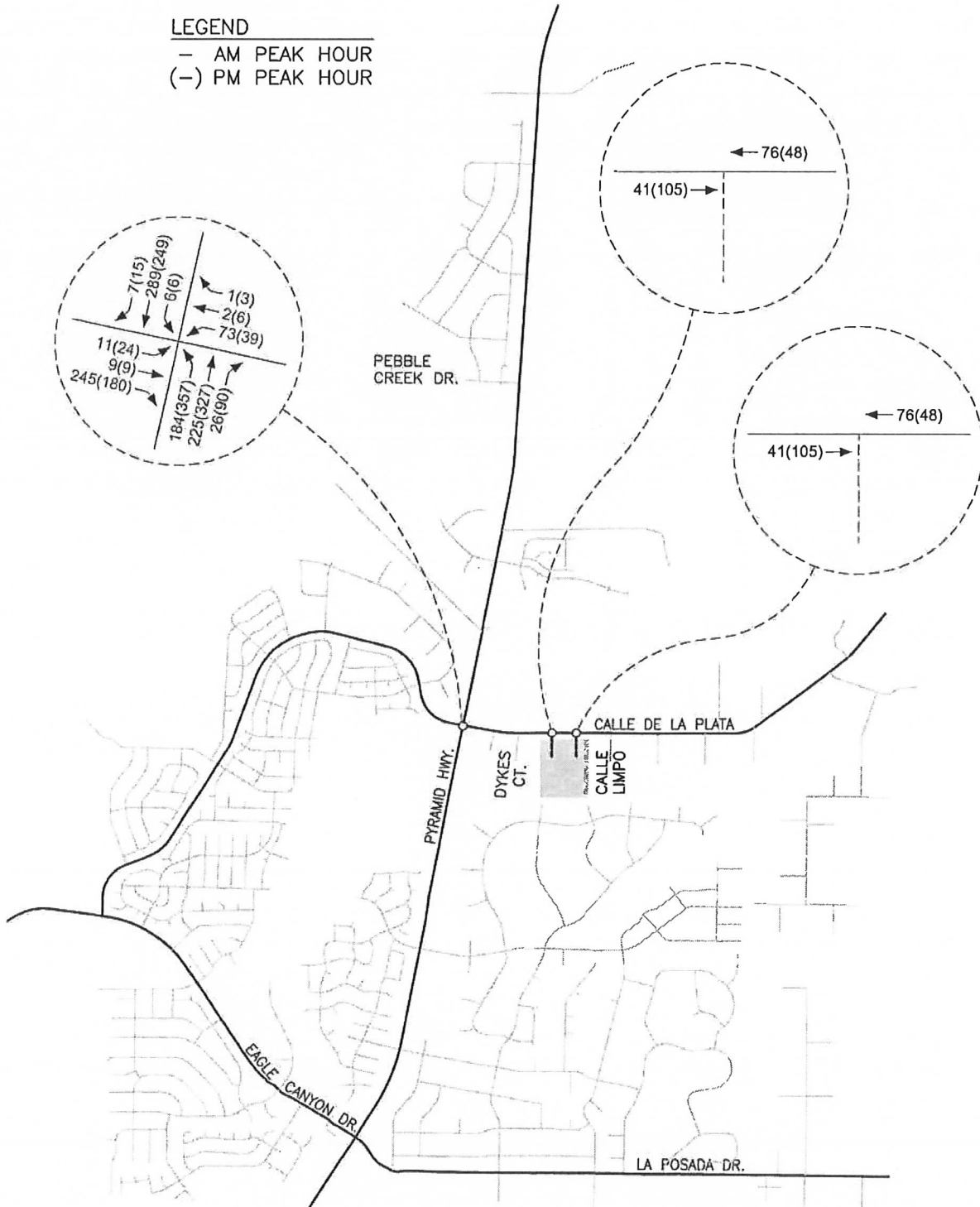
375 CALLE DE LA PLATA
TRIP DISTRIBUTION
FIGURE 2

LEGEND
 — AM PEAK HOUR
 (—) PM PEAK HOUR



375 CALLE DE LA PLATA
 TRIP ASSIGNMENT
 FIGURE 3

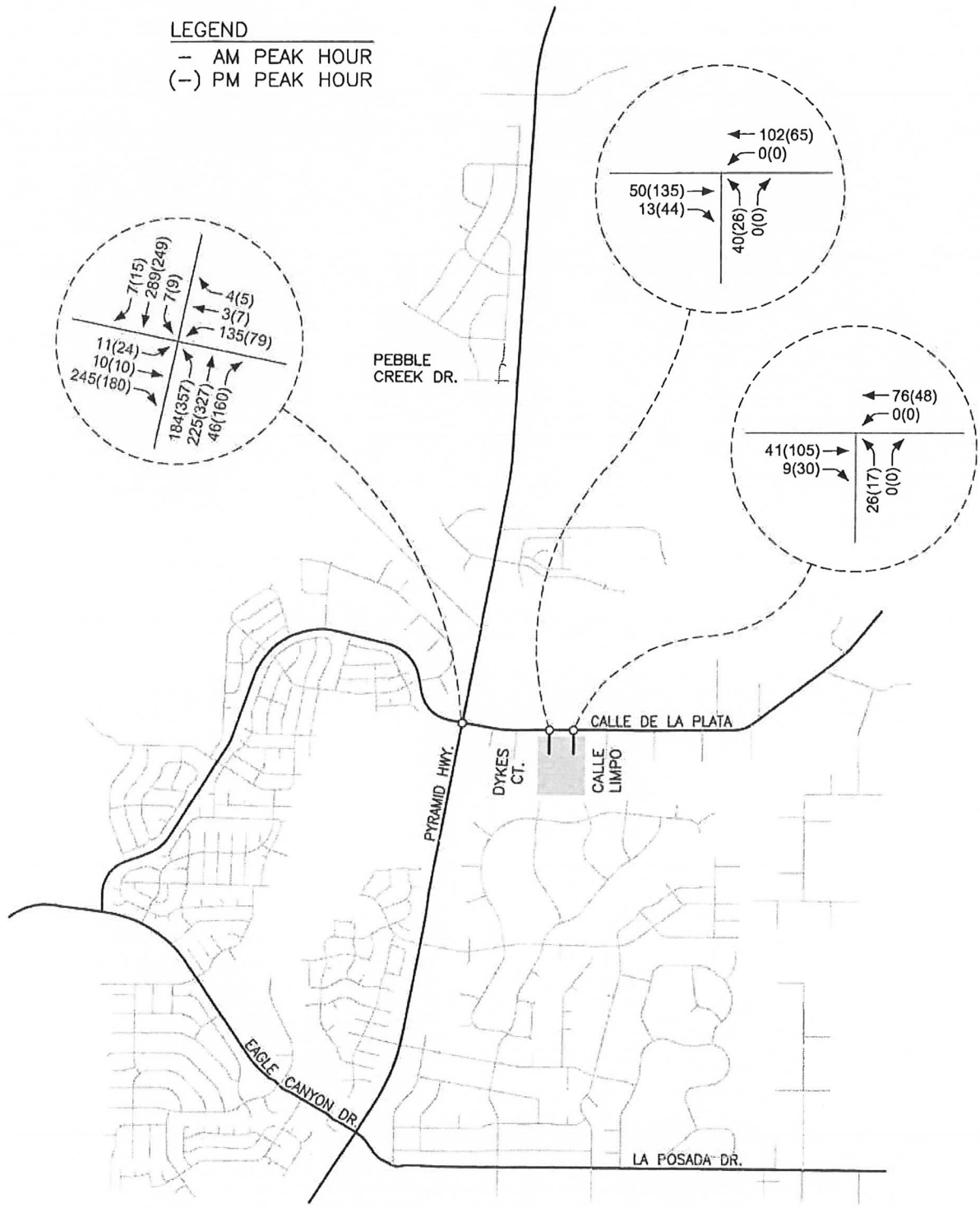
LEGEND
 - AM PEAK HOUR
 (-) PM PEAK HOUR



375 CALLE DE LA PLATA
 EXISTING TRAFFIC VOLUMES
 FIGURE 4

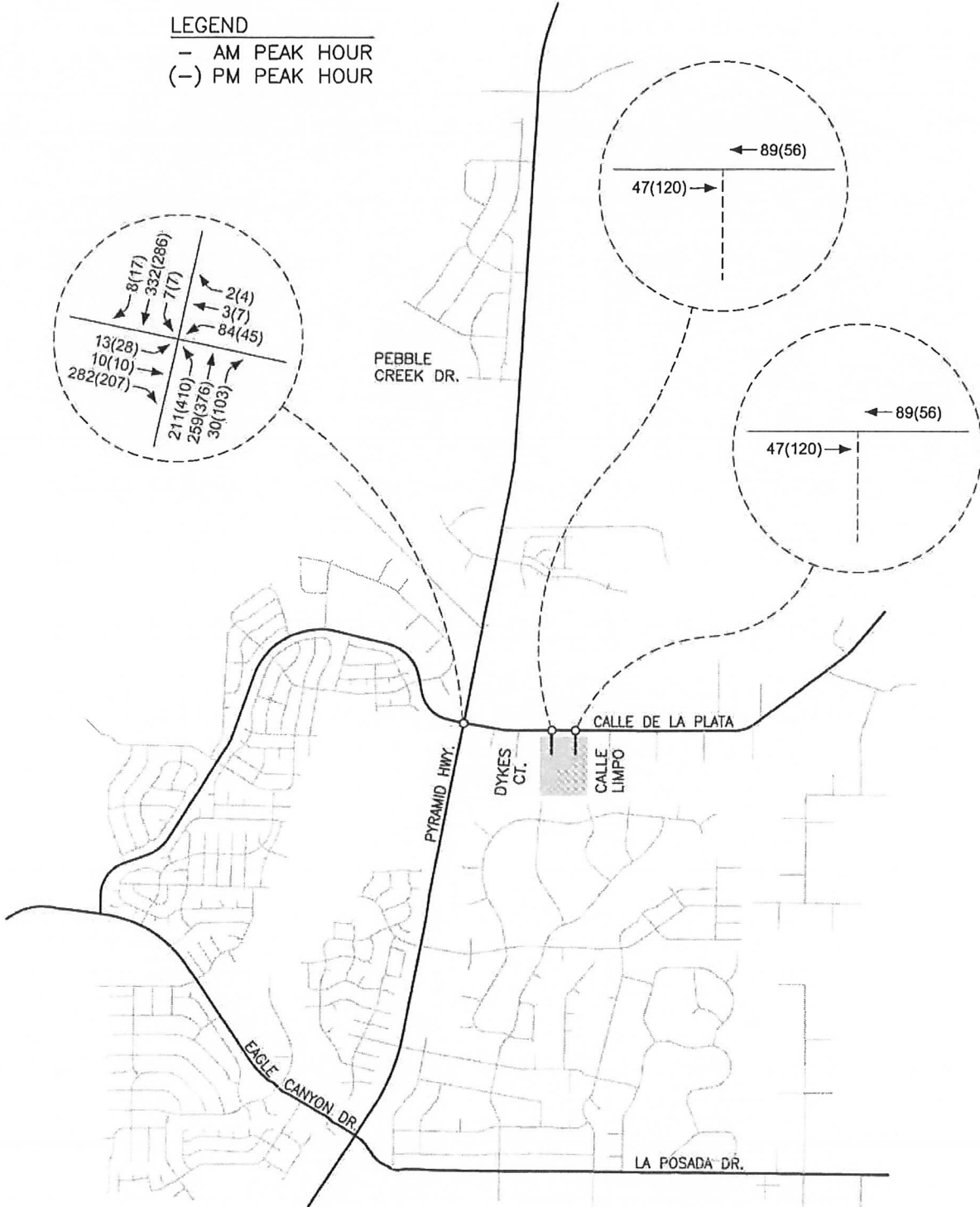
LEGEND

- AM PEAK HOUR
- (-) PM PEAK HOUR



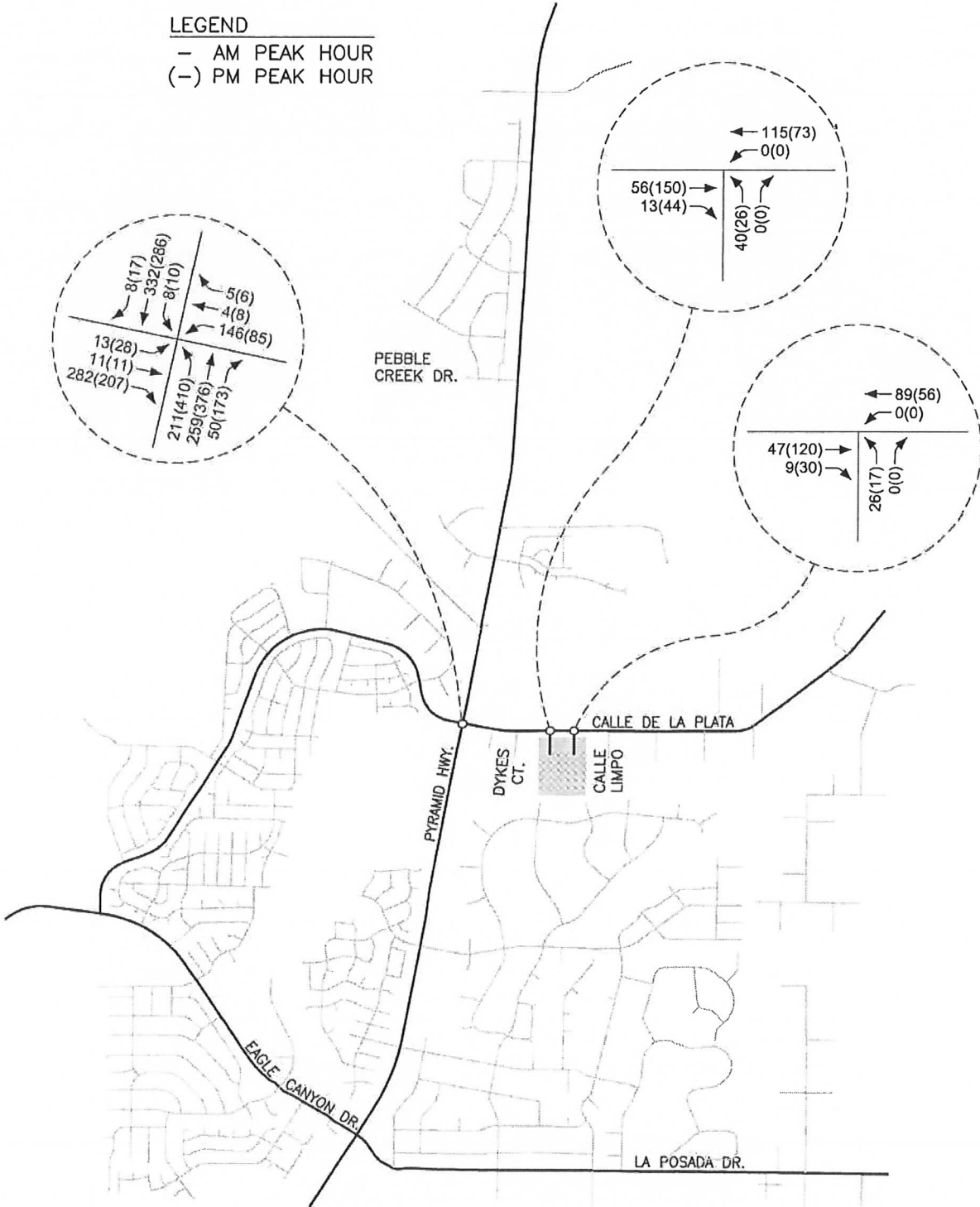
375 CALLE DE LA PLATA
EXISTING PLUS PROJECT TRAFFIC VOLUMES
FIGURE 5

LEGEND
 - AM PEAK HOUR
 (-) PM PEAK HOUR



375 CALLE DE LA PLATA
 2028 BASE TRAFFIC VOLUMES
 FIGURE 6

LEGEND
 - AM PEAK HOUR
 (-) PM PEAK HOUR



375 CALLE DE LA PLATA
 2028 BASE PLUS PROJECT TRAFFIC VOLUMES
 FIGURE 7

INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual (6th Edition)*, prepared by the Transportation Research Board, for unsignalized and signalized intersections using the latest version of the Highway Capacity software.

The result of capacity analysis is a level of service (LOS) rating for signalized intersections or minor movements at a two-way stop controlled intersection. Level of service is a qualitative measure of traffic operating conditions where a letter grade “A” through “F”, corresponding to progressively worsening traffic operation, is assigned to the intersection or minor movement.

The *Highway Capacity Manual* defines level of service for stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the intersection as a whole. The level of service criteria for unsignalized intersections is shown in Table 2.

LEVEL OF SERVICE	DELAY RANGE (SEC/VEH)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Level of service for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The level of service criteria for signalized intersections is shown in Table 3.

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Table 4 shows a summary of the level of service and delay results at the key intersections for the existing, existing plus project, 2028 base, and 2028 base plus project scenarios. The intersection capacity worksheets are included in the Appendix.

TABLE 4 INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS								
INTERSECTION	EXISTING		EXISTING + PROJECT		2028 BASE		2028 BASE + PROJECT	
	AM	PM	AM	PM	AM	PM	AM	PM
Pyramid & Calle De La Plata Unsignalized Four-Leg								
EB Left-Thru	D25.3	F85.9	D26.1	F101.5	D32.8	F205.3	D34.0	F252.5
WB Left-Thru-Right	E36.1	F99.0	F69.2	F265.0	F63.6	F285.2	F170.0	F690.5
NB Left	A8.5	A9.1	A8.5	A9.1	A8.8	A9.6	A8.8	A9.6
SB Left	A7.8	A8.3	A7.9	A8.5	A7.9	A8.5	A8.0	A8.7
Pyramid & Calle De La Plata Signalized	B18.4	B17.9	B18.5	B18.1	B19.5	B19.2	B19.5	B19.5
Calle De La Plata/West Access Unsignalized Three-Leg								
WB Left	N/A	N/A	A7.3	A7.6	N/A	N/A	A7.4	A7.6
NB Left-Right	N/A	N/A	A9.6	B10.0	N/A	N/A	A9.8	B10.2
Calle De La Plata/East Access Unsignalized Three-Leg								
WB Left	N/A	N/A	A7.3	A7.5	N/A	N/A	A7.3	A7.5
NB Left-Right	N/A	N/A	A9.3	A9.6	N/A	N/A	A9.4	A9.7

Pyramid Highway/Calle De La Plata Intersection

The Pyramid Highway/Calle De La Plata intersection was analyzed for capacity as an unsignalized four-leg intersection with stop sign control at the east and west approaches for all scenarios. The left turn and through movements at the east and west approaches currently operate at LOS D/E during the AM peak hour and LOS F during the PM peak hour. For the existing plus project traffic volumes the left turn and through movements at the east and west approaches operate at LOS D/F during the AM peak hour and LOS F during the PM peak hour. For the 2028 base traffic volumes the left turn and through movements at the east and west approaches operate at LOS D/F during the AM peak hour and LOS F during the PM peak hour. For the 2028 base plus project traffic volumes the left turn and through movements at the east and west approaches continue to operate at LOS D/F during the AM peak hour and LOS F during the PM peak hour.

It is our understanding that the Regional Transportation Commission (RTC) is currently preparing designs plans for the installation of a traffic signal at the Pyramid Highway/Calle De La Plata intersection. Traffic signal control is anticipated to result in LOS B operation during the AM and PM peak hours for all scenarios.

The existing left turn pocket at the north approach of the Pyramid Highway/Calle De La Plata intersection was subsequently reviewed for storage and deceleration requirements. Less than 50 feet of storage length is required for the existing, existing plus project, 2028 base, and 2028 base plus project volumes based on signalized conditions. However, NDOT's access management standards specify that a minimum of 100 feet of storage be provided for all left turn lanes. NDOT's access management standards also indicate that the left turn lane shall contain a desirable deceleration length of 365 feet or a minimum deceleration length of 245 feet based on the 55 mile per hour speed limit on Pyramid Highway. The existing left turn pocket contains ±525 feet of storage/deceleration length which meets the 100 foot storage and 365 foot desirable deceleration requirements.

Calle De La Plata/West Access Intersection

The Calle De La Plata/West Access intersection was analyzed as an unsignalized three-leg intersection with stop control at the south approach for the existing plus project and 2028 base plus project scenarios. For the existing plus project volumes the intersection minor movements operate at LOS B or better during the AM and PM peak hours. For the 2028 base plus project volumes the intersection minor movements continue to operate at LOS B or better during the AM and PM peak hours. The intersection was analyzed with single lanes at all approaches.

The need for an exclusive left turn lane on Calle De La Plata at the west access was reviewed based on AASHTO guidelines for left turn lanes on two-lane roadways. Table 9-23 of the AASHTO publication lists traffic volumes and operating speeds which necessitate the need for left turn lanes on two-lane roads. The traffic volumes to be considered include advancing traffic volumes, opposing traffic volumes, and the percent of advancing traffic which is turning left. The projected traffic volumes do not meet the requirements for an exclusive left turn lane at the west access based on the 50 mile per hour speed limit on Calle De La Plata.

Calle De La Plata/East Access Intersection

The Calle De La Plata/East Access intersection was analyzed as an unsignalized three-leg intersection with stop control at the south approach for the existing plus project and 2028 base plus project scenarios. For the existing plus project volumes the intersection minor movements operate at LOS A during the AM and PM peak hours. For the 2028 base plus project volumes the intersection minor movements continue to operate at LOS A during the AM and PM peak hours. The intersection was analyzed with single lanes at all approaches.

The need for an exclusive left turn lane on Calle De La Plata at the east access was reviewed based on AASHTO guidelines for left turn lanes on two-lane roadways. Table 9-23 of the AASHTO publication lists traffic volumes and operating speeds which necessitate the need for left turn lanes on two-lane roads. The traffic volumes to be considered include advancing traffic volumes, opposing traffic volumes, and the percent of advancing traffic which is turning left. The projected traffic volumes do not meet the requirements for an exclusive left turn lane at the east access based on the 50 mile per hour speed limit on Calle De La Plata.

TRAFFIC CRASH REVIEW

Traffic crash data at the Pyramid Highway/Calle De La Plata intersection was obtained from NDOT Traffic Safety Engineering for the study period from June 1, 2014 to June 1, 2017. A total of 11 crashes occurred at the intersection during the three-year period with no fatalities reported. The crash type was 6 angle collision, 4 rear-end collisions, and 1 sideswipe overtaking collision.

RECOMMENDATIONS

Traffic generated by the 375 Calle De La Plata development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with Nevada Department of Transportation and Washoe County requirements.

It is recommended that the Calle De La Plata/West Access intersection be constructed per Washoe County standards and contain a stop sign at the south approach.

It is recommended that the Calle De La Plata/East Access intersection be constructed per Washoe County standards and contain a stop sign at the south approach.

APPENDIX

Trip Generation Summary - Alternative 1

Project: New Project
 Alternative: Alternative 1

Open Date: 1/5/2018
 Analysis Date: 1/5/2018

ITE	Land Use	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
210	SFHOUSE 1	557	557	1114	22	66	88	74	43	117
	117 Dwelling Units									
Unadjusted Volume		0	0	0	0	0	0	0	0	0
Internal Capture Trips		0	0	0	0	0	0	0	0	0
Pass-By Trips		0	0	0	0	0	0	0	0	0
Volume Added to Adjacent Streets		0	0	0	0	0	0	0	0	0

Total AM Peak Hour Internal Capture = 0 Percent

Total PM Peak Hour Internal Capture = 0 Percent

HCS7 Two-Way Stop-Control Report

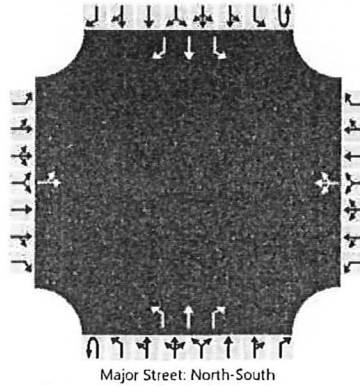
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2018
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Pyramid & Calle De La Plata
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	Pyramid Highway
Peak Hour Factor	0,92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	1	0		0	1	1	1		0	1	1	1
Configuration		LT					LTR			L	T	R			L	T	R	
Volume, V (veh/h)		11	9			73	2	1		184	225	26			6	289	7	
Percent Heavy Vehicles (%)		2	2			2	2	2		2					2			
Proportion Time Blocked																		
Percent Grade (%)		0				0												
Right Turn Channelized		No				No				No				No				
Median Type/Storage		Undivided																

Critical and Follow-up Headways

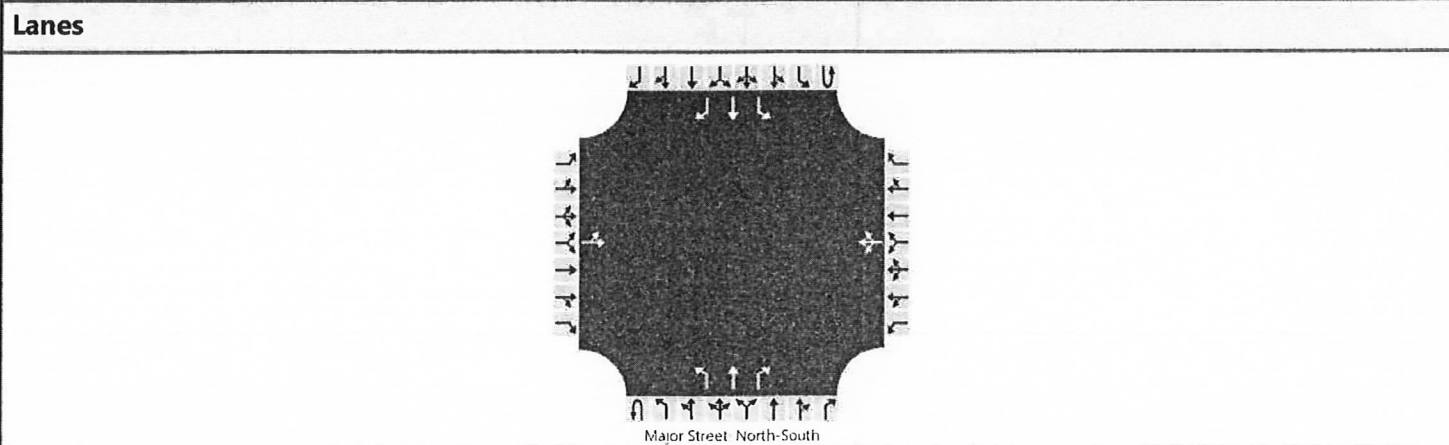
Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		22				82				200					7		
Capacity, c (veh/h)		200				196				1237					1289		
v/c Ratio		0,11				0,42				0,16					0,01		
95% Queue Length, Q ₉₅ (veh)		0,4				1,9				0,6					0,0		
Control Delay (s/veh)		25,3				36,1				8,5					7,8		
Level of Service, LOS		D				E				A					A		
Approach Delay (s/veh)		25,3				36,1				3,6				0,2			
Approach LOS		D				E				A				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Pyramid & Calle De La Plata
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2018	North/South Street	Pyramid Highway
Time Analyzed	PM Existing	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	1	0		0	1	1		0	1	1		
Configuration		LT					LTR			L	T	R		L	T	R		
Volume, V (veh/h)		24	9			39	6	3		357	327	90		6	249	15		
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2				
Proportion Time Blocked																		
Percent Grade (%)		0				0												
Right Turn Channelized		No				No				No					No			
Median Type/Storage		Undivided																

Critical and Follow-up Headways

Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				52				388					7		
Capacity, c (veh/h)		78				85				1274					1107		
v/c Ratio		0.46				0.61				0.30					0.01		
95% Queue Length, Q ₉₅ (veh)		1.9				2.8				1.3					0.0		
Control Delay (s/veh)		85.9				99.0				9.1					8.3		
Level of Service, LOS		F				F				A					A		
Approach Delay (s/veh)		85.9				99.0				4.2				0.2			
Approach LOS		F				F											

HCS7 Two-Way Stop-Control Report

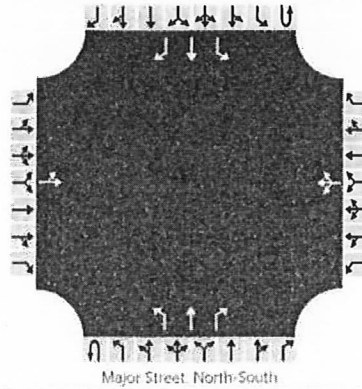
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2018
Time Analyzed	AM Existing + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Pyramid & Calle De La Plata
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	Pyramid Highway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	1	0	1	1	1
Configuration		LT					LTR			L	T	R		L	T	R
Volume, V (veh/h)		11	10			135	3	4		184	225	46		7	289	7
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

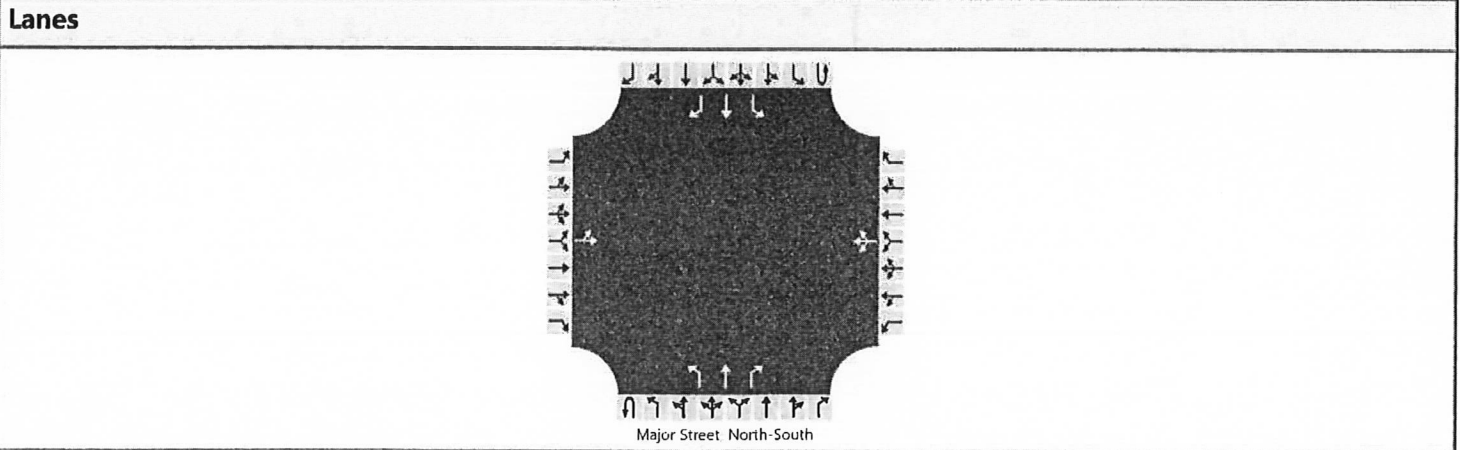
Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23				154				200				8		
Capacity, c (veh/h)		193				196				1237				1266		
v/c Ratio		0.12				0.79				0.16				0.01		
95% Queue Length, Q ₉₅ (veh)		0.4				5.4				0.6				0.0		
Control Delay (s/veh)		26.1				69.2				8.5				7.9		
Level of Service, LOS		D				F				A				A		
Approach Delay (s/veh)		26.1				69.2				3.4				0.2		
Approach LOS		D				F				A				A		

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Pyramid & Calle De La Plata
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2018	North/South Street	Pyramid Highway
Time Analyzed	PM Existing + Project	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	1	1	1	0	1	1	1	
Configuration		LT				LTR				L	T	R		L	T	R	
Volume, V (veh/h)		24	10			79	7	5		357	327	160		9	249	15	
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2			
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized		No				No				No				No			
Median Type/Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

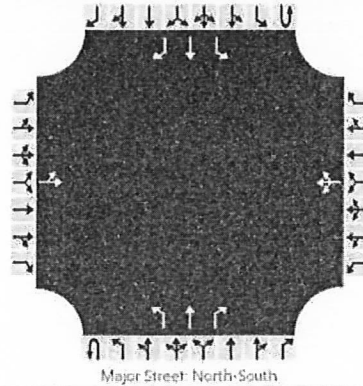
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37				99				388				10			
Capacity, c (veh/h)		71				81				1274				1038			
v/c Ratio		0.52				1.23				0.30				0.01			
95% Queue Length, Q ₉₅ (veh)		2.2				7.3				1.3				0.0			
Control Delay (s/veh)		101.5				265.0				9.1				8.5			
Level of Service, LOS		F				F				A				A			
Approach Delay (s/veh)		101.5				265.0				3.8				0.3			
Approach LOS		F				F											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Pyramid & Calle De La Plata
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2028	North/South Street	Pyramid Highway
Time Analyzed	AM Base	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description			

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	1	0		0	1	1	1		0	1	1	1
Configuration		LT					LTR			L	T	R		L	T	R		
Volume, V (veh/h)		13	10			84	3	2		211	259	30		7	332	8		
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2				
Proportion Time Blocked																		
Percent Grade (%)		0				0												
Right Turn Channelized		No				No				No				No				
Median Type/Storage		Undivided																

Critical and Follow-up Headways

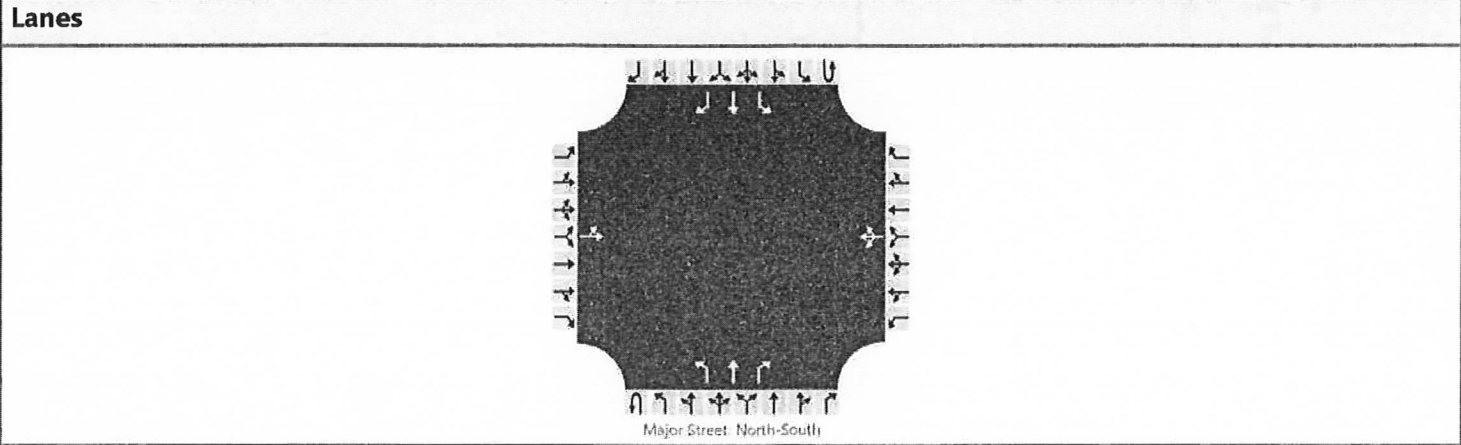
Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		25				96				229					8		
Capacity, c (veh/h)		154				151				1188					1244		
v/c Ratio		0.16				0.64				0.19					0.01		
95% Queue Length, Q ₉₅ (veh)		0.6				3.5				0.7					0.0		
Control Delay (s/veh)		32.8				63.6				8.8					7.9		
Level of Service, LOS		D				F				A					A		
Approach Delay (s/veh)		32.8				63.6				3.7				0.2			
Approach LOS		D				F				A				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Pyramid & Calle De La Plata
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2028	North/South Street	Pyramid Highway
Time Analyzed	PM Base	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	1	0	1	1	1
Configuration		LT					LTR			L	T	R		L	T	R
Volume, V (veh/h)		28	10			45	7	4		410	376	103		7	286	17
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

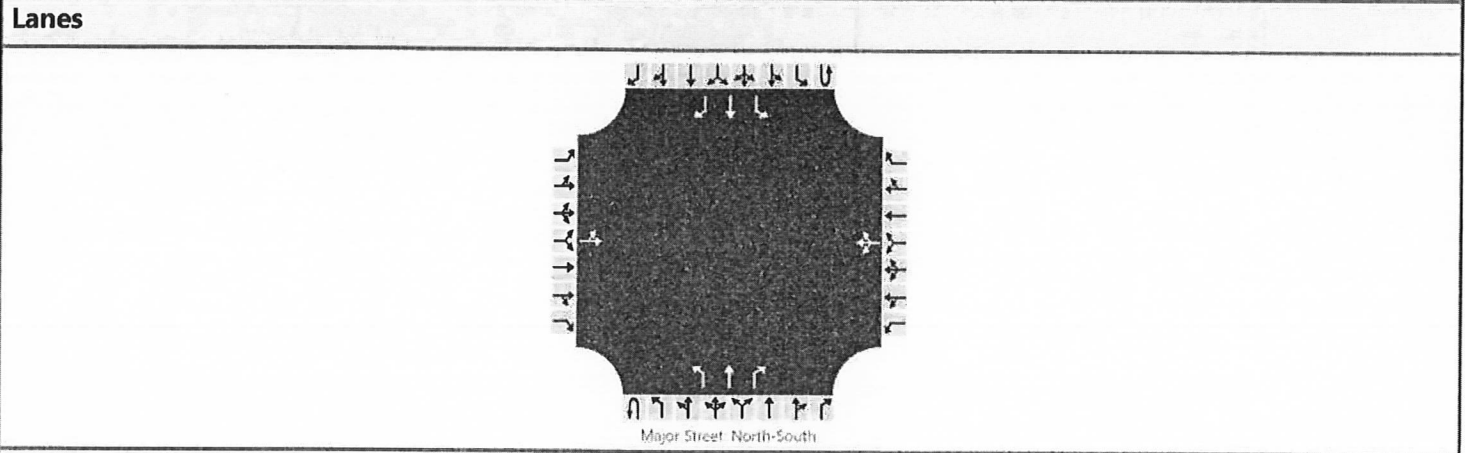
Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		41				61				446				8		
Capacity, c (veh/h)		50				54				1230				1045		
v/c Ratio		0.82				1.13				0.36				0.01		
95% Queue Length, Q ₉₅ (veh)		3.4				5.2				1.7				0.0		
Control Delay (s/veh)		205.3				285.2				9.6				8.5		
Level of Service, LOS		F				F				A				A		
Approach Delay (s/veh)		205.3				285.2				4.4				0.2		
Approach LOS		F				F				A				A		

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Pyramid & Calle De La Plata
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2028	North/South Street	Pyramid Highway
Time Analyzed	AM Base + Project	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description			



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	1	0	1	1	1
Configuration		LT					LTR			L	T	R		L	T	R
Volume, V (veh/h)		13	11			146	4	5		211	259	50		8	332	8
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				168				229				9		
Capacity, c (veh/h)		150				150				1188				1222		
v/c Ratio		0.17				1.12				0.19				0.01		
95% Queue Length, Q ₉₅ (veh)		0.6				9.2				0.7				0.0		
Control Delay (s/veh)		34.0				170.0				8.8				8.0		
Level of Service, LOS		D				F				A				A		
Approach Delay (s/veh)		34.0				170.0				3.5				0.2		
Approach LOS		D				F										

HCS7 Two-Way Stop-Control Report

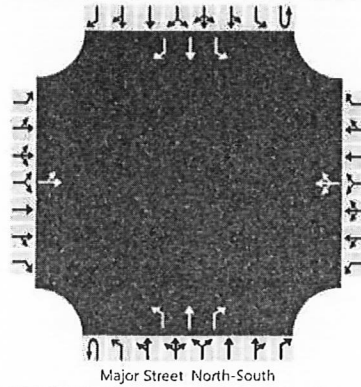
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2028
Time Analyzed	PM Base + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Pyramid & Calle De La Plata
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	Pyramid Highway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	1	0		0	1	1	1		0	1	1	1
Configuration		LT					LTR			L	T	R		L	T	R		
Volume, V (veh/h)		28	11			85	8	6		410	376	173		10	286	17		
Percent Heavy Vehicles (%)		2	2			2	2	2		2				2				
Proportion Time Blocked																		
Percent Grade (%)		0				0												
Right Turn Channelized		No				No				No				No				
Median Type/Storage		Undivided																

Critical and Follow-up Headways

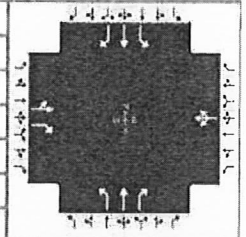
Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		42				108				446					11		
Capacity, c (veh/h)		45				51				1230					979		
v/c Ratio		0.93				2.12				0.36					0.01		
95% Queue Length, Q ₉₅ (veh)		3.8				10.9				1.7					0.0		
Control Delay (s/veh)		252.5				690.5				9.6					8.7		
Level of Service, LOS		F				F				A					A		
Approach Delay (s/veh)		252.5				690.5				4.1				0.3			
Approach LOS		F				F				A				A			

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa18ax.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	11	9	245	73	2	1	184	225	26	6	289	7

Signal Information												
Cycle, s	66.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
		Green	8.0	25.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Yellow	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Red	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

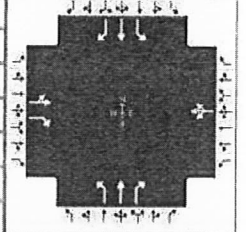
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		23.0		23.0	13.0	30.0	13.0	30.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.0	3.1	3.0
Queue Clearance Time (g _s), s		10.0		5.0	8.7	8.2	2.2	10.3
Green Extension Time (g _e), s		0.5		0.6	0.1	1.0	0.0	0.9
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.03		0.00	0.31	0.00	0.00	0.02

Movement Group Results	EB			WB			NB			SB			
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow Rate (v), veh/h		22	223		83		200	245	28	7	314	8	
Adjusted Saturation Flow Rate (s), veh/h/ln		1597	1556		1393		1781	1870	1589	1781	1870	1564	
Queue Service Time (g _s), s		0.0	8.0		2.4		6.7	6.2	0.7	0.2	8.3	0.2	
Cycle Queue Clearance Time (g _c), s		0.6	8.0		3.0		6.7	6.2	0.7	0.2	8.3	0.2	
Green Ratio (g/C)		0.27	0.27		0.27		0.20	0.38	0.38	0.12	0.38	0.38	
Capacity (c), veh/h		520	424		487		351	708	602	216	708	592	
Volume-to-Capacity Ratio (X)		0.042	0.525		0.170		0.570	0.345	0.047	0.030	0.443	0.013	
Back of Queue (Q), ft/ln (95 th percentile)		10.4	124.6		41.5		125.7	107.2	10.8	3.9	144.7	2.9	
Back of Queue (Q), veh/ln (95 th percentile)		0.4	4.9		1.6		4.9	4.2	0.4	0.2	5.7	0.1	
Queue Storage Ratio (RQ) (95 th percentile)		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		17.7	20.4		18.5		24.0	14.7	13.0	25.6	15.3	12.8	
Incremental Delay (d ₂), s/veh		0.0	0.6		0.1		1.4	0.1	0.0	0.0	0.2	0.0	
Initial Queue Delay (d ₃), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		17.7	21.0		18.6		25.4	14.8	13.0	25.6	15.5	12.8	
Level of Service (LOS)		B	C		B		C	B	B	C	B	B	
Approach Delay, s/veh / LOS	20.7	C		18.6	B		19.1	B			15.6	B	
Intersection Delay, s/veh / LOS	18.4						B						

Multimodal Results	EB			WB			NB			SB			
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B			2.3	B	
Bicycle LOS Score / LOS	0.9	A		0.6	A		1.3	A			1.0	A	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa18px.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	24	9	180	39	6	3	357	327	90	6	249	15

Signal Information				Signal Phases													
Cycle, s	68.0	Reference Phase	2														
Offset, s	0	Reference Point	End														
Uncoordinated	Yes	Simult. Gap E/W	On	Green	6.0	14.0	17.0	16.0	0.0	0.0	Green	6.0	14.0	17.0	16.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	0.0	Yellow	4.0	0.0	4.0	4.0	0.0	0.0
				Red	1.0	0.0	1.0	1.0	0.0	0.0	Red	1.0	0.0	1.0	1.0	0.0	0.0

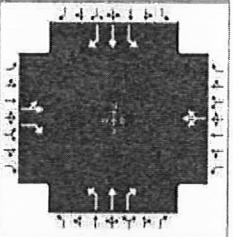
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		21.0		21.0	25.0	36.0	11.0	22.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		7.2		3.8	14.0	10.7	2.2	10.6
Green Extension Time (g _e), s		0.3		0.4	0.6	1.4	0.0	0.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.01		0.00	0.00	0.00	0.18	1.00

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Approach Movement													
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow Rate (v), veh/h	36	141		52			388	355	98	7	271	16	
Adjusted Saturation Flow Rate (s), veh/h/ln	1501	1551		1446			1781	1870	1593	1781	1870	1553	
Queue Service Time (g _s), s	0.0	5.2		0.7			12.0	8.7	2.4	0.2	8.6	0.5	
Cycle Queue Clearance Time (g _c), s	1.1	5.2		1.8			12.0	8.7	2.4	0.2	8.6	0.5	
Green Ratio (g/C)	0.24	0.24		0.24			0.37	0.46	0.46	0.09	0.25	0.25	
Capacity (c), veh/h	445	365		436			655	853	726	157	468	388	
Volume-to-Capacity Ratio (X)	0.081	0.387		0.120			0.593	0.417	0.135	0.041	0.579	0.042	
Back of Queue (Q), ft/ln (50 th percentile)	10.6	45.3		15.6			115.8	80.5	18.8	2.4	92.9	4.7	
Back of Queue (Q), veh/ln (50 th percentile)	0.4	1.8		0.6			4.6	3.2	0.8	0.1	3.7	0.2	
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	20.3	21.9		20.5			17.4	12.4	10.7	28.4	22.4	19.3	
Incremental Delay (d ₂), s/veh	0.0	0.2		0.0			1.0	0.1	0.0	0.0	1.2	0.0	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	20.3	22.1		20.6			18.4	12.5	10.8	28.4	23.5	19.3	
Level of Service (LOS)		C	C		C			B	B	B	C	C	B
Approach Delay, s/veh / LOS	21.8	C		20.6	C		15.0	B		23.4	C		
Intersection Delay, s/veh / LOS	17.9						B						

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B		2.3	B	
Bicycle LOS Score / LOS	0.8	A		0.6	A		1.9	B		1.0	A	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	Existing + Project	Analysis Period	1 > 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa18aw.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	11	10	245	135	3	7	184	225	46	7	289	7

Signal Information				Signal Timing (s)										
Cycle, s	66.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	8.0	25.0	18.0	0.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0				
				Red	1.0	1.0	1.0	0.0	0.0	0.0				

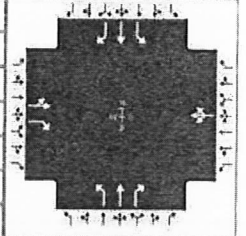
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		23.0		23.0	13.0	30.0	13.0	30.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		10.0		8.1	8.7	8.2	2.2	10.3
Green Extension Time (g _e), s		0.6		0.7	0.1	1.1	0.0	0.9
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.05		0.01	0.31	0.00	0.00	0.03

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow Rate (v), veh/h		23	223		158		200	245	50	8	314	8	
Adjusted Saturation Flow Rate (s), veh/h/ln		1605	1556		1397		1781	1870	1589	1781	1870	1564	
Queue Service Time (g _s), s		0.0	8.0		5.5		6.7	6.2	1.3	0.2	8.3	0.2	
Cycle Queue Clearance Time (g _c), s		0.6	8.0		6.1		6.7	6.2	1.3	0.2	8.3	0.2	
Green Ratio (g/C)		0.27	0.27		0.27		0.20	0.38	0.38	0.12	0.38	0.38	
Capacity (c), veh/h		521	424		486		351	708	602	216	708	592	
Volume-to-Capacity Ratio (X)		0.044	0.525		0.324		0.570	0.345	0.083	0.035	0.443	0.013	
Back of Queue (Q), ft/ln (95 th percentile)		10.9	124.6		83.5		125.7	107.2	19.4	4.6	144.7	2.9	
Back of Queue (Q), veh/ln (95 th percentile)		0.4	4.9		3.3		4.9	4.2	0.8	0.2	5.7	0.1	
Queue Storage Ratio (RQ) (95 th percentile)		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		17.7	20.4		19.6		24.0	14.7	13.1	25.6	15.3	12.8	
Incremental Delay (d ₂), s/veh		0.0	0.6		0.1		1.4	0.1	0.0	0.0	0.2	0.0	
Initial Queue Delay (d ₃), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		17.7	21.0		19.8		25.4	14.8	13.2	25.6	15.5	12.8	
Level of Service (LOS)		B	C		B		C	B	B	C	B	B	
Approach Delay, s/veh / LOS	20.7	C		19.8	B		18.9	B			15.6	B	
Intersection Delay, s/veh / LOS	18.5						B						

Multimodal Results	EB			WB			NB			SB			
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B			2.3	B	
Bicycle LOS Score / LOS	0.9	A		0.7	A		1.3	A			1.0	A	

HCS7 Signalized Intersection Results Summary

General Information					Intersection Information			
Agency	Solaegui Engineers				Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018		Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour		PHF	0.92		
Urban Street		Analysis Year	Existing + Project		Analysis Period	1 > 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa18pw.xus					
Project Description								



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	24	10	180	79	7	5	357	327	160	9	249	15

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	68.0	Reference Phase	2	Green	6.0	14.0	17.0	16.0	0.0	0.0	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	4.0	0.0	4.0	4.0	0.0	0.0	5	6	7	8	
Uncoordinated	Yes	Simult. Gap E/W	On	Red	1.0	0.0	1.0	1.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On												

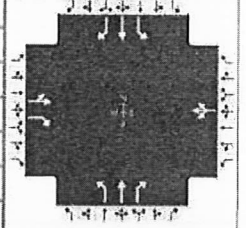
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		21.0		21.0	25.0	36.0	11.0	22.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		9.5		5.8	14.0	10.7	2.3	10.6
Green Extension Time (g _e), s		0.4		0.5	0.6	1.5	0.0	0.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.10		0.01	0.00	0.00	0.27	1.00

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Approach Movement													
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow Rate (v), veh/h	37	196		99			388	355	174	10	271	16	
Adjusted Saturation Flow Rate (s), veh/h/ln	1507	1551		1420			1781	1870	1593	1781	1870	1553	
Queue Service Time (g _s), s	0.0	7.5		2.7			12.0	8.7	4.5	0.3	8.6	0.5	
Cycle Queue Clearance Time (g _c), s	1.1	7.5		3.8			12.0	8.7	4.5	0.3	8.6	0.5	
Green Ratio (g/C)	0.24	0.24		0.24			0.37	0.46	0.46	0.09	0.25	0.25	
Capacity (c), veh/h	445	365		433			655	853	726	157	468	388	
Volume-to-Capacity Ratio (X)	0.083	0.536		0.228			0.593	0.417	0.240	0.062	0.579	0.042	
Back of Queue (Q), ft/ln (50 th percentile)	10.9	66.5		30.8			115.8	80.5	35.2	3.6	92.9	4.7	
Back of Queue (Q), veh/ln (50 th percentile)	0.4	2.6		1.2			4.6	3.2	1.4	0.1	3.7	0.2	
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	20.3	22.8		21.3			17.4	12.4	11.3	28.4	22.4	19.3	
Incremental Delay (d ₂), s/veh	0.0	0.8		0.1			1.0	0.1	0.1	0.1	1.2	0.0	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	20.3	23.6		21.4			18.4	12.5	11.4	28.5	23.5	19.3	
Level of Service (LOS)		C	C		C		B	B	B		C	C	B
Approach Delay, s/veh / LOS	23.1		C	21.4		C	14.8		B	23.5		C	
Intersection Delay, s/veh / LOS	18.1						B						

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.4		B	2.4		B	2.1		B	2.3		B
Bicycle LOS Score / LOS	0.9		A	0.7		A	2.0		B	1.0		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2028 Base	Analysis Period	1 > 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa28ax.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	13	10	282	84	3	2	211	259	30	7	332	8

Signal Information				Signal Phases								
Cycle, s	66.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	8.0	25.0	18.0	0.0	0.0	0.0						
Yellow	4.0	4.0	4.0	0.0	0.0	0.0						
Red	1.0	1.0	1.0	0.0	0.0	0.0						

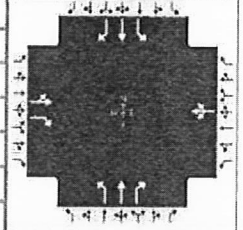
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		23.0		23.0	13.0	30.0	13.0	30.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.0	3.1	3.0
Queue Clearance Time (g _s), s		11.8		5.5	9.8	9.3	2.2	11.8
Green Extension Time (g _e), s		0.5		0.7	0.1	1.2	0.0	1.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.15		0.00	0.96	0.00	0.00	0.08

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	25	263		97			229	282	33	8	361	9
Adjusted Saturation Flow Rate (s), veh/h/ln	1587	1556		1397			1781	1870	1589	1781	1870	1564
Queue Service Time (g _s), s	0.0	9.8		2.9			7.8	7.3	0.9	0.2	9.8	0.2
Cycle Queue Clearance Time (g _c), s	0.7	9.8		3.5			7.8	7.3	0.9	0.2	9.8	0.2
Green Ratio (g/C)	0.27	0.27		0.27			0.20	0.38	0.38	0.12	0.38	0.38
Capacity (c), veh/h	518	424		487			351	708	602	216	708	592
Volume-to-Capacity Ratio (X)	0.048	0.620		0.199			0.654	0.397	0.054	0.035	0.509	0.015
Back of Queue (Q), ft/ln (95th percentile)	11.9	158.7		48.9			154.8	126.3	12.5	4.6	171.9	3.3
Back of Queue (Q), veh/ln (95th percentile)	0.5	6.2		1.9			6.1	5.0	0.5	0.2	6.8	0.1
Queue Storage Ratio (RQ) (95th percentile)	0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	17.7	21.0		18.7			24.4	15.0	13.0	25.6	15.8	12.8
Incremental Delay (d ₂), s/veh	0.0	2.1		0.1			3.4	0.1	0.0	0.0	0.3	0.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.7	23.1		18.8			27.9	15.1	13.0	25.6	16.0	12.8
Level of Service (LOS)		B C		B			C	B	B	C	B	B
Approach Delay, s/veh / LOS	22.6	C		18.8	B		20.4	C		16.2	B	
Intersection Delay, s/veh / LOS	19.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.4	B	2.4	B	2.1	B	2.3	B
Bicycle LOS Score / LOS	1.0	A	0.6	A	1.4	A	1.1	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2028 Base	Analysis Period	1> 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa28px.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	28	10	207	45	7	4	410	376	103	7	286	17

Signal Information				Signal Phases								
Cycle, s	68.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
		Green	6.0	14.0	17.0	16.0	0.0	0.0				
		Yellow	4.0	0.0	4.0	4.0	0.0	0.0				
		Red	1.0	0.0	1.0	1.0	0.0	0.0				

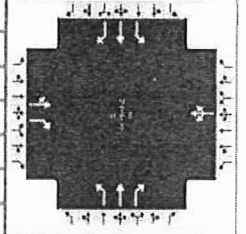
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		21.0		21.0	25.0	36.0	11.0	22.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		8.9		4.2	16.3	12.3	2.3	12.2
Green Extension Time (g _e), s		0.4		0.5	0.7	1.6	0.0	0.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.05		0.00	0.03	0.00	0.20	1.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	41	182		61			446	409	112	8	311	18
Adjusted Saturation Flow Rate (s), veh/h/ln	1493	1551		1447			1781	1870	1593	1781	1870	1553
Queue Service Time (g _s), s	0.0	6.9		0.9			14.3	10.3	2.8	0.3	10.2	0.6
Cycle Queue Clearance Time (g _c), s	1.3	6.9		2.2			14.3	10.3	2.8	0.3	10.2	0.6
Green Ratio (g/C)	0.24	0.24		0.24			0.37	0.46	0.46	0.09	0.25	0.25
Capacity (c), veh/h	443	365		436			655	853	726	157	468	388
Volume-to-Capacity Ratio (X)	0.093	0.497		0.140			0.681	0.479	0.154	0.048	0.665	0.048
Back of Queue (Q), ft/ln (50 th percentile)	12.3	60.2		18.4			144.3	96.1	21.7	2.8	114.3	5.3
Back of Queue (Q), veh/ln (50 th percentile)	0.5	2.4		0.7			5.7	3.8	0.9	0.1	4.5	0.2
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	20.4	22.5		20.7			18.1	12.9	10.8	28.4	22.9	19.4
Incremental Delay (d ₂), s/veh	0.0	0.4		0.1			2.4	0.2	0.0	0.0	2.9	0.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	20.4	22.9		20.7			20.5	13.0	10.9	28.4	25.8	19.4
Level of Service (LOS)		C	C		C		C	B	B	C	C	B
Approach Delay, s/veh / LOS	22.4	C		20.7	C		16.2	B		25.5	C	
Intersection Delay, s/veh / LOS	19.2						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B		2.3	B	
Bicycle LOS Score / LOS	0.9	A		0.6	A		2.1	B		1.0	A	

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.25		
Analyst	MSH	Analysis Date	Jan 8, 2018	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2028 With	Analysis Period	1 > 7:00		
Intersection	Pyramid & Calle De La...	File Name	PyCa28aw.xus				
Project Description							



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	13	11	282	146	4	5	211	259	50	8	332	8

Signal Information																		
Cycle, s	66.0	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	Yes	Simult. Gap E/W	On															
Force Mode	Fixed	Simult. Gap N/S	On															
		Green	8.0	25.0	18.0	0.0	0.0	0.0										
		Yellow	4.0	4.0	4.0	0.0	0.0	0.0										
		Red	1.0	1.0	1.0	0.0	0.0	0.0										

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		23.0		23.0	13.0	30.0	13.0	30.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		11.8		8.6	9.8	9.3	2.3	11.8
Green Extension Time (g _e), s		0.6		0.7	0.1	1.2	0.0	1.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.17		0.03	0.96	0.00	0.00	0.08

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	26	263		168			229	282	54	9	361	9
Adjusted Saturation Flow Rate (s), veh/h/ln	1596	1556		1395			1781	1870	1589	1781	1870	1564
Queue Service Time (g _s), s	0.0	9.8		5.9			7.8	7.3	1.5	0.3	9.8	0.2
Cycle Queue Clearance Time (g _c), s	0.7	9.8		6.6			7.8	7.3	1.5	0.3	9.8	0.2
Green Ratio (g/C)	0.27	0.27		0.27			0.20	0.38	0.38	0.12	0.38	0.38
Capacity (c), veh/h	519	424		486			351	708	602	216	708	592
Volume-to-Capacity Ratio (X)	0.050	0.620		0.346			0.654	0.397	0.090	0.040	0.509	0.015
Back of Queue (Q), ft/ln (95 th percentile)	12.5	158.7		90.2			154.8	126.3	21.1	5.3	171.9	3.3
Back of Queue (Q), veh/ln (95 th percentile)	0.5	6.2		3.6			6.1	5.0	0.8	0.2	6.8	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	17.7	21.0		19.8			24.4	15.0	13.2	25.6	15.8	12.8
Incremental Delay (d ₂), s/veh	0.0	2.1		0.2			3.4	0.1	0.0	0.0	0.3	0.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0			0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.7	23.1		20.0			27.9	15.1	13.2	25.6	16.0	12.8
Level of Service (LOS)		B C		B			C	B	B	C	B	B
Approach Delay, s/veh / LOS	22.6	C		20.0	B		20.1	C		16.2	B	
Intersection Delay, s/veh / LOS	19.5			B			B			B		

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B		2.3	B	
Bicycle LOS Score / LOS	1.0	A		0.8	A		1.4	A		1.1	A	

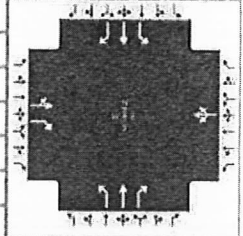
HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers		
Analyst	MSH	Analysis Date	Jan 8, 2018
Jurisdiction	NDOT	Time Period	PM Peak Hour
Urban Street		Analysis Year	2028 With
Intersection	Pyramid & Calle De La...	File Name	PyCa28pw.xus
Project Description			

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.92
Analysis Period	1 > 7:00



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	28	11	207	85	8	6	410	376	173	10	286	17

Signal Information

Cycle, s	68.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	6.0	14.0	17.0	16.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	0.0		
				Red	1.0	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		7.0		8.0	2.0	3.0	2.0	3.0
Phase Duration, s		21.0		21.0	25.0	36.0	11.0	22.0
Change Period, (Y+R _c), s		5.0		5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		10.8		6.2	16.3	12.3	2.4	12.2
Green Extension Time (g _e), s		0.4		0.6	0.7	1.8	0.0	0.0
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.28		0.01	0.03	0.00	0.30	1.00

Movement Group Results

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		42	225		108		446	409	188	11	311	18
Adjusted Saturation Flow Rate (s), veh/h/ln		1499	1551		1422		1781	1870	1593	1781	1870	1553
Queue Service Time (g _s), s		0.0	8.8		2.9		14.3	10.3	5.0	0.4	10.2	0.6
Cycle Queue Clearance Time (g _c), s		1.3	8.8		4.2		14.3	10.3	5.0	0.4	10.2	0.6
Green Ratio (g/C)		0.24	0.24		0.24		0.37	0.46	0.46	0.09	0.25	0.25
Capacity (c), veh/h		444	365		433		655	853	726	157	468	388
Volume-to-Capacity Ratio (X)		0.096	0.616		0.248		0.681	0.479	0.259	0.069	0.665	0.048
Back of Queue (Q), ft/ln (50 th percentile)		12.6	81.7		33.7		144.3	96.1	38.5	4	114.3	5.3
Back of Queue (Q), veh/ln (50 th percentile)		0.5	3.2		1.3		5.7	3.8	1.5	0.2	4.5	0.2
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		20.4	23.3		21.4		18.1	12.9	11.4	28.4	22.9	19.4
Incremental Delay (d ₂), s/veh		0.0	2.3		0.1		2.4	0.2	0.1	0.1	2.9	0.0
Initial Queue Delay (d ₃), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh		20.4	25.6		21.6		20.5	13.0	11.5	28.5	25.8	19.4
Level of Service (LOS)		C	C		C		C	B	B	C	C	B
Approach Delay, s/veh / LOS	24.7	C		21.6	C		15.9	B		25.5	C	
Intersection Delay, s/veh / LOS	19.5						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.4	B		2.4	B		2.1	B		2.3	B	
Bicycle LOS Score / LOS	0.9	A		0.7	A		2.2	B		1.0	A	

HCS7 Two-Way Stop-Control Report

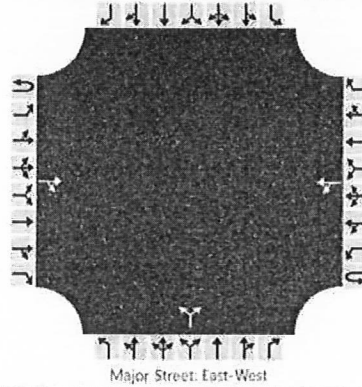
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2018
Time Analyzed	AM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & West Access
Jurisdiction	Wasjho County
East/West Street	Calle De La Plata
North/South Street	West Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement	1U	1	2	3	4U	4	5	6	7	8	9			10	11	12	
Priority																	
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0			0	0	0	
Configuration				TR		LT					LR						
Volume, V (veh/h)			50	13	0	102			40		0						
Percent Heavy Vehicles (%)					2				2		2						
Proportion Time Blocked																	
Percent Grade (%)									0								
Right Turn Channelized		No				No				No				No			
Median Type/Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

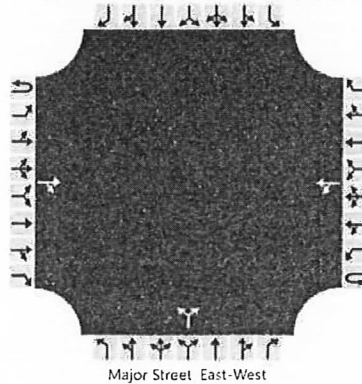
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					0						43						
Capacity, c (veh/h)					1532						818						
v/c Ratio					0.00						0.05						
95% Queue Length, Q ₉₅ (veh)					0,0						0,2						
Control Delay (s/veh)					7,3						9,6						
Level of Service, LOS					A						A						
Approach Delay (s/veh)					0,0							9,6					
Approach LOS					A							A					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Calle & West Access
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2018	North/South Street	West Access
Time Analyzed	PM Existing + Project	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT					LR					
Volume, V (veh/h)			135	44		0	65			26		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						28				
Capacity, c (veh/h)						1377						746				
v/c Ratio						0.00						0.04				
95% Queue Length, Q ₉₅ (veh)						0.0						0.1				
Control Delay (s/veh)						7.6						10.0				
Level of Service, LOS						A						B				
Approach Delay (s/veh)					0.0				10.0							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

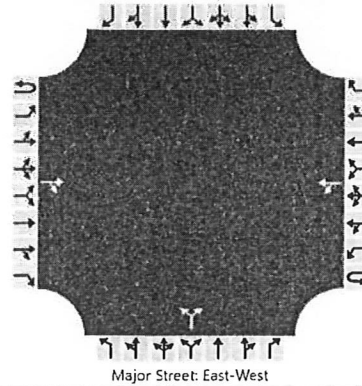
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2028
Time Analyzed	AM Base + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & West Access
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	West Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT				LR						
Volume, V (veh/h)			56	13		0	115			40		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0					43					
Capacity, c (veh/h)						1523					796					
v/c Ratio						0.00					0.05					
95% Queue Length, Q ₉₅ (veh)						0.0					0.2					
Control Delay (s/veh)						7.4					9.8					
Level of Service, LOS						A					A					
Approach Delay (s/veh)						0.0					9.8					
Approach LOS						A					A					

HCS7 Two-Way Stop-Control Report

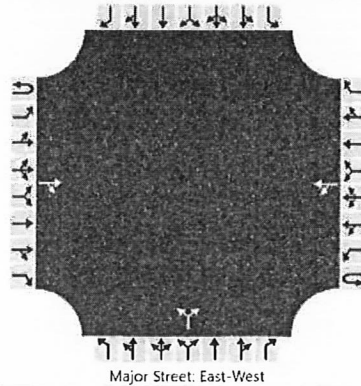
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2028
Time Analyzed	PM Base + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & West Access
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	West Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			150	44		0	73			26		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						28				
Capacity, c (veh/h)						1359						723				
v/c Ratio						0.00						0.04				
95% Queue Length, Q ₉₅ (veh)						0.0						0.1				
Control Delay (s/veh)						7.6						10.2				
Level of Service, LOS						A						B				
Approach Delay (s/veh)						0.0						10.2				
Approach LOS												B				

HCS7 Two-Way Stop-Control Report

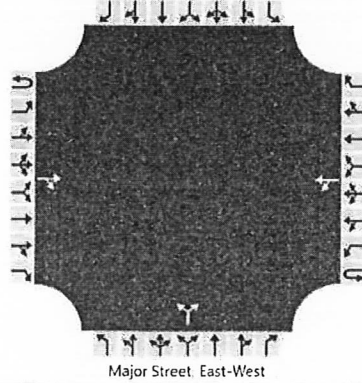
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2018
Time Analyzed	AM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & East Access
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	East Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT				LR						
Volume, V (veh/h)			41	9	0	76			26		0					
Percent Heavy Vehicles (%)					2				2		2					
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized		No			No				No			No				
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					0					28						
Capacity, c (veh/h)					1549					860						
v/c Ratio					0.00					0.03						
95% Queue Length, Q ₉₅ (veh)					0.0					0.1						
Control Delay (s/veh)					7.3					9.3						
Level of Service, LOS					A					A						
Approach Delay (s/veh)					0.0				9.3							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

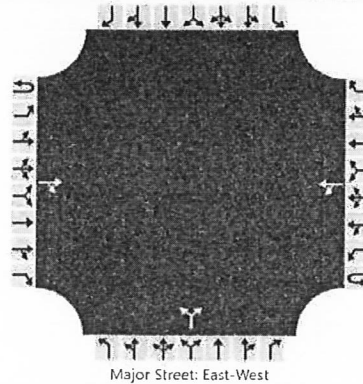
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2018
Time Analyzed	PM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & East Access
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	East Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			105	30		0	48			17		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

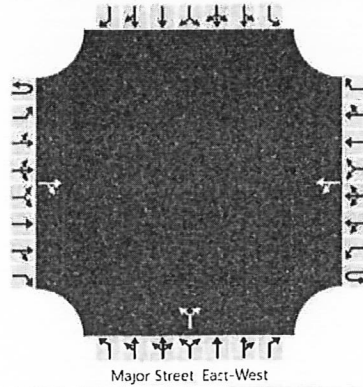
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						18				
Capacity, c (veh/h)						1434						807				
v/c Ratio						0.00						0.02				
95% Queue Length, Q ₉₅ (veh)						0.0						0.1				
Control Delay (s/veh)						7.5						9.6				
Level of Service, LOS						A						A				
Approach Delay (s/veh)					0.0				9.6							
Approach LOS					A				A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Calle & East Access
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	1/5/2018	East/West Street	Calle De La Plata
Analysis Year	2028	North/South Street	East Access
Time Analyzed	AM Base + Project	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			47	9		0	89			26		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						28				
Capacity, c (veh/h)						1541						838				
v/c Ratio						0.00						0.03				
95% Queue Length, Q ₉₅ (veh)						0.0						0.1				
Control Delay (s/veh)						7.3						9.4				
Level of Service, LOS						A						A				
Approach Delay (s/veh)						0.0						9.4				
Approach LOS												A				

HCS7 Two-Way Stop-Control Report

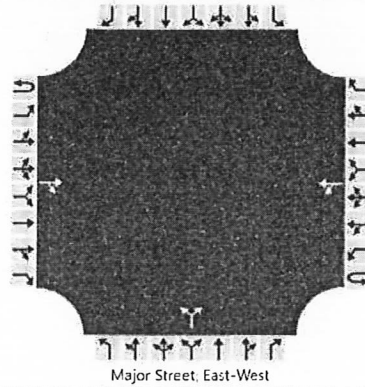
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	1/5/2018
Analysis Year	2028
Time Analyzed	PM Base + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Calle & East Access
Jurisdiction	Washoe County
East/West Street	Calle De La Plata
North/South Street	East Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Configuration				TR		LT				LR						
Volume, V (veh/h)			120	30		0	56			17		0				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0					18					
Capacity, c (veh/h)						1415					780					
v/c Ratio						0.00					0.02					
95% Queue Length, Q ₉₅ (veh)						0.0					0.1					
Control Delay (s/veh)						7.5					9.7					
Level of Service, LOS						A					A					
Approach Delay (s/veh)					0.0				9.7							
Approach LOS					A				A							

INTERSECTION DETAIL
 SR445 @ CALLE DE LA PLATA
 01 JUN 14 - 01 JUN 17

COUNTY: CLARK				
Crash Severity	Crash Date	Crash Year	Crash Time	Primary Street
PROPERTY DAMAGE ONLY	25-Feb-2015	2015	05:58 PM	CALLE DE LA PLATA
PROPERTY DAMAGE ONLY	22-Sep-2015	2015	04:06 PM	SR445
PROPERTY DAMAGE ONLY	18-Nov-2016	2016	02:05 PM	SR445
INJURY CRASH	17-Feb-2015	2015	06:57 PM	SR445
INJURY CRASH	4-Feb-2016	2016	06:20 AM	SR445
PROPERTY DAMAGE ONLY	15-Aug-2016	2016	03:12 PM	SR445
PROPERTY DAMAGE ONLY	20-Oct-2016	2016	05:21 PM	SR445
INJURY CRASH	15-Oct-2016	2016	07:57 PM	SR445
INJURY CRASH	18-Jan-2017	2017	06:55 AM	SR445
PROPERTY DAMAGE ONLY	7-Mar-2017	2017	07:06 AM	SR445
INJURY CRASH	18-Jan-2017	2017	06:55 AM	SR445

Distance	Dir	Secondary Street	Weather	Fatalities	Injured
122	W	SR445	CLEAR		
200	N	CALLE DE LA PLATA	CLEAR		
1	N	CALLE DE LA PLATA	CLEAR		
	AT INT	CALLE DE LA PLATA	CLEAR		3
	AT INT	CALLE DE LA PLATA	CLOUDY		1
	AT INT	CALLE DE LA PLATA	CLEAR		
	AT INT	CALLE DE LA PLATA	CLEAR		
	AT INT	CALLE DE LA PLATA	RAIN		6
40	S	CALLE DE LA PLATA	CLOUDY		2
60	S	CALLE DE LA PLATA	CLOUDY		
85	S	CALLE DE LA PLATA	CLOUDY		3
				Sum: 0	Sum: 15
				Count: 0	Count: 5
				Total:	11

Property Damage Only	Injury Type	Crash Type	Total Vehicles	V1 Type
PDO		ANGLE	1	HARDTOP, 2 DOOR
PDO		ANGLE	2	SEDAN, 4 DOOR
PDO		ANGLE	2	VAN
	C	REAR-END	2	SEDAN, 4 DOOR
	C	ANGLE	2	CARRY-ALL
PDO		ANGLE	2	PICKUP
PDO		SIDESWIPE, OVERTAKING	2	SEDAN, 4 DOOR
	C	ANGLE	2	SEDAN, 4 DOOR
	C	REAR-END	2	SEDAN, 4 DOOR
PDO		REAR-END	2	CARRY-ALL
	C	REAR-END	3	SEDAN, 4 DOOR
Count: 6				

V1 Dir	V1 Driver Age	V1 Lane Num	V1 Action
E			NOT REPORTED
S	32	2	GOING STRAIGHT
N	76	1	MAKING U-TURN
E	17		GOING STRAIGHT
W	48		TURNING LEFT
W	25		TURNING LEFT
E			GOING STRAIGHT
W	17		TURNING LEFT
N	35		GOING STRAIGHT
E			GOING STRAIGHT
N	49		GOING STRAIGHT

V1 Driver Factors	V1 Driver Distracted
INATTENTION/DISTRACTED	UNKNOWN
APPARENTLY NORMAL	
APPARENTLY NORMAL	
APPARENTLY NORMAL	
APPARENTLY NORMAL	
APPARENTLY NORMAL	
INATTENTION/DISTRACTED	OTHER
APPARENTLY NORMAL	
APPARENTLY NORMAL	
APPARENTLY NORMAL: OBSTRUCTED VIEW	
APPARENTLY NORMAL	

V1 Vehicle Factors
FAILURE TO KEEP IN PROPER LANE OR RUNNING OFF ROAD: UNSAFE LANE CHANGE
UNKNOWN
MADE AN IMPROPER TURN
OTHER IMPROPER DRIVING
DRIVING TOO FAST FOR CONDITIONS
FAILED TO YIELD RIGHT OF WAY
OTHER IMPROPER DRIVING
FAILED TO YIELD RIGHT OF WAY
OTHER IMPROPER DRIVING
FOLLOWED TOO CLOSELY: VISIBILITY OBSTRUCTED
DRIVING TOO FAST FOR CONDITIONS

V1 Most Harmful Event	V1 All Events	V2 Type	V2 Dir	V2 Driver Age	V2 Lane Num
		PICKUP	S	35	2
		CARRY-ALL	N	49	1
	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	S	34	
		DUMP	N	57	
		CARRY-ALL	N	34	
	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	E		
		CARRY-ALL	N	46	
	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	N	25	
		CARRY-ALL	E		
	SLOW/STOPPED VEHICLE	SEDAN, 2 DOOR	N	35	

V2 Action	V2 Driver Factors	V2 Driver Distracted	V2 Vehicle Factors	V2 Most Harmful Event
GOING STRAIGHT	APPARENTLY NORMAL		UNKNOWN	
TURNING LEFT	APPARENTLY NORMAL			
STOPPED	APPARENTLY NORMAL			
GOING STRAIGHT	APPARENTLY NORMAL			
GOING STRAIGHT	APPARENTLY NORMAL			
STOPPED	APPARENTLY NORMAL			
GOING STRAIGHT	APPARENTLY NORMAL			
STOPPED	APPARENTLY NORMAL			
GOING STRAIGHT	APPARENTLY NORMAL			
STOPPED	APPARENTLY NORMAL			

V2 All Events	First Harmful Event	Nonmotorist Factors
SLOW/STOPPED VEHICLE		
SLOW/STOPPED VEHICLE		
SLOW/STOPPED VEHICLE: SLOW/STOPPED VEHICLE		
SLOW/STOPPED VEHICLE		
		UNKNOWN: OTHER

Factors Roadway	Lighting	HWY Factors	Agency
			WASO
DRY	DAYLIGHT	NONE	NHP
DRY	DAYLIGHT	NONE	NHP
DRY	DARK - SPOT LIGHTING	NONE	NHP
DRY	DAYLIGHT	WET, ICY, SNOW, SLUSH	NHP
DRY	DAYLIGHT	NONE	NHP
			WASO
DRY	DARK - NO LIGHTING	WEATHER: WET, ICY, SNOW, SLUSH	NHP
DRY	DAYLIGHT	WET, ICY, SNOW, SLUSH	NHP
			WASO
DRY	DAWN	WET, ICY, SNOW, SLUSH	NHP

Accident Rec Num
2308193
2198387
2340605
2174695
2226181
2328044
2344510
2338587
2358716
2368928
2358718