

Common Open Space Commercial Subdivision & SUP Continuum of Care Cottage Community

Submitted to Washoe County
January 10, 2022

Prepared for

Silverado Homes NV Inc

5525 Kietzke Lane

Reno, NV 89511

Prepared by



WOOD RODGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS

1361 Corporate Blvd • Reno, NV 89502 • Tel: 775 823 4068

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Section 1

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: Continuum of Care Cottage Community			
Project Description: A common open space commercial subdivision and special use permit to allow the subdivision of 21.56 acres into 136 unit continuum of care cottage units, for sale, with 10.42 acres of common open space. The proposed project offers a housing type specifically designed to support long term needs for seniors.			
Project Address: 0 Neighborhood Way, Washoe County			
Project Area (acres or square feet): 21.56 acres			
Project Location (with point of reference to major cross streets AND area locator): Approximately 1,650 feet north of the intersection of Eagle Canyon Drive and Neighborhood Way.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
532-032-05	20.75		
a portion of 532-032-16	0.81		
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: Spanish Springs Associates LP		Name: Wood Rodgers, Inc	
Address: 550 W. Plum Lane, Ste B		Address: 1361 Corporate Blvd	
Reno, NV	Zip: 89509	Reno, NV	Zip: 89502
Phone: 775-425-4422	Fax:	Phone: 775-823-5258	Fax:
Email: jesse@hawcoproperties.com		Email: shuggins@woodrogers.com	
Cell:	Other:	Cell:	Other:
Contact Person: Jesse Haw		Contact Person: Stacie Huggins	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Silverado Homes NV Inc		Name:	
Address: 5525 Kietzke Lane		Address:	
Reno, NV	Zip: 89511		Zip:
Phone: 775-333-5620	Fax:	Phone:	Fax:
Email: gpeitzmeier@silveradohomes.com		Email:	
Cell:	Other:	Cell:	Other:
Contact Person: Greg Peitzmeier		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: Spanish Springs Associates LP

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, JESSE HAW
(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): 532-032-05 & 532-032-16

Printed Name JESSE HAW

Signed [Signature]

Address 550 W. PLUMB LANE
SUITE B #505 RENO, NV 89809

Subscribed and sworn to before me this
22nd day of December, 2021.

(Notary Stamp)

[Signature]
Notary Public in and for said county and state

My commission expires: 1-8-24



*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

Tentative Subdivision Map Application Supplemental Information

(All required information may be separately attached)

1. What is the location (address or distance and direction from nearest intersection)?

0 Neighborhood Way, approximately 1,650 feet north of the intersection of Eagle Canyon Dr & Neighborhood Way

2. What is the subdivision name (proposed name must not duplicate the name of any existing subdivision)?

Continuum of Care Cottage Community

3. Density and lot design:

a. Acreage of project site	21.56
b. Total number of lots	136 units
c. Dwelling units per acre	6.3 du/ac
d. Minimum and maximum area of proposed lots	2,004- 2,400 square feet
e. Minimum width of proposed lots	40 feet
f. Average lot size	2,220 square feet

4. What utility company or organization will provide services to the development:

a. Sewer Service	Washoe County
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or Spectrum Communications
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Spectrum Communications
g. Water Service	TMWA

5. For common open space subdivisions (Article 408), please answer the following:

- a. Acreage of common open space:

10.42 acres

- b. What development constraints are within the development and how many acres are designated slope, wetlands, faults, springs, and/or ridgelines:

None.

- c. Range of lot sizes (include minimum and maximum lot size):

As designed, each lot will be the unit with units ranging from 2,004 - 2,400 square feet in size.

d. Proposed yard setbacks if different from standard:

The project proposes the following setbacks apply to each lot: 0' Front, 0' Side, 0' Rear with 10' separation between each unit. A minimum 20' driveway (measured from curb to garage door) will be provided for each lot.

e. Justification for setback reduction or increase, if requested:

As a common open space development, each lot is intended to accommodate a home so the homeowner is only responsible for the building with the yards and amenities owned/maintained by the HOA.

f. Identify all proposed non-residential uses:

Village Center/recreation area centrally located, additional amenities such as a dog park and raised community gardens will be strategically located throughout.

g. Improvements proposed for the common open space:

All common areas will be fully landscaped with a paseo trail system that provides connection to and from the Village Center/recreation area from the units.

h. Describe or show on the tentative map any public or private trail systems within common open space of the development:

The paseo trail system is shown on the plans.

i. Describe the connectivity of the proposed trail system with existing trails or open space adjacent to or near the property:

The trail system within the project will connect with existing sidewalk along Neighborhood Way so residents can access the trail system west of the project as well as the trails system across the channel for access to additional common areas.

j. If there are ridgelines on the property, how are they protected from development?

N/A

k. Will fencing be allowed on lot lines or restricted? If so, how?

Fencing will be provided around the exterior parcel boundary and on perimeter lots (with gates for maintenance) Each unit will also have a fenced in courtyard with open view fencing.

l. Identify the party responsible for maintenance of the common open space:

The HOA for the COC will be responsible for maintenance of all common areas. The Developer will establish CC&R's outlining responsibilities upon approval of the project.

6. Is the project adjacent to public lands or impacted by "Presumed Public Roads" as shown on the adopted April 27, 1999 Presumed Public Roads (see Washoe County Engineering website at <http://www.washoecounty.us/pubworks/engineering.htm>). If so, how is access to those features provided?

N/A

7. Is the parcel within the Truckee Meadows Service Area?

Yes No

8. Is the parcel within the Cooperative Planning Area as defined by the Regional Plan?

Yes No If yes, within what city?

9. Has an archeological survey been reviewed and approved by SHPO on the property? If yes, what were the findings?

At this time, an archaeological survey has not been conducted.

10. Indicate the type and quantity of water rights the application has or proposes to have available:

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

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

11. Describe the aspects of the tentative subdivision that contribute to energy conservation:

Future homes will be constructed with energy efficient appliances, windows, and water conservation elements including use of reclaimed water for all common area landscaping.

12. Is the subject property in an area identified by Planning and Building as potentially containing rare or endangered plants and/or animals, critical breeding habitat, migration routes or winter range? If so, please list the species and describe what mitigation measures will be taken to prevent adverse impacts to the species:

No.

13. If private roads are proposed, will the community be gated? If so, is a public trail system easement provided through the subdivision?

The community will be gated for safety purposes and all roads will be private. A public trail easement is not included.

14. Are there any applicable policies of the adopted area plan in which the project is located that require compliance? If so, which policies and how does the project comply?

The project complies with policies SS 1.2, 1.3, and 1.5, specifically.

15. Are there any applicable area plan modifiers in the Development Code in which the project is located that require compliance? If so, which modifiers and how does the project comply?

No

16. Will the project be completed in one phase or is phasing planned? If so, please provide that phasing plan:

Anticipate 2 phases; phase 1 will include the Village Center and everything to the south; with phase 2 being everything north of Village Center.

17. Is the project subject to Article 424, Hillside Development? If yes, please address all requirements of the Hillside Ordinance in a separate set of attachments and maps.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, include a separate set of attachments and maps.
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18. Is the project subject to Article 418, Significant Hydrologic Resources? If yes, please address Special Review Considerations within Section 110.418.30 in a separate attachment.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, include separate attachments.
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Grading

Please complete the following additional questions if the project anticipates grading that involves: (1) Disturbed area exceeding twenty-five thousand (25,000) square feet not covered by streets, buildings and landscaping; (2) More than one thousand (1,000) cubic yards of earth to be imported and placed as fill in a special flood hazard area; (3) More than five thousand (5,000) cubic yards of earth to be imported and placed as fill; (4) More than one thousand (1,000) cubic yards to be excavated, whether or not the earth will be exported from the property; or (5) If a permanent earthen structure will be established over four and one-half (4.5) feet high:

19. How many cubic yards of material are you proposing to excavate on site?

The site will be an import site and require approximately 55,000 CY of imported fill.

20. How many cubic yards of material are you exporting or importing? If exporting of material is anticipated, where will the material be sent? If the disposal site is within unincorporated Washoe County, what measures will be taken for erosion control and revegetation at the site? If none, how are you balancing the work on-site?

55,000 CY of material will be imported; no export is anticipated.

21. Can the disturbed area be seen from off-site? If yes, from which directions, and which properties or roadways? What measures will be taken to mitigate their impacts?

Yes, the disturbed areas will be seen from off site during construction. Once the project is complete, the disturbed areas will be landscape or developed.

22. What is the slope (Horizontal/Vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

Cuts/fills are anticipated to be minimal. All disturbed areas will be temporarily stabilized using BMP's during construction.

23. Are you planning any berms and, if so, how tall is the berm at its highest? How will it be stabilized and/or revegetated?

N/A

24. Are retaining walls going to be required? If so, how high will the walls be, will there be multiple walls with intervening terracing, and what is the wall construction (i.e. rockery, concrete, timber, manufactured block)? How will the visual impacts be mitigated?

There is potential for walls along the west and eastern edges. These walls would be a maximum of 6 feet and likely be rockery or manufactured block.

25. Will the grading proposed require removal of any trees? If so, what species, how many, and of what size?

No, the only trees onsite are within the existing landscaping along Neighborhood Way, which will not be removed.

26. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

Any revegetation will include a seed mix applied in accordance with Washoe County requirements.

27. How are you providing temporary irrigation to the disturbed area?

Temporary irrigation during construction will include the use fo water trucks to minimize dust.

28. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

No, since all of the disturbed area is temporary and planned to be developed or formally landscaped, there is not a revegetation plan.

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

The special use permit is needed to address number of units and parking associated with a 136 unit continuum of care (COC) cottage community. The COC community will operate as a commercial entity as outlined in the Project Description in Section 2 of this application.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

A full set of plans have been provided with this submittal package.

3. What is the intended phasing schedule for the construction and completion of the project?

The project is proposed to be completed in 2 phases with approximate 60 units and the Village Center in the first phase (everything south of Village Center) and the remaining units (north of Village Center) in the second phase. The entire project is expect to be completed as soon as possible based on market conditions with a maximum of 6 years from receipt of first building permit.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The site is relativity flat and located in the NC zoning designation, where COC operations are allowed to operate as a commercial entity. The site is vacant but is surrounded by development and should be considered an infill site with existing utilities stubbed to the site. The utilities and roadway infrastructure are adequately sized and will not be negatively impacted by the proposal.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The region is facing an aging population with very few alternatives for independent seniors. This project will serve the "missing middle" for seniors offering a housing type specifically designed to support long term needs. This cottage community will offer a "for sale" housing product for seniors that want the benefit of independent living but with the peace of mind that supportive services are available.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

This project is expected to have minimal impact on the surrounding neighborhood as the existing infrastructure is already in place and the proposed use is a relatively low traffic generator.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

Refer to Project Description and plans included with submittal.

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input checked="" type="checkbox"/> Yes (Provided in Section 4)	<input type="checkbox"/> No
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9. Utilities:

a. Sewer Service	Washoe County
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or Spectrum Communications
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Spectrum Communications
g. Water Service	Truckee Meadows Water Authority (TMWA)

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #		acre-feet per year	
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

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

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10. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Station 46; 1 mile west
b. Health Care Facility	Renown Medical Group - Los Altos Pkwy; 4.5 miles south
c. Elementary School	Taylor Elementary School; 0.5 miles northwest
d. Middle School	Shaw Middle School; adjacent to property
e. High School	Spanish Springs High School; 1 mile east
f. Parks	Eagle Canyon Park; adjacent to property
g. Library	Spanish Springs Library; 2.2 miles south
h. Citifare Bus Stop	RTC Route 2; 6.8 miles south

Special Use Permit Application for Grading Supplemental Information

(All required information may be separately attached)

1. What is the purpose of the grading?

To support development of a 136 unit Continuum of Care Cottage community (operating as a commercial entity) to support long term needs for seniors.

2. How many cubic yards of material are you proposing to excavate on site?

The site will be an import site and require approximately 55,000 CY of imported fill.

3. How many square feet of surface of the property are you disturbing?

Nearly the entire site will be disturbed as part of this project; approx 21 acres or 900,000 sqft.

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

55,000 CY of material will be imported; no export is anticipated.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

No, the site will require an import of 55,000 CY to achieve the proper drainage of the site and to insure all of the development is able to meet the standards outlined in Washoe County Development Code.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

No, the site has not been graded previously.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

Yes, please refer to the grading plan submitted with this application.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

Yes, the disturbed areas will be able to be seen from off site during construction. Once the project is complete the disturbed areas will be landscaped or contain built structures and infrastructure.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

Since all of the streets on the property will be private no neighboring properties will need to access the site. Although existing easements will be maintained.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

Cuts and fills are anticipated to be minimal. All disturbed areas will be temporarily stabilized using BMP's during construction and will be formally landscaped upon completion of the project.

11. Are you planning any berms?

Yes	NoX	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

There is potential for walls along the west and eastern edges. These walls would be a maximum of 6 feet and likely be rockery or manufactured block.

13. What are you proposing for visual mitigation of the work?

All grading will be temporary and should only occur during construction. Visual mitigation will not be required.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

No, the only trees on site are within the formal landscaping along Neighborhood Way. These are not anticipated to be removed.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

No revegetation is anticipated; however, any revegetation will include a seed mix applied in accordance with Washoe County requirements.

16. How are you providing temporary irrigation to the disturbed area?

Temporary irrigation during construction will include the use of water trucks to minimize dust.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

No, since all of the disturbed area is temporary and planned to be developed or formally landscaped there is not a revegetation plan included in this application.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No X	If yes, please attach a copy. A copy of the CC&Rs has been provided.
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Bill Detail

Parcel/Identifier: 53203205

Owner: SPANISH SPRINGS ASSOCIATES LP

Last Update: 1/6/2022 12:53:26 PM

Tax Distribution by Fund

i For information regarding the charges listed here, please contact the respective taxing agency directly, or call (775) 328-2510.

State of Nevada

Tax Authority Fund	Gross Tax Amount	Credit Amount	Net Tax Amount
State Of Nevada	\$308.66	\$0.00	\$308.66
	Gross Tax	Credit Amount	Net Tax
	\$308.66	\$0.00	\$308.66

Truckee Meadows Fire Dist

Washoe County

Washoe County Sc

SPANISH SPRINGS WATER BASIN

Gross Tax	Credit Amount	Net Tax
\$5,884.95	\$0.00	\$5,884.95

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2021	2021350662	U21.7153	\$1,472.72	8/18/21
2021	2021350662	U21.10399	\$1,470.75	10/6/21
2021	2021350662	U21.14170	\$1,470.74	1/3/22

i Attention: Important Information, please be advised:

- 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.
- If payment confirmation is not received, please check the "SPAM" folder in your e-mail account. Add "Payments@Bill2Pay.com" to your safe-senders list in order to ensure that the payment confirmation is routed to your inbox.

Bill Detail

Parcel/Identifier: 53203216

Owner: SPANISH SPRINGS ASSOCIATES LP

Last Update: 1/6/2022 12:50:50 PM

Tax Distribution by Fund

i For information regarding the charges listed here, please contact the respective taxing agency directly, or call (775) 328-2510.

▲ State of Nevada

Tax Authority Fund	Gross Tax Amount	Credit Amount	Net Tax Amount
State Of Nevada	\$164.82	\$0.00	\$164.82
	Gross Tax	Credit Amount	Net Tax
	\$164.82	\$0.00	\$164.82

▼ Truckee Meadows Fire Dist

▼ Washoe County

▼ Washoe County Sc

▼ SPANISH SPRINGS WATER BASIN

Gross Tax	Credit Amount	Net Tax
\$3,143.36	\$0.00	\$3,143.36

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2021	2021371347	U21.7153	\$787.32	8/18/21
2021	2021371347	U21.10399	\$785.35	10/6/21
2021	2021371347	U21.14170	\$785.35	1/3/22

i Attention: Important Information, please be advised:

- **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.
- If payment confirmation is not received, please check the "SPAM" folder in your e-mail account. Add "**Payments@Bill2Pay.com**" to your safe-senders list in order to ensure that the payment confirmation is routed to your inbox.

Section 2

Project Description

Introduction

For decades, the choices afforded to seniors were extremely limited with “active adult” communities serving younger (55+) fully independent and active early retirees, while end of care support was offered by traditional multi-story lodge facilities primarily delivering assisted and memory care support. As seniors are increasingly living longer, many well into their 90’s, these limited options have failed to serve the “missing middle” for seniors needing long-term Continuum of Care support.

Seniors have many hurdles in finding housing that supports their long term needs, such as finances, safety, and health and wellness. When a senior is given the opportunity to age in a safe home environment with programs that augment and support the social and financial needs, seniors are able to age successfully in place in their community with friends and family nearby.

Looking first at the **financial aspect**, seniors are living longer today. Most seniors, given the appropriate safe home and community support, can live independently from their 70’s well into their 90’s. By contrast, the assisted living/memory care component of a continuum of care community typically serves a much shorter 2-5 year end of care cycle. Senior’s nest eggs are heavily funded through the sale of their long-term home where they raised their families. The cost of lodge type living is typically in the \$5,000-\$8,000 per month range. This cost could deplete the seniors nest egg in only a few years. The proposed project fulfills the missing middle, the largest in number and age duration, by allowing for fee simple ownership in a safe home with supportive services. This ownership would maintain or grow the seniors nest egg, allowing them to live for decades independently, thus saving the nest egg for the final stage of the continuum of care journey. Thus, if a higher level of end of care is needed, the availability of a full assisted/memory care lodge is available in their community enabling residents to stay connected with family and friends.

Equally important, a housing choice that **safely** supports the needs of the aging senior. Virtually all housing choices, including the senior’s current home and active adult type communities, do not provide a safe aging environment. The proposed project will address and provide “universal living design features” such as: zero threshold entries and shower stalls, wider doorways and hallways, kitchen workspaces at convenient heights, smoke detectors / fire sprinklers, motion activated lighting controls, hand holds/grab bars, non-slip flooring and technology based communication such as life alert pendant for quick response to senior needs. The community will be based around a paseo trail network that links homes to each other, as well as all the community amenities, including the Village Center, community gardens, dog park and gathering areas within the community that create connections to the rear patio/courtyards of the cottage homes. These trails also foster strong social interaction between seniors and create a true sense of community.

Finally, another prime element of the “missing middle” continuum of care arena is appropriate **health and wellness** services. The project will provide services that fit between active adult and fully assisted living lodge type programs. Active adult communities provide activities such as golf, tennis, pickleball, bicycle clubs and the like. Lodges provide higher levels of assistance to a much older and frail senior such as personal assistance with dressing, bathing, restroom visits, medication management, and wheelchair transport. These services are expensive and not needed by the senior in the mid-point of the continuum of care life span. The project will provide services that match the needs of seniors to maintain a healthy, safe lifestyle such as water aerobics and balance/strength classes to help minimize the prospect of a serious fall, as well as maintenance such as

Continuum of Care Cottage Community

Common Open Space Commercial Subdivision & Special Use Permit

landscaping, gutter cleaning, changing ceiling lights and smoke detector batteries for similar results, on and offsite transportation (both for social outings as well as the full range of medical appointments in area facilities). In addition, since lack of social engagement and isolation can rapidly cause a consequential decline in physical health, the closely connected design of the community, it's amenities and the on-going social activities promotes the long-term wellbeing of our residents. Further, living alone in an isolated home outside of a continuum of care community leaves seniors vulnerable when alone and a medical condition or fall occurs. And while continuum of care facilities are not licensed medical caregivers, all residents have pendant call buttons monitored 24/7 to provide the comfort of a responder to their side, and should that involve the need for emergency medical response, a person is at their side to comfort them, until such appropriate medical response arrives to the community.

These features, combined with the community and social benefits, encourage seniors to spend more time on what is important: family, friends, and hobbies, while having piece of mind that whatever happens tomorrow, there will be a place to call home within a community that cares, not only for them, but about them.

Location

The project site is within unincorporated Washoe County, in the Spanish Springs area. The project site includes Washoe County Assessor Parcel Number (APN) 532-032-05 and a portion of APN 532-032-16. The site is generally located approximately ½ mile northwest of the intersection of Eagle Canyon Road and Pyramid Way Highway, within the Spanish Springs Area Plan/Spanish Springs Suburban Character Management Area. The site is vacant with existing infrastructure located on the western boundary of the site within Neighborhood Way.

The site is bordered by an existing assisted living lodge and vacant land to the west, vacant land to the south, single-family residential development to the north and single family residential and the North Spanish Springs Flood Detention Facility Outlet Channel to the east (*Refer to Vicinity Map, Assessor's Parcel Map and Site Aerial in Section 3 of this submittal packet*).

Site Background

The project site was originally planned to provide commercial and medical services to the growing community. However, with other large commercial centers constructed south of the project area in the City of Sparks, the need for commercial/medical services within this area has decreased. At the same time, the region has been experiencing an aging population and a housing shortage as the population continues to increase with very few alternatives between traditional single-family homes, multi-family and assisted living facilities. This new community will support other previously approved Continuum of Care facilities in the area by providing seniors with yet another option for independent living in a home like environment but with the convenience of not having to maintain a yard and with access to a number of supportive care elements.

Washoe County Master Plan and Zoning

According to Washoe County mapping, the current master plan designation is split into Commercial (C) and Open Space (OS) which conforms with the current respected zoning designations of Neighborhood Commercial (NC) and Open Space (OS). (*Refer to Section 3 of the submittal packet for Zoning and Master Plan Maps*). The proposed land use is conforming with the current zoning designations and is allowed within the SSAP with the approval of a Special Use Permit (SUP).

Continuum of Care Cottage Community
Common Open Space Commercial Subdivision & Special Use Permit

ADJACENT PROPERTY DESCRIPTION			
	Land Use Designation	Zoning	Use
North	SR	MDS	Single-Family Detached
South	C	NC	Vacant Land
East	OS/S	OS/MDS	North Spanish Springs Flood Detention Facility Outlet Channel/Single Family Detached
West	C	NC	Continuum of Care Facilities (Cascades of the Sierra/future Silverado Continuum of Care Facility)

Site Characteristics

The entire parcel is nearly flat with a slight slope from the northwest to the southeast with no steep slopes. The North Spanish Springs Flood Detention Facility Outlet Channel extends along the eastern boundary of the main parcel and Neighborhood Way extends along the western boundary of the site. Neighborhood Way is a two-lane arterial street with a median and turn lanes, existing landscaping, and sidewalks on both sides. An existing intersection along Neighborhood Way will provide access to the site.

Although some of the site has been graded by past activities, the site is generally undisturbed and characterized by native vegetation consisting primarily of native shrubs, sagebrush, and grasses. Several utilities, drainage, and trail easements are located throughout the site (*Refer to Site Aerial in Section 3 of this submittal packet*).

Proposed Use/CC&R's

By definition, the continuum of care facilities are commercial operations. To ensure the project operates in a commercial capacity in perpetuity, the applicant will prepare CC&R's that address commercial operations. The applicant is providing sample language that would be incorporated into the project CC&R's. The applicant is proposing that Washoe County would review and approve the final CC&R language prior to the first final map recording. Below is the sample language.

1) Homeowners Association (HOA) Related Services.

"In order to conform with the Washoe County requirements for Continuum of Care Cottage Community to meet the needs of older adults to maintain independence and to enhance the quality of their lives through the provision of direct services, the HOA shall provide and operate senior programs for all residences, including offsite transportation to local medical appointments and onsite health and wellness programming. In addition, the HOA shall provide all residents with an on-call a pendent or other transmitting device for ongoing medical monitoring or emergency responders contacts, and dedicated space for onsite defibrillator equipment."

2) HOA Funding Requirements.

"The Board shall have the power and the duty to levy Regular Assessments and Special Assessments sufficient to meet the Association's obligations under the Governing Documents and applicable law. The Board's duty to levy Assessments pursuant to this Section shall include the obligation to determine and fully fund the estimated total annual contribution to the Association's annual operating funds necessary to perform the services described in Section 1, above. In addition, the Board shall fully fund the estimated total annual contribution to the Association's reserve funds that is necessary to defray the cost to repair, replace, restore, or maintain the components identified in the reserve study prepared pursuant to Section

Continuum of Care Cottage Community
Common Open Space Commercial Subdivision & Special Use Permit

1 above, during and at the end of their useful life, after subtracting total reserve funds as of the date of the study”

3) County Enforcement Rights / County as Third Party Beneficiary

“The County is hereby named a third party beneficiary with the right, but not the obligation, to enforce the Association's Governing Document obligations, including, but not limited to, the right to enforce the Association's performance of all County-mandated services required by Section 1, above. All costs incurred by the County in connection with performing corrective actions or providing the required services shall be paid for by the Association, out of Association Regular Assessment funds as provided in this Declaration, and if requested by the County to do so, the Association shall levy Special Assessments against all Lots as an emergency assessment pursuant to Section 1, above. This right of enforcement is in addition to all other legal and equitable remedies available to the County, including the right to place a lien on the properties and to refuse to issue building permits for any building or structure which is not in compliance with all applicable State and local laws, regulations and permits. If the County brings an action or proceeding to enforce the foregoing rights, the prevailing party in each such action or proceeding shall be entitled to receive from the losing party its costs and expenses, including reasonable attorneys' fees which shall be payable whether or not such action or proceeding is prosecuted to judgment.”

4) County Amendment Protection Rights.

(c) Additional Approvals by County for Amendments to Particular Provisions. The provisions of Sections _____, this subsection _____(c), and _____, and any other provision of this Declaration which relates to a County condition of approval for the Subdivision Map, may not be amended without the prior written consent of the County, with a copy of such written approval attached to the recorded amendment.

Project Request

The current request is to develop a 136 unit common open space commercial subdivision with a Special Use Permit (SUP) to develop a Continuum of Care cottage community as defined in Washoe County Development Code and permitted within the Neighborhood Commercial (NC) zoning designation in the Spanish Springs Area Plan. Consistent with common open space requirements, the proposed project includes a mix of unit sizes with approximately 10.42 acres (48%) of common open space maintained by the Homeowners Association (HOA), or equivalent. As a commercial common open space development, each “lot” is intended to accommodate a home so a variation of setbacks to allow zero foot setbacks on all sides is also requested. This concept makes the homeowner responsible for only the building with all yards and amenities owned and maintained by the commercial entity.

In addition to the commercial subdivision element, a special use permit is needed to determine the number of units and parking requirements for the project. It is worth noting that the project is comparable to the density and intensity of the adjacent COC facilities and conforms with the current zoning designations.

The request is summarized as follows:

- **A Commercial Subdivision Map and Special Use Permit** to permit development of a 136-unit continuum of care cottage community on 21.56 ± acres through the Common Open Space Development Standards.

Continuum of Care Cottage Community
Common Open Space Commercial Subdivision & Special Use Permit

Common Open Space Commercial Subdivision Details

This continuum of care community is specifically designed for seniors who want to live in a place that feels like a traditional neighborhood but with on-site support that changes as individual needs change while also offering financial sustainability.

In order to achieve a more traditional neighborhood environment, the project proposes a mix of lot/unit sizes with reduced setbacks, a Village Center/recreation area, private streets, and common open space throughout. In addition, in accordance with Washoe County Code requirements, this neighborhood will also offer 24 hour medical response as noted previously through the CC&R discussion.

Through the Common Open Space Commercial Subdivision standards, lot sizes and lot widths can be modified. As designed, and previously discussed, the proposed project is designed in a traditional sense but with the home being the lot, which limits the homeowner's responsibility to the structure while the Homeowners Association (HOA), or equivalent, is responsible for, and maintains, all of the common areas and common amenities.

In accordance with Article 110.406.05 of the Washoe County Development Code, and through the Common Open Space Development, the applicant is requesting a reduction to the front, side, and rear yard setbacks. The standard minimum yard setbacks associated with NC are reflective of the standard minimum lot size of 10,000 square feet. Through this Commercial Common Open Space subdivision, the setbacks would be more reflective of a smaller lot design such as the High Density Suburban (HDS) zoning lot size standards.

Minimum lot sizes, widths and setbacks for the subdivision are proposed as follows:

Minimum Lot Size: 2,004± square feet
Minimum Lot Width: 40 feet

Minimum Setbacks (as measured from primary parcel boundary):

Front Yard Setback = 10 feet
Side Yard Setback = 5 feet
Rear Yard Setback = 10 feet

**It should be noted that the project is designed so that each home is considered the "lot", therefore, individual lot setbacks are proposed to be 0 foot on all sides with a minimum of 10 feet between structures. Additionally, all homes will be setback 20 feet from the curb to the garage door to accommodate a 2 car driveway.

House Design

As designed, the proposed cottage community will include units ranging in size offering 2 bedroom units and 2 bedroom plus den units. Each unit will include a 2 car garage. The units are designed to be single story with a warm and inviting cottage/ranch appearance with tile roof, lap and/or board and batten siding, stucco and covered patio's (*refer to Colored Building Elevations in Section 3 of this submittal packet*).

All units will be designed with livable design features incorporated. These include by example zero threshold (no step) unit entries, wider halls and doorways to accommodate those with walkers and wheelchairs, cabinetry that can be easily modified to accommodate disabilities, appropriate backing and supports for support bars in bathrooms, zero step showers with seats and dual controls, motion censored lighting in appropriate locations, as well as fire sprinklers in all units.

Continuum of Care Cottage Community

Common Open Space Commercial Subdivision & Special Use Permit

Common Areas

A total of 15.09 acres (70%) of the project will be dedicated to common area/landscape. This includes approximately 10.42 acres dedicated to common open space and the Village Center/Recreation Area, plus another 4.67 acres for private streets and parking.

The Village Center/Recreation Area is centrally located on the site and will include both internal and external recreational elements. As designed, the proposed Village Center is approximately 3,500 square feet in size and will be single story with architecture to compliment the proposed units (*refer to Colored Building Elevations in Section 3 of this submittal packet*).

Inside the Village Center, residents will have access to a centralized gathering area for residents, a fitness center, a dog wash, a Bistro, activities room, common gathering area and the HOA office for the community. Outside of the Village Center, the recreation area will offer a mix of community amenities including, but not limited to, a swimming pool, bocce ball, and lawn games all accessible via the fully landscaped community wide paseo trail system that connects the cottages to and from the Village Center. All areas dedicated to common area will be maintained by the HOA or equivalent (*Refer to Preliminary Landscaping Plan in Section 3 and the Map Pocket of this submittal packet*).

Primary pedestrian access will include paseo paths located within open space/common areas so residents have access/circulation throughout the project. There will be services available at the Village Center that will provide motorized transportation to and from the Village Center to a residents' private unit should that be requested.

Landscaping

In accordance with Section 110.412.35 all yards that adjoin a public street include a minimum of one tree for every fifty linear feet of street frontage. Although all streets within the project are planned to be private, the project includes one tree every 50 linear feet (*Refer to Preliminary Landscaping Plan in Section 3 and the Map Pocket of this submittal packet*).

The portion of the site along Neighborhood Way is currently landscaped and will remain as-is. All of the areas outside of the buildings and roadway infrastructure will be formally landscaped using trees, shrubs (including the use of climatic adaptive landscaping), decorative rock and artificial turf to conserve water.

Parking

Washoe County Development Code does not specify parking requirement for Continuum of Care uses. However, according to Washoe County Code, parking will be determined through the special use permit process.

Each unit will provide a minimum of 4 parking spaces (2 garage/2 driveway). Additional off-street parking for overflow and guests is located throughout the development including a majority around the Village Center. Specifically, the project will include a minimum of 90 overflow/guest spaces strategically located throughout the project. In addition to the parking, transportation services will be offered to all residents. No on-street parking is allowed within the project site.

Traffic and Circulation

A traffic study was prepared by Soleaugui Engineers based on the project layout. Based on the proposed use and anticipated resident within the project, the study estimated that the project would generate 301 Average Daily Trips (ADT), with 10 AM peak hour trips and 27 PM peak hour trips. Minimal improvements including signage and striping are recommended as part of the traffic analysis but given the type of use planned and the typical driving patterns associated with typical residents at these facilities, overall, the project is not anticipated to significantly impact the traffic in the area. A copy of the full Traffic Report prepared by Solaugui Engineers is provided in Section 4 of this application for reference.

As designed, the project includes three access points from Neighborhood Way, all of which will be gated and private. The main entrance to the community is centrally located along Neighborhood Way in the middle of the primary parcel, providing full access to the site for residents, guests, and deliveries. Improvements to the main entrance will include two drive aisles and a landscaped median in the middle. The intersection will be striped with stop sign control. The other two access points (one to the north and one to the south along Neighborhood Way) will be gated emergency access limited to ingress and egress during an emergency. These three access points will provide plenty of ingress and egress for the limited traffic anticipated on the site and provide for optimal on site circulation.

The streets from the main access narrow to a 24-foot-wide local street that will be privately owned/maintained. No on-street parking will be allowed. Pedestrian access will include paseo paths located within open space/common areas so residents have an inviting landscape paseo to walk dogs, visit friends and enjoy all the community amenities. There will be services available at the Village Center that will provide motorized transportation to and from the Village Center to a residents' private unit should that be requested. *(Refer to Tentative Map Plan Set in Section 3 and Map Pocket of this submittal packet).*

Grading

This site is relatively flat and therefore minimal grading to construct the project will be required. The site is anticipated to import approximately 55,000 cubic yards of fill. Disturbed areas will be landscaped and in accordance with Washoe County requirements. *(Refer to Tentative Map Plan Set in Map Pocket of this submittal packet).*

Drainage

The parcel is currently undeveloped land and drains south and east to the existing channels south and east of the site. The east channel flows south toward Eagle Canyon Drive and ultimately to the Sparks Regional Detention Basin, the North Truckee Drain and to the Truckee River. There is also an existing concrete lined channel west of Neighborhood Way. A storm drain system picks up flows from Neighborhood Way west of the site and discharges to the existing ditch which runs south along Neighborhood Way to a box culvert south of the site where it is then discharged to a drainage channel south of the project site. This channel flows east and discharges to the existing channel east of the site.

The proposed drainage system for the project site consists of sheet flow from the buildings and streets into a system of gutters with which storm water is conveyed into drop inlets and underground storm drainpipes. Onsite flows will be directed to the existing channel east of the site or to the existing concrete v-ditch along Neighborhood Way (small portions of some of the western access roads) which drains to existing storm drain that outlets to the concrete lined channel west of Neighborhood Way and flows south.

The existing drainageways have capacity to handle the proposed flows with no negative impacts to adjacent or downstream properties as a result of the proposed development during the 5-year and 100-year storms

Continuum of Care Cottage Community
Common Open Space Commercial Subdivision & Special Use Permit

(Refer to Tentative Map Plan set and Preliminary Hydrology Letter in Section 4 and Map Pocket of this submittal packet).

Water, Sewer, and Utilities

Public utilities currently exist within the project site, currently serving the surrounding communities. The utilities are located within Neighborhood Way and are adequately sized to accommodate the estimated generation associated with this request based on the density and intensity.

The site will be served by Truckee Meadows Water Authority (TMWA) and is within the TMWA service area.

Sewer service is anticipated to be provided by Washoe County with treatment at the Truckee Meadow Water Reclamation Facility (TMWRF). The proposed project is anticipated to generate approximately 24,660 gallons per day at peak flow. As noted previously, this site was originally planned for small scale commercial or medical office buildings so pipes were stubbed to the site at each existing intersection designed to accommodate a higher sewer flow rate. Based on the larger anticipated sewer flows, there should be sufficient capacity to serve the project. A preliminary sanitary sewer report is provided in Section 4 of this application packet.

Public Services

Fire service is currently provided by Truckee Meadows Fire District. The closest fire station is Truckee Meadows Fire Station 46 located approximately 1 mile to the west at the intersection of Rockwell Boulevard and La Posada Drive. Washoe County Sheriff provide police.

Development Statistics Summary

The following is a summary of the development statistics of the site:

Total Site Area:	21.56± acres
Total Dwelling Units:	136 single family residences
Gross Density:	6.3 d.u./acre
Total Lot Area:	6.47± acres (30%±)
Total Right of Way Area:	4.67± acres (22%±)
Total Common Area/Open Space	10.42± acres (48%±)

Common Open Space Development Site Analysis

Land Use: The site is currently undeveloped with a Master Plan designation of Commercial and Open Space and corresponding zoning designation of Neighborhood Commercial (NC) and Open Space (OS). The proposed land use is commercial subdivision to allow development of a continuum of care community, as allowed by the Spanish Springs Area Plan. Surrounding property designations are shown on the Zoning Map included in Section 3 of this application. The proposed project is compatible with the area, which includes an assisted living facility, as well as other recently approved continuum of care facilities.

Existing Structures: The subject site is currently undeveloped and does not include any structures with the exception of other than an open drainage ditch running along the eastern most boundary and landscaping, drainage and road improvements running along Neighborhood Way.

Existing Vegetation: The subject site consists primarily of native shrubs, sagebrush and desert grasses. Formal landscaping, including shrubs and trees are located within the project area along Neighborhood Way.

Topography: The project site is in a nearly flat area with gentle sloping from the north to south. The entire site is free of steep slopes with no slope over 15%.

Soil: The subject site is located within the northwestern portion of Spanish Springs. Soils associated with future development are generally native clay soils.

Natural Drainageways: There are no natural drainageways on or adjacent to the site.

Wetlands and Water Bodies: There are no wetlands on the site.

Flood Hazards: The entire site is located out of the FEMA mapped 100-year Floodplain. Any FEMA Flood zone designations are identified on the Tentative Map.

Seismic Hazards: There are no known seismic hazards on or near the subject site.

Avalanche Hazards: There are no known avalanche or other landslide hazards on the site.

Sensitive Habitat and Migration Routes: There are no sensitive habitats or migrations routes on the site.

Easements: Refer to Tentative Map sheets for easements.

Utilities: Refer to Tentative Map Utility Sheets.

Appropriate Access Points: The subject site is accessed from Neighborhood Way via existing intersections. These intersections will be extended from Neighborhood Way and will provide circulation throughout the site. All proposed streets will be private and designed in accordance with Washoe County Code.

Findings

Prior to approving an application for a development, the Planning Commission, Board of Adjustment or a hearing examiner shall find that all of the following are true:

TENTATIVE MAP FINDINGS

(a) Plan Consistency. That the proposed map is consistent with the Master Plan and any specific plan;

Response: The proposed map is based on the Continuum of Care use which is an allowed use through the approval of a special use permit that allows the variation of standards including setbacks within the Neighborhood Commercial (NC) zoning designation. This designation is consistent with the current Master Plan designation of Commercial and Open Space and meets all applicable goals and policies of the Washoe County Master Plan and the Spanish Springs Area Plan.

(b) Design or Improvement. That the design or improvement of the proposed subdivision is consistent with the Master Plan and any specific plan;

Response: The proposed common open space commercial subdivision is consistent with the Master Plan and is particularly consistent with the Spanish Springs Area Plan as related to the Spanish Springs Suburban Character Management Area goals and policies including dwelling units per acre, transportation, scenic/recreational/cultural resources, and natural resources.

(c) Type of Development. That the site is physically suited for the type of development proposed;

Response: The project site is generally flat gently sloping from northwest to southeast making it physically suited for the proposed project. Existing infrastructure is surrounding the project site and the number of dwellings and configuration of the proposed subdivision is consistent with the requirements of the master plan.

(d) Availability of Services. That the subdivision will meet the requirements of Article 702, Adequate Public Facilities Management System;

Response: In accordance with Article 702, the proposed project has been designed to ensure that public infrastructure necessary to support the project is available concurrently with the impacts of the project without causing the level of service to fall below adopted standards. The site has been anticipated for development for many years and with the construction of Neighborhood Way utilities sufficient to support the proposed development are available.

(e) Fish and Wildlife. That neither the design of the subdivision nor any proposed improvements is likely to cause substantial environmental damage, or substantial and avoidable injury to any endangered plant, wildlife or their habitat;

Response: The proposed subdivision is not located within an environmentally sensitive location. In fact, the site is surrounded by development and has been anticipated for infill development for several years. The improvements associated with the project are not anticipated to cause substantial environmental damage or harm to endangered plants or wildlife habitats.

- (f) Public Health. That the design of the subdivision or type of improvement is not likely to cause significant public health problems;**

Response: The proposed continuum of care facility has been designed in accordance with environmental and health laws and regulations concerning water and air pollution, solid waste disposal, water service and sewer service. All necessary infrastructure is currently located adjacent to the project. All new infrastructure required to serve the proposed project will be constructed to service all proposed development. Refer to attached engineering reports in Section 4 of this application packet for detailed information.

- (g) Easements. That the design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through, or use of property within, the proposed subdivision;**

Response: There are easements identified along Neighborhood Way and on the property that have been incorporated into the proposed project. Specifically, as designed the proposed project does not conflict with the easements through or adjacent to the property.

- (h) Access. That the design of the subdivision provides any necessary access to surrounding, adjacent land and provides appropriate secondary access for emergency vehicles;**

Response: The project includes three access points from Neighborhood Way, all of which will be gated. The main entrance to the community is centrally located in the middle of the primary parcel, providing full access to the site for residents, guests, and deliveries. Improvements to the main entrance will include striping and a stop sign control in accordance with the recommendations in the Traffic Report included in this submittal packet. The other two access points (one to the north and one to the south) will be used as gated emergency access that will only allow ingress and egress during an emergency. These three access points will provide plenty of ingress and egress for the limited traffic anticipated on the site and provide for optimal on site circulation.

Access roads within the project will be 24 feet from back face of curb to back face of curb to accommodate two travel lanes with rolled curb and gutter. All roads will be privately owned/maintained. Although there will be no parking along the roads, additional off-street parking for overflow and guests is located throughout the development including a majority around the Village Center. Pedestrian access will include paseo paths located within open space/common areas so residents have access/circulation throughout the project. There will be services available at the Village Center that will provide motorized transportation to and from the Village Center to a residents' private unit should that be requested.

- (i) Dedications. That any land or improvements to be dedicated to the County is consistent with the Master Plan; and**

Response: All common open space and/or roads will be maintained by the HOA, or equivalent, as noted previously throughout this document.

- (j) Energy. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision.**

Response: Floor plans and building elevations have been included with this submittal and will be similar to the approved development west of Neighborhood Way. Methods such as landscaping with artificial turf,

Continuum of Care Cottage Community
Common Open Space Commercial Subdivision & Special Use Permit

trees and shrubs, that are included in the design as part of this submittal will help with passive and natural cooling. Furthermore, it is anticipated that new high-performance building and material technologies will be used for energy efficiency.

Special Use Permit Findings

- (a) Consistency. The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan;**

Response: The proposed project is consistent with the current Master Plan designation of Commercial and meets all applicable goals and policies of the Washoe County Master Plan and the Spanish Springs Area Plan.

- (b) Improvements. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;**

Response: For the Neighborhood Commercial zoning designation, the intensity and density of this project are much lower than other uses permitted within this designation. Since this site was originally intended as a commercial development, Neighborhood Way, as well as the utilities located within it, were designed to accommodate development with more density and intensity than the one proposed. Therefore, all of the surrounding infrastructure and public facilities are adequately sized to handle the projected level of service that is generated from this request.

- (c) Site Suitability. The site is physically suitable for the type of development and for the intensity of development;**

Response: As stated earlier the intensity of the proposed development is relatively low for the NC zoning designation and is not anticipated to be a large traffic generator. According to Washoe County Code, the residential density for the continuum care facility is determined during the special use permitting process. The proposed project includes 136 units which would be 6.3 dwelling units per acre (du/ac). Based on reasons previously stated, the site is physically suitable for the proposed project.

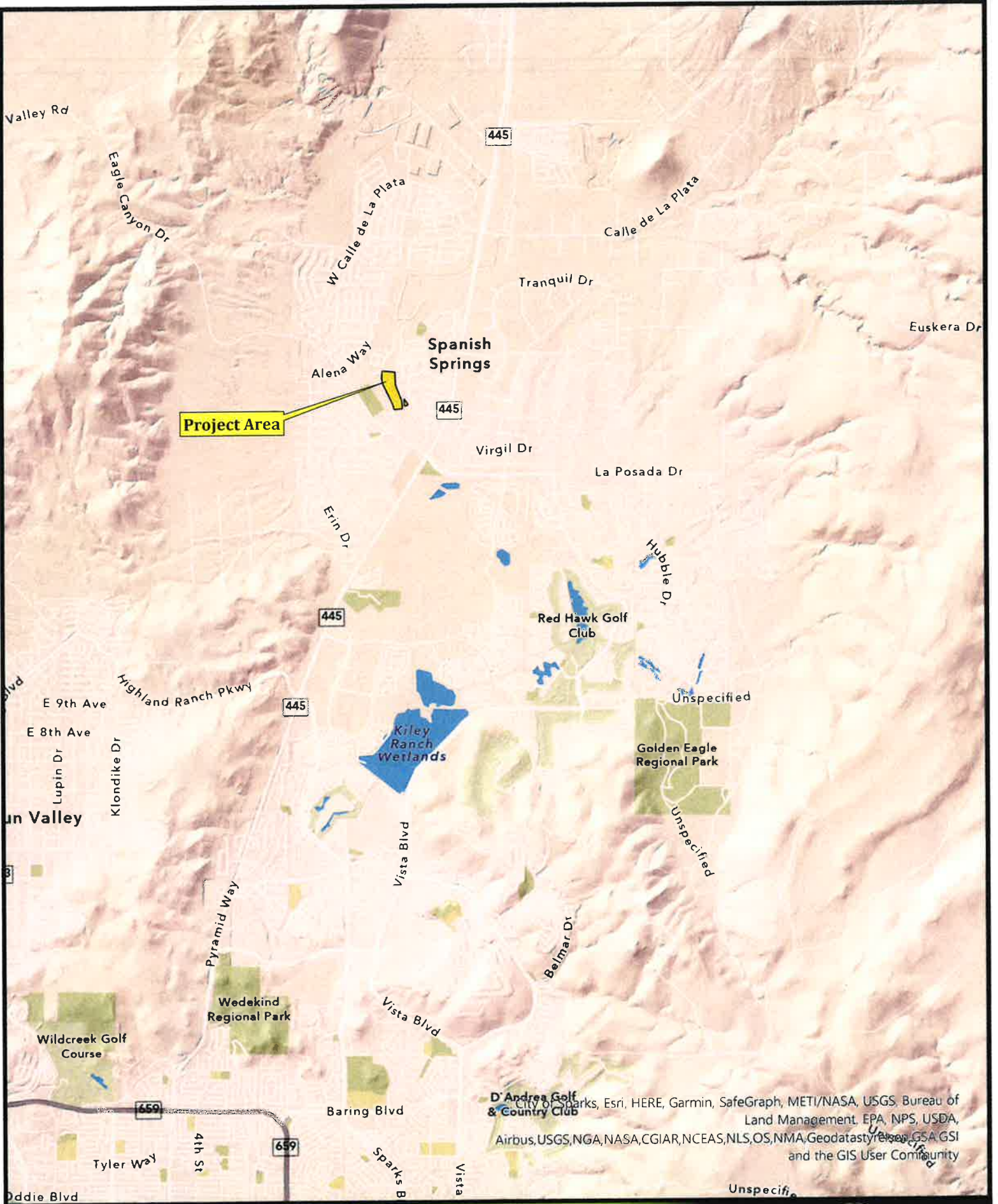
- (d) Issuance Not Detrimental. Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area; and**

Response: The project will not be detrimental to public health; in fact, the project will have a positive impact on the public health as it will provide a need to the housing issue facing many seniors in the region. Furthermore, this will complement the assisted living facility to the south while still providing a use that is similar to the single family residential properties to the north.

- (e) Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.**

Response: Not applicable to the project.

Section 3



City of Sparks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, Airbus, USGS, NGA, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodastyle.com, GSA GSI and the GIS User Community



Vicinity Map

Silverado Continuum of Care East SUP & TM

January 2022



WOOD RODGERS
 BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
 1361 Corporate Boulevard Tel: 775.823.4068
 Reno, NV 89502 Fax: 775.823.4066



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Legend

 Project Area

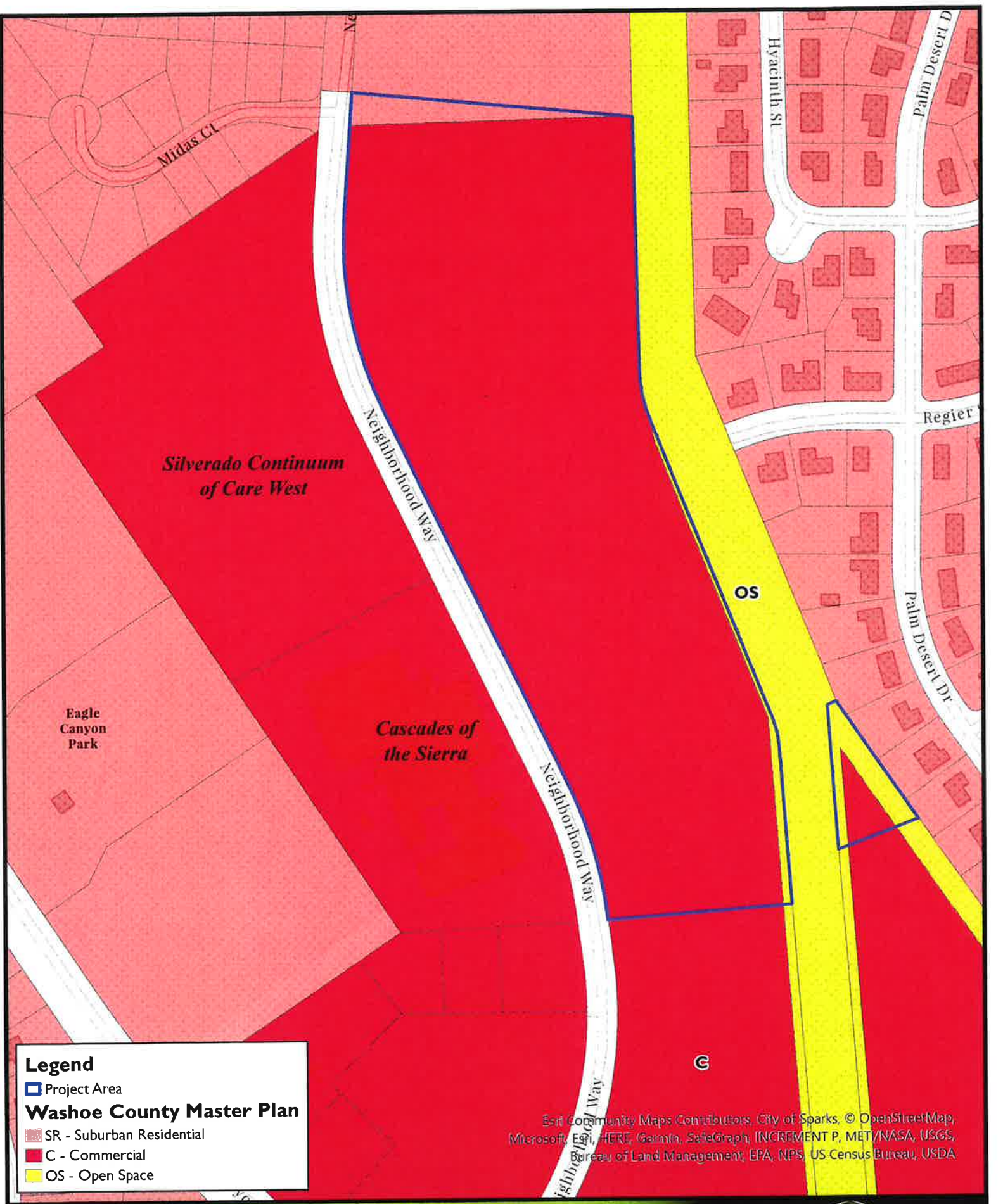
Existing Conditions

Silverado Continuum of Care East SUP & TM

January 2022



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 1361 Corporate Boulevard Tel: 775.823.4068
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Legend

Project Area

Washoe County Master Plan

SR - Suburban Residential

C - Commercial

OS - Open Space

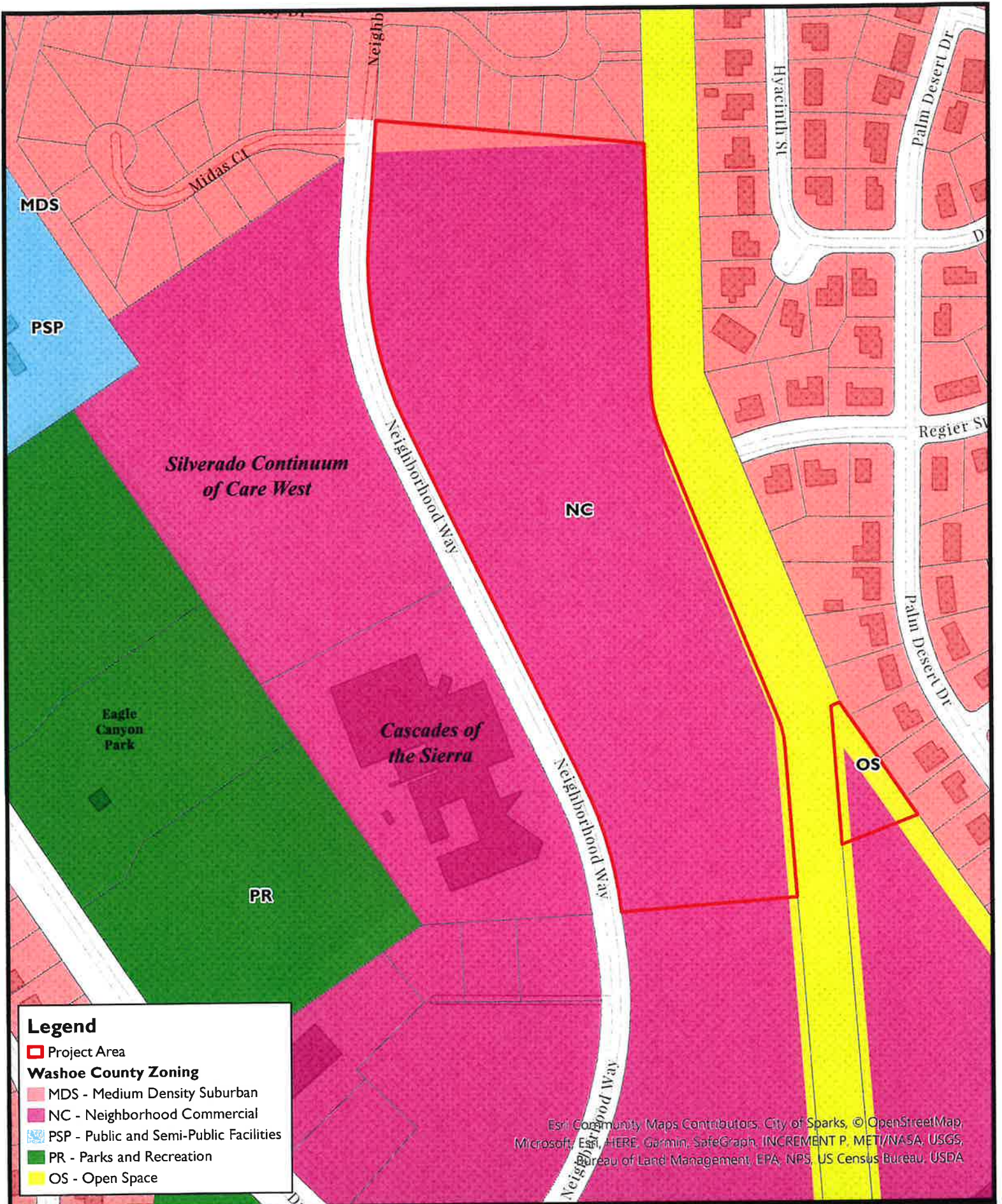
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Master Plan

Silverado Continuum of Care East SUP & TM

January 2022

WOOD RODGERS
 BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
 1361 Corporate Boulevard Tel: 775.823.4068
 Reno, NV 89502 Fax: 775.823.4066



Legend

- ▭ Project Area
- Washoe County Zoning**
- ▭ MDS - Medium Density Suburban
- ▭ NC - Neighborhood Commercial
- ▭ PSP - Public and Semi-Public Facilities
- ▭ PR - Parks and Recreation
- ▭ OS - Open Space

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Zoning

Silverado Continuum of Care East SUP & TM

January 2022



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SILVERADO CONTINUUM OF CARE COTTAGES

SINGLE FAMILY HOMES + CLUBHOUSE



COUNTY OF WASHOE, NEVADA
09.29.2021

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A2.4	PLAN 1 SCHEMATIC PERSPECTIVE RUSTIC RANCH
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A5.1	PLAN 4 SCHEMATIC FLOOR PLAN 1,718 SF
A5.2	PLAN 4 SCHEMATIC PERSPECTIVE CONTEMPORARY RANCH
A5.3	PLAN 4 SCHEMATIC ELEVATIONS CONTEMPORARY RANCH
A5.4	PLAN 4 SCHEMATIC PERSPECTIVE RUSTIC RANCH
A5.5	PLAN 4 SCHEMATIC ELEVATIONS RUSTIC RANCH
A5.6	PLAN 4 SCHEMATIC PERSPECTIVE TRADITIONAL RANCH
A5.7	PLAN 4 SCHEMATIC ELEVATIONS TRADITIONAL RANCH
A6.1	CLUBHOUSE SCHEMATIC FLOOR PLAN 2,994 SF
A6.2	CLUBHOUSE SCHEMATIC ELEVATIONS FRONT + REAR
A6.3	CLUBHOUSE SCHEMATIC ELEVATIONS RIGHT + LEFT



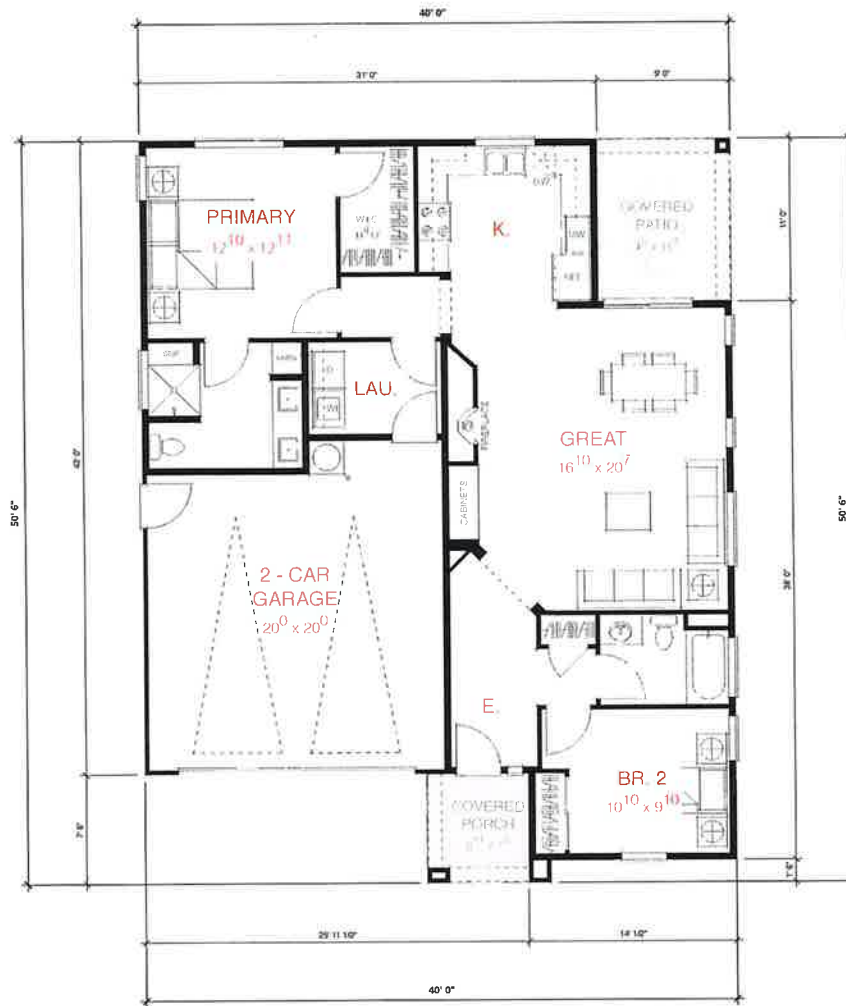
SHEET NOTES

PROGRAM

STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2
GARAGE	=	2 CAR
KITCHEN / GREAT ROOM	=	
COVERED PATIO	=	
COVERED PORCH	=	

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,273 SF
GARAGE	=	433 SF
PORCH / PATIO	=	151 SF



PLAN 1 | SCHEMATIC FLOOR PLAN | 1,273 SF



DATE: 08/19/2021

A2.1



SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



PLAN 1 | SCHEMATIC PERSPECTIVE | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



EDWARD J. DAVIS ARCHITECTS
4001 S. RAY

A2.2

SHEET NOTES

PLAN #1

SQUARE FOOTAGE	•	1,273 SF
STORIES	•	1
BEDROOMS	•	2
BATHROOMS	•	2

MATERIALS

- ① TILE ROOF
- ② STUCCO (SMOOTH FINISH)
- ③ SIDING + TRIM BOARDS (BOARD + BATTEN | 16" O.C.)
- ④ BRICK VENEER
- ⑤ BEAM (DECORATIVE)



PLAN 1 | SCHEMATIC ELEVATIONS | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



JDA ARCHITECTURE, INC.
DATE: 09.22.22

A2.3



PLAN 1 | SCHEMATIC PERSPECTIVE | RUSTIC RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



BOARD NUMBER:
DATE ISSUED:

A2.4



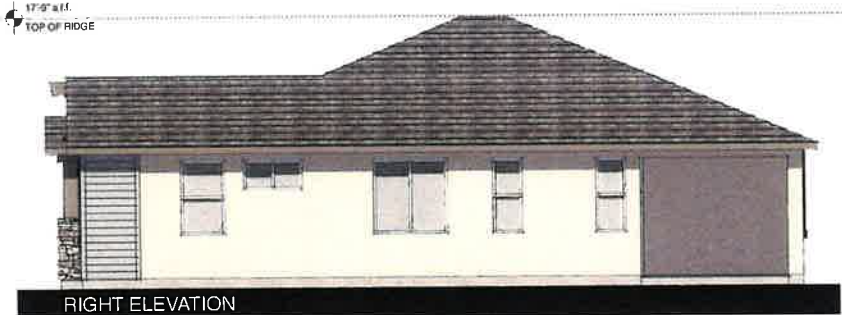
SHEET NOTES

PLAN #1

SQUARE FOOTAGE	=	1,273 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO SMOOTH FINISH
- ③ SIDING + TRIM BOARDS HORIZONTAL LAP 1/8" EXPOSURE
- ④ STONE VENEER
- ⑤ BRACE DECORATIVE
- ⑥ SHUTTERS DECORATIVE



PLAN 1 | SCHEMATIC ELEVATIONS | RUSTIC RANCH

JDA ARCHITECTURE
 2024.08.01
A2.5

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA





PLAN 1 | SCHEMATIC PERSPECTIVE | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

09/29/2021 | PROGRESS SET



DATE: 09/29/2021
DRAWING NO: A2.6

A2.6

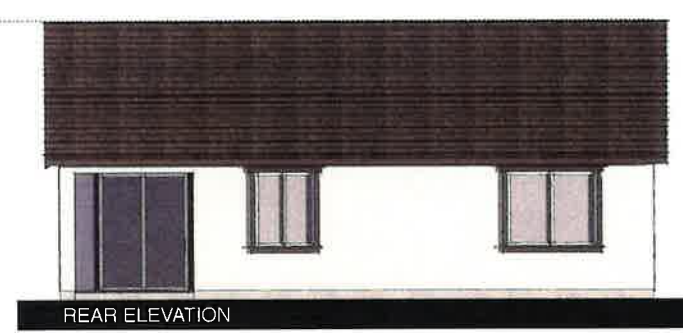
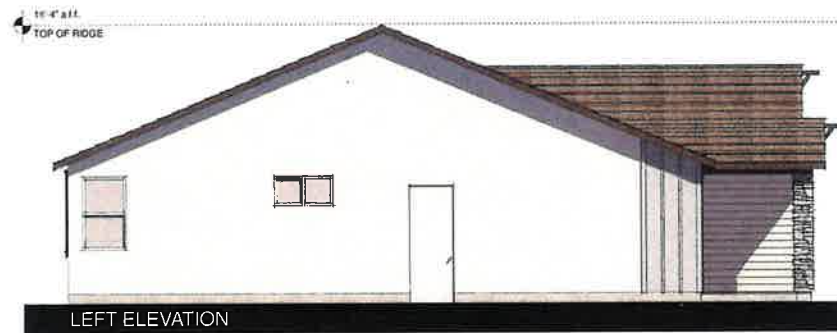
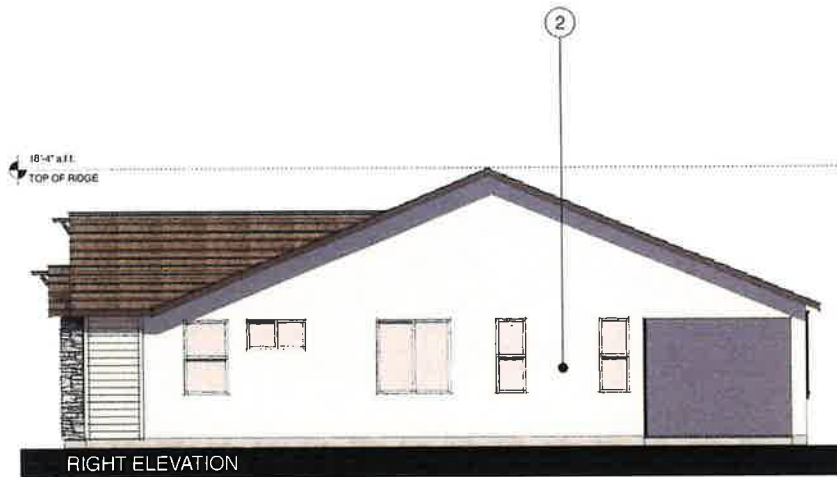
SHEET NOTES

PLAN #1

SQUARE FOOTAGE	=	1,273 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
HORIZONTAL
LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS
BOARD + BATTEN | 16" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE
DECORATIVE



PLAN 1 | SCHEMATIC ELEVATIONS | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 10/20/21

A2.7



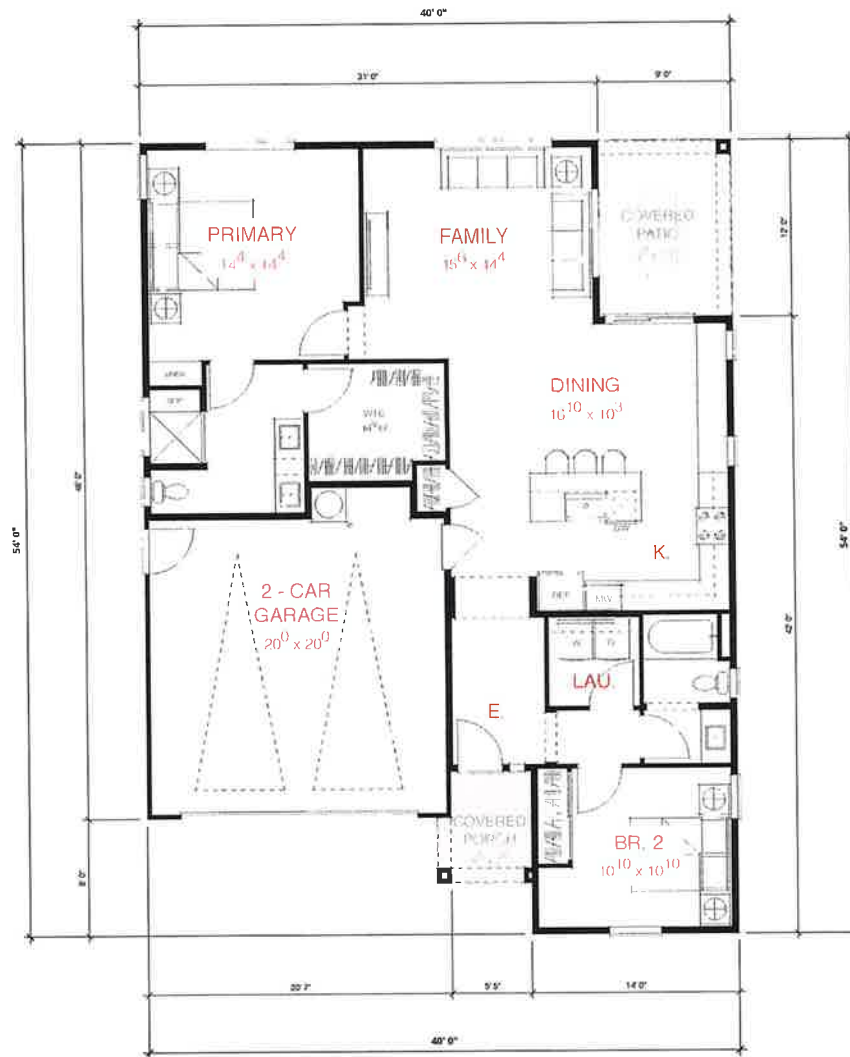
SHEET NOTES

PROGRAM

STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2
GARAGE	=	2 - CAR
KITCHEN / FAMILY + DINING ROOM	=	
COVERED PATIO	=	
COVERED PORCH	=	

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,400 SF
GARAGE	=	427 SF
PORCH / PATIO	=	154 SF



PLAN 2 | SCHEMATIC FLOOR PLAN | 1,400 SF



PROJECT NUMBER: 2021-01
DATE: 11-15-2021

A3.1





PLAN 2 | SCHEMATIC PERSPECTIVE | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DESIGNED BY JDA
ARCHITECTURE

A3.2

10/20/2021 | PROGRESS 50%



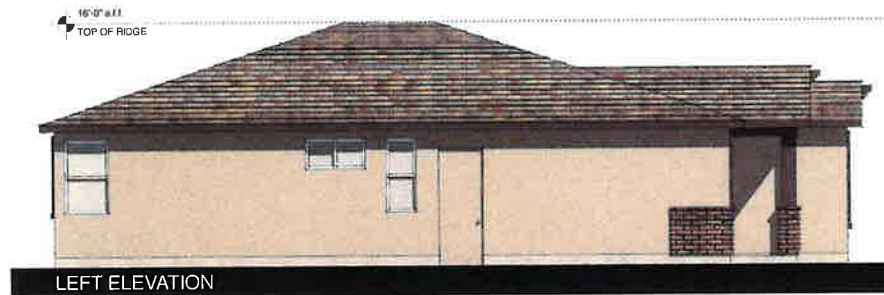
SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,400 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO SMOOTH FINISH
- ③ SIDING + TRIM BOARDS BOARD + BATTEN | 16" O.C.
- ④ BRICK VENEER
- ⑤ BEAM DECORATIVE



PLAN 2 | SCHEMATIC ELEVATIONS | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

09/29/2021 | PROGRESS SET



DESIGNED BY JDA
4881 179 1500

A3.3



PLAN 2 | SCHEMATIC PERSPECTIVE | RUSTIC RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



JDA ARCHITECTURE
1041 19th Street, Suite 100
Reno, NV 89502

A3.4



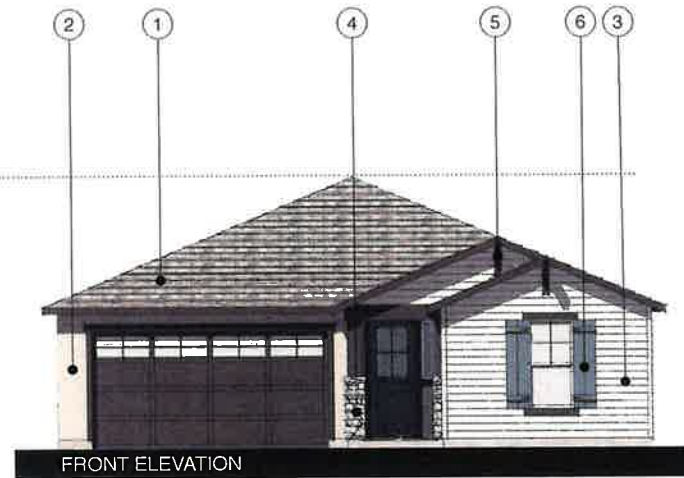
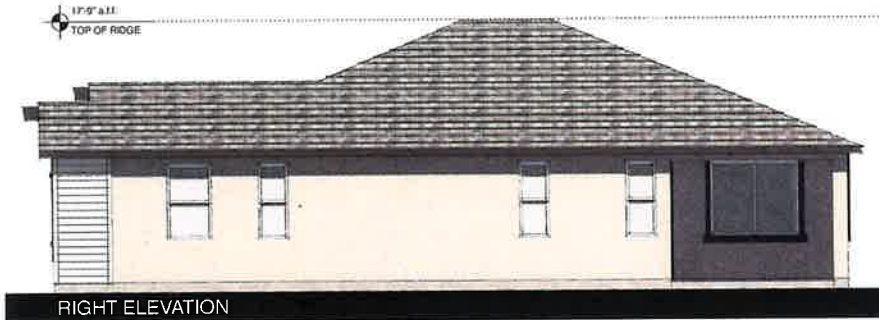
SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,400 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
HORIZONTAL
1/4" x 6" EXPOSURE
- ④ STONE VENEER
- ⑤ BRACE
DECORATIVE
- ⑥ SHUTTERS
DECORATIVE



PLAN 2 | SCHEMATIC ELEVATIONS | RUSTIC RANCH



DATE: 08/11/2021
TIME: 10:00 AM

A3.5



PLAN 2 | SCHEMATIC PERSPECTIVE | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

03/29/2021 | PROGRESS SET



DESIGNED BY JDA

A3.6

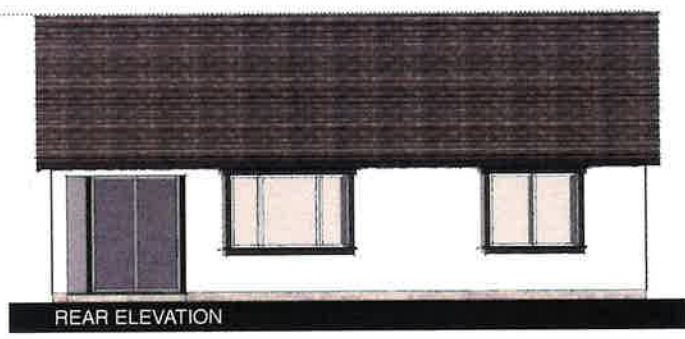
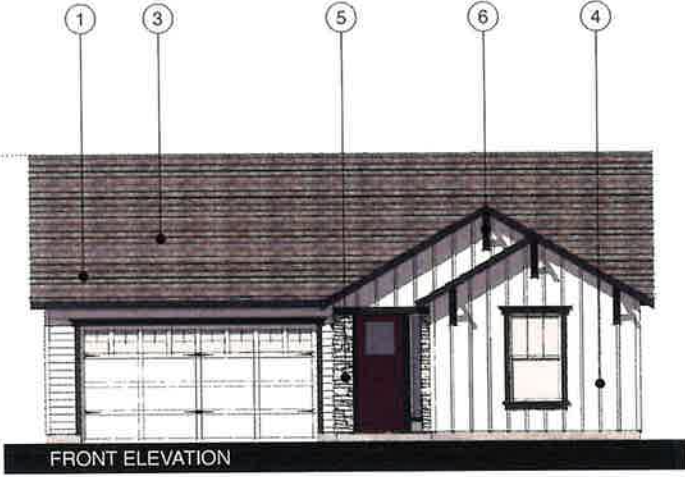
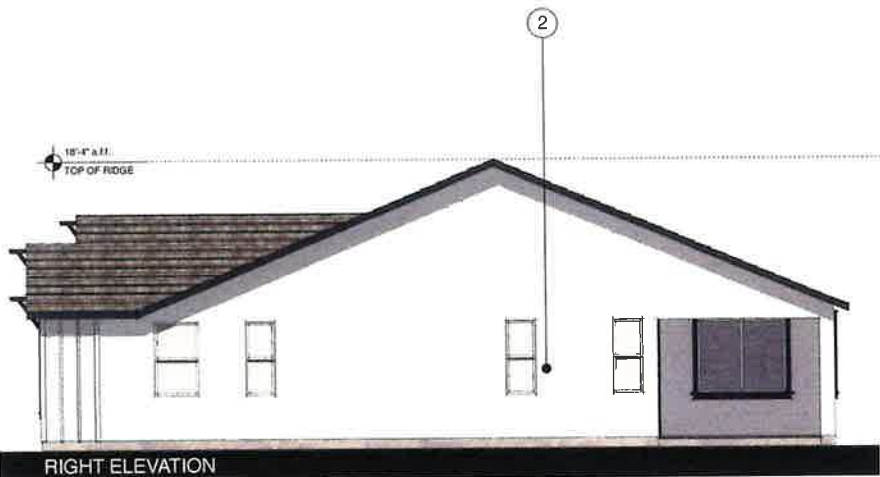
SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,400 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
HORIZONTAL
LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS
BOARD + BATTEN | 1 1/2" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE
DECORATIVE



PLAN 2 | SCHEMATIC ELEVATIONS | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 10/10/2021

A3.7



SHEET NOTES

PROGRAM

STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2
GARAGE	=	2 - CAR
KITCHEN / GREAT ROOM	=	
FLEX ROOM	=	
COVERED PATIO	=	
COVERED PORCH	=	

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,579 SF
GARAGE	=	488 SF
PORCH / PATIO	=	209 SF



PLAN 3 | SCHEMATIC FLOOR PLAN | 1,579 SF



DATE: 01/11/2022

A4.1



SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

1000 W. WASHINGTON AVENUE, SUITE 100, SPARKS, NV 89415



PLAN 3 | SCHEMATIC PERSPECTIVE | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 01/20/2021

A4.2



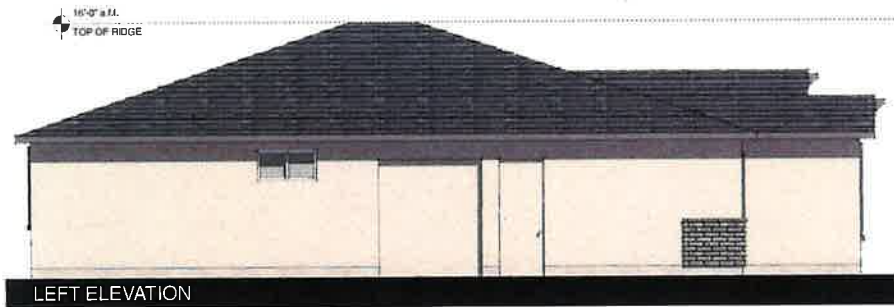
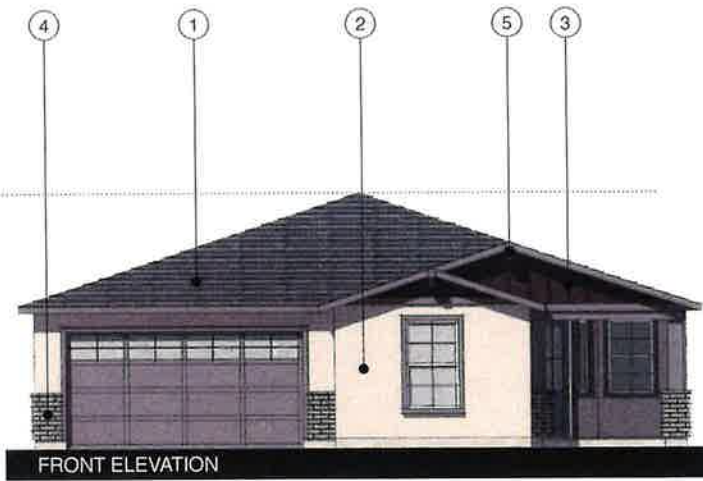
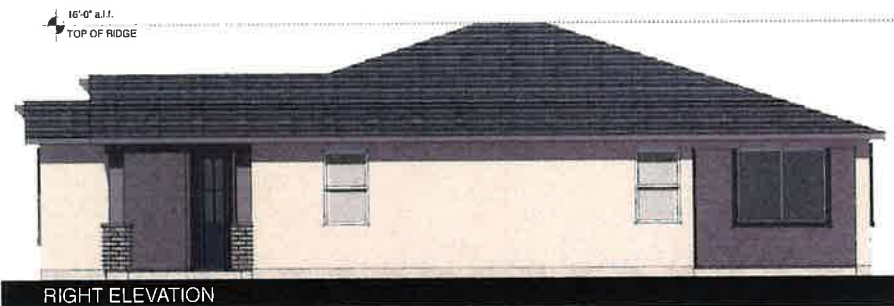
SHEET NOTES

PLAN #3

SQUARE FOOTAGE	=	1,579 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO SMOOTH FINISH
- ③ SIDING + TRIM BOARDS BOARD + BATTEN | 16" O.C
- ④ BRICK VENEER
- ⑤ BEAM DECORATIVE



PLAN 3 | SCHEMATIC ELEVATIONS | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

10000 Silverado Blvd., Reno, NV 89509



DATE: 08/11/2021
DRAWN BY: JDA

A4.3





PLAN 3 | SCHEMATIC PERSPECTIVE | RUSTIC RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



ARCHITECTURE
INTERIOR DESIGN
LANDSCAPE ARCHITECTURE

A4.4

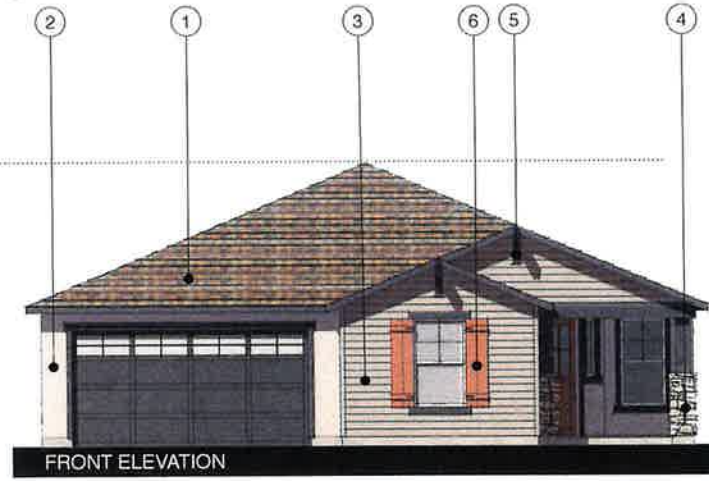
SHEET NOTES

PLAN #3

SQUARE FOOTAGE	=	1,579 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
HORIZONTAL
LAP | 6" EXPOSURE
- ④ STONE VENEER
- ⑤ BRACE
DECORATIVE
- ⑥ SHUTTERS
DECORATIVE



PLAN 3 | SCHEMATIC ELEVATIONS | RUSTIC RANCH



BOARD NUMBER
SHEET 15 OF 15

A4.5



SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

10/20/2021 | 1906425552





PLAN 3 | SCHEMATIC PERSPECTIVE | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DESIGNED BY JDA
ARCHITECTURE

A4.6



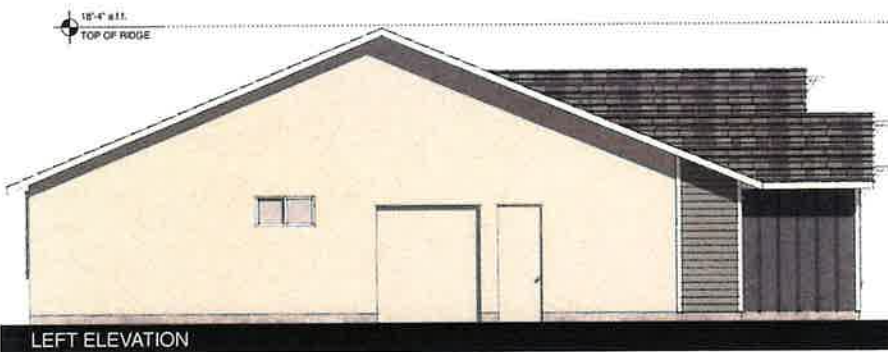
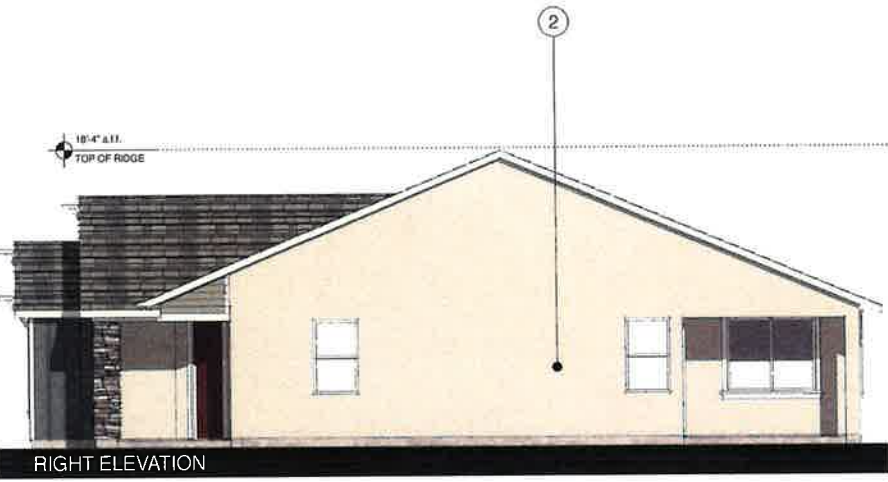
SHEET NOTES

PLAN #3

SQUARE FOOTAGE	=	1,579 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
HORIZONTAL
LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS
BOARD + BATTEN | 16" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE
DECORATIVE



PLAN 3 | SCHEMATIC ELEVATIONS | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 08-11-2021

A4.7





SHEET NOTES

PROGRAM

STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2
GARAGE	=	2 - CAR
KITCHEN		
LIVING + DINING ROOM		
FLEX ROOM		
COVERED PATIO		
COVERED PORCH		

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,718 SF
GARAGE	=	449 SF
PORCH / PATIO	=	162 SF

PLAN 4 | SCHEMATIC FLOOR PLAN | 1,718 SF



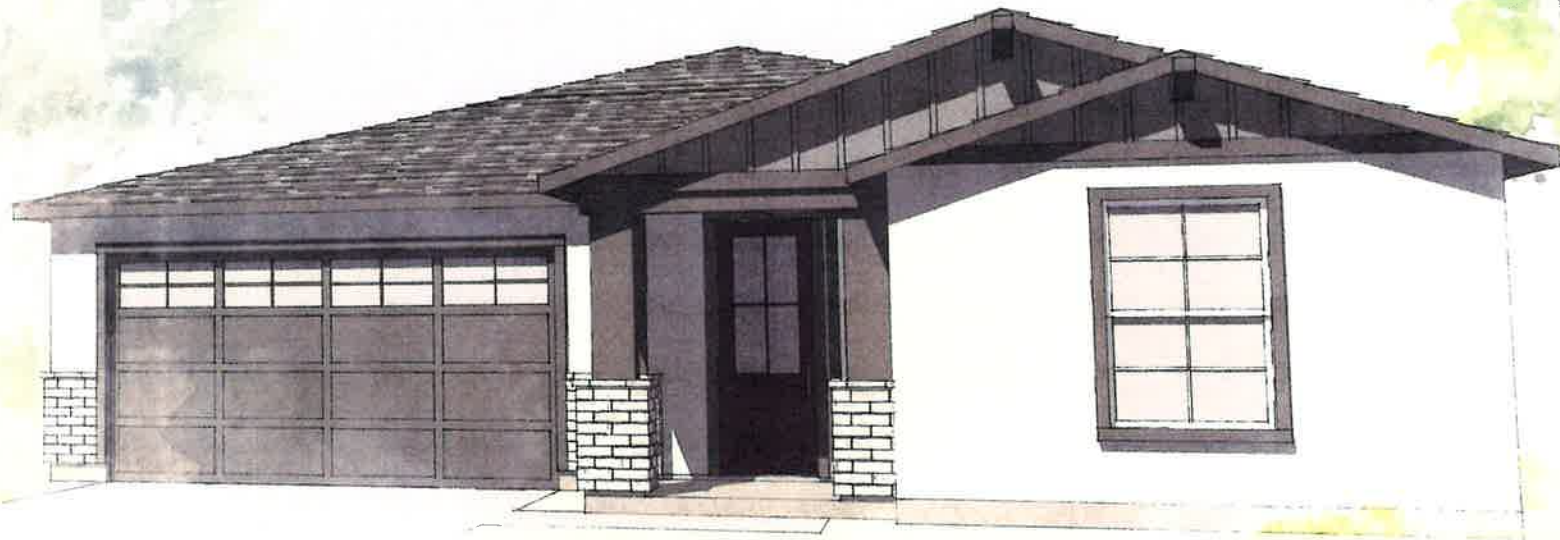
DESIGNED BY JDA CONSULTING & DESIGN

A5.1



SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



PLAN 4 | SCHEMATIC PERSPECTIVE | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



BOA 2011-2015
EARTH 2017

A5.2



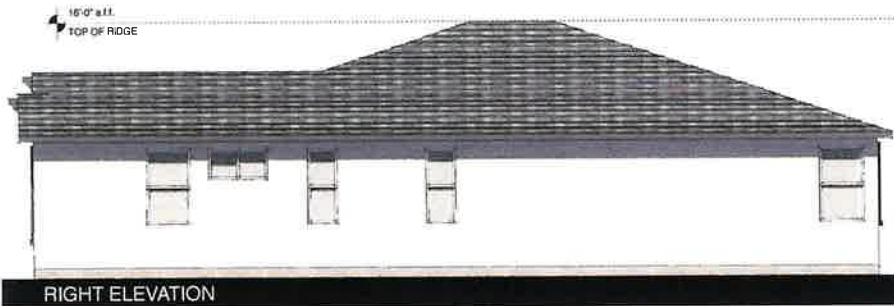
SHEET NOTES

PLAN #4

SQUARE FOOTAGE	=	1,718 SF
STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

- ① TILE ROOF
- ② STUCCO
SMOOTH FINISH
- ③ SIDING + TRIM BOARDS
BOARD + BATTEN | 16" O.C.
- ④ BRICK VENEER
- ⑤ BEAM
DECORATIVE



PLAN 4 | SCHEMATIC ELEVATIONS | CONTEMPORARY RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 08/11/2021
TIME: 10:11:20

A5.3



PLAN 4 | SCHEMATIC PERSPECTIVE | RUSTIC RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



ISSUE DATE: 10/15/21
DATE: 10/22/21

A5.4

09.29.2021 | 19063255.SCT



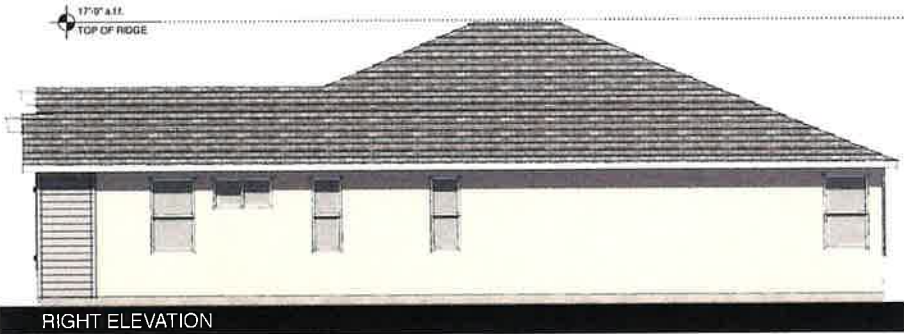
SHEET NOTES

PLAN #4

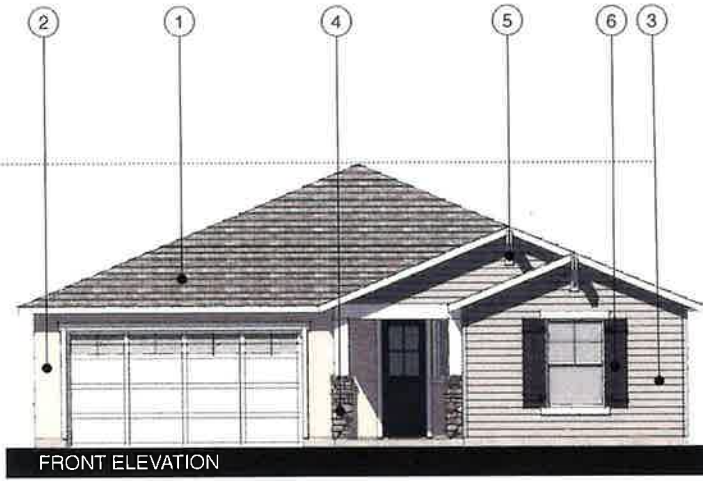
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STORIES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

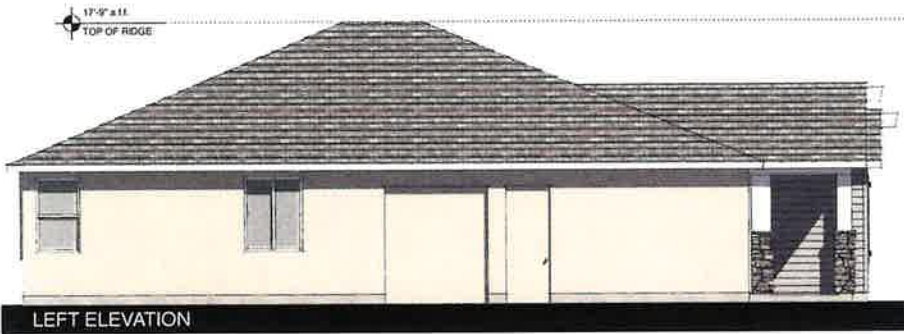
- ① TILE ROOF
- ② STUCCO SMOOTH FINISH
- ③ SIDING + TRIM BOARDS HORIZONTAL LAP | 6" EXPOSURE
- ④ STONE VENEER
- ⑤ BRACE DECORATIVE
- ⑥ SHUTTERS DECORATIVE



RIGHT ELEVATION



FRONT ELEVATION



LEFT ELEVATION



REAR ELEVATION

PLAN 4 | SCHEMATIC ELEVATIONS | RUSTIC RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



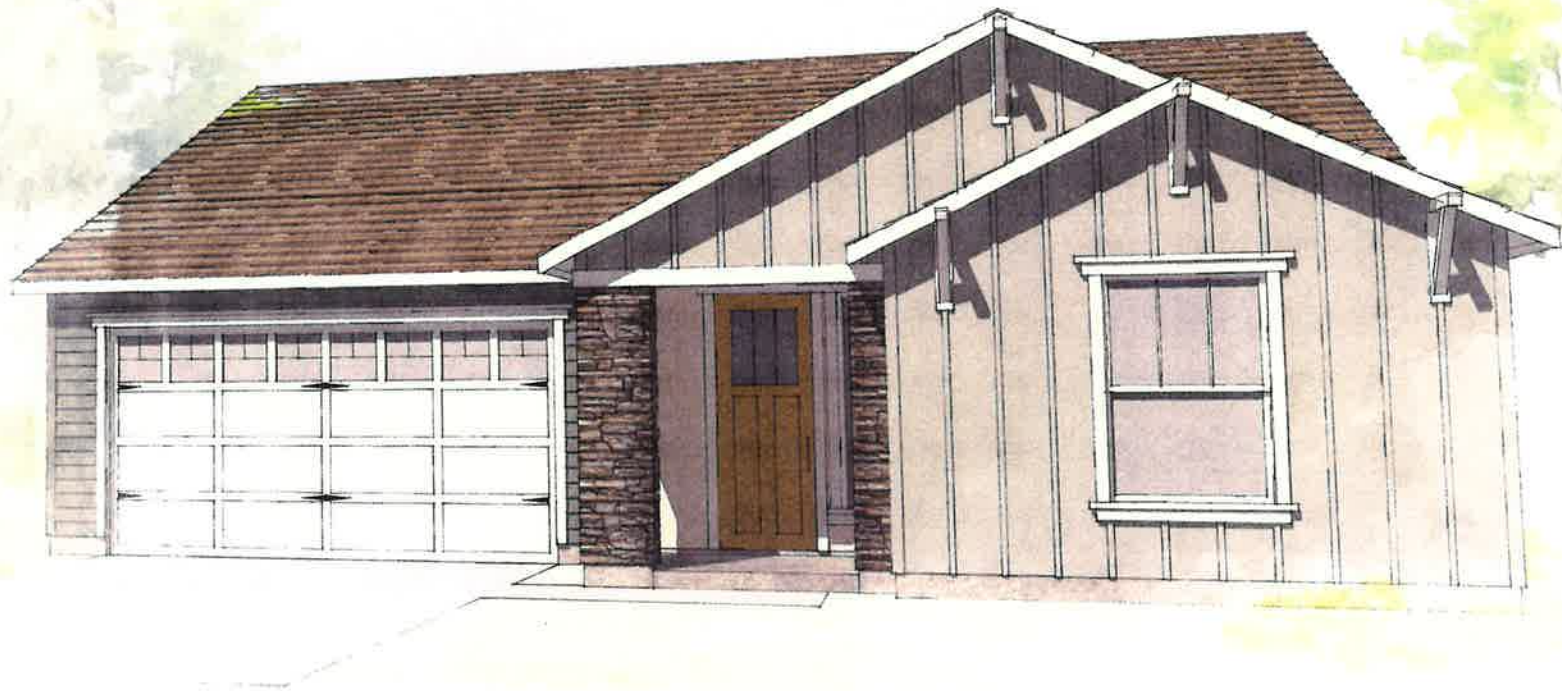
SCALE: 1/4" = 1'-0"



DATE: 03/22/21

A5.5





PLAN 4 | SCHEMATIC PERSPECTIVE | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



SCALE: 1/8" = 1'-0"



DATE: 08/11/2021
TIME: 10:30 AM

A5.6



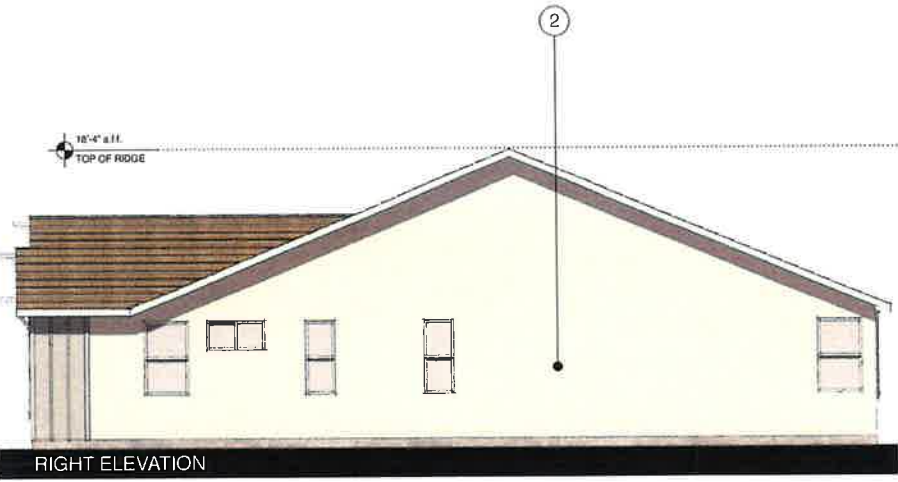
SHEET NOTES

PLAN #4

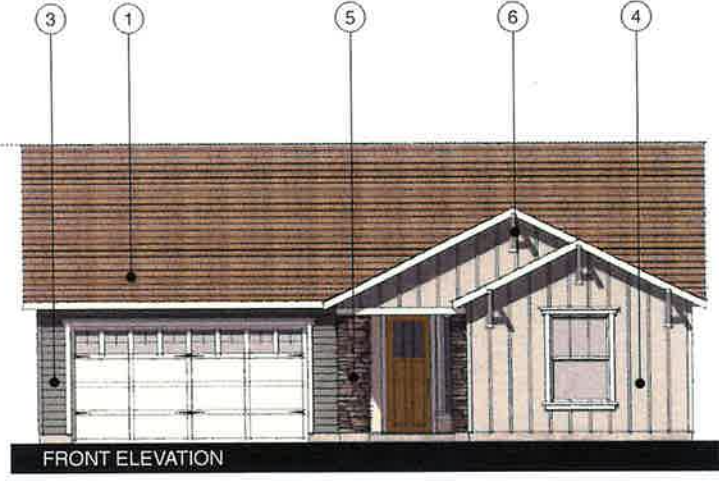
SQUARE FOOTAGE	=	1,718 SF
STORES	=	1
BEDROOMS	=	2
BATHROOMS	=	2

MATERIALS

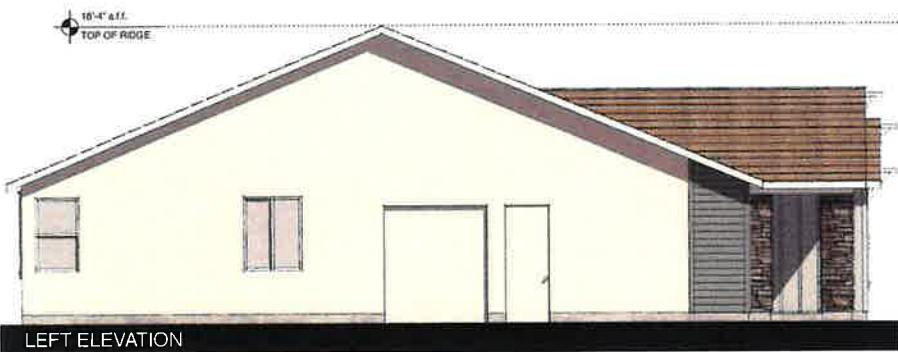
- ① TILE ROOF
- ② STUCCO (SMOOTH FINISH)
- ③ SIDING + TRIM BOARDS HORIZONTAL LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS BOARD + BATTEN | 16" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE (DECORATIVE)



RIGHT ELEVATION



FRONT ELEVATION



LEFT ELEVATION



REAR ELEVATION

PLAN 4 | SCHEMATIC ELEVATIONS | TRADITIONAL RANCH

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



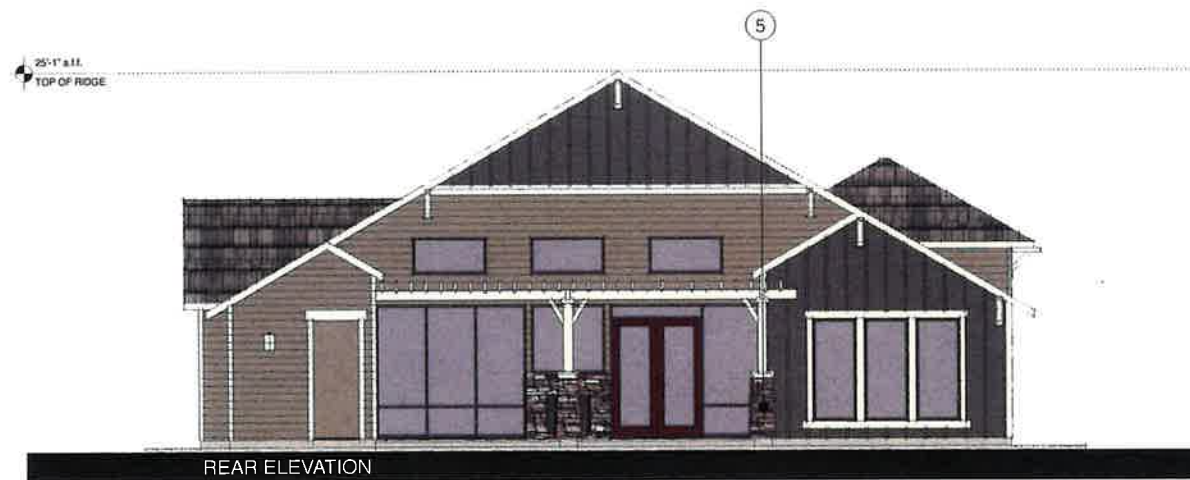
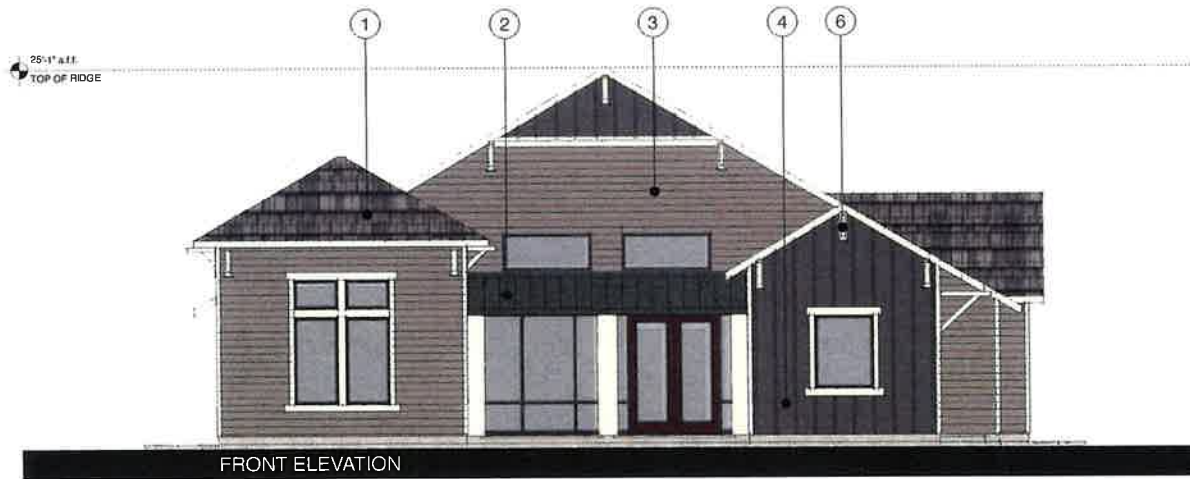
DATE: 04/21/2021
A5.7

SHEET NOTES

CLUBHOUSE PLAN
 SQUARE FOOTAGE = 2,994 SF

MATERIALS

- ① TILE ROOF
- ② METAL ROOF
STANDING SEAM
- ③ SIDING + TRIM BOARDS
HORIZONTAL SIDING
LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS
BOARD + BATTEN | 16" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE
DECORATIVE



CLUBHOUSE | SCHEMATIC ELEVATIONS | FRONT + REAR

SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA



DATE: 08.14.2021
 DRAWING NO: 2102

A6.2



SHEET NOTES

CLUBHOUSE PLAN
 SQUARE FOOTAGE ■ 2,994 SF

MATERIALS

- ① TILE ROOF
- ② METAL ROOF
STANDING SEAM
- ③ SIDING + TRIM BOARDS
HORIZONTAL SIDING
LAP | 6" EXPOSURE
- ④ SIDING + TRIM BOARDS
BOARD + BATTEN | 1 1/2" O.C.
- ⑤ STONE VENEER
- ⑥ BRACE
DECORATIVE



CLUBHOUSE | SCHEMATIC ELEVATIONS | RIGHT + LEFT



DATE: 11/19/2021
 TIME: 10:22

A6.3



SILVERADO CONTINUUM OF CARE COTTAGES

COUNTY OF WASHOE, NEVADA

CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

TITLE SHEET

OWNER:
 SPANISH SPRINGS ASSOCIATES
 550 W. PLUMB LANE SUITE B#505
 RENO, NV 89509
 (775) 360-6922

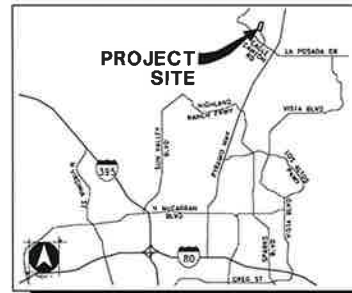
DEVELOPER:
 SILVERADO HOMES NV, INC.
 5525 KIETZKE LANE, SUITE 102
 RENO, NV 89511
 (775) 333-5620

BASIS OF BEARINGS

NEVADA STATE PLAIN COORDINATE SYSTEM (NAD 83) - NORTH AMERICAN DATUM OF 1983 (NAD 83) - HIGH ACCURACY REFERENCE NETWORK (NAD 83) - AS DETERMINED USING REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS WITH CORRECTIONS TRANSMITTED BY THE "KODEN" NEVADA COORDINATE REAL TIME NETWORK GPS (NAD 83) THE BEARING BETWEEN GPS REFERENCE STATION 5887 533201000 AND 59140 - 02240 (D) IS TAKEN AS NORTH 86°29'47" WEST. ALL DIMENSIONS SHOWN ARE GROUND DIMENSIONS CORRECTED TO GRID (G) DIMENSIONS - 1000 1998

BASIS OF ELEVATION

THE BASIS OF ELEVATIONS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AS TAKEN FROM CITY OF SPARKS BENCHMARK 121 WITH A PUBLISHED ELEVATION OF 4997.63 FT. BENCHMARK 121 IS DESCRIBED AS BEING 1/4" DIA BRASS CAPSULE IN CONCRETE 7" WIDE BY 7" HIGH 7" APART FROM BENCH FENCE 22.2 EAST OF EDGE THERMIST AT THERMO JAKE HIGHWAY AND ROBERT BANK BOLLIVARD MONUMENT 55.2 ABOVE GROUND



VICINITY MAP
 NOT TO SCALE



SITE PLAN
 NOT TO SCALE

SITE INFORMATION:

SITE SUMMARY
 9.1 AC ± A.P. 337 027 00 20.75 AC
 PORTION OF A.P. 337 022 14 - 0.81 AC
 TOTAL SITE AREA 21.56 AC
 LARGEST LOT AREA APPROXIMATELY 7,200 SF ±
 SMALLEST LOT AREA APPROXIMATELY 2,000 SF ±
 TOTAL LOTS 134

COMMON AREAS/ROADWAYS/PARKING
 COMMON AREA A - 4.13 AC
 COMMON AREA B - 0.03 AC
 COMMON AREA C - 0.04 AC
 COMMON AREA D - 1.73 AC
 COMMON AREA E - 1.07 AC
 COMMON AREA F - 0.72 AC
 COMMON AREA G - 0.44 AC
 COMMON AREA H - 0.81 AC
 TOTAL COMMON AREA - 10.47 AC

TOTAL ROADWAYS/PARKING/HER - 4.6 AC
 MAXIMUM BUILDING COVERAGE - 30%

ASSESSOR PARCEL NUMBERS
 337 022 14, 337 027 00

ENGINEERS STATEMENT:

I, TODD W. GAMMILL, DO HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY SUPERVISION AND WAS COMPLETED ON THE 15th DAY OF JANUARY, 2022.



TODD W. GAMMILL, P.E. # 3683

SHEET INDEX

SHEET NO.	DWG. ID	DRAWING DESCRIPTION
1	T-1	THIS SHEET
2	A-1	PRELIMINARY SITE/LOT AND BLOCK PLAN
3	B-2	PRELIMINARY SITE/LOT AND BLOCK PLAN
4	C-1	PRELIMINARY GRADING PLAN
5	C-2	PRELIMINARY GRADING PLAN
6	U-1	PRELIMINARY UTILITY PLAN
7	U-2	PRELIMINARY UTILITY PLAN
8	CS-1	PRELIMINARY SECTION DETAILS
9	LS-3	PRELIMINARY LOT/DIVISION TABLES
10	LS-1	PRELIMINARY LANDSCAPE PLAN
11	LS-2	PRELIMINARY LANDSCAPE PLAN

CONTINUUM OF CARE
 COTTAGE COMMUNITY



WOOD RODGERS
 BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
 1381 Corporate Blvd Reno, NV 89502
 Tel 775.823.4088 Fax 775.823.4088

3599008 JANUARY, 2022

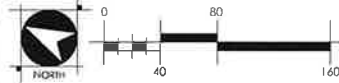
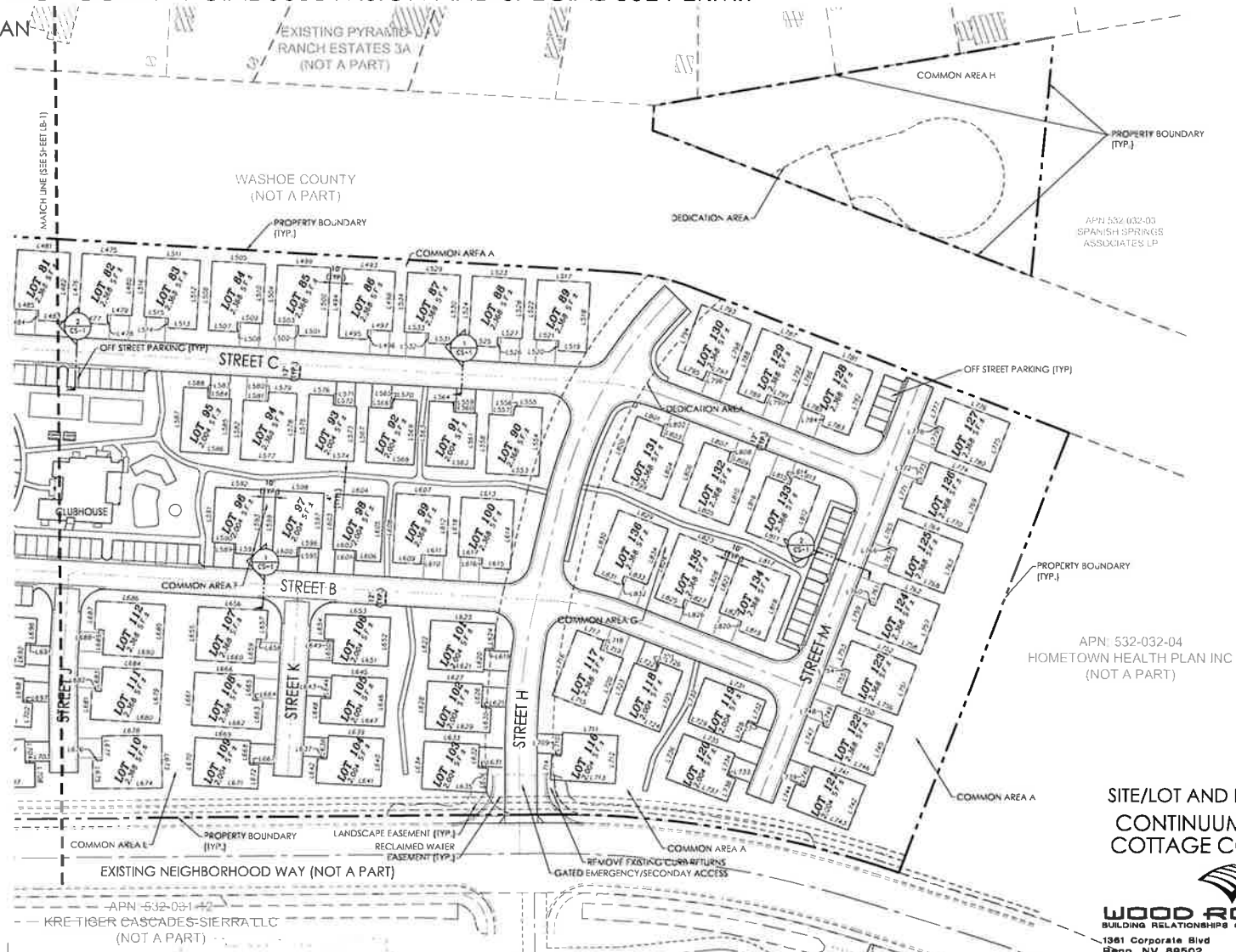
SHEET T-1 OF 11

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CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

SITE/LOT AND BLOCK PLAN



SITE/LOT AND BLOCK PLAN
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SHEET LB-2 OF 11

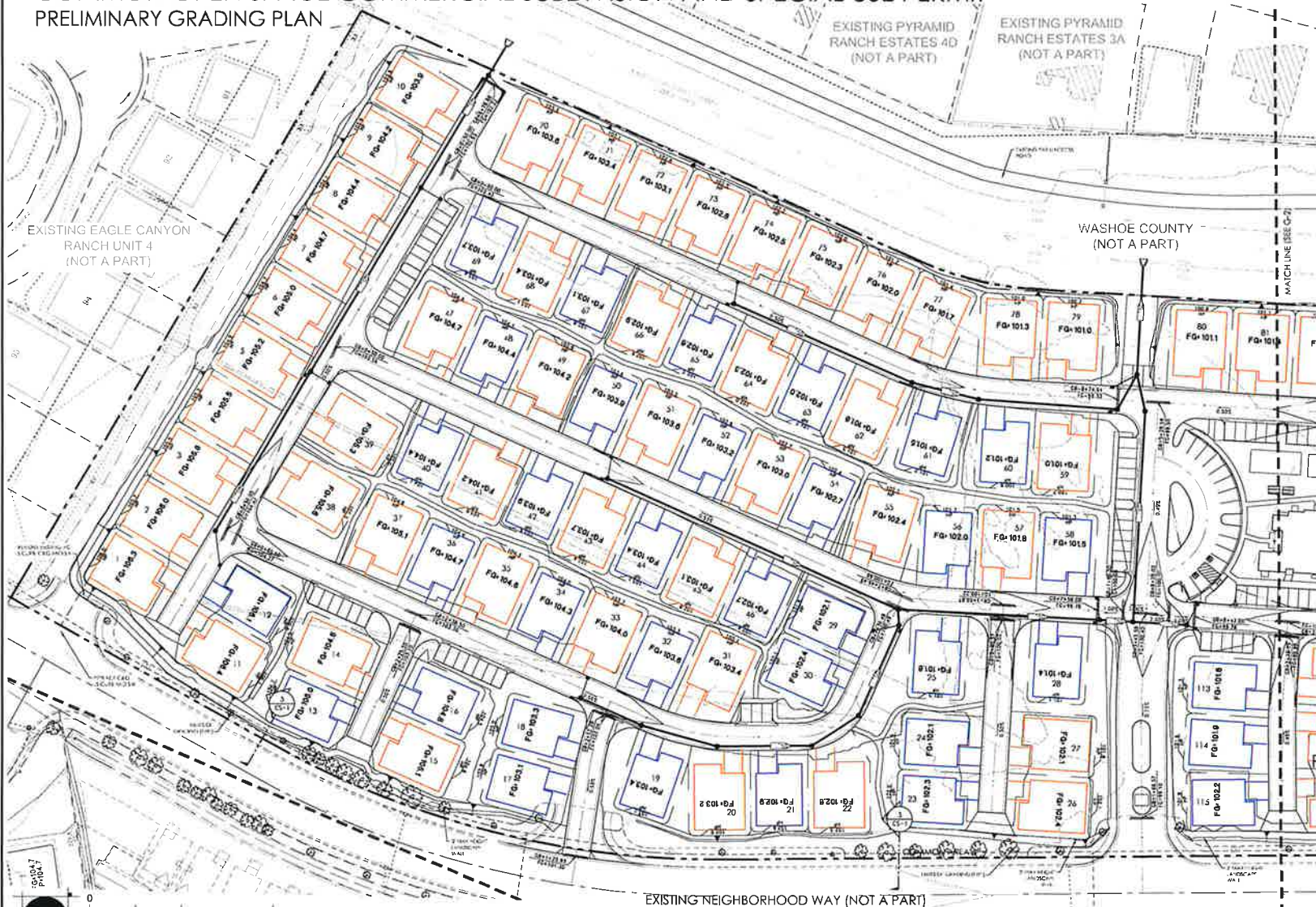


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CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY GRADING PLAN



- GRADING NOTES**
1. ADD 400 TO ALL FG ELEVATIONS
 2. CUT AREAS: STREET RIGHT OF WAY
 3. FILL AREAS: RESIDENCES, ETC.
 4. APPROXIMATE CUT AND FILL:
APPROXIMATE CUT: 5,000 CY
APPROXIMATE FILL: 6,000 CY
EXPORT NEEDED: NONE
IMPORT NEEDED: 3,000 CY
 5. DISTURBED AREAS: APPROXIMATELY 7.71 ACRES
 6. ALL AREAS DISTURBED AND 27% UNDEVELOPED FOR A PERIOD OF MORE THAN 180 DAYS SHALL BE STABILIZED BY THE APPLICATION OF DUST PALMATIVE.



PRELIMINARY GRADING PLAN
CONTINUUM OF CARE
COTTAGE COMMUNITY

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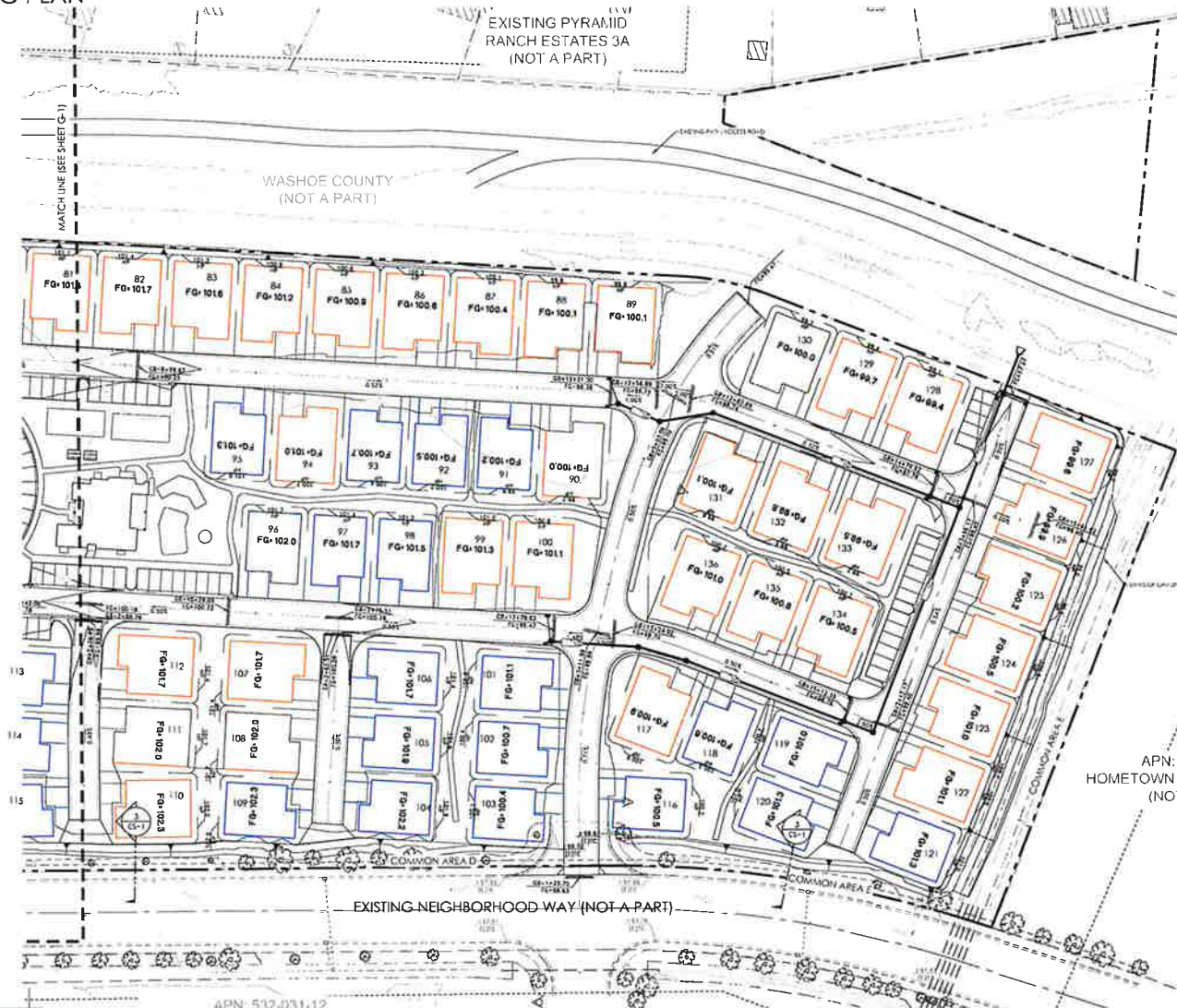
SHEET G-1 OF 11

Wood Rodgers & Associates, Inc. 10000 North 136th Street, Suite 100, Reno, NV 89505-1361, NV License No. 10000

CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY GRADING PLAN



GRADING NOTES

1. ADD 4" TO ALL ELEVATIONS.
2. CUT AREAS 5' TO 11' RIGHT OF WAY.
3. FILL AREAS REMAINING ON SITE.
4. APPROXIMATE CUT AND FILL VOLUMES:
 APPROXIMATE CUT: 1000 CY
 APPROXIMATE FILL: 8000 CY
 APPROXIMATE TOTAL: 9000 CY
5. DISTURBED AREAS APPROXIMATELY 2 ACRES.
6. ALL AREAS DISTURBED AND LEFT UNDEVELOPED FOR A PERIOD OF MORE THAN FORTY DAYS SHALL BE STABILIZED BY THE APPLICATION OF SOIL MULCH.



APN: 532-032-04
 HOMETOWN HEALTH PLAN INC
 (NOT A PART)

PRELIMINARY GRADING PLAN
 CONTINUUM OF CARE
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SHEET G-2 OF 11

APN: 532-031-12
 KRE TIGER CASCADES-SIERRA LLC
 (NOT A PART)

CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY UTILITY PLAN



NOTES:

1. STORM DRAIN AND SANITARY SEWER TO BE PRIVATE. WATER TO BE OWNED AND MAINTAINED BY PROJECT MEADOWS WATER AUTHORITY.



PRELIMINARY UTILITY PLAN
CONTINUUM OF CARE
COTTAGE COMMUNITY



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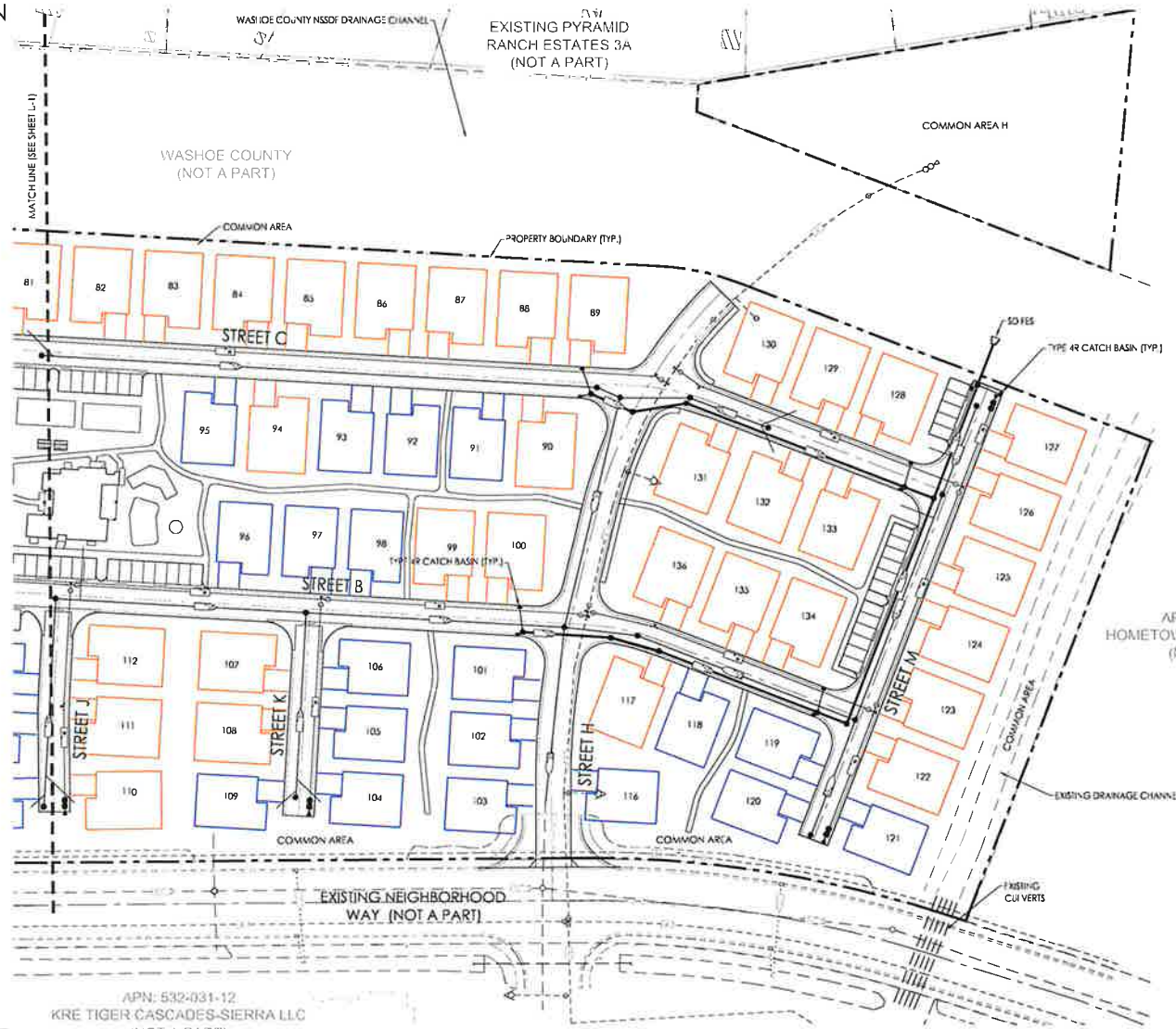
SHEET U-1 OF 11

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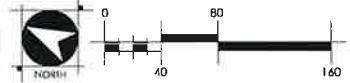
CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY UTILITY PLAN



NOTES:
 1. STORM DRAIN AND SANITARY SEWER TO BE PRIVATE. WATER TO BE OWNED AND MAINTAINED BY TRUCKEE MEADOWS WATER AUTHORITY.



APN: 532-031-12
 KRE TIGER CASCADES-SIERRA LLC
 (NOT A PART)

APN: 532-032-04
 HOMETOWN HEALTH PLAN INC
 (NOT A PART)



PRELIMINARY UTILITY PLAN
 CONTINUUM OF CARE
 COTTAGE COMMUNITY

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 SHEET U-2 OF 11

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CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY LANDSCAPE PLAN



PLANT LEGEND

- DECIDUOUS TREES
- EVERGREEN TREES
- ACCENT TREES
- FLOWERING TREES
- SHRUBS
- LANDSCAPE AREA
- PAVING MATERIAL LANDSCAPE AREA
- AMENITY AREAS

POTENTIAL MEMORY FEATURES/AMENITIES

- NOTE: CONSIDER THE FOLLOWING FEATURES TO BE OPTIONAL:
- BIRD GARDEN
 - BIODIVERSITY COURT
 - BIRD FEEDER
 - PLANTING GREEN
 - GARTENING AREA/GARDEN
 - 50% LANDSCAPE MATERIALS
 - TANA BOWL (CERAMIC)
 - PAVING MATERIALS
 - DOG PARK
 - WHEELCHAIR
 - TANA AREA

GENERAL NOTES:

1. ALL PLANS AND PRESENTATIONS SHALL BE AS PER LOCAL GOVERNING CODES.
2. FINAL PLANT SELECTION AND INSTALLATION SHALL BE BASED ON LOCAL HORTICULTURAL PRACTICES RELATIVE TO MICROCLIMATE, SOIL, AND WATER REGIMES. ALL TREES WILL BE SPACED SO AS TO REPAIR, PROTECT AND PROMOTE PLANTING TO BEING ESTABLISHED. PLANT SIZE AND QUALITY AT TIME OF PLANTING SHALL BE PER AMERICAN STANDARD FOR PLANT STOCK (ANSI Z603.1-1998).
3. ALL PLANTING SHALL BE AUTOMATICALLY IRRIGATED. CONTAINMENT PLANS SHALL BE PREPARED BASED ON THE SPECIFIC HORTICULTURAL REQUIREMENTS OF EACH SPECIES. A REQUIRED IRRIGATION SYSTEM SHALL BE PROVIDED ON THE IRRIGATION SYSTEM AS REQUIRED PER CODE.
4. PLANTING SCHEDULE, PLANT LOCATIONS, FINAL SPECIFICATION AND SITE PLAN SHALL BE DETERMINED DURING DEVELOPMENT OF FINAL CONSTRUCTION DOCUMENTS.

LANDSCAPE REQUIREMENTS:

- THE FOLLOWING REQUIREMENTS ARE PER WASHOE COUNTY DEVELOPMENT CODE:
- MINIMUM REQUIREMENTS:**
- SHALL BE A MINIMUM OF FIVE (5) DECIDUOUS TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) EVERGREEN TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) SHRUBS PER ACRE (360,000 SQ. FT.)
- MINIMUM REQUIREMENTS FOR COMMON AREAS:**
- SHALL BE A MINIMUM OF FIVE (5) DECIDUOUS TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) EVERGREEN TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) SHRUBS PER ACRE (360,000 SQ. FT.)
- MINIMUM REQUIREMENTS FOR AMENITY AREAS:**
- SHALL BE A MINIMUM OF FIVE (5) DECIDUOUS TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) EVERGREEN TREES PER ACRE (360,000 SQ. FT.)
 - FIVE (5) SHRUBS PER ACRE (360,000 SQ. FT.)
- NOTE: ALL PLANTING AREAS SHALL BE MAINTAINED AND REVEGETATION AREAS SHALL RECEIVE 2 DEPTH MIN. MAINT. WITH WATER COVERS.

LANDSCAPE DATA:

- SITE AREA: 31.36 ACRES (2113,130 SQ. FT.)
 - DEVELOPED AREA: 1.87 ACRES (81,780 SQ. FT.)
 - TOTAL LANDSCAPE AREA: 29.49 ACRES (1,231,350 SQ. FT.)
 - REGULATED LANDSCAPE AREA: 2.88 ACRES (125,760 SQ. FT.)
 - UNREGULATED LANDSCAPE AREA: 26.61 ACRES (1,105,590 SQ. FT.)
- 10' AL TREES REQUIRED:** 339
- STREET TREES REQUIRED: 30 (1 TREE PER 300 FT FOR 1 MILE OF NEIGHBORHOOD WAY)
 - LANDSCAPE AREA TREES REQUIRED: 49 (1 TREE PER 300 SQ FT OF 117,720 SQ FT OF REGULATED LANDSCAPE AREA)
- 10' AL TREES PROPOSED:** 339
- STREET TREES PROPOSED: 49 (1 TREE PER 300 FT FOR 1 MILE OF NEIGHBORHOOD WAY)
 - LANDSCAPE AREA TREES PROPOSED: 49 (1 TREE PER 300 SQ FT OF 117,720 SQ FT OF REGULATED LANDSCAPE AREA)

PRELIMINARY LANDSCAPE PLAN

CONTINUUM OF CARE COTTAGE COMMUNITY



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CONTINUUM OF CARE COTTAGE COMMUNITY

COMMON OPEN SPACE COMMERCIAL SUBDIVISION AND SPECIAL USE PERMIT

PRELIMINARY LANDSCAPE PLAN

PLANT LEGEND

- DECIDUOUS TREES
- ACCENT TREES
- EVERGREEN TREES
- SHRUB
- EXISTING TREES
- LANDSCAPE AREA
- EXISTING MATURE LANDSCAPE TO REMAIN
- AMENITY AREAS

POTENTIAL MEMORY FEATURES/AMENITIES

- WAY CONFINED TO HOLDING PLANS FOR SERVICE
- ROSE GARDEN
 - ROCKY BAY / COOL
 - FRESH GARDEN
 - PLAYING GOLF
 - GARDENING AREA/GALLERY
 - SOME AREAS WITH A VETICED PRIVATE YARDS
 - LAWN / SOFT / CROCK
 - PAVED VEGETABLE GARDEN
 - GOLF PARK
 - WATER FEATURE
 - LAWN AREA

GENERAL NOTES:

1. ALL PLANTING AND SPECIFICATIONS SHALL BE INSTALLED TO LOCAL GOVERNING CODES.
2. FINAL PLANT SPECIFICATION AND LAYOUT SHALL BE BASED ON FINAL SITE/UTILITY PLAN/ENGINEERING DRAWINGS. SOIL ANALYSIS AND REPORTS SHALL BE PROVIDED AS TO SOIL TYPE AND PHOSPHORUS FOLLOWING INSTALLATION. PLANT SPECIFICATION SHALL BE BASED ON THE SPECIFIC INSTALLATION. PLANT SPECIFICATION SHALL BE BASED ON THE SPECIFIC INSTALLATION. PLANT SPECIFICATION SHALL BE BASED ON THE SPECIFIC INSTALLATION.
3. ALL ASSOCIATING WILL BE ADJUSTED TO FINAL SPECIFICATIONS. PLANTING SHALL BE BASED ON THE SPECIFIC INSTALLATION. PLANTING SHALL BE BASED ON THE SPECIFIC INSTALLATION. PLANTING SHALL BE BASED ON THE SPECIFIC INSTALLATION.
4. PLANTING CONCEPTS, PLANT SPECIFICATIONS, FINAL SPECIFICATIONS AND SITE PLANNING SHALL BE DETERMINED DURING DEVELOPMENT OF FINAL CONSTRUCTION DOCUMENTS.

LANDSCAPE REQUIREMENTS:

THE FOLLOWING REQUIREMENTS ARE BASED ON WASHOE COUNTY DEVELOPMENT CODE:

- DESIGN REQUIREMENTS:
- SHALL BE A MIXTURE OF PERENNIALS AND BIENNIALS
 - DECIDUOUS TREES (40% OF TOTAL TREE PLANTING)
 - EVERGREEN TREES (20% OF TOTAL TREE PLANTING)

SHRUBS SHALL BE OF VARIETY OF SPECIES AND PLANTING CONCEPTS.

CONSTRUCTION PLANTING SHALL BE:

- 100% COVERED WITHIN 1 YEAR OF INSTALLATION
- 100% COVERED WITHIN 3 YEARS OF INSTALLATION

MULTI-COLOR PLANTING AREAS EXCEPT FOR WILDFLOWERS SHALL RECEIVE 2 GALLONS PER SQUARE FOOT WITH FERTILIZER.

LANDSCAPE DATA:

- SITE AREA: 21.26 ACRES (891,330 SF)
- DEVELOPED AREA: 16.89 ACRES (736,790 SF)
- WASHOE COUNTY REQUIRED (COMMERCIAL):
- REQUIRE LANDSCAPE AREA: 3.28 ACRES (142,932 SQ FT)
 - 20% OF DEVELOPED AREA
 - PROVIDED LANDSCAPE AREA: 10.43 ACRES (453,893 SQ FT)
- TOTAL TREES REQUIRED: 529
- SPECIES TREES REQUIRED: 30 (1 TREE PER 300 SF FOR 1.6% OF NEIGHBORHOOD WAY)
 - LANDSCAPE AREA TREES REQUIRED: 491 (1 TREE PER 300 SF OF 142,932 SQ FT OF REQUIRED LANDSCAPE AREA)
- TOTAL SHRUBS PROVIDED: 329
- SPECIES SHRUBS PROVIDED: 44 (1 SHRUB PER 300 SF OF 142,932 SQ FT OF REQUIRED LANDSCAPE AREA)
 - LANDSCAPE TREES PROVIDED: 491 (142,932 SQ FT OF REQUIRED LANDSCAPE AREA)



APN 532-032-04
HOMETOWN HEALTH PLAN INC
(NOT A PART)

PRELIMINARY LANDSCAPE PLAN
CONTINUUM OF CARE
COTTAGE COMMUNITY

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SHEET LS-2 OF 11

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Section 4



January 10, 2022
Project No. 3599008

Mr. Greg Peitzmeier
Silverado Homes NV, Inc.
5525 Kietzke Lane, Suite 102
Reno, NV 89511

Re: Silverado Continuum of Care East – Geotechnical Summary
APN 532-032-05 & Portion of APN 532-032-16
Washoe County, Nevada

Dear Mr. Peitzmeier,

The overall site, located in Washoe County, Nevada is centrally located at 39.6457°N and -119.7169°E based on a representative latitude and longitude, respectively. As shown in the attached exhibit prepared by Wood Rodgers, the property borders Neighborhood Way to the west, residential housing to the north and east, and vacant land to the south. A design level geotechnical report will be required to provide geotechnical recommendations for design and construction of the project.

Silverado Continuum of Care East encompasses an area of approximately 22 acres and will consist of developing single-family residential units as well as apartment structures with associated infrastructure. Design considerations will be governed by the International Building Code (IBC) and the Washoe County Public Works Design Manual will address public improvements.

Once soils have been adequately prepared, either standard spread foundations or post-tensioned foundations should perform well for the development.

We appreciate the opportunity to provide our services for you. Please contact our office should you have any related questions or comments.

Sincerely,

WOOD RODGERS, INCORPORATED

Justin M. McDougal, PE
Associate
RE Number: 24474
Expires: 12/31/2023



Digitally signed by
Justin McDougal
Date: 2022.01.10
10:59:41-08'00'

Enclosure:

Existing Conditions, Silverado Continuum of Care East SUP & TM, Wood Rodgers, January 2022



Maxar, Esri, Community Maps Contributors, City of Sparks, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Legend
 Project Area

Existing Conditions
Silverado Continuum of Care East SUP & TM
 January 2022



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 1361 Corporate Boulevard Tel: 775.823.4068
 Reno, NV 89502 Fax: 775.823.4068

SILVERADO CONTINUUM OF CARE
TRAFFIC STUDY

AUGUST 2021



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

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SILVERADO CONTINUUM OF CARE

TRAFFIC STUDY

EXECUTIVE SUMMARY

The proposed Silverado Continuum of Care development will be located in Washoe County, Nevada. The project site is located north of Eagle Canyon Road and east of Neighborhood Way. 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/Eagle Canyon Road-La Posada Drive intersection, the Eagle Canyon Road/Neighborhood Way-Ember Drive intersection, and two project access intersections on Neighborhood Way have been identified for AM and PM peak hour intersection capacity analysis for the existing, existing plus project, 2050 base, and 2050 base plus project scenarios.

The proposed Silverado Continuum of Care development will consist of the construction of 139 senior adult detached housing units. Project access will be provided from two access intersections on Neighborhood Way. The proposed Silverado Continuum of Care development is anticipated to generate 752 average daily trips with 52 trips occurring during the AM peak hour and 62 trips occurring during the PM peak hour.

Traffic generated by the Silverado Continuum of Care 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 Washoe County requirements.

It is recommended that the Neighborhood Way/South Access intersection be improved to include stop sign control and single ingress and egress lanes at the east project access approach.

It is recommended that the Neighborhood Way/North Access intersection be improved to include stop sign control and single ingress and egress lanes at the east project access approach.

INTRODUCTION

STUDY AREA

The proposed Silverado Continuum of Care development will be located in Washoe County, Nevada. The project site is located north of Eagle Canyon Road and east of Neighborhood Way. Figure 1 shows the location of the project site. The purpose of this study is to address the project's impact upon the adjacent street network. The Pyramid Highway/Eagle Canyon Road-La Posada Drive intersection, the Eagle Canyon Road/Neighborhood Way-Ember Drive intersection, and two project access intersections on Neighborhood Way have been identified for AM and PM peak hour intersection capacity analysis for the existing, existing plus project, 2050 base, and 2050 base plus project scenarios.

EXISTING AND PROPOSED LAND USES

The project site is currently undeveloped land. Adjacent properties generally include single family homes to the north and east, a senior living facility and undeveloped land to the west, and undeveloped land to the south. The proposed Silverado Continuum of Care development will consist of the construction of 139 senior adult detached housing units. Project access will be provided from two access intersections on Neighborhood Way.

EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

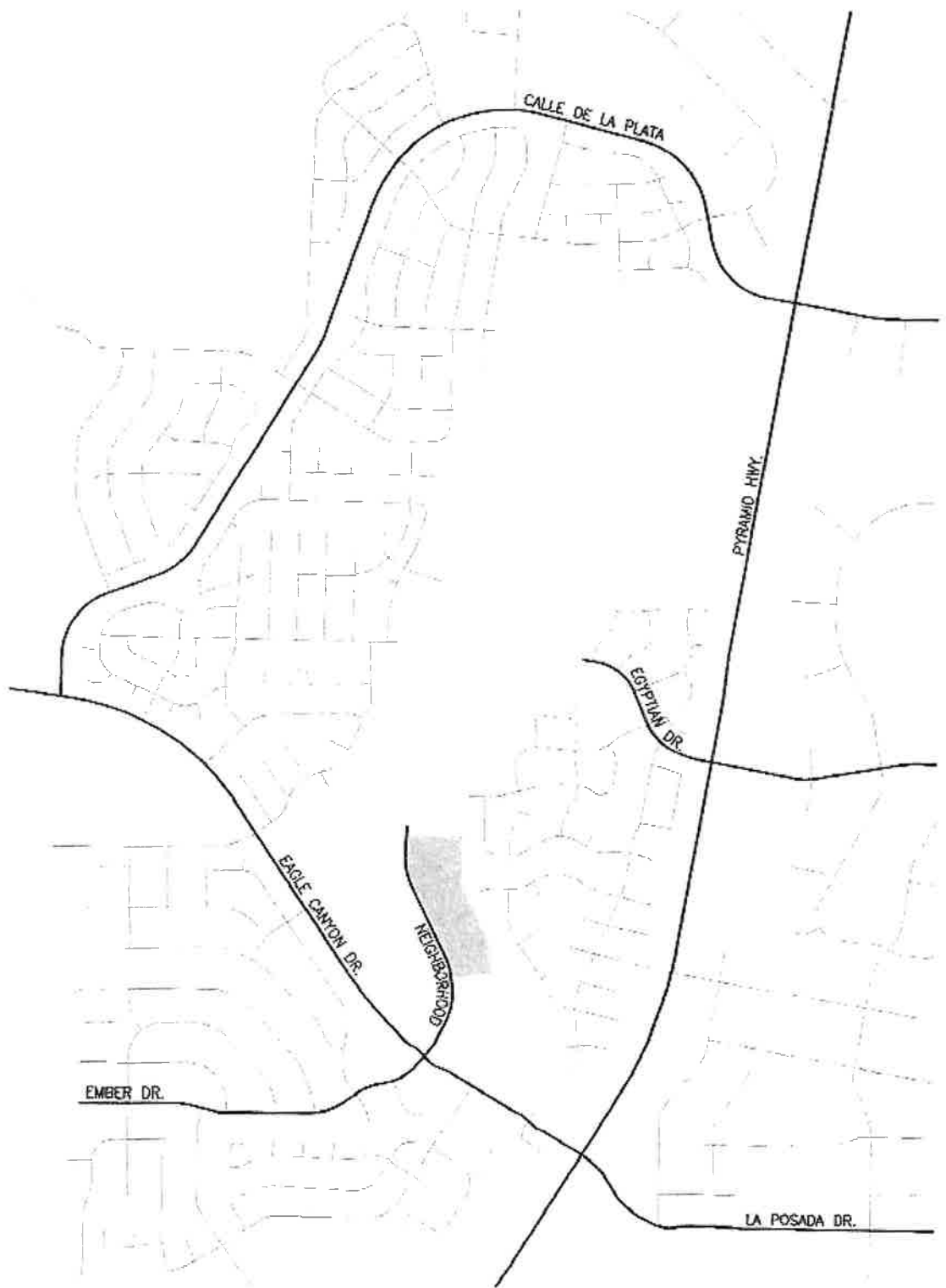
Pyramid Highway is a four-lane roadway with two through lanes in each direction in the vicinity of the site. The speed limit is posted for 45 miles per hour near Eagle Canyon Road. Roadway improvements generally include graded shoulders with striped edgelines and bicycle lanes on both sides of the street and a raised center median north and south of Eagle Canyon Road.

Eagle Canyon Road is a four-lane roadway with two through lanes in each direction west of Pyramid Highway to Neighborhood Way and a two-lane roadway with one through lane in each direction west of Neighborhood Way. The speed limit is posted for 35 miles per hour. Roadway improvements on the four-lane segment include curb, gutter, sidewalk, and bicycle lanes on both sides of the street with a raised center median between Pyramid Highway and the first roundabout. Roadway improvements on the two-lane segment include graded shoulders with striped edgelines and a striped centerline.

La Posada Drive is a four-lane roadway with two through lanes in each direction east of Pyramid Highway. The speed limit is posted for 35 miles per hour. Roadway improvements include curb, gutter, sidewalk, and bicycle lanes on both sides of the street and a raised center median.

Neighborhood Way is a two-lane roadway with one through lane in each direction north of Eagle Canyon Road. The speed limit is posted for 35 miles per hour. Roadway improvements include curb, gutter, sidewalk, and a bicycle lane on both sides of the street and a striped centerline with left turn pockets at key intersections.

LEGEND
PROJECT SITE



SILVERADO CONTINUUM OF CARE
VICINITY MAP
FIGURE 1

Ember Drive is a two-lane roadway with one through lane in each direction south of Eagle Canyon Road. The speed limit is posted for 25 miles per hour. Roadway improvements include curb, gutter, and sidewalk on both sides of the street with a short striped centerline.

The Pyramid Highway/Eagle Canyon Road-La Posada Drive intersection is a signalized four-leg intersection with protected left turn phasing for all approaches. The north approach contains dual left turn lanes, two through lanes, and one tapered right turn lane. The south approach contains dual left turn lanes, two through lanes, and one full-width right turn lane. The east approach contains dual left turn lanes, one through lane, and one shared through lane-right turn lane. The west approach contains dual left turn lanes, one through lane, and one free right turn lane with a southbound acceleration lane. Raised corner islands exist in the northwest, southwest, and southeast quadrants. Pedestrian crosswalks exist at the north, south, east, and west legs.

The Eagle Canyon Road/Neighborhood Way-Ember Drive intersection is a four-leg roundabout with yield control at all approaches. The north and east approaches each contain one shared left turn-through lane and one right turn lane. The south and west approaches each contain one shared left turn-through-right turn lane. Crosswalks exist at the north, south, east, and west legs.

The Neighborhood Way/South Access intersection is currently an unsignalized four-leg intersection with stop sign control at only the west approach. The west approach provides access to an existing senior living facility. The east approach is currently constructed to the curb returns but will be fully constructed to provide access to the project development. The north and south approaches each contain one left turn lane and one shared through-right turn lane. The west approach contains one shared left turn-through-right turn lane. The east approach is anticipated to contain one shared left turn-through-right turn lane. Pedestrian crosswalks exist at the north and south legs.

The Neighborhood Way/North Access intersection is currently an unsignalized four-leg intersection with no traffic control. The east and west approaches are currently constructed to the curb returns. The east approach will be fully constructed to provide access to the project development. The north and south approaches each contain one left turn lane and one shared through-right turn lane. The east approach is anticipated to contain one shared left turn-right turn lane. Pedestrian crosswalks exist at the north and south legs.

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 rates were obtained from the 10th Edition of *ITE Trip Generation* (2018) for Land Use 251: Senior Adult Housing-Detached. Trip generation was calculated for an average weekday and the weekday 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. The proposed Silverado Continuum of Care development will consist of the construction of 139 senior single family dwelling units.

Table 1 shows a summary of the average daily traffic (ADT) and AM and PM peak hour volumes generated by the proposed Silverado Continuum of Care development. The trip generation worksheets are included in the Appendix.

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing-Detached (139 D.U.)	752	17	35	52	38	24	62

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 percentages. Figure 3 shows the project trip assignment at the key intersections during the AM and PM peak hours.

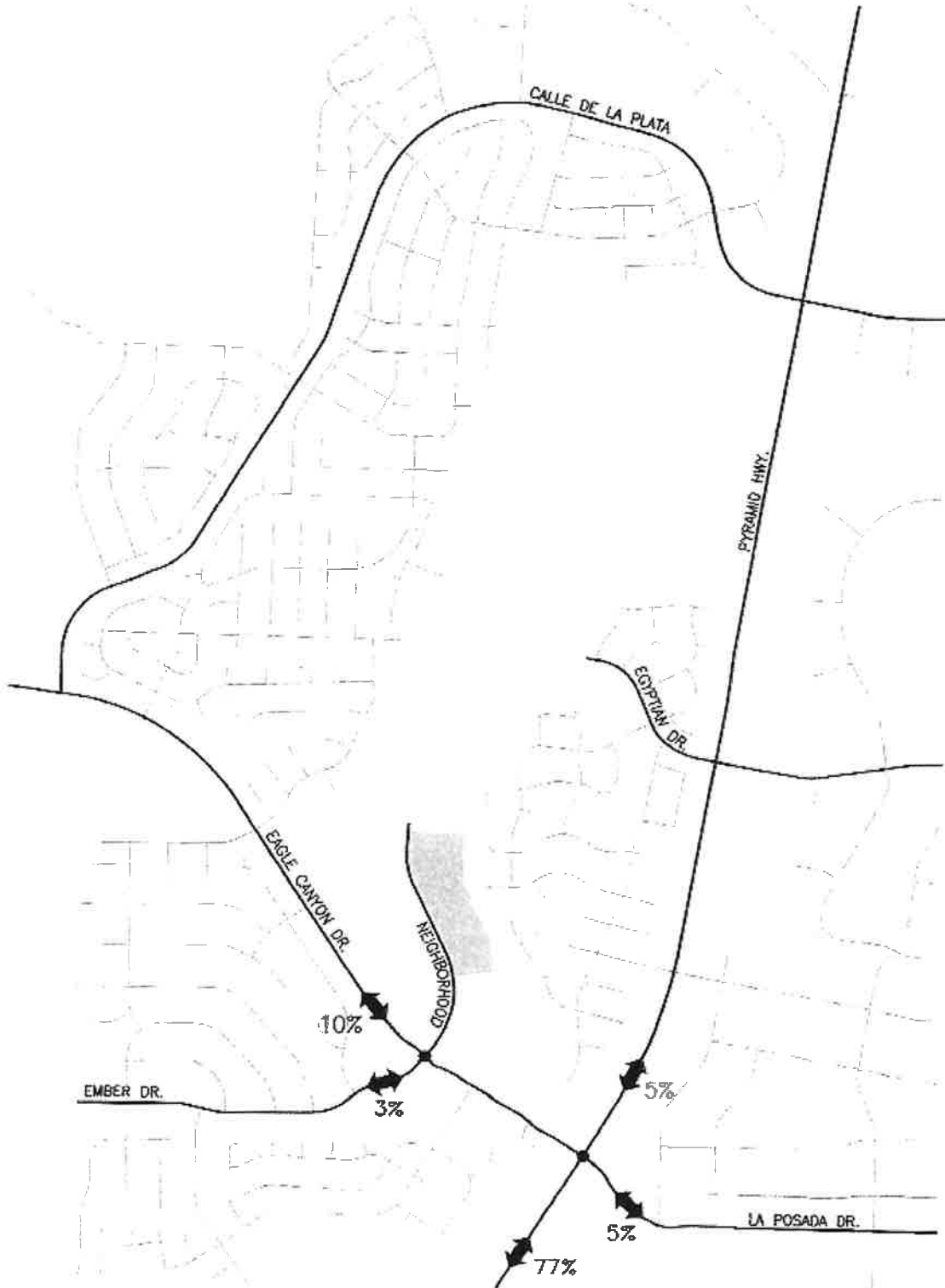
EXISTING AND PROJECTED TRAFFIC VOLUMES

Existing peak hour traffic volumes at the key intersections were obtained from traffic counts conducted in August of 2021 when Washoe County schools were in session. Figure 4 shows the existing AM and PM peak hour traffic volumes at the key intersections. The traffic counts were conducted during the COVID-19 pandemic which may have resulted in reduced traffic on the area streets. The existing traffic counts were subsequently compared with actual pre-pandemic 2018 traffic counts conducted at the Eagle Canyon Road intersections with Pyramid Highway and Neighborhood Way. The comparison indicates that the 2021 total intersection counts are on average 10% higher than the 2018 intersection volumes and therefore the 2021 traffic counts were used in the analysis.

Figure 5 shows the existing plus project traffic volumes at the key intersections during 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 2050 base traffic volumes at the key intersections during the AM and PM peak hours. The 2050 base volumes were estimated by applying a 1.5% average annual growth rate to the existing traffic volumes shown on Figure 4. The growth rate was derived from a comparison of 2020 and 2050 average daily traffic volumes obtained directly from the Regional Transportation Commission's traffic forecasting model. Figure 7 shows the 2050 base plus project traffic volumes at the key intersections during the AM and PM peak hours. The 2050 base plus project traffic volumes were obtained by adding the trip assignment volumes shown on Figure 3 to the 2050 base traffic volumes shown on Figure 6.

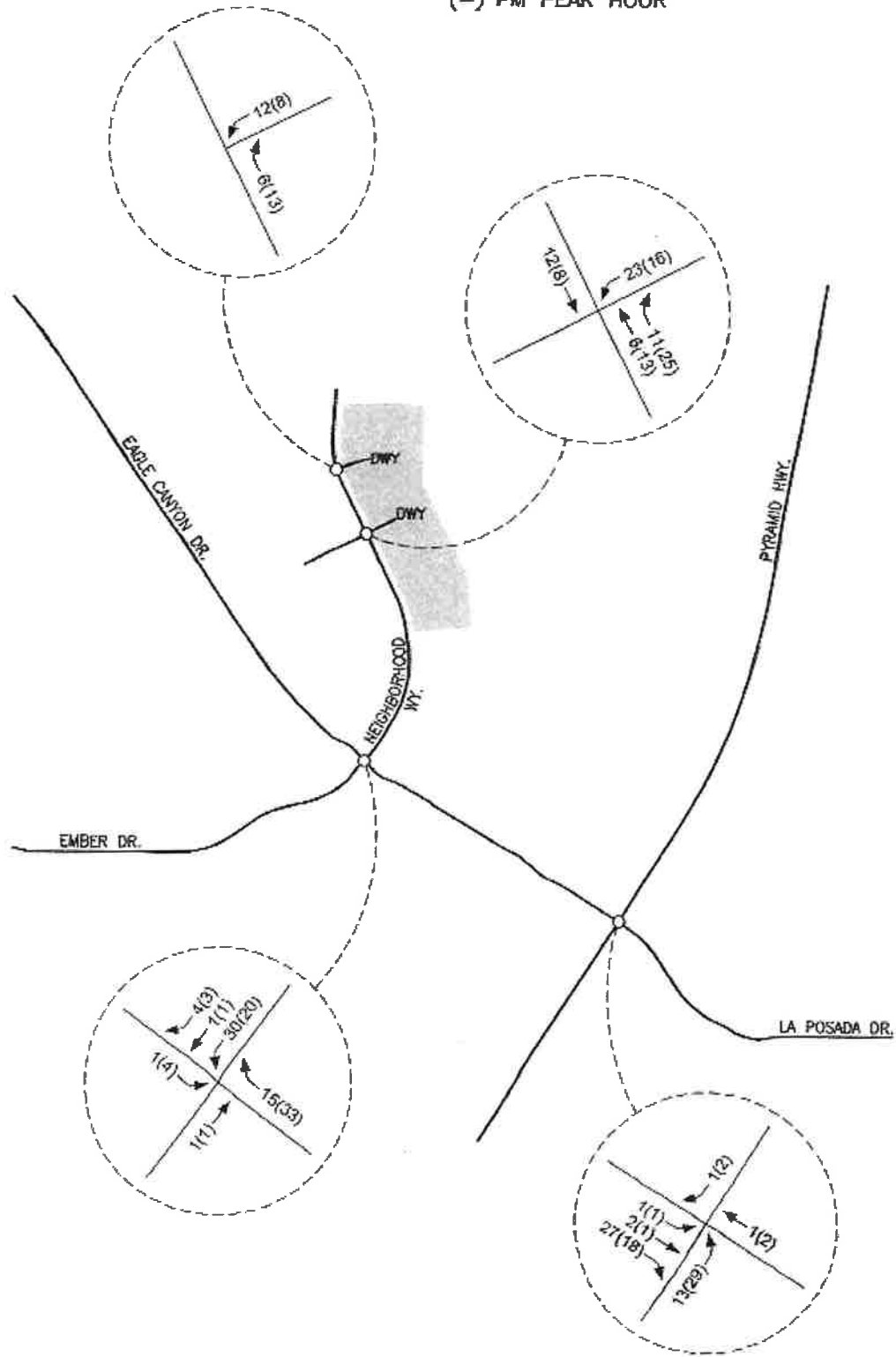
LEGEND

■ PROJECT SITE



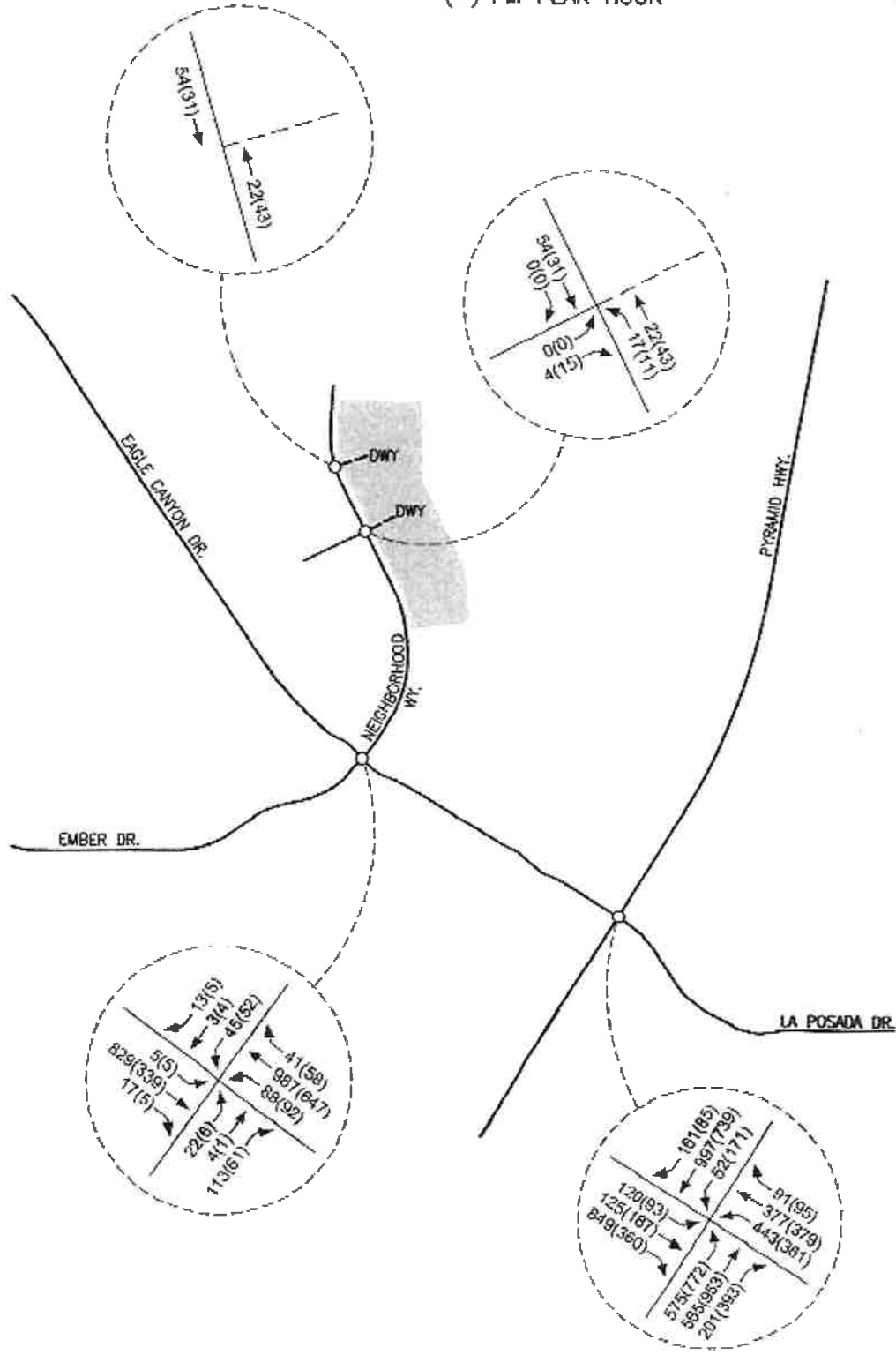
SILVERADO CONTINUUM OF CARE
TRIP DISTRIBUTION
FIGURE 2

LEGEND
 — AM PEAK HOUR
 (—) PM PEAK HOUR



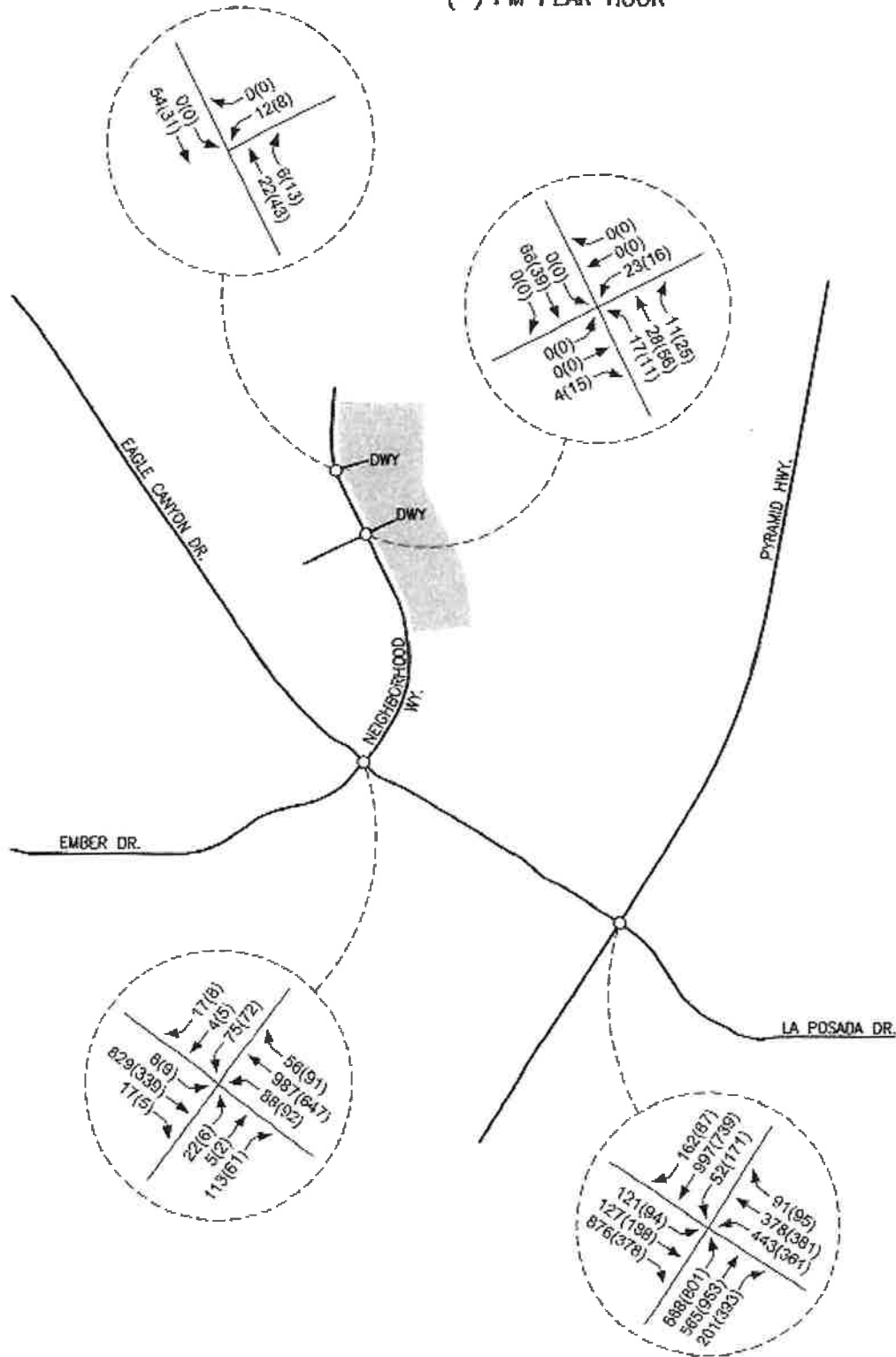
**SILVERADO CONTINUUM OF CARE
 TRIP ASSIGNMENT
 FIGURE 3**

LEGEND
 — AM PEAK HOUR
 (—) PM PEAK HOUR



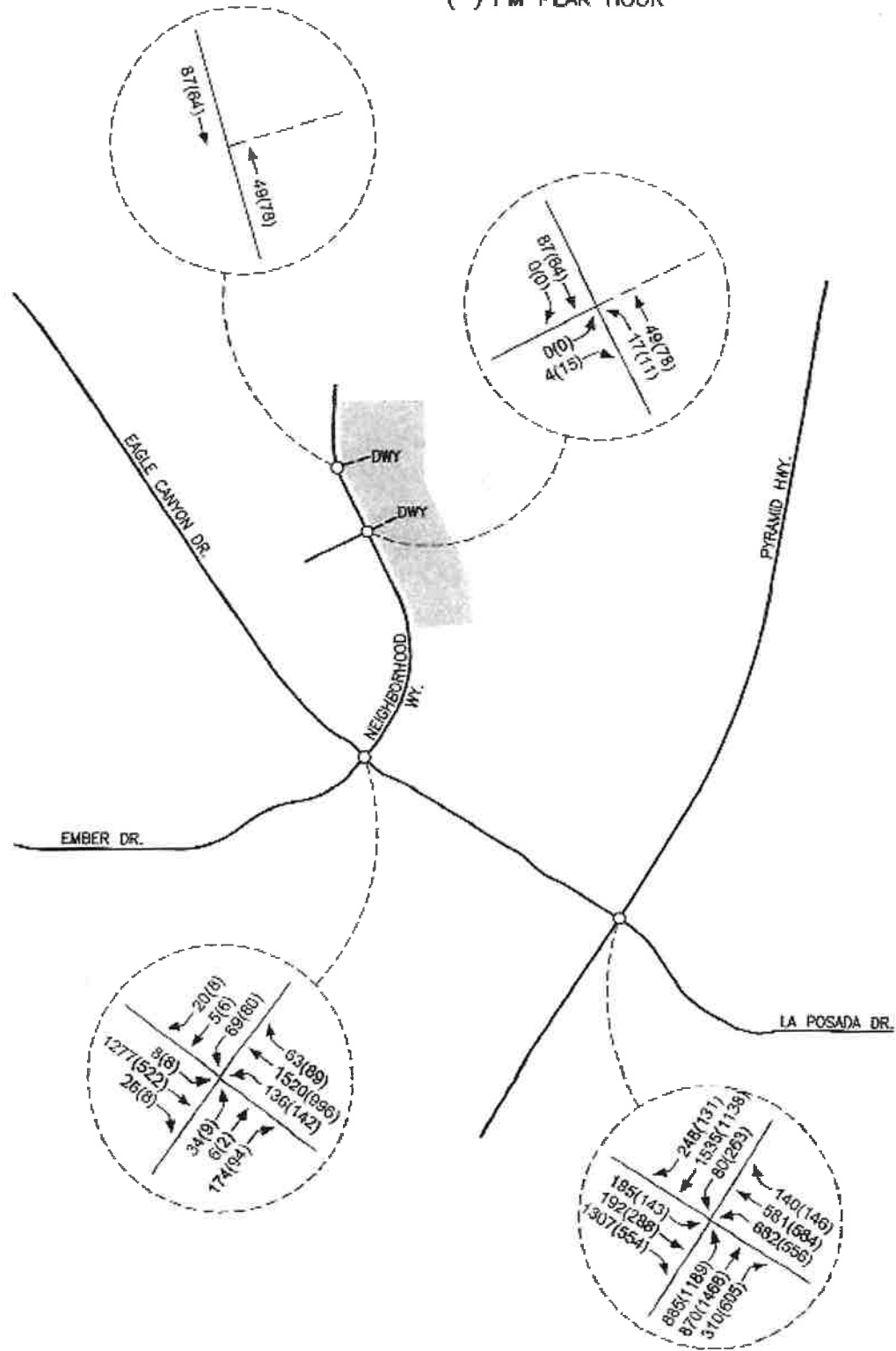
SILVERADO CONTINUUM OF CARE
EXISTING TRAFFIC VOLUMES
FIGURE 4

LEGEND
 — AM PEAK HOUR
 (—) PM PEAK HOUR



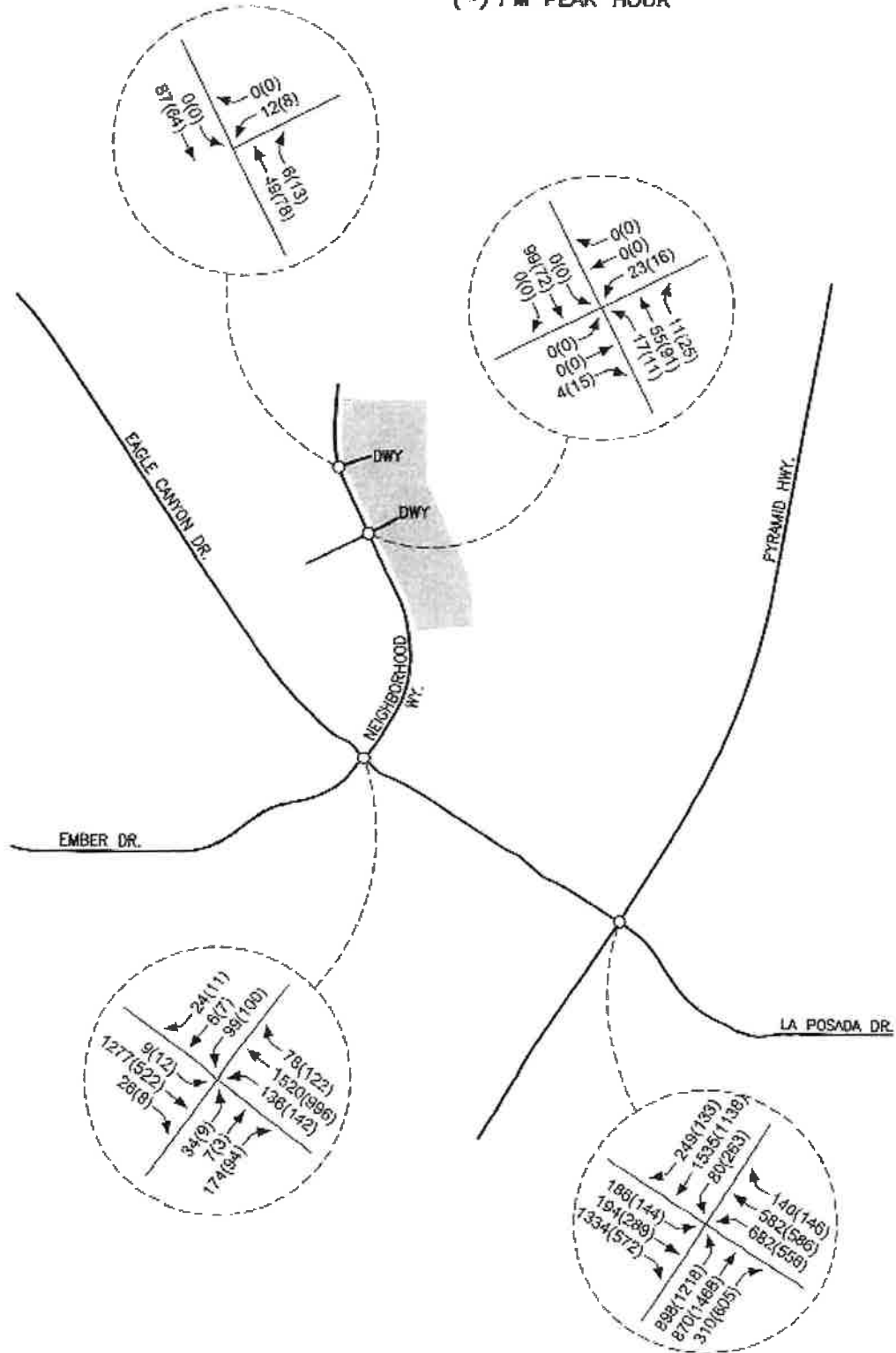
SILVERADO CONTINUUM OF CARE
EXISTING PLUS PROJECT TRAFFIC VOLUMES
FIGURE 5

LEGEND
 - AM PEAK HOUR
 (-) PM PEAK HOUR



SILVERADO CONTINUUM OF CARE
2050 BASE TRAFFIC VOLUMES
FIGURE 6

LEGEND
 - AM PEAK HOUR
 (-) PM PEAK HOUR



SILVERADO CONTINUUM OF CARE
2050 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, roundabouts, and minor movements at partial stop controlled intersections. 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

The Regional Transportation Commission's (RTC) 2050 Regional Transportation Plan indicates that the LOS standards used for assessing the need for street improvements at a planning level is LOS D for all regional roadway facilities projected to carry less than 27,000 ADT and LOS E for all regional roadway facilities projected to carry more than 27,000 ADT. Pyramid Highway, Eagle Canyon Road, La Posada Drive, and Neighborhood Way are regional roadways in the 2050 Regional Transportation Plan. RTC's traffic forecasting model indicates that Pyramid Highway will carry more than 27,000 ADT and therefore LOS E is the standard for the Pyramid Highway/Eagle Canyon Road intersection. RTC's traffic forecasting model indicates that Eagle Canyon Road and Neighborhood Way will carry less than 27,000 ADT and therefore LOS D is the standard for the Eagle Canyon Road/Neighborhood Way-Ember Drive roundabout. LOS C is the policy level of service standard for the Neighborhood Way/Project Access intersections per Washoe County's Spanish Springs Area Plan since the project access is not a regional roadway.

Table 4 shows a summary of the level of service and delay results at the key intersections for the existing, existing plus project, 2050 base, and 2050 base plus project scenarios. The intersection capacity worksheets are included in the Appendix.

INTERSECTION	EXISTING		EXISTING + PROJECT		2050 BASE		2050 BASE + PROJECT	
	AM	PM	AM	PM	AM	PM	AM	PM
Pyramid/Eagle Canyon (Signal) Existing Lanes With Improvements	D53.1 N/A	D44.8 N/A	D54.1 N/A	D45.5 N/A	F149.9 E68.9	F114.7 E68.8	F151.7 E70.2	F117.9 E70.9
Eagle Canyon/Neighborhood (RB) Existing Lanes With Improvements	C20.9 N/A	A8.1 N/A	C21.9 N/A	A8.1 N/A	F177.2 B14.4	C21.2 A7.5	F184.7 C15.5	C21.5 A7.9
Neighborhood/South Access (Stop at West) EB Left-Right NB Left (Stop at East and West) EB Left-Thru-Right WB Left-Thru-Right NB Left SB Left	A8.6 A7.4 N/A N/A N/A N/A	A8.5 A7.3 N/A N/A N/A N/A	N/A N/A A8.7 A9.6 A7.4 A7.3	N/A N/A A8.6 A9.6 A7.3 A7.4	A8.8 A7.4 N/A N/A N/A N/A	A8.7 A7.4 N/A N/A N/A N/A	N/A N/A A8.8 B10.1 A7.5 A7.4	N/A N/A A8.7 B10.2 A7.4 A7.5
Neighborhood/North Access (Stop at East) WB Left-Right SB Left	N/A N/A	N/A N/A	A9.0 A7.3	A9.0 A7.3	N/A N/A	N/A N/A	A9.4 A7.3	A9.4 A7.4

The intersection capacity results are discussed on the following pages.

Pyramid Highway/Eagle Canyon Road-La Posada Drive Intersection

The Pyramid Highway/Eagle Canyon Road-La Posada Drive intersection was analyzed for capacity as a signalized four-leg intersection with the existing approach lanes and signal phasing for all scenarios. The intersection currently operates at LOS D with a delay of 53.1 seconds per vehicle during the AM peak hour and 44.8 seconds per vehicle during the PM peak hour. For the existing plus project traffic volumes the intersection continues to operate at LOS D with delays slightly increasing to 54.1 seconds per vehicle during the AM peak hour and 45.5 seconds per vehicle during the PM peak hour. For the 2050 base traffic volumes the intersection is anticipated to operate at LOS F with a delay of 149.9 seconds per vehicle during the AM peak hour and 114.7 seconds per vehicle during the PM peak hour. For the 2050 base plus project traffic volumes the intersection continues to operate at LOS F with delays increasing to 151.7 seconds per vehicle during the AM peak hour and 117.9 seconds per vehicle during the PM peak hour. The intersection meets the policy LOS E standard for the existing and existing plus project traffic volumes but does not meet the policy LOS E standard for the 2050 base and 2050 base plus project traffic volumes.

The RTC's 2050 Regional Transportation Plan indicates that Pyramid Highway is scheduled to be widened to six lanes from Sparks Boulevard to Eagle Canyon Road-La Posada Drive by 2050. The Pyramid Highway/Eagle Canyon Road-La Posada Drive intersection was subsequently analyzed with a third southbound through lane for the 2050 base and 2050 base plus project traffic volumes and is anticipated to operate at LOS E during the AM and PM peak hours.

Eagle Canyon Road/Neighborhood Way-Ember Drive Intersection

The Eagle Canyon Road/Neighborhood Way-Ember Drive intersection was analyzed as a four-leg roundabout with the existing approach lanes for all scenarios. The roundabout currently operates at LOS C with a delay of 20.9 seconds per vehicle during the AM peak hour and LOS A with a delay of 8.1 seconds per vehicle during the PM peak hour. For the existing plus project traffic volumes the roundabout continues to operate at LOS C during the AM peak hour with delay slightly increasing to 21.9 seconds per vehicle and LOS A during the PM peak hour with no change in delay. For the 2050 base traffic volumes the roundabout operates at LOS F with a delay of 177.2 seconds per vehicle during the AM peak hour and LOS C with a delay of 21.2 seconds per vehicle during the PM peak hour. For the 2050 base plus project traffic volumes the roundabout continues to operate at LOS F during the AM peak hour with delay increasing to 184.7 seconds per vehicle and LOS C during the PM peak hour with delay increasing to 21.5 seconds per vehicle. The roundabout meets the policy LOS D standard for the existing and existing plus project traffic volumes but does not meet the policy LOS D standard for the 2050 base and 2050 base plus project traffic volumes.

The RTC's 2050 Regional Transportation Plan indicates that Eagle Canyon Road is scheduled to be widened to four lanes west to Calle De La Plata in the 2031 to 2050 timeframe. The Eagle Canyon Road/Neighborhood Way-Ember Drive roundabout was subsequently analyzed with one shared left turn-through lane and one shared through-right turn lane at the east and west approaches for the 2050 base and 2050 base plus project traffic volumes and is anticipated to operate at LOS C or better during the AM and PM peak hours.

Neighborhood Way/South Access Intersection

The Neighborhood Way/South Access intersection was analyzed as an unsignalized three-leg intersection with stop control at the west approach for the existing and 2050 base scenarios and as a four-leg intersection with stop control at the east and west approaches for the existing plus project and 2050 base plus project scenarios. The intersection minor movements currently operate at LOS A during the AM and PM peak hours. For the existing plus project traffic volumes the intersection minor movements operate at LOS A during the AM and PM peak hours. For the 2050 base traffic volumes the intersection minor movements operate at LOS A during the AM and PM peak hours. For the 2050 base plus project traffic volumes the intersection minor movements operate at LOS B or better during the AM and PM peak hours. The intersection was analyzed with the existing approach lanes. The intersection meets the policy LOS C standard for the existing and future traffic volumes. It is recommended that the Neighborhood Way/South Access intersection be improved to include stop sign control and single ingress and egress lanes at the east approach.

Neighborhood Way/North Access Intersection

The Neighborhood Way/North Access intersection was analyzed as an unsignalized three-leg intersection with stop control at the east approach for the existing plus project and 2050 base plus project scenarios. For the existing plus project traffic volumes the intersection minor movements operate at LOS A during the AM and PM peak hours. For the 2050 base plus project traffic volumes the intersection minor movements continue to operate at LOS A during the AM and PM peak hours. The intersection was analyzed with the existing approach lanes. The intersection meets the policy LOS C standard for the future traffic volumes. It is recommended that the Neighborhood Way/North Access intersection be improved to include stop sign control and single ingress and egress lanes at the east approach.

TRAFFIC CRASH REVIEW

The Pyramid Highway/Eagle Canyon Road-La Posada Drive and Eagle Canyon Road/Neighborhood Way-Ember Drive intersections were reviewed for traffic crashes. Traffic crash data was obtained from NDOT's Traffic Safety Division for the study period from January 1, 2017 to January 1, 2020. The traffic crash data is included in the Appendix. A total of 34 crashes occurred at the Pyramid Highway/Eagle Canyon Road-La Posada Drive intersection during the three-year period with no fatalities reported. The crash type was 21 rear-end crashes, 8 angle crashes, 3 sideswipe-meeting crashes, 1 rear to rear crash, and 1 non-collision. The intersection currently experiences 0.6768 accidents per million vehicles entering the intersection. The project is anticipated to increase the occurrence of accidents by only 0.1309 accidents per year. A total of 5 crashes occurred at the Eagle Canyon Road/Neighborhood Way-Ember Drive intersection during the three-year period with no fatalities reported. The crash type was 2 non-collision crashes, 1 rear-end crash, 1 angle crash, and 1 unknown crash. The intersection currently experiences 0.2107 accidents per million vehicles entering the intersection. The project is anticipated to increase the occurrence of accidents by only 0.0400 accidents per year.

SITE PLAN REVIEW

A copy of the site plan for the site plan for the Silverado Continuum of Care development is included with this submittal. The site plan indicates that project access will be provided from two access intersections on Neighborhood Way. The project accesses will provide direct access to the project's interior roadway network. The project accesses and on-site roadways are anticipated to provide good access and internal circulation. It is recommended that the project's internal roadways and intersections be designed per Washoe County street standards.

RECOMMENDATIONS

Traffic generated by the proposed Silverado Continuum of Care 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 Washoe County requirements.

It is recommended that the Neighborhood Way/South Access intersection be improved to include stop sign control and single ingress and egress lanes at the east project access approach.

It is recommended that the Neighborhood Way/North Access intersection be improved to include stop sign control and single ingress and egress lanes at the east project access approach.

APPENDIX

Senior Adult Housing - Detached (251)

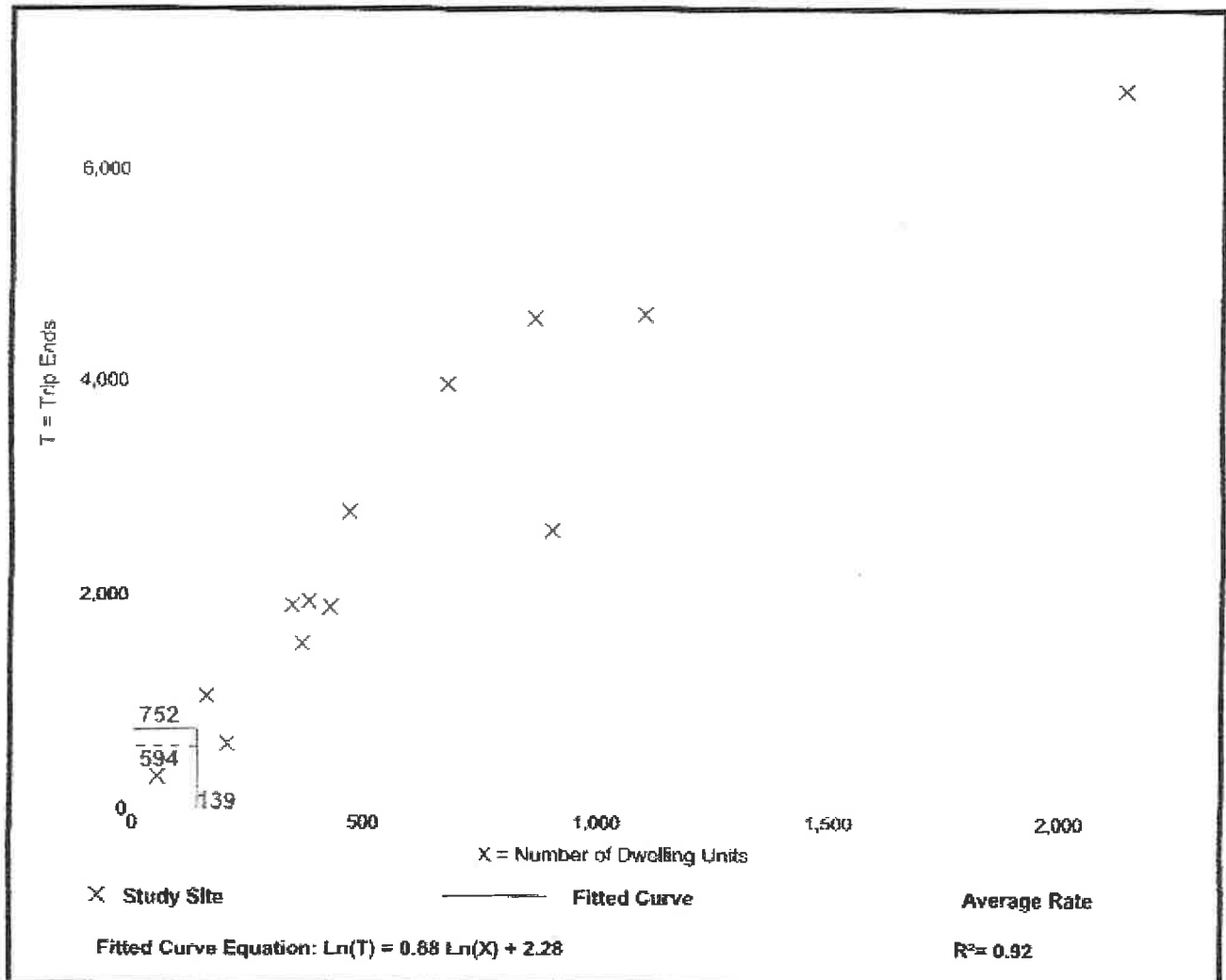
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Dwelling Units: 655
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.27	2.90 - 6.66	1.11

Data Plot and Equation



Senior Adult Housing - Detached (251)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 29

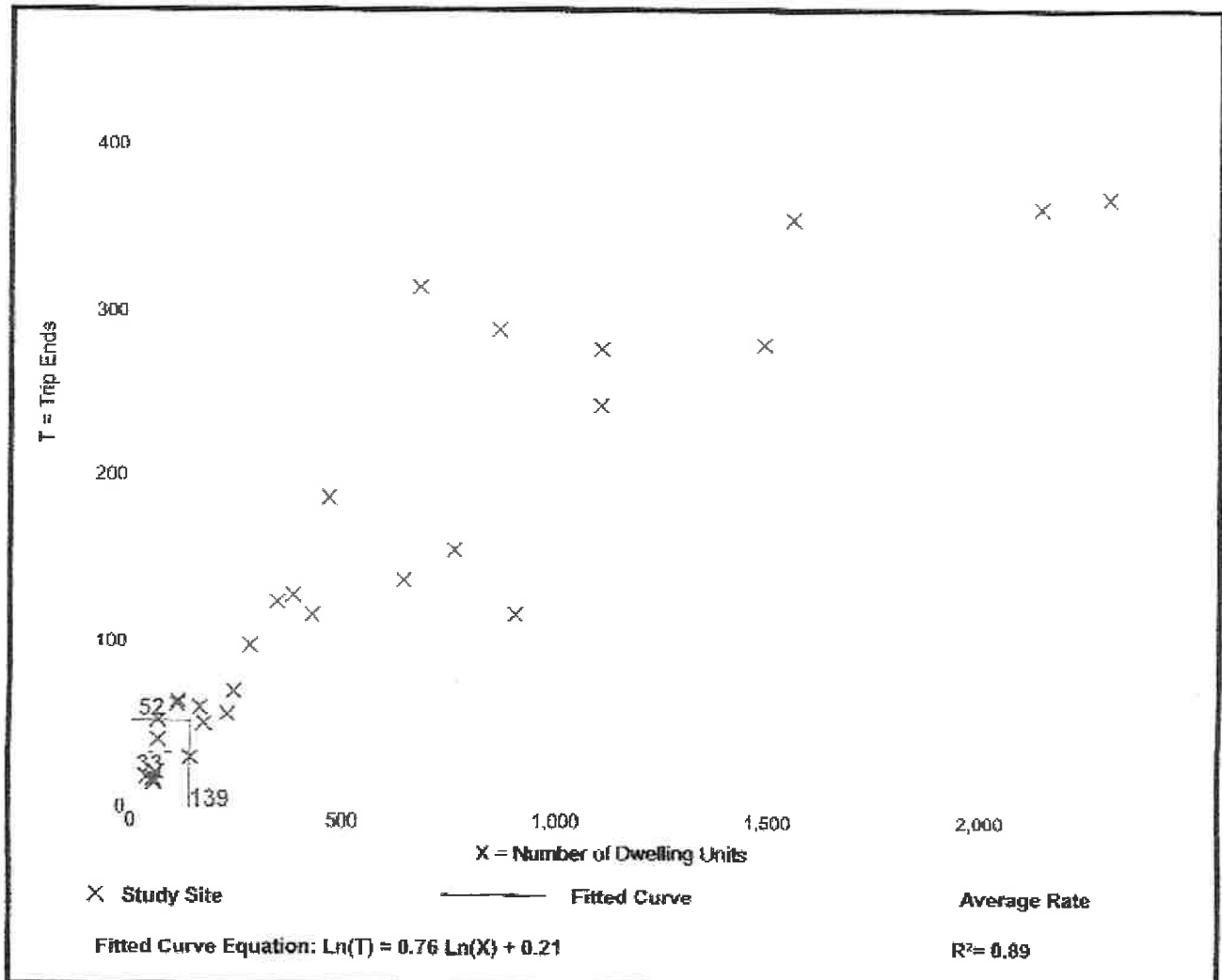
Avg. Num. of Dwelling Units: 583

Directional Distribution: 33% entering, 67% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.24	0.13 - 0.84	0.10

Data Plot and Equation



Senior Adult Housing - Detached (251)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

Avg. Num. of Dwelling Units: 582

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate

Range of Rates

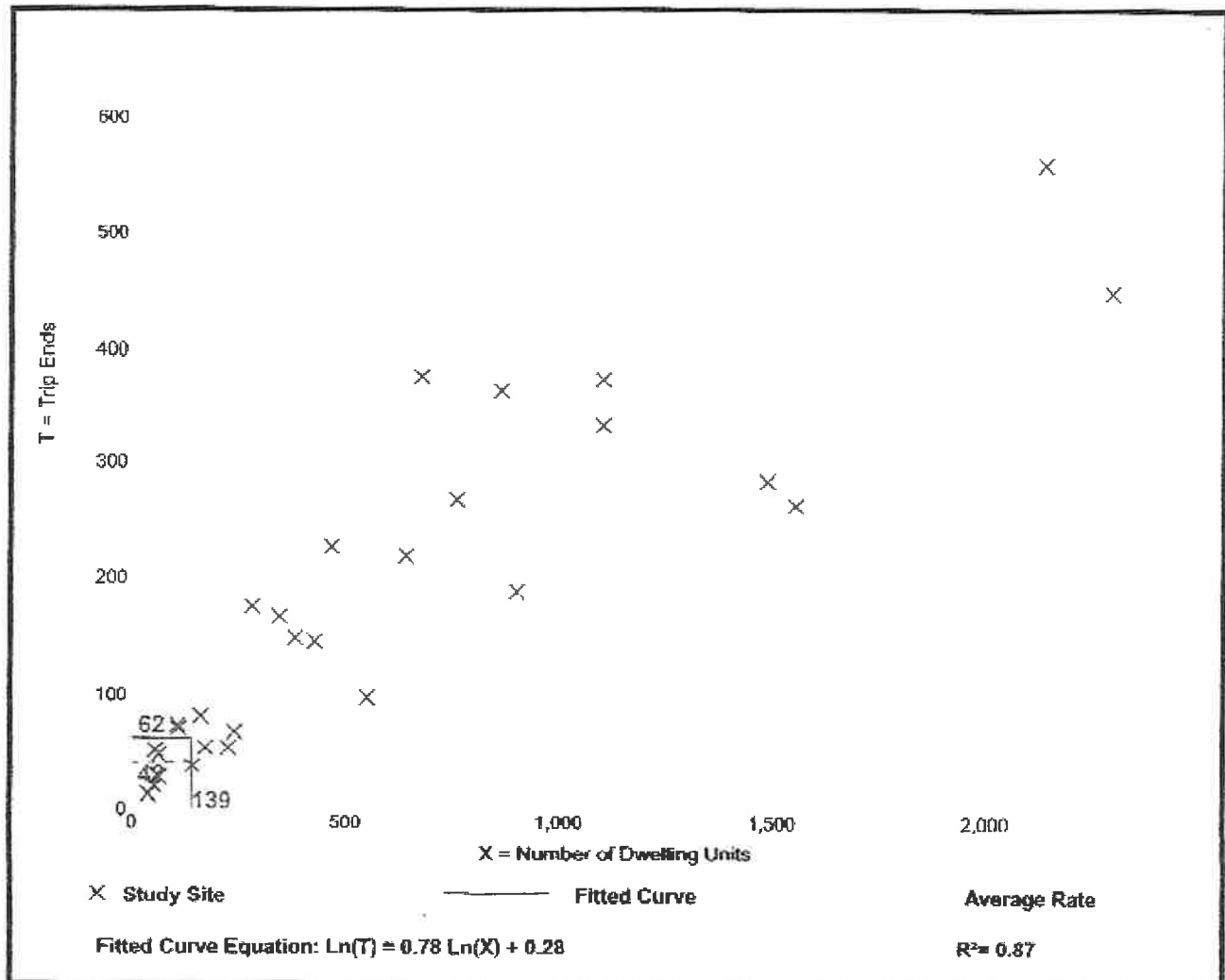
Standard Deviation

0.36

0.17 - 0.95

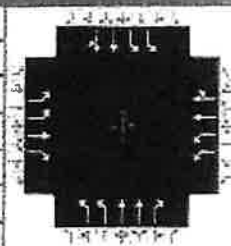
0.13

Data Plot and Equation



HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	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 & La Posada		File Name	PyEc21ax.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	120	125	0	443	377	91	575	565	201	52	997	161

Signal Information				Signal Timing Diagram																
Cycle, s	127.0	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	13.0	46.0	8.0	6.0	28.0										
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0										
				Red	1.0	0.0	1.0	1.0	0.0	1.0										

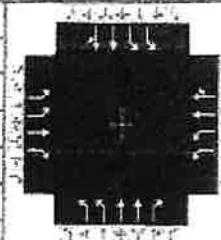
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	13.0	33.0	19.0	39.0	24.0	64.0	11.0	51.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	6.7	9.8	19.5	16.4	24.7	16.3	4.0	43.2
Green Extension Time (g _e), s	0.0	1.1	0.0	1.0	0.0	4.5	0.0	1.6
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	0.01	1.00	0.22	1.00	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	130	136	0	482	247	235	625	614	191	57	624	597
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1754	1730	1766	1548	1730	1856	1770
Queue Service Time (g _s), s	4.7	7.8	0.0	17.5	14.1	14.4	22.7	14.3	9.6	2.0	41.0	41.2
Cycle Queue Clearance Time (g _c), s	4.7	7.8	0.0	17.5	14.1	14.4	22.7	14.3	9.6	2.0	41.0	41.2
Green Ratio (g/C)	0.06	0.22	0.22	0.15	0.27	0.27	0.19	0.46	0.46	0.05	0.36	0.36
Capacity (c), veh/h	218	412	349	518	501	469	654	1641	719	163	672	641
Volume-to-Capacity Ratio (X)	0.599	0.329	0.000	0.930	0.492	0.500	0.956	0.374	0.266	0.346	0.928	0.931
Back of Queue (Q), ft/ln (95 th percentile)	97.1	164.1	0	359.7	271.2	257.3	447.6	252.3	158.1	40.5	752.7	713.9
Back of Queue (Q), veh/ln (95 th percentile)	3.8	6.5	0.0	14.2	10.7	10.3	17.6	9.9	6.2	1.6	29.4	28.6
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	57.9	41.6	0.0	53.3	39.2	39.3	51.0	22.0	20.8	58.6	38.9	39.0
Incremental Delay (d ₂), s/veh	3.2	0.2	0.0	23.3	0.3	0.3	24.6	0.1	0.1	0.5	19.0	20.1
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	0.0	0.0	0.0
Control Delay (d), s/veh	61.1	41.8	0.0	76.6	39.5	39.6	75.5	22.1	20.8	59.1	57.9	59.1
Level of Service (LOS)	E	D		E	D	D	E	C	C	E	E	E
Approach Delay, s/veh / LOS	51.2		D	58.1		E	45.3		D	58.5		E
Intersection Delay, s/veh / LOS	53.1						D					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.63		C	2.50		C	2.46		B	2.44		B
Bicycle LOS Score / LOS	0.93		A	1.28		A	1.67		B	1.54		B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	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 & La Posada		File Name	PyEc21px.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	93	187	0	361	379	95	772	953	393	171	739	85

Signal Information				Signal Timing (s)																			
Cycle, s	117.0	Reference Phase	2	Green	9.0	19.0	31.0	6.0	4.0	28.0	Yellow	4.0	0.0	4.0	4.0	4.0	Red	1.0	0.0	1.0	1.0	0.0	1.0
Offset, s	0	Reference Point	End																				
Uncoordinated	Yes	Simult. Gap E/W	On																				
Force Mode	Fixed	Simult. Gap N/S	On																				

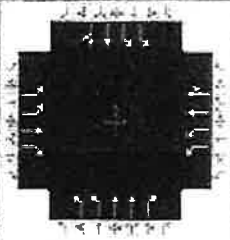
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	11.0	33.0	15.0	37.0	33.0	55.0	14.0	36.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	5.3	12.9	15.1	15.4	28.9	29.8	8.1	29.1
Green Extension Time (g _e), s	0.0	1.2	0.0	1.1	1.1	0.2	0.0	1.3
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	0.01	0.65	1.00	1.00	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	101	203	0	392	250	238	839	1036	373	186	445	429
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1749	1730	1766	1547	1730	1856	1791
Queue Service Time (g _s), s	3.3	10.9	0.0	13.1	13.1	13.4	26.9	27.8	21.3	6.1	27.1	27.1
Cycle Queue Clearance Time (g _c), s	3.3	10.9	0.0	13.1	13.1	13.4	26.9	27.8	21.3	6.1	27.1	27.1
Green Ratio (g/C)	0.05	0.24	0.24	0.13	0.27	0.27	0.28	0.43	0.43	0.08	0.26	0.26
Capacity (c), veh/h	177	448	379	443	512	478	976	1510	661	266	492	475
Volume-to-Capacity Ratio (X)	0.570	0.454	0.000	0.885	0.489	0.497	0.860	0.686	0.564	0.699	0.904	0.905
Back of Queue (Q), ft/ln (95th percentile)	69.1	218.6	0	278	253.3	240	456	439.8	312.5	131.9	540.9	515.1
Back of Queue (Q), veh/ln (95th percentile)	2.7	8.6	0.0	10.9	10.0	9.6	18.0	17.2	12.3	5.2	21.1	20.6
Queue Storage Ratio (RQ) (95th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	54.2	38.0	0.0	50.2	35.6	35.7	39.8	27.1	25.3	52.7	41.6	41.6
Incremental Delay (d ₂), s/veh	2.8	0.3	0.0	18.2	0.3	0.3	7.5	1.1	0.7	6.7	19.6	20.2
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	0.0	0.0	0.0
Control Delay (d), s/veh	57.0	38.2	0.0	68.3	35.9	36.0	47.3	28.2	26.0	59.3	61.2	61.7
Level of Service (LOS)	E	D		E	D	D	D	C	C	E	E	E
Approach Delay, s/veh / LOS	44.5		D	50.4		D	35.0		C	61.1		E
Intersection Delay, s/veh / LOS	44.8						D					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.66		C	2.48		B	2.46		B	2.45		B
Bicycle LOS Score / LOS	0.99		A	1.21		A	2.34		B	1.36		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	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 & La Posada		File Name	PyEc21aw.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	121	127	0	443	378	91	588	565	201	52	997	162

Signal Information												
Cycle, s	127.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	6.0	13.0	46.0	8.0	6.0	28.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	4.0		
				Red	1.0	0.0	1.0	1.0	0.0	1.0		

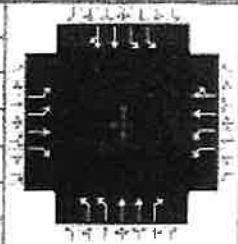
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	13.0	33.0	19.0	39.0	24.0	64.0	11.0	51.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	6.7	9.9	19.5	16.4	25.3	16.3	4.0	43.3
Green Extension Time (g _e), s	0.0	1.1	0.0	1.0	0.0	4.5	0.0	1.6
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	0.01	1.00	0.22	1.00	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	132	138	0	482	247	235	639	614	191	57	625	597
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1754	1730	1766	1548	1730	1856	1769
Queue Service Time (g _s), s	4.7	7.9	0.0	17.5	14.2	14.4	23.3	14.3	9.6	2.0	41.1	41.3
Cycle Queue Clearance Time (g _c), s	4.7	7.9	0.0	17.5	14.2	14.4	23.3	14.3	9.6	2.0	41.1	41.3
Green Ratio (g/C)	0.06	0.22	0.22	0.15	0.27	0.27	0.19	0.46	0.46	0.05	0.36	0.36
Capacity (c), veh/h	218	412	349	518	501	470	654	1641	719	163	672	641
Volume-to-Capacity Ratio (X)	0.604	0.335	0.000	0.930	0.494	0.501	0.978	0.374	0.266	0.346	0.929	0.932
Back of Queue (Q), ft/ln (95 th percentile)	98.2	166.9	0	359.7	271.7	258.1	470	252.3	158.1	40.5	754.7	715.2
Back of Queue (Q), veh/ln (95 th percentile)	3.9	6.6	0.0	14.2	10.7	10.3	18.5	9.9	6.2	1.6	29.5	28.6
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	58.0	41.7	0.0	53.3	39.2	39.3	51.2	22.0	20.8	58.6	38.9	39.0
Incremental Delay (d ₂), s/veh	3.3	0.2	0.0	23.3	0.3	0.3	29.4	0.1	0.1	0.5	19.1	20.3
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	0.0	0.0	0.0
Control Delay (d), s/veh	61.3	41.8	0.0	76.6	39.5	39.7	80.7	22.1	20.8	59.1	58.1	59.3
Level of Service (LOS)	E	D		E	D	D	F	C	C	E	E	E
Approach Delay, s/veh / LOS	51.3		D	58.1		E	47.8		D	58.7		E
Intersection Delay, s/veh / LOS	54.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.63	C	2.50	C	2.46	B	2.44	B
Bicycle LOS Score / LOS	0.93	A	1.28	A	1.68	B	1.54	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	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 & La Posada		File Name	PyEc21pw.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	94	188	0	361	381	95	801	953	393	171	739	87

Signal Information				Signal Timing (s)												
Cycle, s	117.0	Reference Phase	2	Green	9.0	19.0	31.0	6.0	4.0	28.0						
Offset, s	0	Reference Point	End	Yellow	4.0	0.0	4.0	4.0	0.0	4.0						
Uncoordinated	Yes	Simult. Gap E/W	On	Red	1.0	0.0	1.0	1.0	0.0	1.0						
Force Mode	Fixed	Simult. Gap N/S	On													

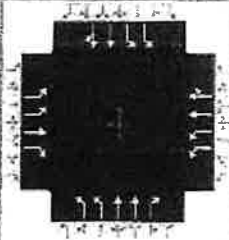
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	11.0	33.0	15.0	37.0	33.0	55.0	14.0	36.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	5.4	12.9	15.1	15.4	30.3	29.8	8.1	29.2
Green Extension Time (g _e), s	0.0	1.2	0.0	1.1	0.8	0.2	0.0	1.2
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	0.01	1.00	1.00	1.00	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	102	204	0	392	251	239	871	1036	373	186	446	430
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1749	1730	1766	1547	1730	1856	1789
Queue Service Time (g _s), s	3.4	10.9	0.0	13.1	13.2	13.4	28.3	27.8	21.3	6.1	27.2	27.2
Cycle Queue Clearance Time (g _c), s	3.4	10.9	0.0	13.1	13.2	13.4	28.3	27.8	21.3	6.1	27.2	27.2
Green Ratio (g/C)	0.05	0.24	0.24	0.13	0.27	0.27	0.28	0.43	0.43	0.08	0.26	0.26
Capacity (c), veh/h	177	448	379	443	512	478	976	1510	661	266	492	474
Volume-to-Capacity Ratio (X)	0.576	0.457	0.000	0.885	0.491	0.499	0.892	0.686	0.564	0.699	0.907	0.907
Back of Queue (Q), ft/ln (95 th percentile)	70.1	219.8	0	278	254.2	240.8	484.4	439.8	312.5	131.9	544.2	517.8
Back of Queue (Q), veh/ln (95 th percentile)	2.8	8.7	0.0	10.9	10.0	9.6	19.1	17.2	12.3	5.2	21.3	20.7
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	54.3	38.0	0.0	50.2	35.7	35.8	40.3	27.1	25.3	52.7	41.6	41.6
Incremental Delay (d ₂), s/veh	3.0	0.3	0.0	18.2	0.3	0.3	10.1	1.1	0.7	6.7	20.0	20.6
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	0.0	0.0	0.0
Control Delay (d), s/veh	57.2	38.3	0.0	68.3	35.9	36.1	50.4	28.2	26.0	59.3	61.6	62.2
Level of Service (LOS)	E	D		E	D	D	D	C	C	E	E	E
Approach Delay, s/veh / LOS	44.6		D	50.4		D	36.3		D	61.5		E
Intersection Delay, s/veh / LOS	45.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.66	C	2.48	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	0.99	A	1.22	A	2.37	B	1.36	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base	Analysis Period	1 > 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50ax.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	185	192	0	682	581	140	885	870	310	80	1535	248

Signal Information				Signal Timing (s)												
Cycle, s	162.0	Reference Phase	2	Green	8.0	20.0	67.0	10.0	9.0	28.0	Yellow	4.0	0.0	4.0	4.0	4.0
Offset, s	0	Reference Point	End	Red	1.0	0.0	1.0	1.0	0.0	1.0	Signal Phases Diagram					
Uncoordinated	Yes	Simult. Gap E/W	On													
Force Mode	Fixed	Simult. Gap N/S	On													

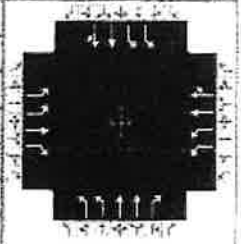
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	15.0	33.0	24.0	42.0	33.0	92.0	13.0	72.0
Change Period, (Y+Rc), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (gs), s	11.4	18.8	26.0	35.2	35.0	29.4	6.0	69.0
Green Extension Time (ge), s	0.0	1.5	0.0	0.0	0.0	12.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.11	1.00	1.00	1.00	0.07	1.00	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	201	209	0	741	391	365	962	946	310	87	952	948
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1738	1730	1766	1551	1730	1856	1765
Queue Service Time (gs), s	9.4	16.8	0.0	24.0	33.1	33.2	33.0	27.4	18.7	4.0	67.0	67.0
Cycle Queue Clearance Time (gc), s	9.4	16.8	0.0	24.0	33.1	33.2	33.0	27.4	18.7	4.0	67.0	67.0
Green Ratio (g/C)	0.06	0.17	0.17	0.15	0.23	0.23	0.20	0.54	0.54	0.05	0.41	0.41
Capacity (c), veh/h	214	323	274	512	427	397	705	1897	833	171	767	730
Volume-to-Capacity Ratio (X)	0.942	0.646	0.000	1.446	0.916	0.920	1.365	0.498	0.372	0.509	1.241	1.298
Back of Queue (Q), ft/ln (95th percentile)	237.5	331.5	0	1001.3	648.9	607.7	1197.6	435.5	284.1	82	2022.1	2099.2
Back of Queue (Q), veh/ln (95th percentile)	9.4	13.1	0.0	39.4	25.5	24.3	47.1	17.0	11.2	3.2	79.0	84.0
Queue Storage Ratio (RQ) (95th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	75.7	62.4	0.0	69.0	61.0	61.0	64.5	23.7	21.7	75.1	47.5	47.5
Incremental Delay (d2), s/veh	44.9	3.5	0.0	211.7	23.9	25.8	173.4	0.1	0.1	1.1	119.4	144.2
Initial Queue Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	120.6	65.8	0.0	280.7	84.9	86.8	237.9	23.8	21.8	76.1	166.9	191.7
Level of Service (LOS)	F	E		F	F	F	F	C	C	E	F	F
Approach Delay, s/veh / LOS	92.7		F	182.3		F	116.4		F	174.7		F
Intersection Delay, s/veh / LOS	149.9						F					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS	2.65 / C	2.52 / C	2.46 / B	2.44 / B
Bicycle LOS Score / LOS	1.16 / A	1.72 / B	2.32 / B	2.13 / B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base	Analysis Period	1 > 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50px.xus			
Project Description							



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	143	288	0	556	584	146	1189	1468	605	263	1138	131

Signal Information				Signal Timing (s)													
Cycle, s	144.0	Reference Phase	2	Green	13.0	24.0	45.0	7.0	7.0	28.0	Yellow	4.0	0.0	4.0	4.0	0.0	4.0
Offset, s	0	Reference Point	End	Red	1.0	0.0	1.0	1.0	0.0	1.0	Diagram						
Uncoordinated	Yes	Simult. Gap E/W	On														
Force Mode	Fixed	Simult. Gap N/S	On														

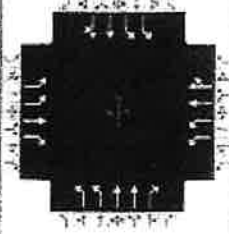
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	12.0	33.0	19.0	40.0	42.0	74.0	18.0	50.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	8.4	25.3	21.0	31.5	44.0	63.8	13.8	47.0
Green Extension Time (g _e), s	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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	155	313	0	604	397	369	1292	1596	603	286	690	668
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1734	1730	1766	1549	1730	1856	1786
Queue Service Time (g _s), s	6.4	23.3	0.0	19.0	29.4	29.5	42.0	61.8	47.8	11.8	45.0	45.0
Cycle Queue Clearance Time (g _c), s	6.4	23.3	0.0	19.0	29.4	29.5	42.0	61.8	47.8	11.8	45.0	45.0
Green Ratio (g/C)	0.05	0.19	0.19	0.13	0.24	0.24	0.29	0.48	0.48	0.09	0.31	0.31
Capacity (c), veh/h	168	364	308	456	455	422	1009	1693	742	312	580	558
Volume-to-Capacity Ratio (X)	0.924	0.861	0.000	1.324	0.873	0.876	1.281	0.943	0.813	0.915	1.189	1.196
Back of Queue (Q), ft/ln (95 th percentile)	180.4	472	0	725.9	565.4	528.5	1366.2	950.7	658.7	270.2	1338	1282.9
Back of Queue (Q), veh/ln (95 th percentile)	7.1	18.6	0.0	28.6	22.3	21.1	53.8	37.1	25.9	10.6	52.3	51.3
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	68.2	56.1	0.0	62.5	52.4	52.4	51.0	35.6	32.0	65.0	49.5	49.5
Incremental Delay (d ₂), s/veh	47.2	17.7	0.0	160.5	16.3	17.7	134.1	11.0	6.4	29.6	101.6	104.9
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	0.0	0.0	0.0
Control Delay (d), s/veh	115.4	73.9	0.0	223.0	68.6	70.1	185.1	46.6	38.4	94.6	151.1	154.4
Level of Service (LOS)	F	E		F	E	E	F	D	D	F	F	F
Approach Delay, s/veh / LOS	87.6	F		137.1	F		96.4	F		142.6	F	
Intersection Delay, s/veh / LOS	114.7						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.68	C	2.49	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.26	A	1.62	B	3.37	C	1.84	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base + Project	Analysis Period	1> 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50aw.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	186	194	0	682	582	140	898	870	310	80	1535	249

Signal Information				Signal Timing (s)										
Cycle, s	182.0	Reference Phase	2	Green	8.0	20.0	67.0	10.0	9.0	28.0				
Offset, s	0	Reference Point	End	Yellow	4.0	0.0	4.0	4.0	0.0	4.0				
Uncoordinated	Yes	Simult. Gap E/W	On	Red	1.0	0.0	1.0	1.0	0.0	1.0				
Force Mode	Fixed	Simult. Gap N/S	On											

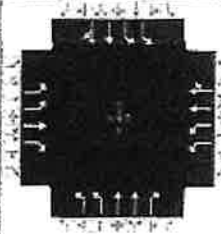
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	15.0	33.0	24.0	42.0	33.0	92.0	13.0	72.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	11.4	19.0	26.0	35.3	35.0	29.4	6.0	69.0
Green Extension Time (g _e), s	0.0	1.5	0.0	0.0	0.0	12.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.12	1.00	1.00	1.00	0.07	1.00	1.00

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	18
Adjusted Flow Rate (v), veh/h	202	211	0	741	392	366	976	946	310	87	953	948
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1738	1730	1766	1551	1730	1866	1765
Queue Service Time (g _s), s	9.4	17.0	0.0	24.0	33.1	33.3	33.0	27.4	18.7	4.0	67.0	67.0
Cycle Queue Clearance Time (g _c), s	9.4	17.0	0.0	24.0	33.1	33.3	33.0	27.4	18.7	4.0	67.0	67.0
Green Ratio (g/C)	0.06	0.17	0.17	0.15	0.23	0.23	0.20	0.54	0.54	0.05	0.41	0.41
Capacity (c), veh/h	214	323	274	512	427	397	705	1897	833	171	767	730
Volume-to-Capacity Ratio (X)	0.947	0.652	0.000	1.446	0.918	0.921	1.385	0.498	0.372	0.509	1.242	1.299
Back of Queue (Q), ft/ln (95 th percentile)	239.7	335.3	0	1001.3	650.7	609.5	1233.1	435.5	284.1	82	2024.6	2102.7
Back of Queue (Q), veh/ln (95 th percentile)	9.4	13.2	0.0	39.4	25.6	24.4	48.5	17.0	11.2	3.2	79.1	84.1
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	75.7	62.5	0.0	69.0	61.0	61.1	64.5	23.7	21.7	75.1	47.5	47.5
Incremental Delay (d ₂), s/veh	46.2	3.7	0.0	211.7	24.1	26.0	182.1	0.1	0.1	1.1	119.6	144.7
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	0.0	0.0	0.0
Control Delay (d), s/veh	121.9	66.1	0.0	280.7	85.1	87.1	246.6	23.8	21.8	76.1	167.1	192.2
Level of Service (LOS)	F	E		F	F	F	F	C	C	E	F	F
Approach Delay, s/veh / LOS	93.4 / F			182.3 / F			121.0 / F			175.1 / F		
Intersection Delay, s/veh / LOS	151.7						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.65	C	2.52	C	2.46	B	2.44	B
Bicycle LOS Score / LOS	1.17	A	1.72	B	2.33	B	2.13	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base + Project	Analysis Period	1 > 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50pw.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	144	289	0	556	586	146	1218	1468	605	263	1138	133

Signal Information				Signal Timing (s)										
Cycle, s	144.0	Reference Phase	2	Green	13.0	24.0	45.0	7.0	7.0	28.0				
Offset, s	0	Reference Point	End	Yellow	4.0	0.0	4.0	4.0	0.0	4.0				
Uncoordinated	Yes	Simult. Gap E/W	On	Red	1.0	0.0	1.0	1.0	0.0	1.0				
Force Mode	Fixed	Simult. Gap N/S	On											

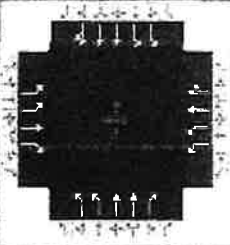
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	12.0	33.0	19.0	40.0	42.0	74.0	18.0	50.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	8.5	25.4	21.0	31.6	44.0	63.8	13.8	47.0
Green Extension Time (g _e), s	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	157	314	0	604	398	370	1324	1596	603	286	691	669
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1735	1730	1766	1549	1730	1856	1785
Queue Service Time (g _s), s	6.5	23.4	0.0	19.0	29.5	29.6	42.0	61.8	47.8	11.8	45.0	45.0
Cycle Queue Clearance Time (g _c), s	6.5	23.4	0.0	19.0	29.5	29.6	42.0	61.8	47.8	11.8	45.0	45.0
Green Ratio (g/C)	0.05	0.19	0.19	0.13	0.24	0.24	0.29	0.48	0.48	0.09	0.31	0.31
Capacity (c), veh/h	168	364	308	456	455	422	1009	1693	742	312	580	558
Volume-to-Capacity Ratio (X)	0.931	0.864	0.000	1.324	0.876	0.878	1.312	0.943	0.813	0.915	1.192	1.199
Back of Queue (Q), ft/ln (95 th percentile)	183.1	474.7	0	725.9	568.1	531.1	1445.3	950.7	658.7	270.2	1343.9	1288.4
Back of Queue (Q), veh/ln (95 th percentile)	7.2	18.7	0.0	28.6	22.4	21.2	56.9	37.1	25.9	10.6	52.5	51.5
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	68.3	56.2	0.0	62.5	52.4	52.5	51.0	35.6	32.0	65.0	49.5	49.5
Incremental Delay (d ₂), s/veh	48.9	18.1	0.0	160.5	16.6	18.0	147.6	11.0	6.4	29.6	102.5	105.9
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	0.0	0.0	0.0
Control Delay (d), s/veh	117.1	74.3	0.0	223.0	69.0	70.5	198.6	46.6	38.4	94.6	152.0	155.4
Level of Service (LOS)	F	E		F	E	E	F	D	D	F	F	F
Approach Delay, s/veh / LOS	88.5		F	137.2		F	102.3		F	143.4		F
Intersection Delay, s/veh / LOS	117.9						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.68	C	2.49	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.26	A	1.62	B	3.39	C	1.85	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	AM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base	Analysis Period	1> 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50axl2.xus			
Project Description	w/Improvements						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	185	192	0	682	581	140	885	870	310	80	1535	248

Signal Information													
Cycle, s	139.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	6.0	25.0	48.0	9.0	3.0	28.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	4.0			
				Red	1.0	0.0	1.0	1.0	0.0	1.0			

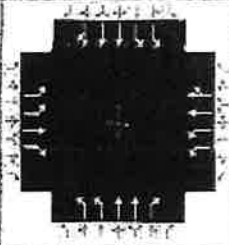
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	14.0	33.0	17.0	36.0	36.0	78.0	11.0	53.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	10.0	15.9	19.0	30.7	38.0	26.1	4.2	50.0
Green Extension Time (g _e), s	0.0	1.7	0.0	0.1	0.0	12.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.04	1.00	1.00	1.00	0.08	1.00	1.00

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	201	209	0	741	391	365	962	946	310	87	1296	604
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1738	1730	1766	1551	1730	1856	1716
Queue Service Time (g _s), s	8.0	13.9	0.0	17.0	28.6	28.7	36.0	24.1	16.5	2.2	48.0	48.0
Cycle Queue Clearance Time (g _c), s	8.0	13.9	0.0	17.0	28.6	28.7	36.0	24.1	16.5	2.2	48.0	48.0
Green Ratio (g/C)	0.06	0.20	0.20	0.34	0.22	0.22	0.26	0.53	0.53	0.39	0.35	0.36
Capacity (c), veh/h	224	377	319	764	417	388	896	1855	814	653	1282	592
Volume-to-Capacity Ratio (X)	0.898	0.554	0.000	0.970	0.939	0.942	1.074	0.510	0.380	0.133	1.012	1.019
Back of Queue (Q), ft/ln (95 th percentile)	204.7	275.4	0	310.1	592.4	556.2	782.9	383.9	251.4	41.8	907.1	897.3
Back of Queue (Q), veh/ln (95 th percentile)	8.1	10.8	0.0	12.2	23.3	22.2	30.8	15.0	9.9	1.6	35.4	35.9
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	64.5	49.9	0.0	45.3	53.1	53.1	51.5	21.4	19.6	26.7	45.5	45.5
Incremental Delay (d ₂), s/veh	33.3	1.1	0.0	25.2	28.7	30.8	51.9	0.1	0.1	0.0	28.1	41.8
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	0.0	0.0	0.0
Control Delay (d), s/veh	97.8	50.9	0.0	70.5	81.8	83.9	103.4	21.5	19.7	26.7	73.6	87.3
Level of Service (LOS)	F	D		E	F	F	F	C	B	C	F	F
Approach Delay, s/veh / LOS	73.9		E	76.7		E	56.8		E	75.7		E
Intersection Delay, s/veh / LOS	68.9						E					

Multimodal Results	EB			WB			NB			SB		
	Pedestrian LOS Score / LOS	2.77		C	2.65		C	2.46		B	2.45	
Bicycle LOS Score / LOS	1.16		A	1.72		B	2.32		B	1.58		B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base	Analysis Period	1 > 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50pxl2.xus			
Project Description	w/Improvements						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	143	288	0	556	584	146	1189	1468	605	263	1138	131

Signal Information				EB			WB			NB			SB		
Cycle, s	159.0	Reference Phase	2	Green	7.0	44.0	44.0	8.0	7.0	29.0					
Offset, s	0	Reference Point	End	Yellow	4.0	0.0	4.0	4.0	0.0	4.0					
Uncoordinated	Yes	Simult. Gap EW	On	Red	1.0	0.0	1.0	1.0	0.0	1.0					
Force Mode	Fixed	Simult. Gap N/S	On												

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	13.0	34.0	20.0	41.0	56.0	93.0	12.0	49.0
Change Period. (Y+R), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	9.1	28.1	22.0	35.3	58.0	60.5	9.0	40.1
Green Extension Time (g _e), s	0.0	0.0	0.0	0.3	0.0	13.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	1.00	1.00	1.00	1.00	0.37	1.00	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	155	313	0	604	397	369	1292	1596	603	286	922	436
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1733	1730	1766	1551	1730	1856	1750
Queue Service Time (g _s), s	7.1	26.1	0.0	20.0	33.2	33.3	56.0	58.5	45.2	7.0	38.0	38.1
Cycle Queue Clearance Time (g _c), s	7.1	26.1	0.0	20.0	33.2	33.3	56.0	58.5	45.2	7.0	38.0	38.1
Green Ratio (g/C)	0.05	0.18	0.18	0.32	0.23	0.23	0.35	0.55	0.55	0.32	0.28	0.28
Capacity (c), veh/h	174	341	289	564	423	392	1218	1955	859	353	1027	484
Volume-to-Capacity Ratio (X)	0.893	0.918	0.000	1.071	0.938	0.941	1.061	0.816	0.703	0.809	0.898	0.898
Back of Queue (Q), ft/ln (95 th percentile)	187	545.4	0	516.5	663.4	620.2	1073	846	601	142	674.6	661.1
Back of Queue (Q), veh/ln (95 th percentile)	7.4	21.5	0.0	20.3	26.1	24.8	42.2	33.0	23.7	5.6	26.4	26.4
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	75.1	63.8	0.0	47.8	60.4	60.5	51.5	28.9	25.9	48.9	55.3	55.4
Incremental Delay (d ₂), s/veh	38.5	28.3	0.0	58.4	28.2	30.4	43.5	2.6	2.2	12.3	10.3	18.9
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	0.0	0.0	0.0
Control Delay (d), s/veh	113.6	92.1	0.0	106.2	88.6	90.8	95.0	31.5	28.1	61.1	65.6	74.3
Level of Service (LOS)	F	F		F	F	F	F	C	C	E	E	E
Approach Delay, s/veh / LOS	99.2		F	97.0		F	54.5		D	67.1		E
Intersection Delay, s/veh / LOS	68.8						E					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.81		C	2.63		C	2.46		B	2.46		B
Bicycle LOS Score / LOS	1.26		A	1.62		B	3.37		C	1.39		A

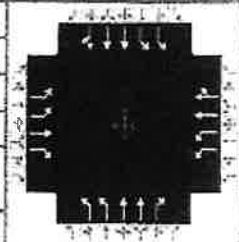
HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers		
Analyst	MSH	Analysis Date	Aug 23, 2021
Jurisdiction	NDOT	Time Period	AM Peak Hour
Urban Street		Analysis Year	2050 Base + Project
Intersection	Pyramid & La Posada	File Name	PyEc50awl2.xus
Project Description	w/Improvements		

Intersection Information

Duration, h	0.250
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	186	194	0	682	582	140	898	870	310	80	1535	249

Signal Information

Cycle, s	139.0	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	25.0	48.0	9.0	3.0	28.0
Yellow	4.0	0.0	4.0	4.0	0.0	4.0
Red	1.0	0.0	1.0	1.0	0.0	1.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	14.0	33.0	17.0	36.0	36.0	78.0	11.0	53.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	10.1	16.1	19.0	30.8	38.0	26.1	4.2	50.0
Green Extension Time (g _e), s	0.0	1.7	0.0	0.1	0.0	12.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	0.04	1.00	1.00	1.00	0.08	1.00	1.00

Movement Group Results

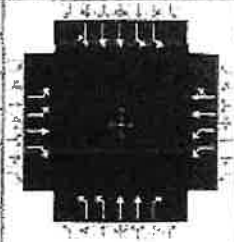
Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	202	211	0	741	392	366	976	946	310	87	1297	604
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1738	1730	1766	1551	1730	1856	1715
Queue Service Time (g _s), s	8.1	14.1	0.0	17.0	28.6	28.8	36.0	24.1	16.5	2.2	48.0	48.0
Cycle Queue Clearance Time (g _c), s	8.1	14.1	0.0	17.0	28.6	28.8	36.0	24.1	16.5	2.2	48.0	48.0
Green Ratio (g/C)	0.06	0.20	0.20	0.34	0.22	0.22	0.26	0.53	0.53	0.39	0.35	0.35
Capacity (c), veh/h	224	377	319	761	417	388	896	1855	814	653	1282	592
Volume-to-Capacity Ratio (X)	0.903	0.560	0.000	0.974	0.940	0.943	1.089	0.510	0.380	0.133	1.012	1.019
Back of Queue (Q), ft/ln (95 th percentile)	206.5	278.1	0	313.2	594	557.7	811.2	383.9	251.4	41.8	908.5	898.5
Back of Queue (Q), veh/ln (95 th percentile)	8.1	11.0	0.0	12.3	23.4	22.3	31.9	15.0	9.9	1.6	35.5	35.9
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	64.6	50.0	0.0	45.3	53.1	53.1	51.5	21.4	19.6	26.7	45.5	45.5
Incremental Delay (d ₂), s/veh	34.3	1.1	0.0	26.2	29.0	31.1	57.4	0.1	0.1	0.0	28.2	42.0
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	0.0	0.0	0.0
Control Delay (d), s/veh	98.9	51.1	0.0	71.5	82.1	84.2	108.9	21.5	19.7	26.7	73.7	87.5
Level of Service (LOS)	F	D		E	F	F	F	C	B	C	F	F
Approach Delay, s/veh / LOS	74.5	E		77.4	E		59.5	E			75.8	E
Intersection Delay, s/veh / LOS	70.2						E					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.77	C		2.65	C		2.46	B			2.45	B
Bicycle LOS Score / LOS	1.17	A		1.72	B		2.33	B			1.58	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	Solaegui Engineers			Duration, h	0.250		
Analyst	MSH	Analysis Date	Aug 23, 2021	Area Type	Other		
Jurisdiction	NDOT	Time Period	PM Peak Hour	PHF	0.92		
Urban Street		Analysis Year	2050 Base + Project	Analysis Period	1 > 7:00		
Intersection	Pyramid & La Posada		File Name	PyEc50pwl2.xus			
Project Description	w/improvements						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	144	289	0	556	586	146	1218	1468	605	263	1138	133

Signal Information				Signal Timing Diagram									
Cycle, s	159.0	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	7.0	44.0	44.0	8.0	7.0	29.0					
		Yellow	4.0	0.0	4.0	4.0	0.0	4.0					
		Red	1.0	0.0	1.0	1.0	0.0	1.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	13.0	34.0	20.0	41.0	56.0	93.0	12.0	49.0
Change Period, (Y+R _c), s	5.0	5.0	0.0	5.0	0.0	5.0	5.0	5.0
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s	9.2	28.2	22.0	35.4	58.0	60.5	9.0	40.2
Green Extension Time (g _e), s	0.0	0.0	0.0	0.2	0.0	13.8	0.0	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	1.00	1.00	1.00	1.00	1.00	0.37	1.00	1.00

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	157	314	0	604	398	370	1324	1596	603	286	924	436
Adjusted Saturation Flow Rate (s), veh/h/ln	1730	1870	1585	1730	1870	1733	1730	1766	1551	1730	1856	1748
Queue Service Time (g _s), s	7.2	28.2	0.0	20.0	33.3	33.4	56.0	58.5	45.2	7.0	38.1	38.2
Cycle Queue Clearance Time (g _c), s	7.2	26.2	0.0	20.0	33.3	33.4	56.0	58.5	45.2	7.0	38.1	38.2
Green Ratio (g/C)	0.05	0.18	0.18	0.32	0.23	0.23	0.35	0.55	0.55	0.32	0.28	0.28
Capacity (c), veh/h	174	341	289	563	423	392	1218	1955	859	353	1027	484
Volume-to-Capacity Ratio (X)	0.899	0.921	0.000	1.074	0.940	0.943	1.087	0.816	0.703	0.809	0.900	0.900
Back of Queue (Q), ft/ln (95 th percentile)	189.7	548.8	0	518.2	667	623.5	1138.1	846	601	142	676.8	663
Back of Queue (Q), veh/ln (95 th percentile)	7.5	21.6	0.0	20.4	26.3	24.9	44.8	33.0	23.7	5.6	26.4	26.5
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	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	75.1	63.9	0.0	47.7	60.4	60.5	51.5	28.9	25.9	48.9	55.4	55.4
Incremental Delay (d ₂), s/veh	40.0	28.9	0.0	59.4	28.8	30.9	52.7	2.6	2.2	12.3	10.4	19.2
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	0.0	0.0	0.0
Control Delay (d), s/veh	115.1	92.8	0.0	107.1	89.2	91.4	104.2	31.5	28.1	61.1	65.8	74.6
Level of Service (LOS)	F	F		F	F	F	F	C	C	E	E	E
Approach Delay, s/veh / LOS	100.2	F		97.7	F		58.3	E		67.3	E	
Intersection Delay, s/veh / LOS	70.9						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.81	C	2.63	C	2.46	B	2.46	B
Bicycle LOS Score / LOS	1.26	A	1.62	B	3.39	C	1.39	A

HCS7 Roundabouts Report

General Information

Site Information

Analyst	MSH		Intersection	Eagle Canyon/Neighborhood
Agency or Co.	Sofaegui Engineers		E/W Street Name	Eagle Canyon Road
Date Performed	8/23/2021		N/S Street Name	Neighborhood Way/Ember Dr
Analysis Year	2021		Analysis Time Period (hrs)	0.25
Time Analyzed	AM Existing		Peak Hour Factor	0.90
Project Description			Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT				R				LTR			
Volume (V), veh/h	0	5	829	17	0	88	987	41	0	22	4	113	0	45	3	13
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{adj}), pc/h	0	5	940	19	0	100	1119	46	0	25	5	128	0	51	3	15
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436	
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352	

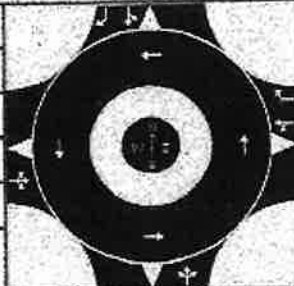
Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		965		1219	46			158		54	15	
Entry Volume, veh/h		946		1195	45			155		53	15	
Circulating Flow (v _i), pc/h		154		36				997			1244	
Exiting Flow (v _e), pc/h		1119		1159				57			122	
Capacity (C _{acc}), pc/h		1179		1374	1374			499		458	458	
Capacity (c), veh/h		1155		1332	1332			489		449	449	
v/c Ratio (x)		0.82		0.90	0.03			0.32		0.12	0.03	

Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		19.5		24.4	3.0			12.3		9.7	8.5	
Lane LOS		C		C	A			B		A	A	
95% Queue, veh		9.9		14.3	0.1			1.3		0.4	0.1	
Approach Delay, s/veh		19.5		23.6				12.3		9.4		
Approach LOS		C		C				B		A		
Intersection Delay, s/veh LOS	20.9						C					

HCS7 Roundabouts Report

General Information				Site Information			
Analyst	MSH				Intersection		Eagle Canyon/Neighborhood
Agency or Co.	Solaegui Engineers				E/W Street Name		Eagle Canyon Road
Date Performed	8/23/2021				N/S Street Name		Neighborhood Way/Ember Dr
Analysis Year	2021				Analysis Time Period (hrs)		0.25
Time Analyzed	PM Existing				Peak Hour Factor		0.90
Project Description					Jurisdiction		Washoe County

Volume Adjustments and Site Characteristics																
Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT				R				LTR			
Volume (V), veh/h	0	5	339	5	0	92	647	58	0	6	1	61	0	52	4	5
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{pc}), pc/h	0	6	384	6	0	104	733	66	0	7	1	69	0	59	5	6
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment														
Approach	EB			WB			NB			SB				
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass		
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436			
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352			

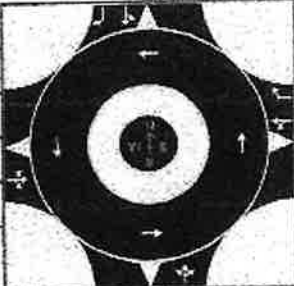
Flow Computations, Capacity and v/c Ratios												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		396		837	66			77		64	6	
Entry Volume, veh/h		388		821	65			75		63	6	
Circulating Flow (v _c), pc/h		168			14			449			844	
Exiting Flow (v _w), pc/h		512			746			73			115	
Capacity (c _{pc}), pc/h		1163		1402	1402			873		659	659	
Capacity (c), veh/h		1138		1359	1359			855		645	645	
v/c Ratio (x)		0.34		0.60	0.05			0.09		0.10	0.01	

Delay and Level of Service												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		6.5		9.6	3.0			5.1		6.7	5.7	
Lane LOS		A		A	A			A		A	A	
95% Queue, veh		1.5		4.3	0.1			0.3		0.3	0.0	
Approach Delay, s/veh		6.5			9.1			5.1			6.6	
Approach LOS		A			A			A			A	
Intersection Delay, s/veh LOS	8.1						A					

HCS7 Roundabouts Report

General Information

Site Information

Analyst	MSH		Intersection	Eagle Canyon/Neighborhood
Agency or Co.	Solaegui Engineers		E/W Street Name	Eagle Canyon Road
Date Performed	8/23/2021		N/S Street Name	Neighborhood Way/Ember Dr
Analysis Year	2021		Analysis Time Period (hrs)	0.25
Time Analyzed	AM Existing + Project		Peak Hour Factor	0.90
Project Description			Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment			LTR		LT			R			LTR		LT			R
Volume (V), veh/h	0	6	829	17	0	88	987	56	0	22	5	113	0	75	4	17
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{adj}), pc/h	0	7	940	19	0	100	1119	63	0	25	6	128	0	85	5	19
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436	
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		966		1219	63			159		90	19	
Entry Volume, veh/h		947		1195	62			156		88	19	
Circulating Flow (v _c), pc/h	190			38			1032			1244		
Exiting Flow (v _w), pc/h	1153			1163			76			124		
Capacity (C _{flow}), pc/h		1137		1372	1372			482		458	458	
Capacity (C), veh/h		1113		1330	1330			472		449	449	
v/c Ratio (x)		0.85		0.90	0.05			0.33		0.20	0.04	

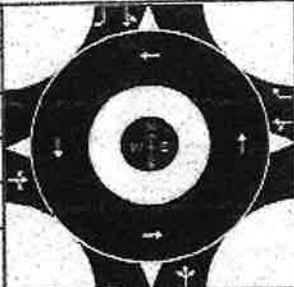
Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Lane Control Delay (d), s/veh		22.6		24.6	3.1			13.0		11.0	8.6	
Lane LOS		C		C	A			B		B	A	
95% Queue, veh		11.1		14.4	0.1			1.4		0.7	0.1	
Approach Delay, s/veh	22.6			23.5			13.0			10.5		
Approach LOS	C			C			B			B		
Intersection Delay, s/veh LOS	21.9						C					

HCS7 Roundabouts Report

General Information

Site Information

Analyst	MSH		Intersection	Eagle Canyon/Neighborhood
Agency or Co.	Solaegui Engineers		E/W Street Name	Eagle Canyon Road
Date Performed	8/23/2021		N/S Street Name	Neighborhood Way/Ember Dr
Analysis Year	2021		Analysis Time Period (hrs)	0.25
Time Analyzed	PM Existing + Project		Peak Hour Factor	0.90
Project Description			Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment			LTR		LT		R				LTR		LT		R	
Volume (V), veh/h	0	9	339	5	0	92	647	91	0	6	2	61	0	72	5	8
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{adj}), pc/h	0	10	384	6	0	104	733	103	0	7	2	69	0	82	6	9
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436	
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352	

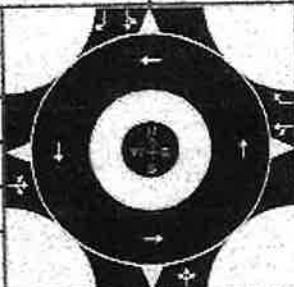
Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		400		837	103			78		88	9	
Entry Volume, veh/h		392		821	101			76		86	9	
Circulating Flow (v _c), pc/h		192			19			476			844	
Exiting Flow (v _w), pc/h		535			749			115			116	
Capacity (C _{pr}), pc/h		1135		1396	1396			849		659	659	
Capacity (c), veh/h		1111		1353	1353			831		645	645	
v/c Ratio (x)		0.35		0.61	0.07			0.09		0.13	0.01	

Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		6.8		9.7	3.2			5.2		7.1	5.7	
Lane LOS		A		A	A			A		A	A	
95% Queue, veh		1.6		4.3	0.2			0.3		0.5	0.0	
Approach Delay, s/veh		6.8			9.0			5.2			7.0	
Approach LOS		A			A			A			A	
Intersection Delay, s/veh LOS	8.1						A					

HCS7 Roundabouts Report

General Information				Site Information				
Analyst	MSH				Intersection	Eagle Canyon/Neighborhood		
Agency or Co.	Solaegui Engineers				E/W Street Name	Eagle Canyon Road		
Date Performed	8/23/2021				N/S Street Name	Neighborhood Way/Ember Dr		
Analysis Year	2050				Analysis Time Period (hrs)	0.25		
Time Analyzed	AM Base				Peak Hour Factor	0.90		
Project Description					Jurisdiction	Washoe County		

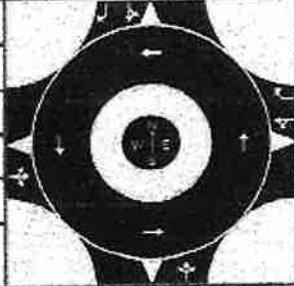
Volume Adjustments and Site Characteristics																
Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT		R		LTR				LI		R	
Volume (V), veh/h	0	8	1277	26	0	136	1520	63	0	34	6	174	0	69	5	20
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{rc}), pc/h	0	9	1447	29	0	154	1723	71	0	39	7	197	0	78	6	23
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment														
Approach	EB			WB			NB			SB				
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass		
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436			
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352			

Flow Computations, Capacity and v/c Ratios												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		1485		1877	71			243		84	23	
Entry Volume, veh/h		1456		1840	70			238		82	23	
Circulating Flow (v _c), pc/h	238			55			1534			1916		
Exiting Flow (v _e), pc/h	1722			1785			87			189		
Capacity (c _{ave}), pc/h		1083		1351	1351			289		248	248	
Capacity (c), veh/h		1060		1310	1310			283		243	243	
v/c Ratio (x)		1.37		1.41	0.05			0.84		0.34	0.09	

Delay and Level of Service												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		188.2		199.1	3.2			59.4		23.9	16.8	
Lane LOS		F		F	A			F		C	C	
95% Queue, veh		58.8		75.5	0.2			7.1		1.4	0.3	
Approach Delay, s/veh	188.2			192.0			59.4			22.3		
Approach LOS	F			F			F			C		
Intersection Delay, s/veh LOS	177.7						F					

HCS7 Roundabouts Report

General Information				Site Information				
Analyst	MSH				Intersection	Eagle Canyon/Neighborhood		
Agency or Co.	Solaegui Engineers				E/W Street Name	Eagle Canyon Road		
Date Performed	8/23/2021				N/S Street Name	Neighborhood Way/Ember Dr		
Analysis Year	2050				Analysis Time Period (hrs)	0.25		
Time Analyzed	PM Base				Peak Hour Factor	0.90		
Project Description					Jurisdiction	Washoe County		

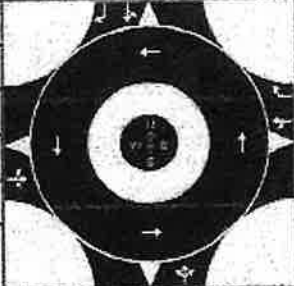
Volume Adjustments and Site Characteristics																
Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT				R				LTR			
Volume (V), veh/h	0	8	522	8	0	142	996	89	0	9	2	94	0	80	6	8
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{adj}), pc/h	0	9	592	9	0	161	1129	101	0	10	2	107	0	91	7	9
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436		
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352		

Flow Computations, Capacity and v/c Ratios												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h	610			1290			101			119		
Entry Volume, veh/h	598			1265			99			117		
Circulating Flow (v _c), pc/h	259			21			692			1300		
Exiting Flow (v _w), pc/h	790			1148			112			177		
Capacity (C _{acc}), pc/h	1060			1393			1393			681		
Capacity (c), veh/h	1037			1350			1350			667		
v/c Ratio (x)	0.58			0.94			0.07			0.17		

Delay and Level of Service												
Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh	11.0			29.5			3.2			7.4		
Lane LOS	B			D			A			A		
95% Queue, veh	3.8			17.1			0.2			0.6		
Approach Delay, s/veh	11.0			27.6			7.4			11.7		
Approach LOS	B			D			A			B		
Intersection Delay, s/veh LOS	21.2						C					

HCS7 Roundabouts Report

General Information				Site Information				
Analyst	MSH				Intersection	Eagle Canyon/Neighborhood		
Agency or Co.	Solaegui Engineers				E/W Street Name	Eagle Canyon Road		
Date Performed	8/23/2021				N/S Street Name	Neighborhood Way/Ember Dr		
Analysis Year	2050				Analysis Time Period (hrs)	0.25		
Time Analyzed	AM Base + Project				Peak Hour Factor	0.90		
Project Description					Jurisdiction	Washoe County		

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT	R			LTR				LT	R		
Volume (V), veh/h	0	9	1277	26	0	136	1520	78	0	34	7	174	0	99	6	24
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (wcr), pc/h	0	10	1447	29	0	154	1723	88	0	39	8	197	0	112	7	27
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436	
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352	

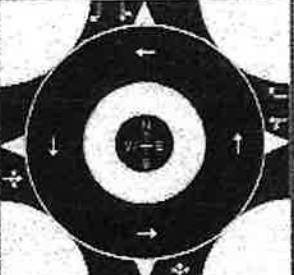
Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h		1486		1877	88			244		119	27	
Entry Volume, veh/h		1457		1840	86			239		117	26	
Circulating Flow (v _c), pc/h		273		57			1569			1916		
Exiting Flow (v _e), pc/h		1756		1789			106			190		
Capacity (c _{pc}), pc/h		1045		1348	1348		279			248	248	
Capacity (c), veh/h		1023		1307	1307		273			243	243	
v/c Ratio (x)		1.42		1.41	0.07		0.88			0.48	0.11	

Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		210.7		200.2	3.3			67.0		30.1	17.1	
Lane LOS		F		F	A			F		D	C	
95% Queue, veh		62.9		75.7	0.2			7.6		2.4	0.4	
Approach Delay, s/veh		210.7		191.4			67.0			27.7		
Approach LOS		F		F			F			D		
Intersection Delay, s/veh LOS	184.7						F					

HCS7 Roundabouts Report

General Information				Site Information				
Analyst	MSH				Intersection	Eagle Canyon/Neighborhood		
Agency or Co.	Solaegui Engineers				E/W Street Name	Eagle Canyon Road		
Date Performed	8/23/2021				N/S Street Name	Neighborhood Way/Ember Dr		
Analysis Year	2050				Analysis Time Period (hrs)	0.25		
Time Analyzed	PM Base + Project				Peak Hour Factor	0.90		
Project Description					Jurisdiction	Washoe County		

Volume Adjustments and Site Characteristics																
Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1
Lane Assignment	LTR				LT		R		LTR				LT		R	
Volume (V), veh/h	0	12	522	8	0	142	996	122	0	9	3	94	0	100	7	11
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _c), pc/h	0	14	592	9	0	161	1129	138	0	10	3	107	0	113	8	12
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment														
Approach	EB			WB			NB			SB				
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass		
Critical Headway (s)		4.9763		4.5436	4.5436			4.9763		4.5436	4.5436			
Follow-Up Headway (s)		2.6087		2.5352	2.5352			2.6087		2.5352	2.5352			

Flow Computations, Capacity and v/c Ratios													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Entry Flow (v _e), pc/h		615		1290	138			120		121	12		
Entry Volume, veh/h		603		1265	135			118		119	12		
Circulating Flow (v _c), pc/h		282		27				719			1300		
Exiting Flow (v _e), pc/h		812		1151				155		435	435		
Capacity (C _{max}), pc/h		1035		1386	1386			663		435	435		
Capacity (C), veh/h		1013		1343	1343			649		427	427		
v/c Ratio (x)		0.59		0.94	0.10			0.18		0.28	0.03		

Delay and Level of Service													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Lane Control Delay (d), s/veh		11.6		30.4	3.5			7.7		13.1	8.8		
Lane LOS		B		D	A			A		B	A		
95% Queue, veh		4.1		17.4	0.3			0.7		1.1	0.1		
Approach Delay, s/veh		11.6		27.8				7.7		12.7			
Approach LOS		B		D				A		B			
Intersection Delay, s/veh LOS	21.5						C						

HCS7 Roundabouts Report

General Information				Site Information				
Analyst	MSH				Intersection	Eagle Canyon/Neighborhood		
Agency or Co.	Solaegui Engineers				E/W Street Name	Eagle Canyon Road		
Date Performed	8/23/2021				N/S Street Name	Neighborhood Way/Ember Dr		
Analysis Year	2050				Analysis Time Period (hrs)	0.25		
Time Analyzed	AM Base				Peak Hour Factor	0.90		
Project Description	w/Improvements				Jurisdiction	Washoe County		

Volume Adjustments and Site Characteristics																
Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	1
Lane Assignment	LT		TR		LT		TR		ETR				LT		R	
Volume (V), veh/h	0	8	1277	26	0	136	1520	63	0	34	6	174	0	69	5	20
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{wt}), pc/h	0	9	1447	29	0	154	1723	71	0	39	7	197	0	78	6	23
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				2				2			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Critical Headway (s)	4.5436	4.5436		4.5436	4.5436		4.3276			4.6453	4.3276		
Follow-Up Headway (s)	2.5352	2.5352		2.5352	2.5352		2.5352			2.6667	2.5352		

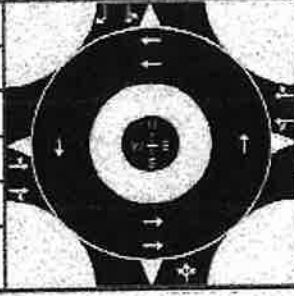
Flow Computations, Capacity and v/c Ratios													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Entry Flow (v _e), pc/h	698	787		916	1032		243			84	23		
Entry Volume, veh/h	684	772		898	1012		238			82	23		
Circulating Flow (v _c), pc/h	238			55			1534			1916			
Exiting Flow (v _w), pc/h	1722			1785			87			189			
Capacity (C _w), pc/h	1143	1143		1351	1351		385			737	279		
Capacity (C), veh/h	1111	1111		1310	1310		378			227	273		
v/c Ratio (x)	0.62	0.69		0.69	0.77		0.63			0.36	0.08		

Delay and Level of Service													
Approach	EB			WB			NB			SB			
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	
Lane Control Delay (d), s/veh	11.4	13.7		11.9	15.2		27.6			26.4	14.8		
Lane LOS	B	B		B	C		D			D	B		
95% Queue, veh	4.4	6.0		5.9	8.3		4.1			1.6	0.3		
Approach Delay, s/veh	12.6			13.7			27.6			23.9			
Approach LOS	B			B			D			C			
Intersection Delay, s/veh LOS	14.4						B						

HCS7 Roundabouts Report

General Information

Site Information



Analyst	MSH	Intersection	Eagle Canyon/Neighborhood
Agency or Co.	Solaegui Engineers	E/W Street Name	Eagle Canyon Road
Date Performed	8/23/2021	N/S Street Name	Neighborhood Way/Ember Dr
Analysis Year	2050	Analysis Time Period (hrs)	0.25
Time Analyzed	PM Base	Peak Hour Factor	0.90
Project Description	w/Improvements	Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	1
Lane Assignment	LT		TR		LT		TR		LTR				LT		R	
Volume (V), veh/h	0	8	522	8	0	142	996	89	0	9	2	94	0	80	6	8
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v/c), pc/h	0	9	592	9	0	161	1129	101	0	10	2	107	0	91	7	9
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				2				2			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)	4.5436	4.5436		4.5436	4.5436			4.3276		4.6453	4.3276	
Follow-Up Headway (s)	2.5352	2.5352		2.5352	2.5352			2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v _e), pc/h	287	323		654	737			119		98	9	
Entry Volume, veh/h	281	317		641	723			117		96	9	
Circulating Flow (v _c), pc/h	259			21			692			1300		
Exiting Flow (v _w), pc/h	790			1148			112			177		
Capacity (C _{com}), pc/h	1122	1122		1393	1393			789		408	470	
Capacity (C), veh/h	1090	1090		1350	1350			772		400	461	
v/c Ratio (x)	0.26	0.29		0.47	0.54			0.15		0.24	0.02	

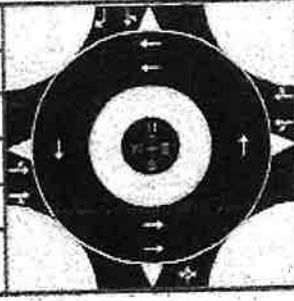
Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh	5.7	6.1		7.4	8.4			6.2		13.0	8.1	
Lane LOS	A	A		A	A			A		B	A	
95% Queue, veh	1.0	1.2		2.6	3.3			0.5		0.9	0.1	
Approach Delay, s/veh	5.9			7.9			6.2			12.6		
Approach LOS	A			A			A			B		
Intersection Delay, s/veh LOS	7.5						A					

HCS7 Roundabouts Report

General Information

Analyst	MSH
Agency or Co.	Solaogui Engineers
Date Performed	8/23/2021
Analysis Year	2050
Time Analyzed	AM Base + Project
Project Description	w/Improvements



Site Information

Intersection	Eagle Canyon/Neighborhood
E/W Street Name	Eagle Canyon Road
N/S Street Name	Neighborhood Way/Ember Dr
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.90
Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	1
Lane Assignment	LT		TR		LT		TR		LTR				LT		R	
Volume (V), veh/h	0	9	1277	26	0	136	1520	78	0	34	7	174	0	99	6	24
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Flow Rate (v _{adj}), pc/h	0	10	1447	29	0	154	1723	88	0	39	8	197	0	112	7	27
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				2				2			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Critical Headway (s)	4.5436	4.5436		4.5436	4.5436		4.3276			4.6453	4.3276	
Follow-Up Headway (s)	2.5352	2.5352		2.5352	2.5352		2.5352			2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Entry Flow (v _e), pc/h	698	788		924	1041		244			119	27	
Entry Volume, veh/h	685	772		905	1021		239			117	26	
Circulating Flow (v _c), pc/h	273			57			1569			1916		
Exiting Flow (v _e), pc/h	1756			1789			106			190		
Capacity (C _{ave}), pc/h	1108	1108		1348	1348		374			232	279	
Capacity (C), veh/h	1076	1076		1307	1307		367			227	273	
v/c Ratio (x)	0.64	0.72		0.69	0.78		0.65			0.51	0.10	

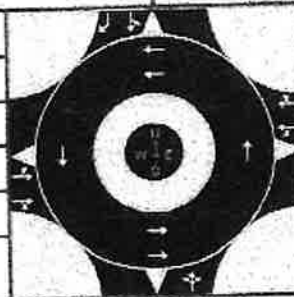
Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Lane Control Delay (d), s/veh	12.2	14.9		12.2	15.7		29.7			34.1	15.1	
Lane LOS	B	B		B	C		D			D	C	
95% Queue, veh	4.8	6.5		6.0	8.6		4.4			2.7	0.3	
Approach Delay, s/veh	13.6			14.0			29.7			30.5		
Approach LOS	B			B			D			D		
Intersection Delay, s/veh LOS	15.5						C					

HCS7 Roundabouts Report

General Information

Site Information



Analyst	MSH	Intersection	Eagle Canyon/Neighborhood
Agency or Co.	Solaegui Engineers	E/W Street Name	Eagle Canyon Road
Date Performed	8/23/2021	N/S Street Name	Neighborhood Way/Ember Dr
Analysis Year	2050	Analysis Time Period (hrs)	0.25
Time Analyzed	PM Base+ Project	Peak Hour Factor	0.90
Project Description	w/Improvements	Jurisdiction	Washoe County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	1
Lane Assignment	LT		TR		LT		TR		LTR				LT		R	
Volume (V), veh/h	0	12	522	8	0	142	996	122	0	9	3	94	0	100	7	11
Percent Heavy Vehicles, %	2	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2
Flow Rate (V _{adj}), pc/h	0	14	592	9	0	161	1129	138	0	10	3	107	0	113	8	12
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				2				2			
Pedestrians Crossing, p/h	10				10				10				10			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Critical Headway (s)	4.5436	4.5436		4.5436	4.5436			4.3276		4.6453	4.3276	
Follow-Up Headway (s)	2.5352	2.5352		2.5352	2.5352			2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Entry Flow (v _e), pc/h	289	326		671	757			120		121	12	
Entry Volume, veh/h	283	320		658	742			118		119	12	
Circulating Flow (v _c), pc/h	282			27			719			1300		
Exiting Flow (v _w), pc/h	812			1151			155			178		
Capacity (C _w), pc/h	1099	1099		1386	1386			771		408	470	
Capacity (C), veh/h	1068	1068		1343	1343			755		400	461	
v/c Ratio (x)	0.27	0.30		0.49	0.55			0.16		0.30	0.03	

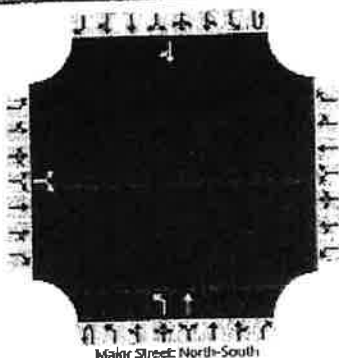
Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane												
Lane Control Delay (d), s/veh	5.9	6.3		7.7	8.7			6.4		14.2	8.1	
Lane LOS	A	A		A	A			A		B	A	
95% Queue, veh	1.1	1.3		2.8	3.5			0.6		1.2	0.1	
Approach Delay, s/veh	6.1			8.2			6.4			13.7		
Approach LOS	A			A			A			B		
Intersection Delay, s/veh LOS	7.9						A					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/Ex. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Driveway
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	AM Existing	Peak Hour Factor	0.90
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	10	1	2	3	4	4	5	6	
Number of Lanes		0	1	0		0	0	0	0								
Configuration			LR							L	T						TR
Volume (veh/h)		0		4						17	22				54	0	
Percent Heavy Vehicles (%)		3		3						3							
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized																	
Median Type Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2									4.1				
Critical Headway (sec)		6.43		6.23									4.13				
Base Follow-Up Headway (sec)		3.5		3.3									2.2				
Follow-Up Headway (sec)		3.53		3.33									2.23				

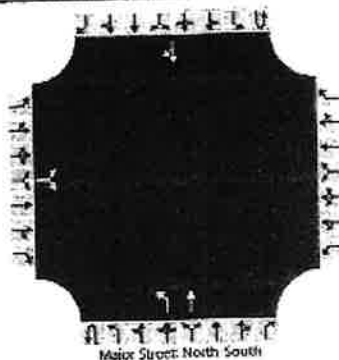
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4										19				
Capacity, c (veh/h)			1003										1537				
v/c Ratio			0.00										0.01				
95% Queue Length, Q ₉₅ (veh)			0.0										0.0				
Control Delay (s/veh)			8.6										7.4				
Level of Service (LOS)			A										A				
Approach Delay (s/veh)		8.6											3.2				
Approach LOS		A															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/Ex. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Driveway
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	PM Existing	Peak Hour Factor	0.90
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		10	11	12		7	8	9	10	1	2	3	4	5	6	
Priority		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Number of Lanes		0	1	0		0	0	0	0							
Configuration			LR							L	T					TR
Volume (veh/h)		0		15						11	43				31	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2								4.1				
Critical Headway (sec)		6.43		6.23								4.13				
Base Follow-Up Headway (sec)		3.5		3.3								2.2				
Follow-Up Headway (sec)		3.53		3.33								2.23				

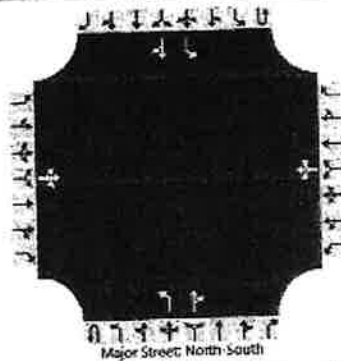
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17									12				
Capacity, c (veh/h)			1036									1571				
v/c Ratio			0.02									0.01				
95% Queue Length, Q ₉₅ (veh)			0.0									0.0				
Control Delay (s/veh)			8.5									7.3				
Level of Service (LOS)			A									A				
Approach Delay (s/veh)		8.5										1.5				
Approach LOS		A														

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/So. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Dwy-South Dwy
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	AM Existing + Project	Peak Hour Factor	0.90
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									1U	1	2	3	4U	4	5	6
Priority		10	11	12		7	8	9	0	1	1	0	0	1	1	0
Number of Lanes		0	1	0		0	1	0								
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		0	0	4		23	0	0		17	28	11		0	66	0
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

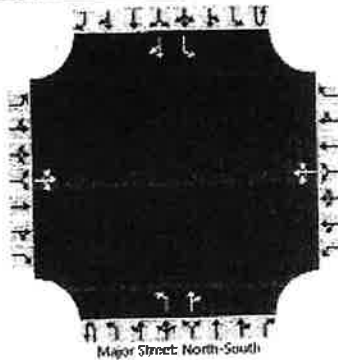
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				26				19				0		
Capacity, c (veh/h)			989				806				1526				1565		
v/c Ratio			0.00				0.03				0.01				0.00		
95% Queue Length, Q ₉₅ (veh)			0.0				0.1				0.0				0.0		
Control Delay (s/veh)			8.7				9.6				7.4				7.3		
Level of Service (LOS)			A				A				A				A		
Approach Delay (s/veh)		8.7				9.6				7.4				7.3			
Approach LOS		A				A				A				A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/So. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Dwy- South Dwy
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	PM Existing + Project	Peak Hour Factor	0.90
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		10	11	12		7	8	9	10	1	2	3	4	5	6		
Priority						0	1	0	0	1	1	0	0	1	1	0	
Number of Lanes		0	1	0		0											
Configuration			LTR				LTR			L		TR		L		TR	
Volume (veh/h)		0	0	15		16	0	0		11	56	25		0	39	0	
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2			
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1					4.1	
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12					4.12	
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2					2.2	
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22					2.22	

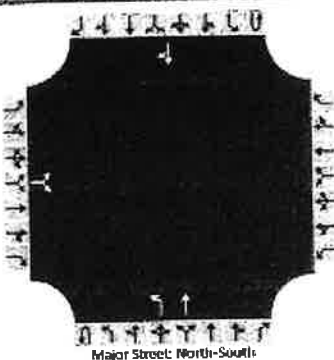
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17			18				12				0			
Capacity, c (veh/h)			1027			797				1565				1505			
v/c Ratio			0.02			0.02				0.01				0.00			
95% Queue Length, Q ₉₅ (veh)			0.0			0.1				0.0				0.0			
Control Delay (s/veh)			8.6			9.6				7.3				7.4			
Level of Service (LOS)			A			A				A				A			
Approach Delay (s/veh)		8.6				9.6				0.9				0.0			
Approach LOS		A				A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/Ex. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Driveway
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	AM Base	Peak Hour Factor	0.90
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									1U				4U			
Priority		10	11	12		7	8	9		1	2	3		4	5	6
Number of Lanes		0	1	0		0	0	0								
Configuration			LR							L	T					TR
Volume (veh/h)		0		4						17	49				87	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

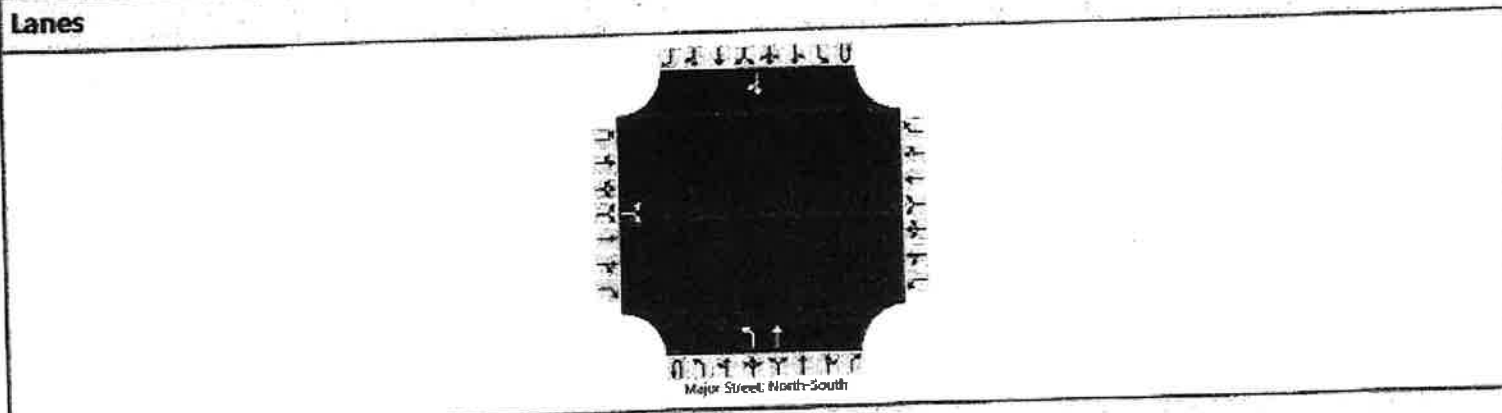
Base Critical Headway (sec)		7.1		6.2												4.1
Critical Headway (sec)		6.43		6.23												4.13
Base Follow-Up Headway (sec)		3.5		3.3												2.2
Follow-Up Headway (sec)		3.53		3.33												2.23

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4													19
Capacity, c (veh/h)			957													1491
v/c Ratio			0.00													0.01
95% Queue Length, Q ₉₅ (veh)			0.0													0.0
Control Delay (s/veh)			8.8													7.4
Level of Service (LOS)			A													A
Approach Delay (s/veh)		8.8											1.9			
Approach LOS		A														

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/Ex. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Driveway
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	PM Base	Peak Hour Factor	0.90
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		10	11	12		7	8	9	10	1	2	3	4	5	6	
Priority						0	0	0	0	1	1	0	0	0	1	0
Number of Lanes		0	1	0		0	0	0								
Configuration			LR							L	T					TR
Volume (veh/h)		0		15						11	78				64	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2							4.1					
Critical Headway (sec)		6.43		6.23							4.13					
Base Follow-Up Headway (sec)		3.5		3.3							2.2					
Follow-Up Headway (sec)		3.53		3.33							2.23					

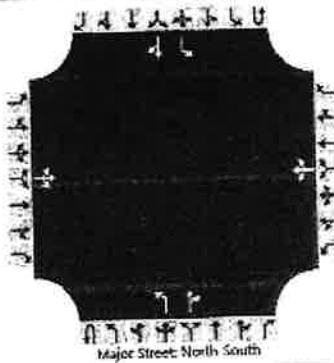
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17								12					
Capacity, c (veh/h)			989								1523					
v/c Ratio			0.02								0.01					
95% Queue Length, Q ₉₅ (veh)			0.1								0.0					
Control Delay (s/veh)			8.7								7.4					
Level of Service (LOS)			A								A					
Approach Delay (s/veh)		8.7								0.9						
Approach LOS		A														

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/So. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Dwy- South Dwy
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	AM Base + Project	Peak Hour Factor	0.90
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		10	1	2	3		4	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	1	0		0	1	1	0
Configuration			LTR				LTR				L		TR			L		TR
Volume (veh/h)		0	0	4		23	0	0		17	55	11			0	99	0	
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2					2			
Proportion Time Blocked																		
Percent Grade (%)		0				0												
Right Turn Channelized																		
Median Type Storage		Undivided																

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1					4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12					4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2					2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22					2.22		

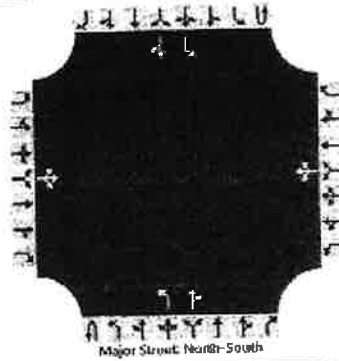
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4			26				19					0		
Capacity, c (veh/h)			943			728				1480					1526		
v/c Ratio			0.00			0.04				0.01					0.00		
95% Queue Length, Q ₉₅ (veh)			0.0			0.1				0.0					0.0		
Control Delay (s/veh)			8.8			10.1				7.5					7.4		
Level of Service (LOS)			A			B				A					A		
Approach Delay (s/veh)		8.8				10.1				1.5				0.0			
Approach LOS		A				B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/So. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	Existing Dwy-South Dwy
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	PM Base + Project	Peak Hour Factor	0.90
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	10	1	2	3	4	5	6		
Number of Lanes		0	1	0		0	1	0	0								
Configuration			LTR				LTR			L		TR		L			TR
Volume (veh/h)		0	0	15		16	0	0		11	91	25		0	72	0	
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2			
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1			
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12			
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2			
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22			

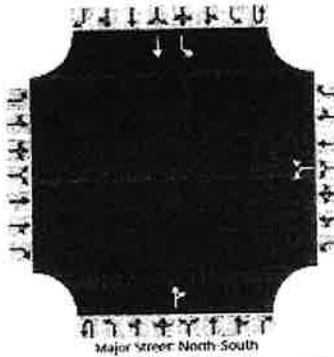
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17			18				12				0			
Capacity, c (veh/h)			980			711				1518				1457			
v/c Ratio			0.02			0.03				0.01				0.0			
95% Queue Length, Q ₉₅ (veh)			0.1			0.1				0.0				0.0			
Control Delay (s/veh)			8.7			10.2				7.4				7.5			
Level of Service (LOS)			A			B				A				A			
Approach Delay (s/veh)		8.7				10.2				0.6				0.0			
Approach LOS		A				B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/No. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	North Driveway
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	AM Existing + Project	Peak Hour Factor	0.90
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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Priority						0	1	0	0	0	1	0	0	1	1	0
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						12		0			22	6		0	54	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

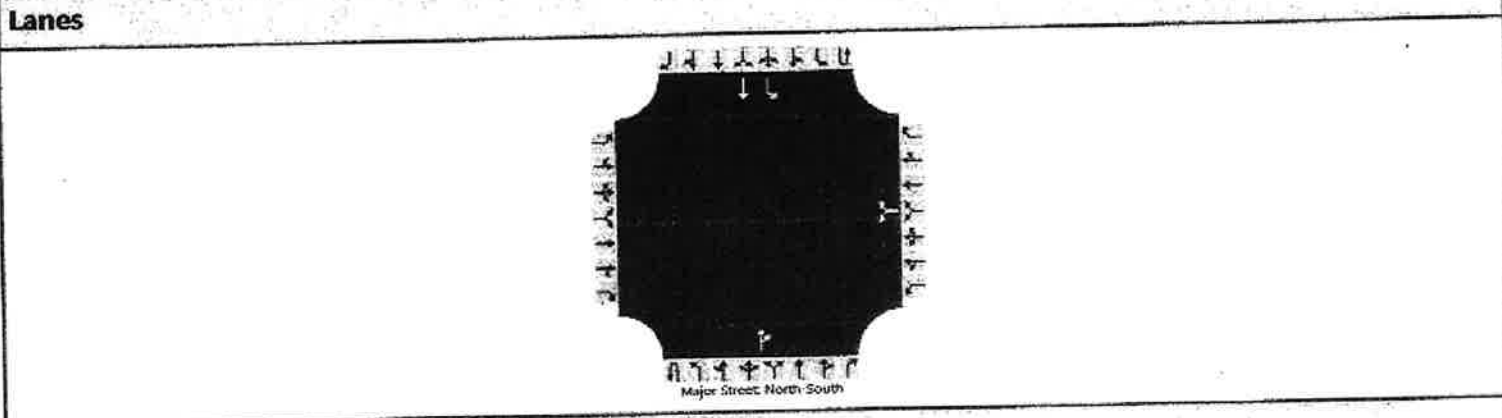
Base Critical Headway (sec)						7.1		6.2								4.1
Critical Headway (sec)						6.42		6.22								4.12
Base Follow Up Headway (sec)						3.5		3.3								2.2
Follow-Up Headway (sec)						3.52		3.32								2.22

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						13										0
Capacity, c (veh/h)						913										1581
v/c Ratio						0.01										0.00
95% Queue Length, Q ₉₅ (veh)						0.0										0.0
Control Delay (s/veh)						9.0										7.3
Level of Service (LOS)						A										A
Approach Delay (s/veh)						9.0									0.0	
Approach LOS						A										

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/No. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	North Driveway
Analysis Year	2021	North/South Street	Neighborhood Way
Time Analyzed	PM Existing + Project	Peak Hour Factor	0.90
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		10	11	12		7	8	9	10	1	2	3	4	5	6	
Priority						0	1	0	0	0	1	0	0	1	1	0
Number of Lanes		0	0	0												
Configuration							LR					TR		L	T	
Volume (veh/h)						8		0			43	13		0	31	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)							0									
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

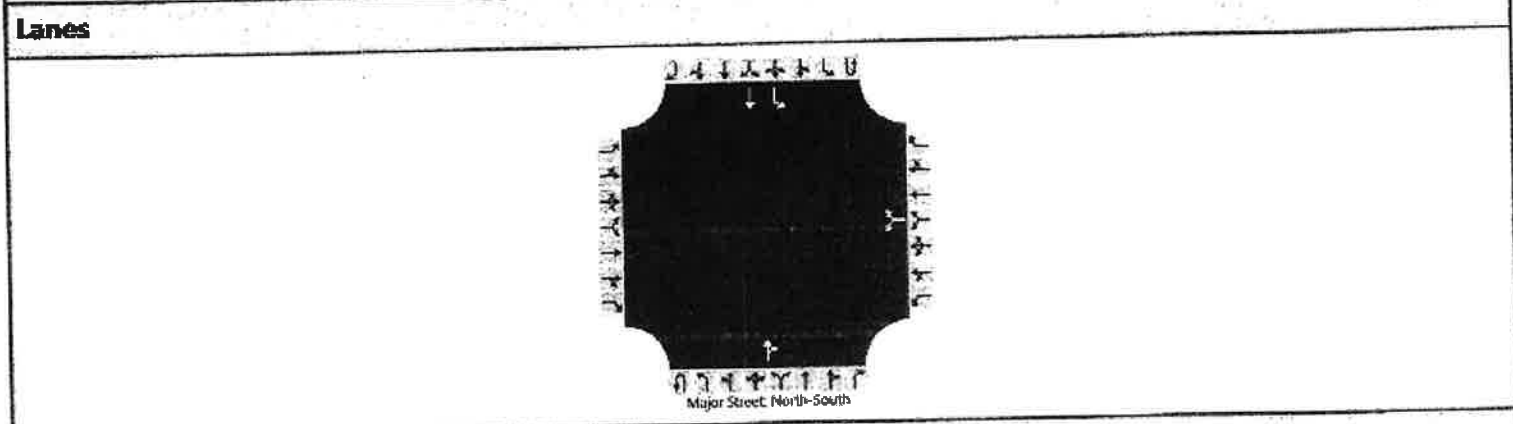
Base Critical Headway (sec)					7.1		6.2							4.1		
Critical Headway (sec)					6.42		6.22							4.12		
Base Follow-Up Headway (sec)					3.5		3.3							2.2		
Follow-Up Headway (sec)					3.52		3.32							2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						9								0		
Capacity, c (veh/h)						911								1541		
v/c Ratio						0.01								0.00		
95% Queue Length, Q ₉₅ (veh)						0.0								0.0		
Control Delay (s/veh)						9.0								7.3		
Level of Service (LOS)						A								A		
Approach Delay (s/veh)						9.0								0.0		
Approach LOS						A										

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/No. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	North Driveway
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	AM Base + Project	Peak Hour Factor	0.90
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	0	0		0	1	0	0	0	1	0	0	1	1	0	
Configuration							LR					TR		L	T		
Volume (veh/h)						12		0			49	6		0	87		
Percent Heavy Vehicles (%)						2		2						2			
Proportion Time Blocked																	
Percent Grade (%)							0										
Right Turn Channelized																	
Median Type Storage	Undivided																

Critical and Follow-up Headways

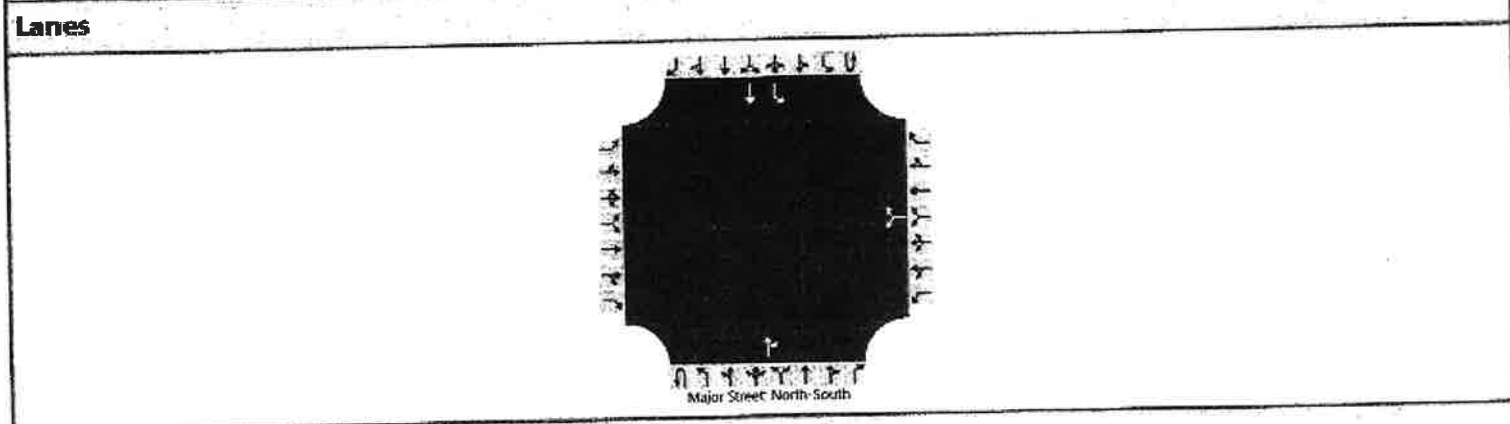
Base Critical Headway (sec)						7.1		6.2								4.1	
Critical Headway (sec)						6.42		6.22								4.12	
Base Follow-Up Headway (sec)						3.5		3.3								2.2	
Follow-Up Headway (sec)						3.52		3.32								2.22	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						13										0	
Capacity, c (veh/h)						837										1542	
v/c Ratio						0.02										0.00	
95% Queue Length, Q ₉₅ (veh)						0.0										0.0	
Control Delay (s/veh)						9.4										7.3	
Level of Service (LOS)						A										A	
Approach Delay (s/veh)						9.4										0.0	
Approach LOS						A											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	MSH	Intersection	Neighborhood/No. Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Washoe County
Date Performed	8/23/2021	East/West Street	North Driveway
Analysis Year	2050	North/South Street	Neighborhood Way
Time Analyzed	PM Base + Project	Peak Hour Factor	0.90
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	10	1	2	3	4	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						8		0			78	13		0	64	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)							0									
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1	
Critical Headway (sec)						6.42		6.22							4.12	
Base Follow-Up Headway (sec)						3.5		3.3							2.2	
Follow-Up Headway (sec)						3.52		3.32							2.22	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						9									0	
Capacity, c (veh/h)						826									1491	
v/c Ratio						0.01									0.00	
95% Queue Length, Q ₉₅ (veh)						0.0									0.0	
Control Delay (s/veh)						9.4									7.4	
Level of Service (LOS)						A									A	
Approach Delay (s/veh)						9.1									0.0	
Approach LOS						A										

SR445 @ EAGLE CANYON DR/LA POSADA DR
01 JAN 17 - 01 JAN 20

COUNTY: WASHOE

Open/Status	Crash Date	Crash Year	Crash Time	Primary Street	Distance	Dir	Secondary Street	Weather	Fatalities	Injured	Property Damage Only	Injury Type	Crash Type	Total Vehicles
											PDO		BIKESWIPE, MEETING	2
PROPERTY DAMAGE ONLY	13-Sep-2018	2019	02:31 PM	LA POSADA DR	48	E	SR445	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	29-Dec-2018	2018	08:30 PM	LA POSADA DR		AT INT	SR445	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	27-Dec-2018	2018	12:37 PM	EAGLE CANYON DR		AT INT	SR445	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	31-Aug-2017	2017	07:01 AM	EAGLE CANYON DR	1	W	SR445	CLEAR			PDO		BIKESWIPE, MEETING	2
PROPERTY DAMAGE ONLY	31-Aug-2017	2017	02:42 PM	EAGLE CANYON DR	1	W	SR445	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	10-Sep-2019	2018	08:45 AM	SR445	100	N	EAGLE CANYON DR	CLEAR				C	REAR-END	2
INJURY ACCIDENT	12-Sep-2017	2017	02:33 PM	SR445	40	N	EAGLE CANYON DR	CLOUDY				C	REAR-END	2
INJURY ACCIDENT	12-Sep-2017	2017	08:34 PM	SR445	20	N	EAGLE CANYON DR	CLEAR				C	REAR-END	2
PROPERTY DAMAGE ONLY	16-Dec-2018	2018	08:11 PM	SR445	10	N	EAGLE CANYON DR	CLOUDY			PDO		BIKESWIPE MEETING	2
INJURY ACCIDENT	17-Feb-2017	2017	11:39 AM	SR445	10	N	EAGLE CANYON DR	CLOUDY SNOW				C	REAR-END	2
INJURY ACCIDENT	10-Mar-2017	2017	03:46 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR				B	REAR-END	2
INJURY ACCIDENT	18-Sep-2017	2017	07:44 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	28-Nov-2017	2017	10:03 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	24-Mar-2018	2018	11:03 PM	SR445		AT INT	EAGLE CANYON DR	CLOUDY			PDO		REAR-TO-REAR	2
PROPERTY DAMAGE ONLY	13-May-2018	2018	08:46 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	13-May-2018	2018	08:46 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	18-Oct-2018	2018	10:40 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR				C	ANGLE	2
INJURY ACCIDENT	23-Feb-2019	2019	07:13 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	31-Oct-2018	2018	07:48 PM	SR445		AT INT	EAGLE CANYON DR	CLEAR				C	REAR-END	2
INJURY ACCIDENT	4-May-2017	2017	05:30 PM	SR445		AT INT	LA POSADA DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	8-Jun-2018	2018	12:18 PM	SR445		AT INT	LA POSADA DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	9-Dec-2018	2018	06:28 PM	SR445		AT INT	LA POSADA DR	CLOUDY			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	20-Mar-2019	2018	02:22 PM	SR445	10	S	EAGLE CANYON DR	CLOUDY				C	REAR-END	2
PROPERTY DAMAGE ONLY	20-Mar-2019	2018	02:22 PM	SR445	10	S	LA POSADA DR	CLOUDY RAIN				C	REAR-END	2
INJURY ACCIDENT	17-Nov-2017	2017	06:51 AM	SR445	11	S	EAGLE CANYON DR	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	28-Nov-2017	2017	06:39 AM	SR445	12	S	EAGLE CANYON DR	CLEAR				C	REAR-END	2
INJURY ACCIDENT	12-Mar-2018	2018	05:54 PM	SR445	15	S	EAGLE CANYON DR	CLEAR				C	REAR-END	2
INJURY ACCIDENT	18-Aug-2018	2018	01:31 PM	SR445	18	S	LA POSADA DR	CLEAR			PDO		REAR-END	2
INJURY ACCIDENT	18-Aug-2018	2018	01:31 PM	SR445	18	S	LA POSADA DR	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	8-Aug-2017	2017	09:44 AM	SR445	20	S	LA POSADA DR	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	16-Jun-2018	2018	08:46 PM	SR445	20	S	LA POSADA DR	CLOUDY			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	16-Dec-2018	2018	03:12 PM	SR445	25	S	LA POSADA DR	CLEAR			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	16-Dec-2018	2018	11:30 AM	SR445	25	S	LA POSADA DR	CLEAR				C	REAR-END	2
PROPERTY DAMAGE ONLY	22-Dec-2018	2018	11:30 AM	SR445	80	S	LA POSADA DR	CLOUDY				C	REAR-END	2
INJURY ACCIDENT	25-Aug-2017	2017	02:59 PM	SR445	100	S	EAGLE CANYON DR	CLEAR			PDO		ANGLE	2
PROPERTY DAMAGE ONLY	6-Jan-2018	2018	02:40 PM	SR445	121	S	EAGLE CANYON DR	CLEAR			PDO		NON-COLLISION	2
PROPERTY DAMAGE ONLY	11-Apr-2018	2018	01:09 PM	SR445	200	S	LA POSADA DR	CLOUDY			PDO		REAR-END	2
PROPERTY DAMAGE ONLY	14-Nov-2017	2017	12:28 PM	SR445		S	EAGLE CANYON DR	CLEAR			PDO		REAR-END	2

Count: 0	Count: 11	Count: 23
Total:	34	

V1 Type	V1 Df	V1 Driver Age	V1 L. and Num	V1 Action	V1 Driver Factors	V1 Driver Distracted	V1 Variable Factors
PICKUP	W	32	2	GOING STRAIGHT	APPARENTLY NORMAL		FAILURE TO KEEP IN PROPER LANE OR RUNNING OFF ROAD
UTILITY	W	43	L1	GOING STRAIGHT	HAD BEEN DRINKING		FOLLOWED TOO CLOSELY
HATCHBACK 4 DOOR	H	53	2	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
CARRY-ALL	E			GOING STRAIGHT	APPARENTLY NORMAL		FOLLOWED TOO CLOSELY
SEDAN 4 DOOR	E			NOT REPORTED	APPARENTLY NORMAL		FAILURE TO KEEP IN PROPER LANE OR RUNNING OFF ROAD; UNSAFE LANE CHANGE
UTILITY	S	21	1	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
PICKUP	S	42	1	GOING STRAIGHT	APPARENTLY NORMAL		OTHER IMPROPER DRIVING
UTILITY	S	60	2	GOING STRAIGHT	APPARENTLY NORMAL		FOLLOWED TOO CLOSELY
	S		1	LEAVING LANE	UNKNOWN		HIT AND RUN
SEDAN 4 DOOR	S	76		GOING STRAIGHT	APPARENTLY NORMAL		
PICKUP	Y	42		GOING STRAIGHT	HAD BEEN DRINKING		HIT AND RUN
VAN	S	28		GOING STRAIGHT	APPARENTLY NORMAL		
SEDAN 4 DOOR	N	51		GOING STRAIGHT	APPARENTLY NORMAL		DISREGARDED TRAFFIC SIGNS, SIGNALS, ROAD MARKINGS
PICKUP	S			GOING STRAIGHT	HAD BEEN DRINKING		UNKNOWN
SEDAN 4 DOOR	N	34	1	GOING STRAIGHT	APPARENTLY NORMAL		DISREGARDED TRAFFIC SIGNS, SIGNALS, ROAD MARKINGS
SEDAN	S	38	2	GOING STRAIGHT	APPARENTLY NORMAL		FAILED TO YIELD RIGHT OF WAY
SEDAN	S	31	2	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
PICKUP	S	33	2	GOING STRAIGHT	HAD BEEN DRINKING		HIT AND RUN
PICKUP	N	38		GOING STRAIGHT	APPARENTLY NORMAL		DRIVING TOO FAST FOR CONDITIONS
CARRY-ALL	W	61	2	TURNING RIGHT	APPARENTLY NORMAL		FAILED TO YIELD RIGHT OF WAY
PICKUP	W	50	L1	TURNING LEFT	OTHER IMPROPER DRIVING		DISREGARDED TRAFFIC SIGNS, SIGNALS, ROAD MARKINGS
CARRY-ALL	S	48	3	GOING STRAIGHT	APPARENTLY NORMAL		OTHER IMPROPER DRIVING
SEDAN 4 DOOR	N	23	1	GOING STRAIGHT	APPARENTLY NORMAL		OTHER IMPROPER DRIVING
SEDAN 4 DOOR	N		2	GOING STRAIGHT			OTHER IMPROPER DRIVING
SEDAN 4 DOOR	N	18	L2	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
SEDAN 4 DOOR	N	49	L2	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
PICKUP	N	23	2	GOING STRAIGHT	FELL ASLEEP, FAINTED, FATIGUED, ETC.		OTHER IMPROPER DRIVING
SEDAN 2 DOOR	N	20	R1	TURNING RIGHT	APPARENTLY NORMAL		OTHER
SEDAN 4 DOOR	N	36	R1	GOING STRAIGHT	APPARENTLY NORMAL		OTHER
HATCHBACK 4 DOOR	N	32	R1	TURNING RIGHT	UNKNOWN		OTHER
VAN	N	31		GOING STRAIGHT	APPARENTLY NORMAL		
PICKUP	N	64	1	CHANGING LANES	APPARENTLY NORMAL		UNSAFE LANE CHANGE
PICKUP	N	54	2	GOING STRAIGHT	APPARENTLY NORMAL		MECHANICAL DEFECTS
PICKUP	S	58	1	GOING STRAIGHT	APPARENTLY NORMAL		

V1 Most Relevant Event	V1 Alt Events	V1 Type	V3 Dir	V2 Driver Age	V2 Lane Num	V2 Action	V2 Driver Factors
MOTOR VEHICLE IN TRANSPORT		SEDAN, 4 DOOR	W	19	1	GOING STRAIGHT	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	HATCHBACK, 4 DOOR	W	59	1	STOPPED	APPARENTLY NORMAL
MOTOR VEHICLE IN TRANSPORT		PICKUP	N	52	R2	GOING STRAIGHT	APPARENTLY NORMAL
		PICKUP	E			GOING STRAIGHT	APPARENTLY NORMAL
	SLOW/STOPPED VEHICLE	PICKUP	E			GOING STRAIGHT	APPARENTLY NORMAL
	RAN OFF ROAD RIGHT	SEDAN, 4 DOOR	E			STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	HARDTOP, 4 DOOR	S	80	1	STOPPED	APPARENTLY NORMAL
		HARDTOP, 4 DOOR	S	89	1	STOPPED	APPARENTLY NORMAL
		HARDTOP, 4 DOOR	S	34	2	STOPPED	APPARENTLY NORMAL
		HARDTOP, 4 DOOR	S	18	1	STOPPED	APPARENTLY NORMAL
		SEDAN, 4 DOOR	S	61		STOPPED	APPARENTLY NORMAL
		PICKUP WITH MOUNTED CAMPER	S	61		STOPPED	APPARENTLY NORMAL
		PICKUP	N	34		STOPPED	APPARENTLY NORMAL
		CARRY-ALL	N	18		TURNING LEFT	APPARENTLY NORMAL
		SEDAN, 4 DOOR	W	80		GOING STRAIGHT	APPARENTLY NORMAL
		SEDAN, 4 DOOR	S			GOING STRAIGHT	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	PICKUP	S	43	L1	TURNING LEFT	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	PICKUP	N	21	L1	TURNING LEFT	APPARENTLY NORMAL
MOTOR VEHICLE IN TRANSPORT		SEDAN	W	42	L2	TURNING LEFT	APPARENTLY NORMAL
MOTOR VEHICLE IN TRANSPORT		UTILITY	S	30	2	STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	SEDAN, 2 DOOR	N	80		STOPPED	APPARENTLY NORMAL
	SLOW/STOPPED VEHICLE	PICKUP	S	32	L2	MAKING U-TURN	APPARENTLY NORMAL
MOTOR VEHICLE IN TRANSPORT		SEDAN, 4 DOOR	W	89	1	GOING STRAIGHT	APPARENTLY NORMAL
MOTOR VEHICLE IN TRANSPORT		PICKUP	S	38	3	GOING STRAIGHT	APPARENTLY NORMAL
	NOT REPORTED	PICKUP	N	21	1	GOING STRAIGHT	APPARENTLY NORMAL
		SEDAN, 4 DOOR	N	33	2	STOPPED	APPARENTLY NORMAL
		PICKUP	N	43	L2	STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	N	46	L2	STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	CARRY-ALL	N	64	2	STOPPED	APPARENTLY NORMAL
	SLOW/STOPPED VEHICLE	PICKUP	N	28	R1	STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	N	33	R1	GOING STRAIGHT	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	UTILITY	N	57	R1	TURNING RIGHT	UNKNOWN
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	UTILITY	N	73		STOPPED	APPARENTLY NORMAL
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	CARRY-ALL	N	39	1	GOING STRAIGHT	APPARENTLY NORMAL
		PICKUP	N	56	L1	STOPPED	APPARENTLY NORMAL
EQUIPMENT FAILURE (BLOWN TIRE, BRAKE FAILURE, ETC.)	EQUIPMENT FAILURE (BLOWN TIRE, BRAKE FAILURE, ETC.)	PICKUP	N	63	1	STOPPED	APPARENTLY NORMAL
	SLOW/STOPPED VEHICLE	PICKUP	N	63	1	STOPPED	APPARENTLY NORMAL

V2 Driver Distracted	V2 Vehicle Factors	V2 Most Harmful Event	V2 All Events
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
	FOLLOWED TOO CLOSELY	SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE
	OBJECT AVOIDANCE		
	UNKNOWN	MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
	UNKNOWN	MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
			NOT REPORTED
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		MOTOR VEHICLE IN TRANSPORT	
		SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE
		MOTOR VEHICLE IN TRANSPORT	
		STRUCK BY FALLING, SHIFTING CARGO OR ANYTHING SET IN MOTION	STRUCK BY FALLING, SHIFTING CARGO OR ANYTHING SET IN MOTION

First Nonfatal Event	Nonfatal Factors	Factors Roadway	Lighting	HWY Factors	Agency	Accident Ref. Num
RAN OFF ROAD RIGHT		DRY	DAYLIGHT	NONE	WASO	3184160
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - SPOT LIGHTING	NONE	WASO	3117473
MOTOR VEHICLE IN TRANSPORT		DRY	DAYLIGHT	NONE	WASO	3033468
					WASO	2401478
					WASO	2401477
SLOW/STOPPED VEHICLE		ICE	DAYLIGHT	NONE	NHP	3151971
		DRY	DAYLIGHT	NONE	NHP	2397572
		DRY	DARK - CONTINUOUS LIGHTING	NONE	NHP	2397028
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	NONE	NHP	3114243
		DRY	DAYLIGHT	NONE	NHP	2385858
		DRY	DAYLIGHT		WASO	2389931
		DRY	DARK - SPOT LIGHTING	NONE	NHP	2397947
		DRY	DARK - SPOT LIGHTING	NONE	NHP	2416223
					WASO	3079019
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - SPOT LIGHTING	NONE	NHP	3082101
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - SPOT LIGHTING	NONE	NHP	3105301
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	NONE	NHP	3072992
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	NONE	NHP	3028774
		DRY	DAYLIGHT	NONE	NHP	2389958
MOTOR VEHICLE IN TRANSPORT		DRY	DAYLIGHT	NONE	NHP	3086243
MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	NONE	NHP	3028338
		DRY	DAYLIGHT	NONE	NHP	2621908
		DRY	DAYLIGHT	NONE	NHP	2415510
		DRY	DAYLIGHT	NONE	NHP	2415170
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	3118740
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	3088611
		DRY	DAYLIGHT	NONE	NHP	2395553
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	3086533
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	3118110
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	3042843
SLOW/STOPPED VEHICLE		DRY	DAYLIGHT	NONE	NHP	2396580
		DRY	DAYLIGHT	NONE	NHP	2418803
		DRY	DAYLIGHT	NONE	NHP	3077838
EQUIPMENT FAILURE (BLOWN TIRE, BRAKE FAILURE, ETC.)		DRY	DAYLIGHT	NONE	NHP	2418310

EAGLE CANYON DR @ EMBER DR/NEIGHBORHOOD WAY
 01 JAN 17 - 01 JAN 20

COUNTY: WASHOE									
Crash Severity	Crash Date	Crash Year	Crash Time	Primary Street	Distance	Dir	Secondary Street	Weather	Fatalties
PROPERTY DAMAGE ONLY	18-Nov-2018	2018	02:10 PM	EAGLE CANYON DR		AT INT	EMBER DR	CLEAR	
PROPERTY DAMAGE ONLY	14-Sep-2019	2019	10:30 AM	EAGLE CANYON DR		AT INT	EMBER DR	CLEAR	
PROPERTY DAMAGE ONLY	22-Feb-2017	2017	09:49 AM	EAGLE CANYON DR		AT INT	NEIGHBORHOOD WAY	OTHER	
PROPERTY DAMAGE ONLY	2-Sep-2018	2018	02:28 AM	EAGLE CANYON DR		AT INT	NEIGHBORHOOD WAY	CLEAR	
PROPERTY DAMAGE ONLY	5-Sep-2018	2018	02:23 PM	EAGLE CANYON DR	100	W	NEIGHBORHOOD WAY	CLEAR	
									Sum: 0
									Count: 0
									Total:

Injured	Property Damage Only	Injury Type	Crash Type	Total Vehicles	V1 Type	V1 Dir	V1 Driver Age	V1 Lane Num	V1 Action	V1 Driver Factors
	PDO		ANGLE	2	BUS	W	50	1	GOING STRAIGHT	APPARENTLY NORMAL
	PDO		NON-COLLISION	1	CARRY-ALL	E		1	NEGOTIATING A CURVE	UNKNOWN
	PDO		UNKNOWN	5	PICKUP	W			GOING STRAIGHT	OTHER IMPROPER DRIVING
	PDO		NON-COLLISION	1	MOTORCYCLE	W	51	1	NEGOTIATING A CURVE	HAD BEEN DRINKING
	PDO		REAR-END	2	SEDAN, 4 DOOR	W		1	GOING STRAIGHT	UNKNOWN
Sort: P	Count: 5									
	Count: 0									
	5									

V1 Driver Distracted	V1 Vehicle Factors	V1 Most Harmful Event	V1 All Events	V2 Type	V2 Dir
	FOLLOWED TOO CLOSELY	MOTOR VEHICLE IN TRANSPORT		CARRY-ALL	W
	FAILED TO YIELD RIGHT OF WAY	PEDAL CYCLE	PEDAL CYCLE		
	FOLLOWED TOO CLOSELY		OTHER MOVABLE OBJECT	UTILITY	W
	EXCEEDED AUTHORIZED SPEED LIMIT	OVERTURN/ROLLOVER	OVERTURN/ROLLOVER; OTHER NON-COLLISION		
	UNKNOWN	SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	SEDAN, 4 DOOR	W

V2 Driver Age	V2 Lane Num	V2 Action	V2 Driver Factors	V2 Driver Distracted	V2 Vehicle Factors	V2 Most Harmful Event
34	1	GOING STRAIGHT	APPARENTLY NORMAL			MOTOR VEHICLE IN TRANSPORT
		GOING STRAIGHT	OTHER IMPROPER DRIVING		FOLLOWED TOO CLOSELY	
	1	GOING STRAIGHT	UNKNOWN		UNKNOWN	SLOW/STOPPED VEHICLE

V2 All Events	First Harmful Event	Nonmotorist Factors	Factors Roadway	Lighting	RWY Factors	Agency	Accident Rec Num
	HORSE		DRY	DAYLIGHT	NONE	WASD	3184121
	PEDAL CYCLE		DRY	DAYLIGHT	NONE	WASO	3184182
OTHER MOVABLE OBJECT						WASO	2368968
	MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	NONE	WASO	3099230
SLOW/STOPPED VEHICLE						WASO	3099234

PRELIMINARY DRAINAGE REPORT
FOR
CONTINUUM OF CARE COTTAGE COMMUNITY

Prepared for:

Silverado Homes
5525 Kietzke Lane, Suite 102
Reno, NV 89511

January 2022

Prepared by:

Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068
Todd Gammill, P.E. - Associate



01/09/2022



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BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard Tel: 775.823.4068
Reno, NV 89502 Fax: 775.823.4066

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4	Conclusions.....	3
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APPENDIX

VICINITY MAP

FEMA FIRM Flood Zone Exhibit

PRELIMINARY BASIN FLOW CALCULATIONS (5-YEAR)

PRELIMINARY BASIN FLOW CALCULATIONS (100-YEAR)

PRELIMINARY STORM DRAIN SYSTEM LAYOUT AND HYDROLOGIC BASIN MAP

NOAA ATLAS 14 PRECIPITATION DATA

DETENTION LETTER



1 INTRODUCTION

This report shall serve as the preliminary drainage report for the Continuum of Care Cottage Community, which will consist of 136 detached units and a clubhouse. The purpose of this report is to address the drainage issues that result from development of the proposed project site in accordance with Truckee Meadows Regional Drainage Manual (TMRDM) and Washoe County development standards. As this report is preliminary in nature, a more detailed study will need to be conducted and a final technical drainage report will need to be submitted with the final improvement plans for the project.

1.1 PROJECT LOCATION/HISTORIC DRAINAGE

The proposed project site (APN 532-032-05 and a portion of APN 532-032-16) is approximately 21.44± acres in size and is located within a portion of Section 34 of T21N, R20E, MDM, Washoe County, Nevada.

The project site is bounded by Eagle Canyon Ranch Unit 4 to the north, existing Neighborhood Way to the west, a drainage channel and undeveloped land to the south, and Washoe County's North Spanish Springs Drainage Facility (NSSDF) outlet regional detention outfall channel. A Vicinity Map is included in the **Appendix** of this report for reference.

The parcel is currently undeveloped land and drains south and east to the existing channels south and east of the site. The east channel flows south toward Eagle Canyon Drive and ultimately to the Sparks Regional Detention Basin, the North Truckee Drain and to the Truckee River.

There is also an existing concrete lined channel west of Neighborhood Way. A storm drain system picks up flows from Neighborhood Way west of the site and discharges to the existing ditch which runs south along Neighborhood Way to a box culvert south of the site where it is then discharged to a drainage channel south of the project site. This channel flows east and discharges to the existing channel east of the site. See the basin map included in the **Appendix** of this report.

The project site is located in FEMA Zone X, areas determined to be outside the 500-year annual chance floodplain. The site can be located on FEMA FIRM Panel 32031C2865G. An exhibit identifying the FEMA zone boundaries and the project site is included in the **Appendix**.



1.2 BACKGROUND/PREVIOUS STUDIES

A master hydrology plan has been completed for the Eagle Canyon Ranch area entitled *Hydrology Master Plan for Eagle Canyon Ranch Subdivision* by DEW Hydrology (Master Plan). The project site has been analyzed as part of the Master Plan. As the site is part of a larger piece of property that was split into parcels and given to the County for the NSSDF detention basin and channel system, no detention is required for development of this property per the letter of understanding included within the **Appendix**.

1.3 REGULATORY PERSPECTIVE

The Project site is located within Washoe County's jurisdiction. The onsite pipes and drain inlet drainage facilities will be operated and maintained privately through easements granted over the private roadways but will discharge to Washoe County drainage facility east of the project site.

2 PRELIMINARY DESIGN

The proposed drainage system for the project site consists of sheet flow from the buildings and streets into a system of gutters with which storm water is conveyed into drop inlets and underground storm drainpipes. Onsite flows will be directed to the existing channel east of the site or to the existing concrete v-ditch along Neighborhood Way (small portions of some of the western access roads) which drains to existing storm drain that outlets to the concrete lined channel west of Neighborhood Way and flows south.

3 HYDROLOGIC ANALYSIS

Preliminary flows were estimated for the 5-year and 100-year design events using the rational method per the TMRDM. NOAA Atlas 14 was used for rainfall intensities. The basin calculations are included in the Appendix. There are three outfalls that will drain onsite flows into the existing channel to the east and small roadways that will drain to the existing catch basins on to the v-ditch along Neighborhood Way. Q5's ranged from 0.3 cfs to 5.2 cfs, and Q100's ranged from 0.9 cfs to 16.3 cfs. These flow rates are manageable in private storm drainpipes within the private streets. Total post development flows have been estimated to be 13.2 cfs for the Q5 and 42.9 cfs for the Q100. These are cumulative rational method summaries and are therefore conservative. It's likely the flows will be slightly smaller when routed through the drainage system in greater detail with a final design analysis. As stated previously, detention is not proposed as it is not per the previously discussed waiver.



4 CONCLUSIONS

The drainage facilities for the Continuum of Care Cottage Community will be designed to capture and perpetuate the design storm event flows to existing channels, ditches, and storm drain. The conveyance of flows is in conformance with the Washoe County Development Code and the TMRDM. There will be no negative impacts to any adjacent or downstream properties as a result of development during the 5-year and 100-year storms due to the implementation of the proposed storm water management system, and the waiver of detention requirements as previously stated. It should this report is preliminary in nature and a more detailed study will need to be conducted and a final technical drainage report will need to be submitted with the final improvement plans for the project.

5 REFERENCES

Hydrology Master Plan for Eagle Canyon Ranch Subdivision, DEW Hydrology, February 2016.

Truckee Meadows Regional Drainage Manual, April 30, 2009.

Washoe County Development Code, Latest Version.



APPENDIX

VICINITY MAP

FEMA FIRM Flood Zone Exhibit

PRELIMINARY BASIN FLOW CALCULATIONS (5-YEAR)

PRELIMINARY BASIN FLOW CALCULATIONS (100-YEAR)

PRELIMINARY STORM DRAIN SYSTEM LAYOUT AND HYDROLOGIC BASIN MAP

NOAA ATLAS 14 PRECIPITATION DATA

DETENTION LETTER

(VICINITY MAP)

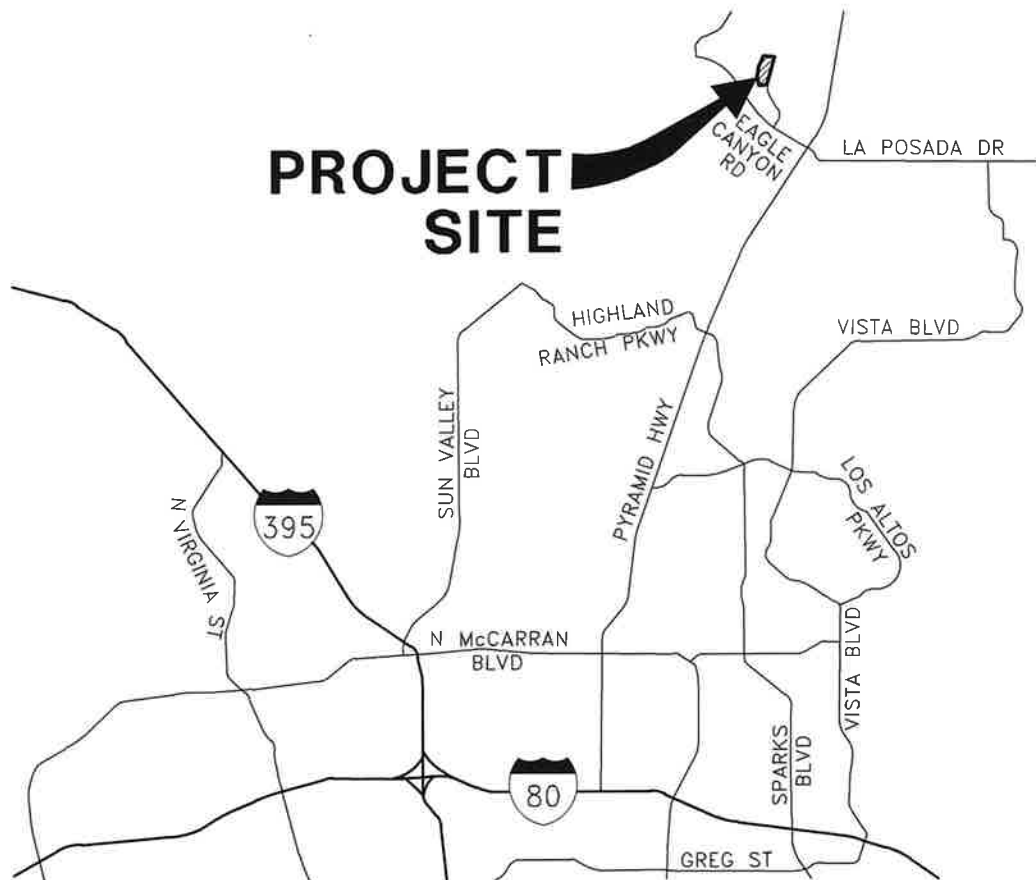
CONTINUUM OF CARE COTTAGE COMMUNITY

SILVERADO HOMES

WASHOE COUNTY

NEVADA

JANUARY 2022



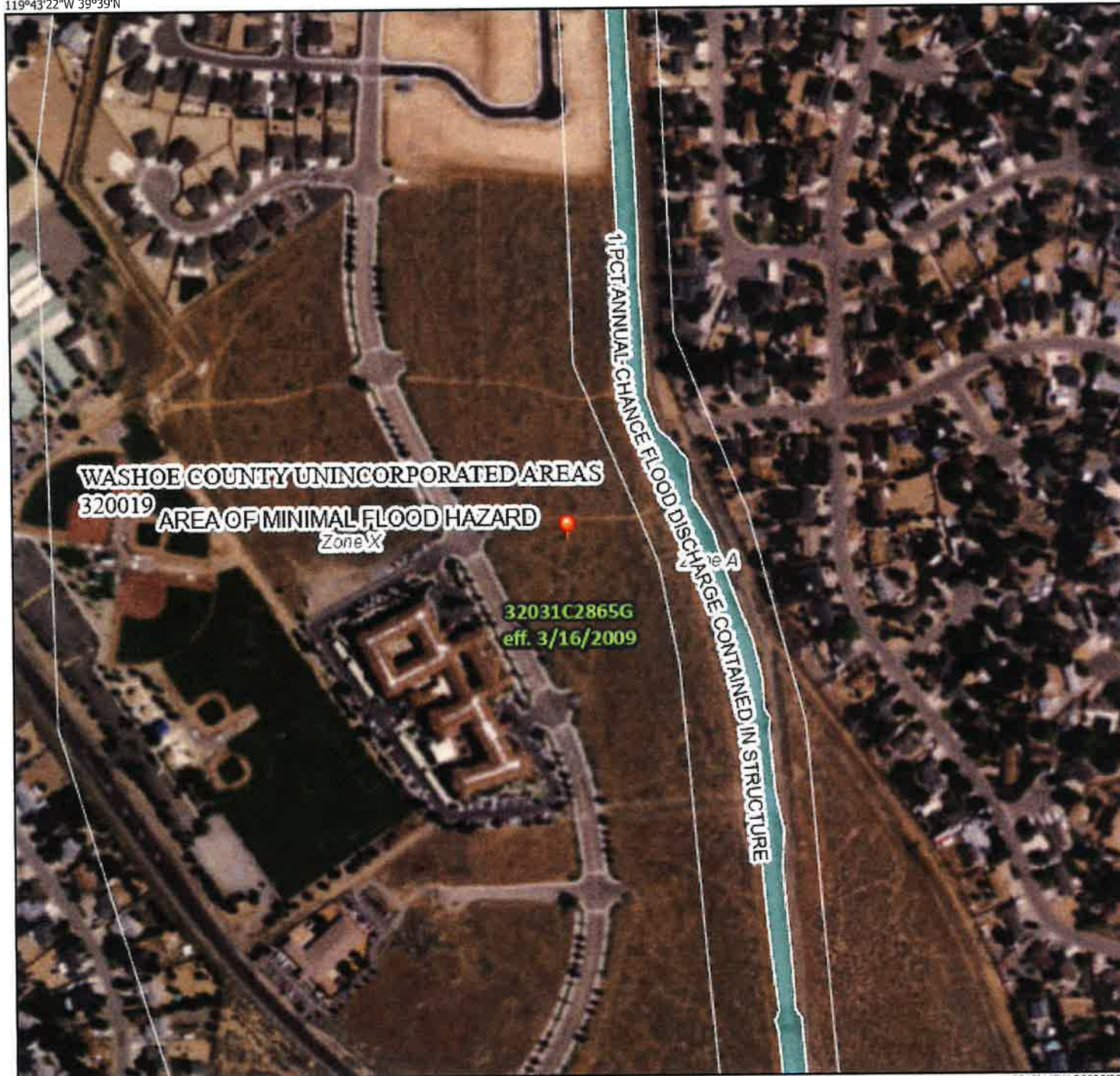
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Reno, NV 89502 Fax 775.823.4068

National Flood Hazard Layer FIRMette



119°43'22"W 39°39'N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|------------------------------------|--|---|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| | | Area of Undetermined Flood Hazard <i>Zone X</i> |
| GENERAL STRUCTURES | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance |
| | | 17.5 Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| | | Hydrographic Feature |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |

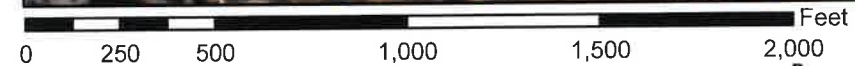


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/5/2022 at 7:42 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



1:6,000

119°42'44"W 39°38'32"N

Count	ID	Drainage Basin	Drainage Area (AC)	Weighted Average C-Factor 5-Year	TIME OF CONCENTRATION																	5-YEAR STORM EVENT				
					Initial Flow Time, T ₁			Travel Time, T _t														Total (T ₁ +T _t)	Urbanized Basins Check	Final	NOAA ATLAS 14 Rainfall Intensity	Rational Flow
					Overland Flow			Channelized Flow				Gutter Flow						Piped Flow								
					L ₁ (ft)	S (ft/ft)	T ₁ (min)	L ₂ (ft)	S (ft/ft)	V (ft/s)	T ₁₁ (min)	L ₃ (ft)	S (ft/ft)	V (ft/s)	T ₁₂ (min)	L ₄ (ft)	n	Pipe ø	S (ft/ft)	V (ft/s)	T ₁₃ (min)	T _c (min)	T _c * (min)	T _c (min)	I _{5-year} (in/hour)	Q _{5-year} (cfs)
1	1.001	A-1	2.40	0.60	140	0.0100	10.6					550	0.0050	1.4	6.4							17.0	13.8	13.8	1.14	1.6
2	1.002	A-2	8.30	0.60	100	0.0100	9.0					1120	0.0050	1.4	13.0							22.0	16.8	16.8	1.05	5.2
3	1.003	A-3	0.30	0.60	70	0.0100	7.5					110	0.0050	1.4	1.3							8.8	11.0	8.8	1.41	0.3
4	1.004	A-4	0.30	0.60	20	0.0100	4.0					180	0.0050	1.4	2.1							6.1	11.1	6.1	1.64	0.3
5	1.005	A-5	1.90	0.60	90	0.0100	8.5					600	0.0050	1.4	7.0							15.5	13.8	13.8	1.14	1.3
6	1.006	A-6	3.10	0.60	90	0.0100	8.5					670	0.0050	1.4	7.8							16.3	14.2	14.2	1.12	2.1
7	1.007	A-7	0.50	0.60	90	0.0100	8.5					150	0.0050	1.4	1.7							10.3	11.3	10.3	1.30	0.4
8	1.008	A-8	2.80	0.60	70	0.0100	7.5					475	0.0050	1.4	5.5							13.0	13.0	13.0	1.18	2.0

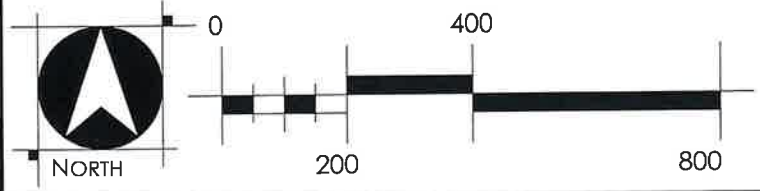
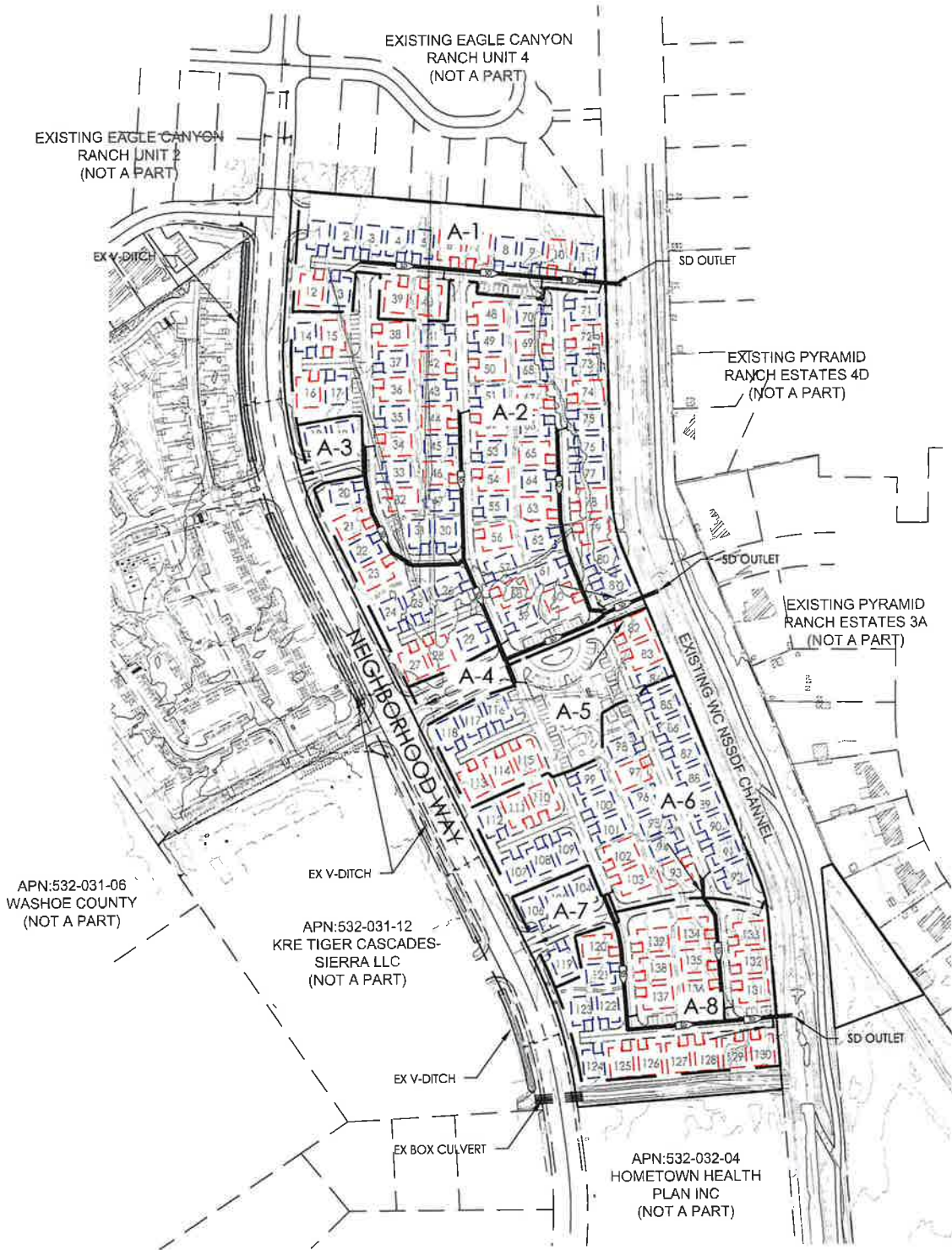


Drainage Basin	Drainage Area (AC)	Weighted Average C-Factor _{100-Year}	TIME OF CONCENTRATION																100-YEAR STORM EVENT				
			Initial Flow Time, T _i			Travel Time, T _t													Total (T _i +T _t)	Urbanized Basins Check	Final	NOAA ATLAS 14 Rainfall Intensity	Rational Flow
			Overland Flow			Channelized Flow				Gutter Flow				Piped Flow									
			L _i (ft)	S (ft/ft)	T _i (min)	L _c (ft)	S (ft/ft)	V(ft/s)	T ₁₁ (min)	L _g (ft)	S (ft/ft)	V (ft/s)	T ₁₂ (min)	L _p (ft)	n	V (ft/s)	T ₁₃ (min)	T _c (min)	T _c *(min)	T _c (min)	I _{100-year} (in/hour)	Q _{100-year} (cfs)	
A-1	2.40	0.78	140	0.0100	6.8					550	0.0050	1.4	6.4					13.2	13.8	13.2	2.82	5.3	
A-2	8.30	0.78	100	0.0100	5.8					1120	0.0050	1.4	13.0					18.7	16.8	16.8	2.52	16.3	
A-3	0.30	0.78	70	0.0100	4.8					110	0.0050	1.4	1.3					6.1	11.0	6.1	3.94	0.9	
A-4	0.30	0.78	20	0.0100	2.6					180	0.0050	1.4	2.1					5.0	11.1	5.0	4.16	1.0	
A-5	1.90	0.78	90	0.0100	5.5					600	0.0050	1.4	7.0					12.4	13.8	12.4	2.90	4.3	
A-6	3.10	0.78	90	0.0100	5.5					670	0.0050	1.4	7.8					13.2	14.2	13.2	2.81	6.8	
A-7	0.50	0.78	90	0.0100	5.5					150	0.0050	1.4	1.7					7.2	11.3	7.2	3.72	1.5	
A-8	2.80	0.78	70	0.0100	4.8					475	0.0050	1.4	5.5					10.3	13.0	10.3	3.13	6.8	

PRELIMINARY STORM DRAIN SYSTEM LAYOUT AND HYDROLOGIC BASIN MAP

CONTINUUM OF CARE COTTAGE COMMUNITY

WASHOE COUNTY, NEVADA
JANUARY 2022



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\\woodrogers.local\ProductionData\Jobs-Reno\Jobs-Spanish_Springs_Business_Cir\Silverado_Continuum Of Care_SUP\Planning\Studies\Drainage\Current_TM\EX_BASIN_MAP_SCE_TM.dwg 1/6/2022 3:22 PM Todd Gammill



NOAA Atlas 14, Volume 1, Version 5
Location name: Sparks, Nevada, USA*
Latitude: 39.6469°, Longitude: -119.7199°
Elevation: 4506.23 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaliuk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

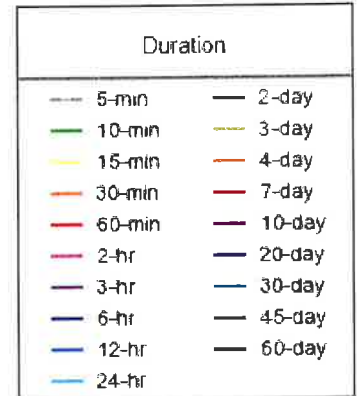
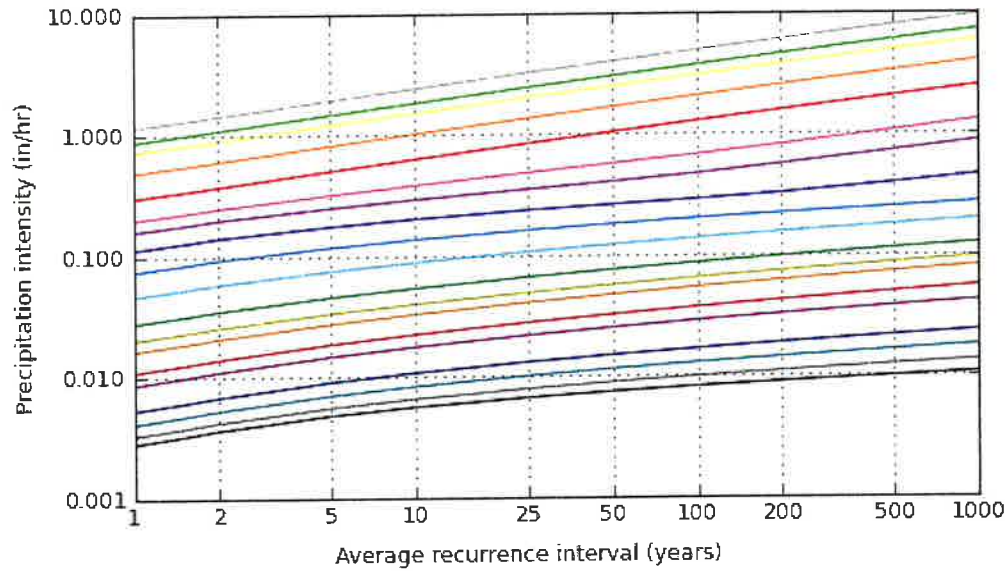
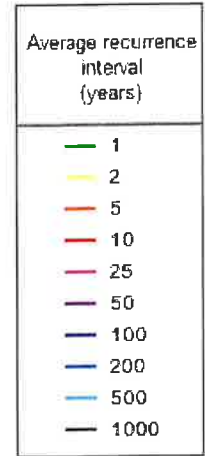
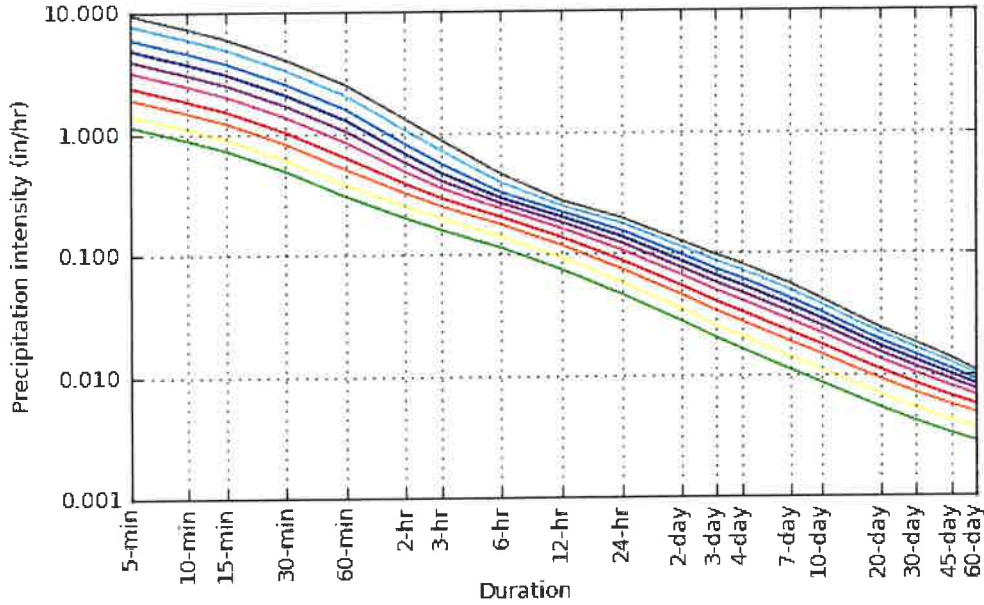
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.15 (0.960-1.32)	1.43 (1.20-1.68)	1.92 (1.62-2.28)	2.40 (2.02-2.87)	3.20 (2.64-3.88)	3.96 (3.17-4.86)	4.87 (3.78-6.07)	5.99 (4.46-7.62)	7.80 (5.51-10.3)	9.47 (6.41-12.8)
10-min	0.876 (0.726-1.01)	1.09 (0.906-1.27)	1.46 (1.24-1.73)	1.82 (1.54-2.18)	2.44 (2.00-2.95)	3.01 (2.41-3.70)	3.71 (2.87-4.62)	4.55 (3.40-5.80)	5.93 (4.19-7.82)	7.21 (4.88-9.73)
15-min	0.724 (0.604-0.836)	0.900 (0.752-1.06)	1.21 (1.02-1.43)	1.51 (1.27-1.80)	2.01 (1.66-2.44)	2.49 (1.99-3.06)	3.06 (2.38-3.82)	3.76 (2.81-4.79)	4.90 (3.46-6.46)	5.96 (4.03-8.04)
30-min	0.488 (0.406-0.562)	0.606 (0.508-0.710)	0.816 (0.688-0.966)	1.02 (0.856-1.21)	1.36 (1.12-1.64)	1.68 (1.34-2.06)	2.06 (1.60-2.57)	2.53 (1.89-3.23)	3.30 (2.33-4.35)	4.01 (2.71-5.41)
60-min	0.302 (0.252-0.348)	0.375 (0.314-0.439)	0.505 (0.426-0.597)	0.629 (0.529-0.750)	0.839 (0.691-1.02)	1.04 (0.830-1.27)	1.28 (0.990-1.59)	1.57 (1.17-2.00)	2.04 (1.44-2.69)	2.48 (1.68-3.35)
2-hr	0.200 (0.176-0.231)	0.248 (0.219-0.288)	0.320 (0.280-0.372)	0.383 (0.330-0.444)	0.482 (0.404-0.562)	0.570 (0.467-0.674)	0.676 (0.539-0.808)	0.813 (0.628-1.01)	1.06 (0.784-1.36)	1.30 (0.922-1.69)
3-hr	0.160 (0.142-0.182)	0.198 (0.178-0.227)	0.250 (0.222-0.285)	0.292 (0.257-0.334)	0.352 (0.305-0.404)	0.405 (0.345-0.471)	0.470 (0.392-0.553)	0.561 (0.457-0.678)	0.720 (0.569-0.915)	0.873 (0.670-1.14)
6-hr	0.113 (0.101-0.128)	0.141 (0.126-0.160)	0.176 (0.156-0.199)	0.202 (0.179-0.229)	0.236 (0.207-0.270)	0.262 (0.226-0.301)	0.289 (0.246-0.335)	0.323 (0.270-0.380)	0.390 (0.319-0.465)	0.456 (0.368-0.576)
12-hr	0.074 (0.066-0.083)	0.093 (0.083-0.105)	0.118 (0.105-0.132)	0.137 (0.121-0.154)	0.162 (0.142-0.184)	0.181 (0.157-0.207)	0.201 (0.172-0.232)	0.221 (0.185-0.258)	0.248 (0.203-0.296)	0.271 (0.217-0.329)
24-hr	0.046 (0.041-0.052)	0.058 (0.052-0.066)	0.075 (0.067-0.084)	0.088 (0.079-0.099)	0.107 (0.095-0.121)	0.122 (0.107-0.138)	0.138 (0.119-0.157)	0.155 (0.132-0.177)	0.178 (0.149-0.206)	0.196 (0.161-0.230)
2-day	0.028 (0.025-0.031)	0.035 (0.031-0.040)	0.046 (0.040-0.052)	0.054 (0.048-0.061)	0.066 (0.057-0.075)	0.076 (0.065-0.087)	0.086 (0.073-0.100)	0.097 (0.082-0.113)	0.112 (0.092-0.133)	0.125 (0.101-0.150)
3-day	0.020 (0.018-0.023)	0.026 (0.023-0.029)	0.033 (0.030-0.038)	0.040 (0.035-0.045)	0.049 (0.043-0.056)	0.057 (0.049-0.065)	0.065 (0.055-0.075)	0.073 (0.062-0.086)	0.086 (0.070-0.102)	0.096 (0.077-0.115)
4-day	0.016 (0.014-0.019)	0.021 (0.018-0.024)	0.027 (0.024-0.031)	0.033 (0.029-0.037)	0.041 (0.036-0.047)	0.047 (0.041-0.054)	0.054 (0.046-0.063)	0.062 (0.052-0.072)	0.072 (0.059-0.086)	0.081 (0.065-0.097)
7-day	0.011 (0.010-0.013)	0.014 (0.012-0.016)	0.019 (0.016-0.021)	0.022 (0.019-0.026)	0.028 (0.024-0.032)	0.032 (0.027-0.038)	0.037 (0.031-0.043)	0.042 (0.035-0.050)	0.049 (0.040-0.059)	0.055 (0.044-0.067)
10-day	0.009 (0.008-0.010)	0.011 (0.010-0.013)	0.015 (0.013-0.017)	0.018 (0.015-0.020)	0.022 (0.019-0.025)	0.025 (0.021-0.029)	0.029 (0.024-0.034)	0.032 (0.027-0.038)	0.038 (0.031-0.045)	0.042 (0.034-0.051)
20-day	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.011 (0.009-0.012)	0.013 (0.011-0.015)	0.015 (0.013-0.017)	0.017 (0.014-0.020)	0.019 (0.016-0.022)	0.022 (0.018-0.026)	0.024 (0.019-0.028)
30-day	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.010)	0.010 (0.009-0.012)	0.011 (0.010-0.013)	0.013 (0.011-0.015)	0.014 (0.012-0.017)	0.016 (0.014-0.019)	0.018 (0.015-0.021)
45-day	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.006-0.007)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.009-0.011)	0.011 (0.009-0.013)	0.012 (0.010-0.014)	0.014 (0.011-0.016)
60-day	0.003 (0.002-0.003)	0.004 (0.003-0.004)	0.005 (0.004-0.005)	0.006 (0.005-0.006)	0.007 (0.006-0.008)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.008-0.012)	0.011 (0.009-0.012)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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PF graphical

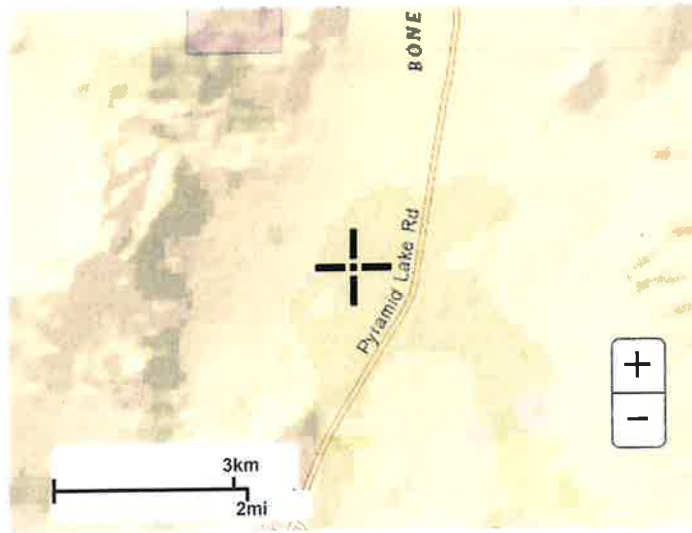
PDS-based intensity-duration-frequency (IDF) curves
Latitude: 39.6469°, Longitude: -119.7199°



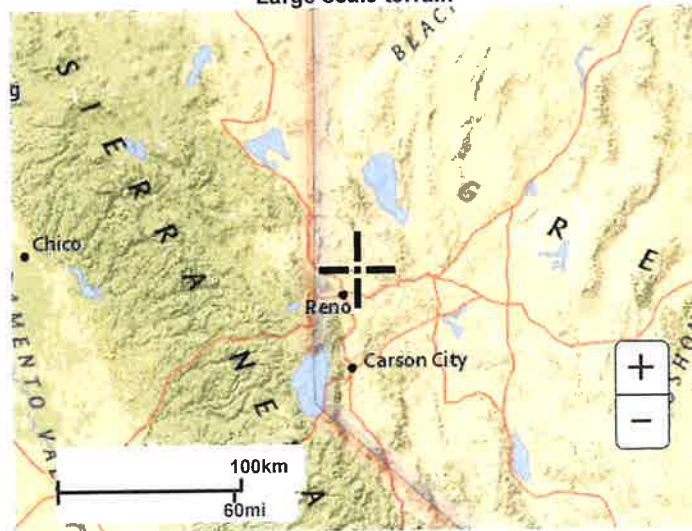
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Maps & aerials

Small scale terrain



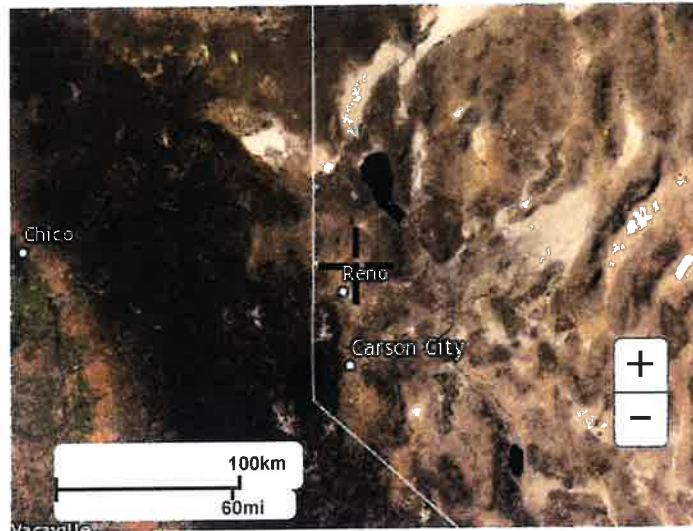
Large scale terrain



Large scale map



Large scale aerial



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[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

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HAWCO

PROPERTIES RECEIVED

PMB 444
9732 State Route 445
Sparks, NV 89435
Ph (775) 425-2900
Ex (775) 425-1631

NOV 07 2001
OFFICE OF
WASHOE COUNTY ENGINEER

November 6, 2001

David Roundtree, Director
Washoe County Public Works Dept.
P.O. Box 11130
Reno, Nevada 89520

via Facsimile

Re: TM01-011 - Eagle Canyon III Flood Control

Dear Dave:

This letter confirms our understanding regarding construction and contribution by the developer of flood control facilities to divert storm flows from Stormy Canyon and other west drainages through the above-referenced subdivision into Boneyard Flat for the 100-year, 24-hour event, as shown in the tentative map application, subject to approval by the county of the hydrology issues pursuant to the tentative map conditions. This diversion will substantially reduce the storm water which flows south through the flood plain west of Pyramid Lake Highway and crosses the highway to contribute to flooding in Sparks.

You have agreed that Eagle Canyon III and other future developments within the Spanish Springs Specific Plan located west of Pyramid Lake Highway will not be required to detain or retain any flood flows caused by development, or otherwise, since the negative flooding impact from future development is far outweighed by the positive impact of diverting the west drainages into Boneyard Flat.

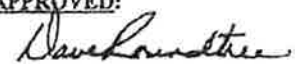
I would appreciate your written confirmation below of Hawco's understanding.

Sincerely,

HAWCO MANAGEMENT, INC.
a Nevada corporation

By: 
GARY HALL, General Manager

APPROVED:


DAVID ROUNDTREE, Director
Washoe County Public Works Department

Date: 11/7/01

the 1990s, the number of people in the world who are under 15 years of age has increased from 1.1 billion to 1.5 billion. The number of people aged 15 years and over has increased from 3.5 billion to 4.5 billion. The total population of the world has increased from 4.6 billion to 6 billion.

There are a number of reasons for the increase in the number of people in the world. One of the main reasons is the increase in life expectancy. In 1950, the average life expectancy at birth was 47 years. In 2000, it was 72 years. This increase in life expectancy is due to a number of factors, including improvements in medicine, nutrition, and sanitation.

Another reason for the increase in the number of people in the world is the increase in the number of children. In 1950, there were 1.1 billion children under 15 years of age. In 2000, there were 1.5 billion children under 15 years of age. This increase in the number of children is due to a number of factors, including improvements in child health care and a decline in infant mortality.

The increase in the number of people in the world has a number of implications. One of the main implications is the increase in the demand for resources. As the number of people in the world increases, the demand for food, water, and energy also increases. This increase in demand for resources can lead to environmental degradation and resource scarcity.

Another implication of the increase in the number of people in the world is the increase in the number of people living in poverty. In 1950, there were 1.1 billion people living in poverty. In 2000, there were 1.5 billion people living in poverty. This increase in the number of people living in poverty is due to a number of factors, including a decline in economic growth and a lack of investment in social services.

The increase in the number of people in the world is a major challenge for the world. It is a challenge that requires a coordinated effort from all countries. We need to find ways to increase the production of food, water, and energy. We need to find ways to improve child health care and reduce infant mortality. We need to find ways to reduce poverty and improve the quality of life for all people.

There are a number of things that we can do to address the challenge of the increasing number of people in the world. One of the most important things is to invest in education. Education is the key to economic growth and development. It is the key to reducing poverty and improving the quality of life for all people.

Another important thing that we can do is to invest in social services. Social services are the key to reducing poverty and improving the quality of life for all people. We need to invest in health care, education, and housing. We need to invest in the infrastructure that is needed to support a growing population.

The future of the world is uncertain. There are a number of challenges that we face. However, if we work together, we can overcome these challenges and create a better future for all people.

PRELIMINARY SANITARY SEWER REPORT
FOR
CONTINUUM OF CARE COTTAGE COMMUNITY

Prepared for:

Silverado Homes
5525 Kietzke Lane, Suite 102
Reno, NV 89511

January 2022

Prepared by:

Wood Rodgers Inc.
1361 Corporate Boulevard
Reno, Nevada 89502
(775) 823-4068
Todd Gammill, PE – Associate



WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard
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Tel: 775.823.4068
Fax: 775.823.4066

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- VICINITY MAP
- SANITARY SEWER SYSTEM LAYOUT
- 8" SS PIPE CALCULATIONS



1 **INTRODUCTION**

This report shall serve as the preliminary sanitary sewer report for the Continuum of Care Cottage Community project, which will consist of 136 detached single family style senior homes and a clubhouse. The proposed project site (APN 532-032-05 and a portion of APN 532-032-16) is approximately 21.44± acres in size and is located within a portion of Section 34 of T21N, R20E, MDM, Washoe County, Nevada.

The project site is bounded by Eagle Canyon Ranch Unit 4 to the north, existing Neighborhood Way to the west, a drainage channel and undeveloped land to the south, and Washoe County's North Spanish Springs Drainage Facility (NSSDF) outlet regional detention outfall channel. A Vicinity Map is included in the **Appendix** of this report for reference.

2 **BACKGROUND/EXISTING FACILITIES**

This site is currently undeveloped land. An existing 10" sanitary sewer main currently runs north to south within Neighborhood Way and existing 8" stubs have been provided for the site.

3 **PROPOSED CONDITIONS**

A Sanitary Sewer Layout is provided in the **Appendix** of this report to show the proposed layout of the sewer mains for the overall Continuum of Care Cottage Community subdivision. It is anticipated that the project will connect to the existing 8" sewer stubs provided to the site, one at the existing intersection midway through the site and one south of the site through the shared access with the property to the south.

The proposed sanitary sewer system was analyzed in accordance with Washoe County Department of Water Resources, Utility Services Division.

Peak sewage flows for single family residence homes are based upon the following equation:

$$Q = \# \text{ of Units} * \text{Peaking Factor} * \text{Per Capita Contributions}$$

Peaking Factor = 3.0 for Single and Multi-Family Residential

Per Capita Contributions = 270 gal per capita per day



The overall peak flow for this project using criteria above is calculated to be:

270 gal per capita per day * 3 * 137 single family residences = **110,970 gal/day**

The gravity sewer Collection Design Standards for Washoe County require that sewer mains meet a minimum velocity of 2.5 feet per second (fps) at half full pipe condition. An 8" pipe meeting these conditions has a capacity of 280,605 gallons per day (at 0.44% slope) and a 10" pipe has a capacity of 440,609 gallons per day (at 0.33% slope). The capacity of the 8" and 10" pipes at this slope are 564,463 gallons per day and 886,324 gallons per day, respectively.

Additionally, it should be noted that per Washoe County standards of 180 gallons per day per dwelling unit for treatment, the project is expected to contribute 24,660 gallons per day to the Truckee Meadows Water Reclamation Facility (TMWRF) via the City of Sparks collection system southeast of the site.

4 CONCLUSION

The proposed sanitary sewer system discussed in this report is shown to sufficiently serve the proposed Continuum of Care Cottage Community project. The Continuum of Care Cottage Community project will connect to the existing sanitary sewer system in Neighborhood Way which has been designed with enough capacity to serve the project area. As this report is preliminary in nature, a more detailed study will need to be conducted and a final sanitary sewer report will need to be submitted with the final improvement plans for the project.



APPENDIX

VICINITY MAP

SANITARY SEWER SYSTEM LAYOUT

PIPE CALCULATIONS

(VICINITY MAP)

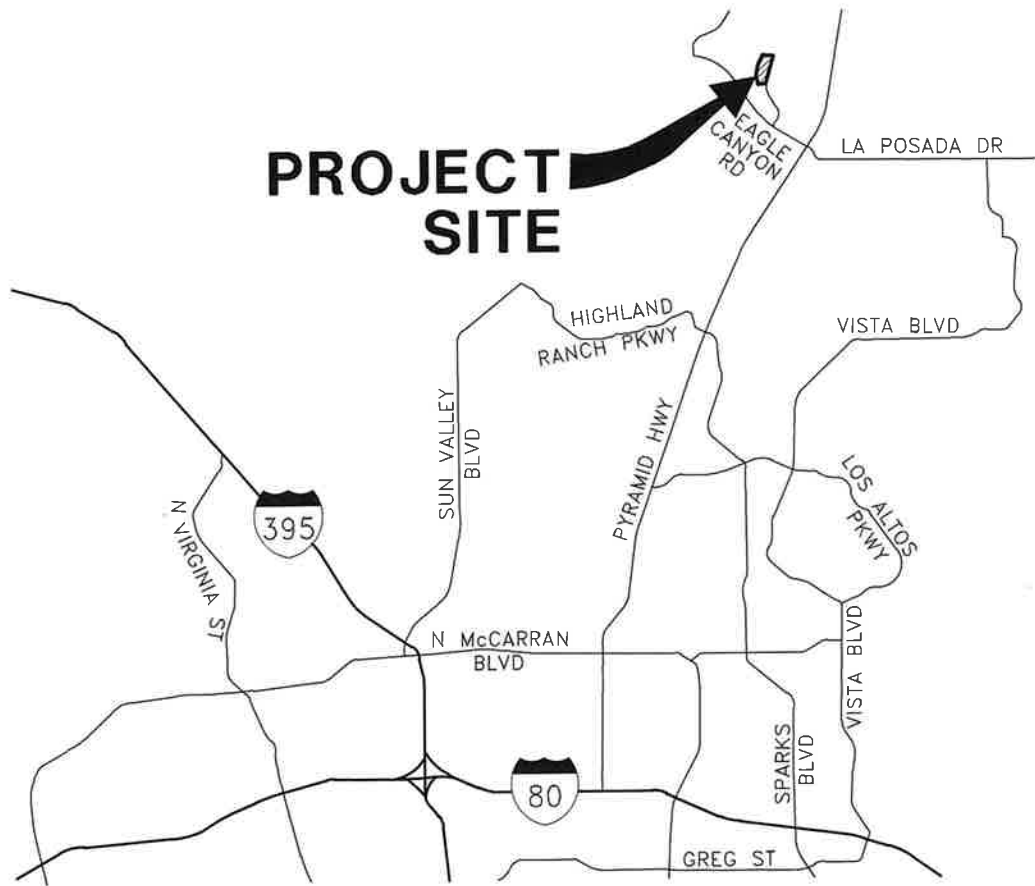
CONTINUUM OF CARE COTTAGE COMMUNITY

SILVERADO HOMES

WASHOE COUNTY

NEVADA

JANUARY 2022

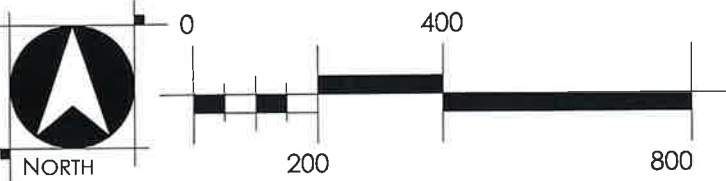


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PRELIMINARY SANITARY SEWER LAYOUT CONTINUUM OF CARE COTTAGE COMMUNITY

WASHOE COUNTY, NEVADA
JANUARY, 2022



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\\woodrogers-loc\ProductionData\Jobs-Reno\Jobs-Springs-Business_Cir\Silverado_Continuum Of Care_SUP\Planning\Studies\Sewer\Current_TM\EXH_SS_LAYOUT_TM_CCE.dwg 1/9/2022 11:26 AM Todd Gammill

CCE 8" MIN SLOPE HALF FULL

Project Description	
Friction Method	Manning
	Formula
Solve For	Discharge

Input Data	
Roughness Coefficient	0.012
Channel Slope	0.44 %
Normal Depth	4.0 in
Diameter	8.0 in

Results	
Discharge	280,605 gpd
Flow Area	0.2 ft ²
Wetted Perimeter	1.0 ft
Hydraulic Radius	2.0 in
Top Width	0.67 ft
Critical Depth	3.7 in
Percent Full	50.0 %
Critical Slope	0.58 %
Velocity	2.49 ft/s
Velocity Head	0.10 ft
Specific Energy	0.43 ft
Froude Number	0.857
Maximum Discharge	603,697 gpd
Discharge Full	561,210 gpd
Slope Full	0.11 %
Flow Type	Subcritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	0.0 %
Downstream Velocity	0.00 ft/s
Upstream Velocity	0.00 ft/s
Normal Depth	4.0 in
Critical Depth	3.7 in
Channel Slope	0.44 %
Critical Slope	0.58 %

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion (United Nations 1998).

There are a number of reasons why the world's population is increasing so rapidly. One of the main reasons is that the number of children born to each woman has increased. This is due to a number of factors, including the fact that women are now having children at a younger age, and that there is a higher birth rate in developing countries.

Another reason why the world's population is increasing so rapidly is that the number of people who are surviving to old age has increased. This is due to a number of factors, including the fact that people are now living longer, and that there is a higher death rate in developing countries.

There are a number of other reasons why the world's population is increasing so rapidly. One of the main reasons is that the number of people who are migrating to other parts of the world has increased. This is due to a number of factors, including the fact that there is a higher death rate in developing countries, and that there is a higher birth rate in developed countries.

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10/22/2007 02:32:56 PM

Requested By

ROBERT M SADER

Washoe County Recorder

Kathryn L. Burke - Recorder

Fee: \$59.00 RPTT: \$0.00

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WHEN RECORDED RETURN TO:

Spanish Springs Associates Limited Partnership
c/o Robert M. Sader, Esq.
8600 Technology Way, Suite 101
Reno, Nevada 89521



**DECLARATION OF COVENANTS,
CONDITIONS AND RESTRICTIONS
FOR
SPANISH SPRINGS NEIGHBORHOOD CENTER**

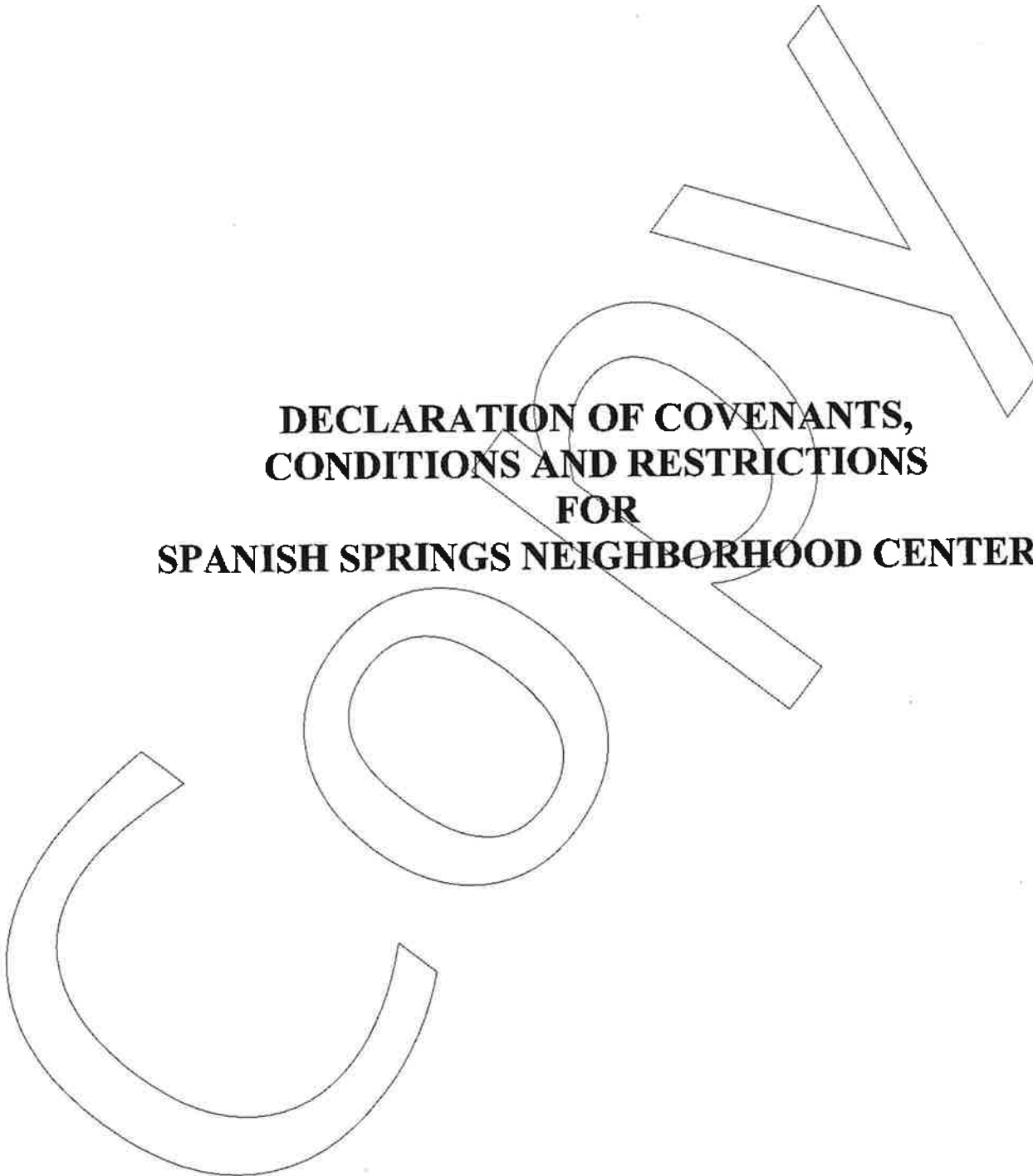


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**DECLARATION OF COVENANTS,
CONDITIONS AND RESTRICTIONS
FOR
SPANISH SPRINGS NEIGHBORHOOD CENTER**

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (the "Declaration") is made this _____ day of _____, 2007, by **SPANISH SPRINGS ASSOCIATES LIMITED PARTNERSHIP**, a Nevada limited partnership, (the "Declarant").

RECITALS:

A. Declarant is the owner of certain real property located in the County of Washoe, State of Nevada. The real property described in Exhibit "A" attached hereto and incorporated herein by this reference shall be referred to as the "Property". The Property together with any other real property which is hereafter made subject to this Declaration pursuant to Article 11 hereof shall be hereinafter referred to as the "Property". Declarant may, but shall not be so obligated to, add real property to the Property which is covered by this Declaration. As of the date of this Declaration, Declarant contemplates that the real property described in Exhibit "B" may be so added at some future date pursuant to the provisions of Article 11 hereof; however, Declarant makes no representation or warranty that the real property described in Exhibit "B" will be annexed.

B. Declarant intends to develop the Property as a multiple purpose civic, mixed use and commercial area which will be known as the "Spanish Springs Neighborhood Center". The Property is envisioned to include land devoted to, without limitation, office, civic, residential, commercial uses and other uses allowed under the "Neighborhood Commercial" or mixed use land use designation of Washoe County's Spanish Springs Area Plan, including any future land use designation or zoning changes approved by Washoe County. The Property is a portion of the Spanish Springs Area Plan (the "SSAP"). The SSAP specifies permitted uses on the Property, which may be further restricted by this Declaration.

C. Declarant may, in its sole and absolute discretion, convey title or lease portions of any property it owns within the Property to certain persons or entities. Any such property, whether conveyed absolutely or subject to a leasehold estate, shall at all times be subject to the covenants, conditions and restrictions hereinafter set forth and all other terms and provisions of this Declaration, as amended or otherwise modified from time to time.

D. Declarant deems it desirable to establish covenants, conditions and restrictions upon the Property for purposes of creating a general scheme for the improvement, development, use, occupancy and enjoyment thereof, all to insure the proper development and use of the Property

and to enhance and protect its value, desirability and attractiveness as a viable neighborhood center; and more particularly, without limitation, to:

1. protect the Owners and Occupants of Lots against such improper or inappropriate development and use of surrounding Lots as may depreciate the value and use of their Lots;
2. prevent the erection on the Property of structures constructed of improper or unsuitable materials, or with improper quality and methods of construction;
3. insure reasonably consistent development of the Property;
4. encourage and insure the erection of attractively designed permanent improvements appropriately located within the Property in order to achieve harmonious appearance and function;
5. insure adequate funding for construction, maintenance, care and repair of Common Areas;
6. provide for the ownership and maintenance for the common benefit of all Owners and Occupants of open space, certain landscaped areas, drainage ways and other Common Area; and
7. generally promote the welfare of the Occupants and Owners of Lots.

NOW, THEREFORE, Declarant hereby covenants, agrees and declares that all of its interests in the Property, as the same may from time to time appear or develop, shall be held and conveyed or leased (as applicable) subject to the following covenants, conditions and restrictions, which are hereby declared to be for the benefit of said interests in the Property and the owners or lessees of said interests, together with their permitted successors and assigns, if any. These covenants, conditions and restrictions shall run with said interests and shall be binding upon all parties having or acquiring any right or title of any nature whatsoever in said interests or any portion thereof, and shall inure to the benefit of each owner or lessee thereof and are imposed upon said interests and each of them as a servitude in favor of each and every of said interests as the dominant tenement or tenements.

ARTICLE 1 - GENERAL PROVISIONS

1.1 Restrictions Operate as Covenants.

Each person or entity that acquires any interest in the Property or any portion thereof hereby covenants and agrees with Declarant (and its successors and assigns, if any) to use the Property only in accordance with the covenants, conditions and restrictions herein set forth and

to refrain from using the Property in any way inconsistent with or prohibited by the provisions of this Declaration.

1.2 Intent of Restrictions and Covenants.

The intent of this Declaration is to insure proper development and use of the Property, to protect the Owner or Occupant, present or future, of each Lot established (or to be established) therein against improper development and use of other Lots in such a manner as to cause the value of any Lot to depreciate or become impaired in value; to prevent Improvements that are inconsistent with Declarant's overall development scheme; and, in general, to provide for a high quality of improvement of the Property in accordance with Declarant's overall development scheme.

1.3 Enforcement.

It shall primarily be the responsibility of the Association to enforce the terms and provisions of this Declaration as required. Notwithstanding the generality of the foregoing, each and every Owner shall retain such enforcement rights as permitted or allowed in accordance with this Declaration as against other Owners or Occupants, or any of them.

1.4 Definitions.

Unless the context of this Declaration clearly indicates otherwise, capitalized terms or phrases found in this Declaration shall have the following meanings.

1.4.1 "Architectural Committee" or "Committee" shall mean the Architectural Committee created pursuant to Article 2 of this Declaration.

1.4.2 "Assessments" shall mean Regular Assessments and Special Assessments, as applicable.

1.4.3 "Association" shall mean the Spanish Springs Neighborhood Center Association established pursuant to Article 2 of this Declaration.

1.4.4 "Board" shall mean the board of directors (also sometimes called the Executive Board) of the Association.

1.4.5 "Building" shall mean any structural improvement on any Lot which is enclosed by exterior walls, floor or roof and is designed for use by the Owner of such Lot, or such Owner's Occupants, licensees, tenants, successors or assigns.

1.4.6 "Common Areas" shall mean and refer to those areas of land shown on any recorded plat or its equivalent of the Property (or any portion thereof) filed or approved by Declarant and identified thereon as "Common Area(s)", or as land subject to a Common Area

easement of maintenance or use by the Association, or any interest in land within the Property owned by Association.

1.4.7 "Common Expenses" shall mean the actual costs of:

- (a) improvements, maintenance, irrigation, utilities, management, operation, reserves, repair and replacement of landscaping, recreation, open space, drainage facilities, joint use and related improvements to all Common Areas (e.g., related improvements may include work out stations, clock towers, art objects, sculptures, paths or trails, water features and signs), provided that construction of drainage facilities and landscaping in Common Areas shall be the obligation of Declarant prior to dedication of said improved Common Areas to the Association;
- (b) reasonable, normal and customary costs of management and performance of Association duties and obligations hereunder, including, but not limited to, compensation paid to managers, accountants, consultants, attorneys, contractors, employees, and members of the Architectural Committee;
- (c) the reasonable costs of any insurance obtained by the Association including, without limitation, public liability insurance, fidelity coverage, casualty, errors and omissions, and other forms of insurance generally obtained by persons or firms performing functions similar to those performed by the Association;
- (d) reasonable reserves as deemed appropriate by the Association;
- (e) any costs or expenses incurred with respect to the operation, maintenance, repair or replacement of any Common Area Signs erected at entrances to the Property or elsewhere;
- (f) other reasonable expenses incurred by the Association in connection with maintenance, management, operation, improvement or repair of the Common Areas, or in the furtherance of the purposes of this Declaration or in the discharge of any duties or powers of Association herein described;
- (g) the cost of any other services which the Association determines is desirable for the benefit of the Property and the Owners and Occupants, including, without limitation, installation and maintenance of streets, driveways, utilities, drainage facilities, snow removal, and landscaping service; and

- (h) the cost of maintaining and repairing hardscape or landscaping in public Streets or right-of-ways adjacent to or in the vicinity of the Property, including medians, parkways, roundabouts and flower beds.

1.4.8 "Common Maintenance Areas" shall mean those portions of the Property reserved or set aside for the purpose of, without limitation, planting, locating, installing, replanting, relocating, reinstalling, maintaining, removing, treating, repairing, and irrigating trees, hedges, shrubs, bushes, plantings, plants, grass, flowers, and other forms of vegetation (including natural vegetation) which, in the sole discretion of the Declarant or Architectural Committee, is necessary to design, create and maintain attractive areas of vegetation throughout the Property in furtherance of the purposes of this Declaration.

1.4.9 "County" shall mean the County of Washoe, a political subdivision of the State of Nevada.

1.4.10 "Design Guidelines" shall have the meaning specified in Article 4 of this Declaration.

1.4.11 "Developable Acreage" shall mean land within the Property owned by a Member on which development of land is customarily feasible and allowed by applicable local, state and federal law (e.g., land on which any structure, parking lot, landscaping or other ancillary use to a commercial or industrial property can be located). Generally, all portions of Lots specifically parceled for development within the Property, excluding Common Area, shall be considered Developable Acreage. Undeveloped land owned by Declarant which is future Streets, flood plain, wetlands, drainageways or subject to other constraints which make said undeveloped land customarily infeasible to be developed shall not be considered Developable Acreage.

1.4.12 "Ground Cover" shall mean shrubs planted in such a manner that selected portions of the Property are covered with foliage or hardscape.

1.4.13 "Improvement" shall mean structures of any kind, above, on or below the land surface, including, without limitation, Buildings, walls, all utilities lines and facilities, parking facilities, private driveways and streets, walkways and sidewalks, fences, poles, loading areas, and related improvements and other structures of any type whatsoever, Landscaping, and Signs. This term shall include both original improvements and all subsequent changes and improvements thereto.

1.4.14 "Inorganic Mulch" shall mean decomposed granite, rock or river washed cobble used to completely cover selected portions of the Property.

1.4.15 "Landscaping" shall mean selected portions of the Property covered by Lawn (as defined below), Ground Cover or Inorganic Mulch combined with shrubbery and trees which may be complemented with berms, masonry, fencing or other materials.

1.4.16 "Lawn" shall mean selected portions of the Property completely covered with grass, which is properly maintained and irrigated.

1.4.17 "Lot" shall mean a parcel that is eligible for separate transfer of ownership pursuant to the filing of a map (or maps) for land subdivision purposes in accordance with applicable laws of the State of Nevada and local governmental entities (including, without limitation, those of Washoe County, Nevada) or by any other procedures permitted or required by such applicable laws.

1.4.18 "Member" shall have the meaning set forth in Section 2.1 of this Declaration.

1.4.19 "Mortgage" shall mean and refer to any duly recorded mortgage or deed of trust encumbering a Lot.

1.4.20 "NRS" shall mean the Nevada Revised Statutes, as amended, adopted, or otherwise altered or changed from time to time by the Nevada legislature.

1.4.21 "Occupant" shall mean one or more persons or entities that have a legal right to occupy any portion of the Property (or Buildings or Improvements located thereon) pursuant to fee ownership, a leasehold interest or any other valid and enforceable legal relationship.

1.4.22 "Owner" shall mean one or more persons or entities who are the record owner of fee simple title of a Lot, or the vendee under an installment land sales contract with respect to such Lot, but excluding those having any such interest merely as security for the performance of an obligation. In the event that the ownership of any Building or other Improvement on any Lot shall ever be severed from the land, whether by lease or by deed, only the owner of the interest in the land shall be deemed an Owner hereunder. An Owner shall not necessarily be an Occupant. The Owner of fee title of a Lot and not the lessee of such Lot shall be deemed the Owner with respect to such Lot, regardless of the provisions of the lease.

1.4.23 "Property" shall have the meaning set forth in Recital A of this Declaration.

1.4.24 "Regular Assessment" shall mean the amount to be paid to the Declarant by each Owner for such Owner's annual share of Common Expenses.

1.4.25 "Sign" shall mean any structure or device, electric or non-electric, permanent or temporary, and all parts thereof which are erected or otherwise used within the Property for identification or advertising purposes.

1.4.26 "Site" shall mean all contiguous Lots owned by the same Owner (or owned in common by two or more Owners) which the Owner(s) thereof have requested Declarant or Association to consider as a single building site in reviewing for approval of plans and specifications for the development of such Lots in accordance with this Declaration; provided, however, that occupancy of a Building on two or more Lots by two or more Occupants shall not alter the character of such Lots as a single Site.

1.4.27 "Special Assessment" shall have the meaning set forth in Section 6.6 of this Declaration.

1.4.28 "Street" shall mean a vehicular right-of-way owned by the Association, public streets or highways, whether presently constructed, dedicated by plat map, or contemplated in the future pursuant to any plan approved or adopted by Declarant or any public authority, including, without limitation, Washoe County, the Regional Transportation Commission or the Nevada Department of Transportation.

1.5 Exemption From NRS Chapter 116.

The Property is expressly hereby declared exempt from Nevada Revised Statutes Chapter 116, the Common-Interest Ownership Act (the "Act"), despite the specific incorporation of certain provisions thereof as provided in Section 6.12. Moreover, the Property is currently restricted by provisions of the SSAP exclusively to nonresidential uses, which results in the Act being inapplicable pursuant to NRS 116.1201(2)(b). If, however, residential areas are allowed in the future under applicable government land use laws and commenced on any Lot within the Property, and said residential uses qualify as a "planned community" as defined in NRS Chapter 116 so that the Property would lose its exemption from NRS Chapter 116, and NRS Chapter 116 would therefore be applicable, then each Lot not so exclusively restricted to nonresidential uses shall automatically be deannexed from this Declaration upon first commencement of the residential use, as further specified in Subsection 12.3, and this Declaration shall have no force or effect on said deannexed Lot.

ARTICLE 2 - SPANISH SPRINGS NEIGHBORHOOD ASSOCIATION

2.1 Membership.

Each and every person or legal entity who is an Owner shall automatically be a member of the Association (a "Member"), provided that any person or entity who holds such an interest merely as security for the performance of any obligation shall not be a Member. The Association shall have no Members who are not also Owners. Membership is mandatory.

2.2 Classes of Voting Members.

The Association shall have two (2) classes of voting membership:

CLASS A. Class A Members shall be all those Members described in Section 2.1 hereof with the exception of Declarant. Class A Members shall be entitled to one (1) vote for each one (1) acre of Developable Acreage owned within the Property. Partial increments of one (1) acre shall entitle a Member to fractional voting rights. If any property interest, ownership of which entitles the Owner thereof to vote, is held jointly or in common by more than one (1) person, the vote or votes to which such property interest is entitled may also be held jointly or in common in

the same manner. However, the vote or votes for such property interest shall be cast, if at all, as a unit, and neither fractional votes nor split votes shall be allowed. In the event that the persons who constitute an Owner are unable to agree among themselves as to how their vote or votes shall be cast as a unit, they shall lose their right to cast their vote or votes on the matter in question. In joint ownership situations, any person who is a part Owner shall be entitled to cast the vote or votes for that Owner unless another part Owner shall have delivered to the Secretary of the Association before the vote a written statement to the effect that the person wishing to cast the vote or votes has not been authorized to do so by the other persons who constitute part of the Owner.

CLASS B. The Class B Member shall be Declarant. The Class B Member shall be entitled to ten (10) votes for each one (1) acre of Developable Acreage owned by Declarant within the Property. A partial increment of one (1) acre shall entitle the Member to fractional voting rights.

2.3 Assignment.

Class A voting rights may be assigned, in whole or in part to an Occupant, as such rights relate to a particular Lot occupied by the Occupant, provided that written notice of the assignment is given to Association prior to the exercise of voting rights by the Occupant. Class B voting rights may only be assigned by Declarant concurrently with the assignment of all Declarant rights, and only in the circumstance when all Property then owned by Declarant is transferred to the assignee.

2.4 Powers Conferred by Corporate Law.

In addition to any powers described herein, the Association shall have all of the powers of a Nevada nonprofit corporation, subject only to such limitations upon the exercise of such powers as are expressly described in this Declaration, the Association Articles of Incorporation, or its Bylaws. It shall further have the power to do and perform any and all acts which may be necessary or proper for or incidental to the exercise of any of the express powers granted to it by the laws of Nevada or by this Declaration.

2.5 Association Establishment and Purpose.

2.5.1 Establishment. The Association shall be created by Declarant as a nonprofit Nevada corporation. The Association shall be created for the purposes, charged with the duties, and invested with the powers prescribed by law or described in its Articles of Incorporation, Bylaws and in this Declaration. Neither the Articles of Incorporation nor the Bylaws of the Association shall for any reason be amended or otherwise changed or interpreted so as to be inconsistent with this Declaration. In case of conflict between the terms of this Declaration and the Articles of Incorporation or the Bylaws of the Association, this Declaration shall control.

2.5.2 Purpose. The purpose of the Association shall be to:

- (a) Own and maintain encroachment permits, easements and deeded real property for Common Area within the Property; including without limitation the funding, operation and maintenance of the following common elements: paths; sidewalks; trails; open space; fences; landscaping; signs; entry ways; drainage ways and drainage facilities; private streets and curbs (if any); snow removal and storage areas, landscaping, fire and fuelbreaks, lighting, and surface water detention areas.
- (b) Provide for removal of ice and snow from Common Area streets (if any) and parking areas owned or controlled by the Association at any time when such a condition may restrain access within the Property. The Association shall either contract for snow and ice removal or acquire equipment and hire personnel to effect the provisions of this subsection. In the event that snow removal operations require exporting of snow or ice from roads or parking areas, said material may be exported outside the perimeter of the Property to a suitable location, said material may also be deposited within the perimeter of the Property on an appropriate easement, open area or Common Area in such a manner as to not unreasonably restrict access or create an unreasonable hazard to any road, parking area or common walkway, or restrict access to any Lot or Site.
- (c) Enforce and administer any provisions of this Declaration pertaining to the Association's rights, obligations, powers and duties.

2.5.3 Purchase Of Equipment. The Association shall purchase any and all equipment, materials and supplies necessary to undertake its duties imposed by this Declaration, its Articles and Bylaws. The Association may purchase any equipment, materials and supplies from the Declarant provided the purchase price shall be no more than the fair market value thereof.

2.5.4 Security Disclaimer. The Association may, but shall not be obligated, to maintain or support certain activities within the Property designed to make the Property safer than it otherwise might be. Neither the Association nor the Declarant shall in any way be considered insurers or guarantors of security within the Property, nor shall any of them be held liable for any loss or damage by reason of failure to provide adequate security or of ineffectiveness of security measures undertaken. No representation or warranty is made that any fire protection system, burglar alarm system, security personnel or other security system cannot be compromised or circumvented, nor that any such systems or security measures undertaken will in all cases prevent loss or provide the detection or protection for which the system is designed or intended. Each Owner acknowledges, understands and covenants to inform its Occupants that the Association and the Declarant, are not insurers or liable to any person for conduct resulting from acts of third parties.

2.6 Architectural Committee.

2.6.1 Designation of Committee. The Association shall have an Architectural Committee ("Committee"), which shall consist of not less than three (3) persons nor more than seven (7) persons who shall be natural persons, and who shall be appointed by the Board. Any and all members of the Committee may be removed by the Board with or without cause. The Committee members need not be Members and may be independent, paid consultants. Until the date Declarant no longer owns or leases any portion of the Property, the appointment or removal of the members of the Committee by the Board must be approved by Declarant. Declarant may waive its right to appoint or approve, but any incident of waiver shall not adversely affect Declarant's subsequent rights hereunder.

2.6.2 Function of Architectural Committee. No Improvement (except as exempted in Section 2.6.3) shall be erected, constructed, placed, altered (by addition or deletion), maintained or permitted to remain on any portion of the Property until plans and specifications, in such form and detail as the Committee may deem necessary, shall have been submitted to and approved in writing by the Committee. The Committee shall have the power to employ professional consultants to assist it in discharging its duties. The decision of the Committee shall be final, conclusive, and binding upon the applicant. The Committee may require a written certification from an Owner's representative who has prepared and submitted the plans and specifications (e.g., architect, engineer, consulting firm) that said submittal is in compliance with the provisions of this Declaration, rules and regulations, and any Design Guidelines; except for any aspects of noncompliance for which a variance has been requested from the Committee as specified in Subsection 2.6.10.

2.6.3 Certain Improvements Exempted. Replacement or repair of any Landscaping or any other Improvements which do not change exterior colors or exterior appearances shall not be required to be submitted and approved by the Committee.

2.6.4 Standards of Approval. Approval of plans and specifications shall be based, among other things, on adequacy of site dimensions, structural design, utility and Landscaping design, street and emergency access, drainage design, conformity and harmony of external design and location with neighboring structures and sites, relation of finished grades and elevations to neighboring sites, conformity to both the specific and general intent of this Declaration, as well as compliance with any other federal, state or local laws, rules or regulations. In addition to these standards of approval, the Committee may promulgate both substantive and procedural rules and standards in addition to those stated above in this Section, in a standards and procedures handbook ("Design Guidelines") or as rules and regulations.

2.6.5 Failure of the Committee to Act. Upon submittal of plans and specifications to the Committee, the Committee may approve, disapprove, or determine that such plans and specifications are not sufficiently complete or are otherwise inadequate, in which case the Committee may reject them as being inadequate or may approve or disapprove part, conditionally or unconditionally, and reject the balance. If the Committee fails to take action

within thirty (30) days after submittal, it shall be conclusively presumed that the Committee has approved said plans and specifications.

2.6.6 Fees. The Committee may assess fees to applicants or others who require or use Committee services. If assessed, the fees shall reasonably reflect the costs and expenses of the Committee to perform its duties, including compensation to Committee members. The Committee may disapprove plans submitted for failure of the applicant to prepay fees. Any fees which are assessed but not paid when due shall be deemed a Special Assessment.

2.6.7 Construction Requirements. Upon receipt of approval of its plans and specifications, any Owner or Occupant shall diligently proceed with the commencement and completion of all approved construction. Unless work on the approved construction shall be commenced one (1) year from the date of such approval and diligently pursued thereafter, the approval shall automatically expire, except in cases where the Committee has given a written extension of time. The Committee may, as a condition of its approval, specify a different construction timetable for commencement and completion of all or any phase of Improvement construction.

2.6.8 Prior Approval. Approval of plans and specifications by the Committee may be secured prior to acquisition of a Lot pursuant to the terms of a sale contract or lease.

2.6.9 Submittal and Inspection Requirements. Information shall be submitted to the Committee in connection with its consideration of any development plans, as stated in the Committee's Design Guidelines, rules or regulations. Inspections may also take place, but the Committee is not required to inspect Improvements.

2.6.10 Variances. The Committee in its sole discretion may grant variances to the provisions of this Article, Design Guidelines, rules or regulations due to undue hardship, extraordinary or exceptional circumstances, or if the granting of the variance will not significantly undermine or adversely affect the intent and purposes of this Declaration. No variances granted by the Committee shall be deemed to create a variance from (or right of noncompliance with) any applicable ordinance, law, rule or regulation of a governmental agency with jurisdiction.

2.7 Provision for Fines.

The Association and the Architectural Committee shall each have the right pursuant to the enforcement rights set forth in this Article and Article 8 hereof to assess fines, not to exceed \$1,000.00 for each occurrence, for any violation or failure to comply with the provisions of this Declaration, any rules or regulations authorized by this Declaration, or provisions of the Association Articles of Incorporation or Bylaws. Upon assessment of such fine pursuant to written notice thereof provided to an Owner or Occupant, such Owner or Occupant shall have thirty (30) days from receipt of such written notice to effectuate a cure or remedy for the violation (provided the violation is capable of remediation). If such cure or remedy is deemed complete and sufficient by the Association or Architectural Committee, as applicable, the fine

shall be extinguished and written notice thereof shall be provided to such Owner or Occupant. Should such Owner or Occupant fail to effectuate a cure or remedy within the thirty (30) day period specified (or if the violation is not continuing and not capable of remediation), the amount of such fine, together with interest on said fine pursuant to Section 6.6 hereof, shall be immediately due and payable and shall constitute a Special Assessment and lien upon such Owner's Lot until paid. If the fine is assessed for a continuing violation, payment of the fine does not excuse the violation and the Committee may fine again or avail itself of other enforcement rights, or both, in order to correct the violation.

2.8 Liability.

Neither the Declarant, the Association, its Directors, the Architectural Committee or the members or designated representatives thereof shall be liable to (i) anyone submitting plans or specifications to them for approval, (ii) any Owner, or (iii) any other person or entity, in damages, loss or prejudice suffered or claimed on account of any mistake in judgment, negligence or nonfeasance arising out of or in connection with the approval or disapproval, or failure to approve or disapprove, of (a) any plans or specifications, whether or not defective; (b) any construction or performance of any work whether or not pursuant to approved plans, drawings and specifications; (c) any Improvement or development of any property within the Property; (d) any execution and filing of a notice of non-compliance whether or not the facts therein are correct; (e) any inspection or failure to inspect Improvements; or (f) any Improvements or plans for Improvements in violation of, or otherwise not in compliance with, applicable codes, laws, regulations or policies of government entities or utilities. Plans and specifications are not approved by the Architectural Committee for engineering design or adequacy.

ARTICLE 3 - USE RESTRICTIONS

3.1 Prohibited Uses/Nonresidential Uses Only.

In addition to uses prohibited pursuant to this Declaration, any use which is not authorized pursuant to the SSAP, applicable zoning or other land use ordinances (or other entitlement permits/requirements) of the County is expressly prohibited on the Property. In addition, in order to comply with NRS 116.1201(2)(b) and exempt the Property and this Declaration for the provisions of NRS Chapter 116, the Property shall hereby be restricted exclusively to nonresidential uses, or residential uses which would not be a "planned community" as defined in NRS Chapter 116.

3.2 General Prohibitions and Covenants.

No use shall be permitted on the Property which is not allowed under applicable public codes, regulations and ordinances either already adopted or as may be adopted by the County or other applicable public authority. Each Owner, Occupant or other user of any portion of the Property at all times shall comply with this Declaration and the Design Guidelines and with any

and all laws, ordinances, policies, rules, regulations and orders of all federal, state, county and municipal governments or their agencies having jurisdictional control over the Property, including, without limitation, applicable land use restrictions placed upon the Property as they exist from time to time. In some instances, governmental requirements may be more or less restrictive than the provisions of this Declaration and the Design Guidelines. In the event a conflict exists between any such governmental requirement and any requirement of this Declaration or the Design Guidelines, the more restrictive requirement shall prevail, except in circumstances where compliance with a more restrictive provision of the Declaration or the Design Guidelines would result in a violation of mandatory applicable governmental requirements, in which event those governmental requirements shall apply. Compliance with mandatory governmental requirements shall not result in the breach of this Declaration or the Design Guidelines even though such compliance may result in noncompliance with provisions of this Declaration or the Design Guidelines. Where a governmental requirement does not clearly conflict with the provisions of this Declaration or the Design Guidelines but permits action that is different from that required by this Declaration or the Design Guidelines, the provisions of this Declaration and the Design Guidelines shall prevail.

3.3 Fire Protection.

All Buildings shall be designed, constructed and maintained so as to comply fully at all times with any applicable public codes, ordinances, rules, regulations and orders relating to fire protection. All such Buildings and their associated ingress and egress from and to Streets and surface parking areas shall be so related to one another and arranged as to permit ease of access for fire and other emergency vehicles. Designated fire lanes within any Lot shall be so located, marked and protected from encroachment as to function effectively at all times. Appropriate signage, as required by applicable governmental entities and approved by the Architectural Committee, shall be installed for such fire lanes and maintained in readable condition.

3.4 Parking.

Each Owner or Occupant shall provide on its Lot adequate parking areas for employees, the disabled, visitors and service vehicles. No parking shall be permitted on Streets and on entrance driveways.

3.5 Signage/Use Of Name.

No sign or other advertising device of any nature shall be placed on the Property except as approved by the Architectural Committee. Declarant or the Association shall have the right to install and maintain signs advertising the Property. No Owner or Occupant may use the name "Spanish Springs Neighborhood Center" or the "Spanish Springs Neighborhood Center" logo or mark (if any) in the name of any Building or in any advertisement or promotional material of any kind or nature whatsoever, without first obtaining the prior written consent of Declarant.

3.6 Loading Docks and Areas.

Each Lot shall provide sufficient on-site loading facilities to accommodate Lot activities, and all loading movements, including, without limitation, turnarounds, shall be made off of Streets.

3.7 Landscaping.

Each Owner, contemporaneously with the development of Improvements on a Lot, shall install Landscaping on areas on its Lot in accordance with applicable laws, the Design Guidelines and subject to approval by the Architectural Committee. An Owner shall keep Landscaping in good condition and repair and in a neat and orderly appearance and shall be responsible for all expenses relating to the maintenance, repair or replacement of Landscaping on the Owner's Lot. Automatic underground irrigation systems shall be installed in all landscaped areas on a Lot. No changes shall be made to the Landscaping plan for a Lot without the prior written approval of the Architectural Committee.

3.8 Surface Water Flow and Drainage.

Plans for all detention basins, ponds, other water features or facilities of any kind, and general Lot drainage, must be submitted in advance for Architectural Committee approval. To the extent that drainage is not controlled by a Common Area Use and Maintenance Easement, each Owner shall control water runoff drainage from his Lot to prevent damage to other Lots, Streets or any other area in the Property, pursuant to applicable County standards.

3.9 Trash and Garbage.

No Lot nor any portion thereof shall be used or maintained as a dumping ground for rubbish, trash or garbage before, during or after the installation of any Improvements. Trash collection enclosures and containers shall be situated as required by the Architectural Committee. Each Owner shall observe and comply with any and all requirements established by the Architectural Committee in connection with the storage and removal of trash and garbage. If within ten (10) days after the issuance of written notice by the Association to an Owner, said Owner shall have failed either to remove any trash, rubble or construction debris, or to exercise reasonable care or conduct to prevent or remedy a dangerous, unclean or unsightly condition, then the Association shall have the authority and right (but not the obligation) to go on the Lot for the purpose of cleaning said Lot or otherwise correcting said condition, or conditions. Should the Association undertake such corrective action on behalf of an Owner, it shall bill such Owner for the costs and expenses related thereto and if such bill is not paid within thirty (30) days, the amount thereof shall be a Special Assessment and constitute a lien upon the Lot and shall also be the personal obligation of the Owner of the Lot as set forth in Article 6 hereof.

3.10 Environmental Issues.

No Owner or Occupant of the Property or any portion thereof (unless issued an applicable government license or permit therefor) shall handle, store, deposit, use, process, manufacture, dispose of or release or allow any of its agents, employees, contractors or invitees to handle, store, deposit, use, process, manufacture, dispose of or release any Hazardous Substances (defined below) of any kind from, on, in, under or in the air above any part of the Property, including, without limitation, any surface waters or groundwater located on the Property, or into public sanitary sewer systems serving the Property without complying with all Environmental Laws (defined below) including, without limitation, performing pre-treatment, obtaining permits and giving notices as required by Environmental Laws. "Hazardous Substances" means those substances now or hereafter included within (whether as a result of such substance's inclusion on a list, physical characteristics or otherwise) any of the definitions of, without limitation, "hazardous substances", "hazardous waste", "hazardous materials", "pollutant", "contaminant" or "toxic substance" under, or otherwise regulated by, any Environmental Law; including, without limitation (i) mixtures containing listed Hazardous Substances and waste generated from the treatment, storage or disposal of Hazardous Substances; (ii) asbestos; (iii) polychlorinated biphenyls; (iv) radioactive materials; and (v) petroleum (including crude oil or any fraction thereof), natural gas, natural gas liquids, liquified natural gas and synthetic gas. "Environmental Laws" shall mean and include, without limitation, all present and future federal, state or local laws, rules, orders, ordinances and regulations pertaining to environmental regulation, or the use, processing, storage, disposal, generation or transportation of Hazardous Substances, or any contamination, cleanup or disclosure related thereto, including, without limitation, the Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 et seq., the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et seq., the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq., Nev. Rev. Stat. ch. 459, Nev. Rev. Stat. ch. 444, Nev. Rev. Stat. ch. 445, Nev. Rev. Stat. ch. 590, Nev. Rev. Stat. Sections 618.750 through 618.850, inclusive, Nev. Rev. Stat. Section 477.045, the Uniform Fire Code, 1988 Edition, and such amendments as may be made to these statutes and such regulations as may be promulgated with respect thereto.

Each Owner and Occupant shall be responsible for and shall pay all costs and expenses related to the disposal or release by such Owner or Occupant of any Hazardous Substances, sewage or wastes of any kind in, on, under or in the air above the Property, which costs and expenses shall include, without limitation, closure, removal, remediation, cleanup, containment and other response costs, injuries to persons, damages to property (whether real or personal), legal expenses, and interest paid to any governmental entity; provided, however, that this covenant does not apply to Hazardous Substances generated on or migrating from other Lots or already existing on the Lot in question as of the date of the acquisition of such Lot by such Owner, which are the responsibility of the generating party. The covenant in the immediately preceding sentence itself does not create any obligation of an Owner or Occupant other than for the payment of the costs and expenses described in such sentence, and no person has any rights under the covenant in such sentence to enforce any claim for any remedy against such Owner or Occupant other than for the payment or recovery of the costs and expenses described in such sentence.

3.11 Fuel Facilities.

The Owner of any Lot on which fuel storage and dispensing facilities are installed shall be fully responsible for insuring that such facilities and their installation comply fully with all applicable laws and regulations, and the provisions of this Declaration.

3.12 Construction Standards.

3.12.1 Any builder, contractor, or subcontractor engaged to construct Improvements on any portion of any Lot may conduct its construction operations and activities to expeditiously commence, continue and diligently complete construction of any such Improvements, including the provision of temporary buildings or trailers for administration of work and for the storage of materials and equipment, and the construction of temporary security fences and lighting. Each Owner is responsible for all costs of cleaning up any debris or waste resulting from the construction of Improvements on its Lot or Site. Each Owner and its agents must maintain an attractive, clean, nuisance-free environment during the period of construction, including dust control. Declarant or the Board shall have the right to designate points of ingress and egress on the Lot and within the Property for construction vehicles, and each Owner of a Lot on which Improvements are being constructed shall use all reasonable efforts to keep all Streets cleared of mud and dirt left by construction vehicles entering such Lot. Once commenced, all construction on a Lot shall be continued with due diligence and good faith until completion.

3.12.2 Each Owner expressly covenants that it shall prevent adverse impacts, including, without limitation, air, soil, dust and water pollution, soil erosion, elimination of vegetation without replacement or increased runoff rates to areas outside its Lot in any way resulting from construction, reconstruction, alteration, maintenance, repair, replacement or removal of Improvements and that it shall indemnify and hold harmless the Association, the Architectural Committee, Declarant and other Owners from any and all damages resulting therefrom. All possible contaminants must be stored in a containment facility that will not allow such to enter any soils or groundwater on or off the Lot.

3.12.3 Prior to any excavation on a Lot, the Owner shall determine and mark the location of and will protect all existing utilities and landscape irrigation lines. Utility lines and landscape irrigation lines are to be located before earth moving or drilling equipment operations are allowed to commence near underground utilities or landscape irrigation lines.

3.13 Owners' Maintenance Responsibilities.

Each Owner shall have the duty and responsibility, at its sole cost and expense, to keep its Lot, and the Buildings and Improvements thereon in a well-maintained, safe, clean, neat, orderly and attractive condition at all times, normal wear and tear and deterioration excepted. Such maintenance includes, without limitation, the following: prompt removal of all litter, trash, refuse and waste; lawn mowing; tree and shrub care; watering; other Landscaping maintenance; keeping exterior lighting and mechanical facilities in working order; keeping driveways and

private roads in good repair; keeping all signs in good repair; complying with all government, health and police requirements; repairing exterior damage to Improvements; and striping and repair of parking and drive isle areas and repainting of Improvements. The Association shall have the right (but not the obligation) to perform any maintenance, repair or replacement required of Owner by this Section on a Lot upon the failure of the Owner to do so if such failure continues for seven (7) days after written notice thereof is given by the Association to such Owner (or after such longer notice period as may be allowed by the Architectural Committee due to the nature of such deficiency). Should the Association undertake such corrective action on behalf of an Owner, it shall bill such Owner for the costs and expenses related thereto (plus a reasonable administrative fee not to exceed 15%) and if such bill is not paid within thirty (30) days the amount thereof shall constitute a Special Assessment and shall be a lien upon the Lot and shall also be the personal obligation of the Owner as set forth in Article 6 hereof.

3.14 Restrictive Covenants for Exclusive or Permitted Uses.

Declarant may, by covenant duly recorded in the office of the Washoe County Recorder, limit uses on any Lot by any of the following methods:

- (a) specify an exclusive use on a Lot, thereby prohibiting other uses of that Lot and other Lots from engaging in that use. However, no exclusive use granted to another shall be binding against a Lot without the Owner's consent, if: (1) the Lot was transferred by sale or lease by Declarant to an Owner prior in time to the imposition of the exclusive use for the benefit of another; and (2) the permitted uses on the Lot allow the use otherwise prohibited by the exclusive use;
- (b) specify certain permitted uses on a Lot owned by Declarant, thereby restricting the uses to be engaged in on that parcel; and
- (c) limit uses on a Lot owned by Declarant by restrictive covenants or easements.

3.15 Variance.

The Architectural Committee is hereby granted the discretion and right to permit a variance from any of the requirements of this Article (except Sections 3.10) due to undue hardship, extraordinary or exceptional circumstances, or if the granting of the variance will not significantly undermine or adversely affect the intent and purposes of this Declaration. No variances granted by the Committee shall be deemed to create a variance from (or right of noncompliance with) any applicable ordinance, law, rule or regulation of a governmental agency with jurisdiction.

ARTICLE 4 - DESIGN GUIDELINES

4.1 General Provisions.

Design Guidelines, including development standards and criteria for the Property, may be promulgated or amended by majority vote of the Committee. Design Guidelines, to be effective, do not have to be recorded against the Property; provided that any development standards and procedures promulgated by Washoe County, including any design standards or guidelines, shall be deemed Design Guidelines for purposes of this Article, whether recorded or not. Design Guidelines promulgated by the Committee may not be imposed retroactively (i.e., after an Owner's plans have been approved).

4.2 Conflicts.

The parties hereto expressly acknowledge and agree that in the event of a conflict between the terms, conditions, covenants and provisions of this Declaration and the Design Guidelines, the terms, conditions, covenants and provisions of this Declaration shall control, unless said Design Guidelines are promulgated by Washoe County, in which case said Design Guidelines shall control.

ARTICLE 5 - COMMON AREAS

5.1 Easements of Enjoyment.

Subject to the provisions of Section 5.3.5, every Member of the Association, Occupants and their employees shall have a right and easement of enjoyment in and to the Common Areas.

5.2 Title And Improvements To Common Areas.

5.2.1 Declarant shall convey ownership of certain Common Areas or an easement thereto to the Association, which shall be responsible for their care, operation and maintenance: either within one (1) year after their designation as such on a recorded plat or its equivalent; or within sixty (60) days after completion of Improvements to be constructed thereon (if any), whichever event is later. Common Areas owned in fee simple by the Association may typically be (but are not limited to) those parcels of land which are entry landscape or signage areas, drainage ways or open space.

5.2.2 Common Areas which are under Association management, care, operation and maintenance due to an easement as specified in Article 7 hereof or encroachment permit, shall be owned in fee simple by the Owners or others (e.g., County roundabout landscaping or Common Area Maintenance Easement).

5.2.3 Prior to dedication to Association of Common Areas to be improved by Declarant or by an Owner (e.g., landscaped areas, drainage channels and basins), all Improvements therein shall be completed in a good and workmanlike manner and consented to by the Association.

5.3 Rights of Association.

The rights and easements of enjoyment in Common Areas created hereby shall be subject to the following:

5.3.1 the right of the Association to prescribe rules and regulations for the use, enjoyment, and maintenance of the Common Areas;

5.3.2 the right of the Association to sell and convey the Common Areas, or any part thereof, provided such sale or conveyance is expressly authorized by Section 5.7.2, or approved by a majority of the total eligible votes of the Members at a properly noticed meeting of the Association;

5.3.3 the right of the Association to borrow money for the purpose of improving the Common Areas, or any part thereof, and to mortgage the Common Areas, or any part thereof;

5.3.4 the right of the Association to take such steps as are reasonably necessary to protect the Common Areas, or any part thereof, against foreclosure;

5.3.5 the right (but not the obligation) of the Association to suspend the easements of enjoyment of any member of the Association during which time any Assessment levied is delinquent; and

5.3.6 any other rights or provisions of Association specified in its Articles of Incorporation or Bylaws.

5.4 Use.

The use of the Common Areas is not confined to their present use, nor is it confined to the initial Landscaping or Improvements located thereon. The Owners and Occupants shall have the right to use the Common Areas for purposes consistent with the other provisions set forth in this Declaration. The general public may also be allowed to use and enjoy Common Area, either as required by County provisions, or as allowed by the Association.

5.5 Additional Common Areas.

Declarant may, at any time by Supplemental Declaration, without the approval of the Owners, Occupants or Association, add additional portions of the Property to the Common Areas and specify the purpose of such additional areas, provided that such additional portions are either owned by Declarant or Association or, in the case of Property owned by the Owners, are covered by easements or licenses granted to Declarant or Association and said Owners consent to the

addition of Common Areas on their lots. The Board must approve the addition of Common Areas. Any such unapproved addition of Common Areas shall be null and void.

5.6 Licensed Landscaping Areas.

Declarant or Association may obtain from an applicable government entity a right to landscape portions of public rights-of-way within or adjacent to the Property, sometimes referred to as "Licensed Landscaping Areas". Subject to the provisions of Subsection 5.2.3, Association shall maintain the landscaping and irrigation systems contained in the Licensed Landscaping Areas (if any), which shall be considered part of the Common Areas.

5.7 Assignment.

5.7.1 Declarant and Association are expressly reserved the right to assign all or any of the landscaping license(s) or permit(s) for Licensed Landscaping Areas and all its right, title and interest therein to any third party including, without limitation, the County, other public authorities, a special assessment district, the Owners or the Association. No such assignment or the acceptance thereof will extinguish, limit or modify any landscaping license unless expressly so stated in such instrument.

5.7.2 In addition to the foregoing, Declarant and Association are expressly reserved the right to transfer title, possession or control to all or any part of the Common Areas to any third party, including, without limitation, the County, other public authorities, a special assessment district or others, provided that the general uses and purposes of the Common Areas so dedicated are preserved.

5.8 Declarant's Obligations.

Except as provided in Section 5.6, nothing herein contained shall require or obligate Declarant to install or maintain Landscaping or other Improvements in the Common Areas.

5.9 Owner Enhancement of Common Area.

Owners may, but only with express approval of the Association, construct additional Improvements in Common Areas, provided the Improvements are of a kind and nature which do not detract from the easement of enjoyment created by Section 5.1 and otherwise are consistent with the purposes and uses of Common Area. Association may require as a condition of approval that an Owner maintain and repair, or pay the cost of maintenance and repair, of any Improvements it constructs in Common Areas.

ARTICLE 6 - ASSESSMENTS FOR COMMON EXPENSES

6.1 Covenant to Pay.

Declarant for each parcel of the Property subject to this Declaration, and each Owner, by its acceptance of a deed for each Lot owned, covenants and agrees to pay to the Association such Regular and Special Assessments as are established, made, and collected as provided in this Declaration.

6.2 Personal Obligations.

Each Assessment, together with any late charge, interest, fine, collection costs, and reasonable attorneys' fees, shall be the personal obligation of the person or entity who was an Owner of the Lot subject to the Assessment at the time such Assessment became due and payable. If more than one person or entity was the Owner of a Lot, the personal obligation to pay such Assessment respecting such Lot shall be joint and several. A purchaser of a Lot shall be jointly and severally liable with the seller for all unpaid Assessments against the Lot without prejudice to the purchaser's right to recover from the seller the amount paid by the purchaser for such Assessments. Suit to recover a money judgment for such personal obligation shall be maintainable by the Association without foreclosure or waiver of the lien securing the same. No Owner may avoid or diminish such personal obligation by abandonment of its parcel.

6.3 Purpose and Amount of Assessments.

The Assessment shall be determined by the Board and shall be the amount estimated to be required, and shall be used exclusively to promote the purposes specified in the Declaration for the performance of the duties of the Association. Funds held by the Association shall be held, to the extent possible, in interest bearing accounts.

6.4 Regular Assessments.

Not less than sixty (60) days before the beginning of each calendar year, the Board shall meet for the purpose of preparing the proposed operating statement or budget and establishing the Regular Assessment for the forthcoming calendar year, subject to the provisions of Section 6.5; provided, however, the Board may not establish a Regular Assessment which is more than two hundred percent (200%) of the Regular Assessment of the prior year (except the first such year if it should be less than twelve (12) months), without the approval by vote or written consent of Members holding fifty-one percent (51%) of the voting rights.

6.5 Budget.

The Board shall adopt a proposed budget for each calendar year based on the projected annual Common Expenses. Within 30 days after adoption of any proposed budget for the Association, the Board shall provide a summary of the budget to all Members, and shall set a date for a meeting of the Members to consider ratification of the budget not less than 14 nor

more 30 days after mailing of the summary. Unless at that meeting 75% of all Members reject the budget, the budget is ratified, whether or not a quorum is present. If the proposed budget is rejected, the periodic budget last ratified by the Members must be continued until such time as the Members ratify a subsequent budget proposed by the Board.

6.6 Special Assessments.

If the Board determines that the estimated total amount of funds necessary to defray the Common Expenses of the Association for a given fiscal year is or will become inadequate to meet expenses for any reason, including, but not limited to, delinquencies in the payment of Assessments, then the Board shall determine the approximate amount necessary to defray such expenses; and if the amount is approved by a majority vote of the Board, it shall become a Special Assessment. The Board may, in its discretion, prorate such Special Assessment over the remaining months of the fiscal year or levy the Assessment immediately against Owners. Additionally, the Association shall have the power to incur expenses for maintenance and repair of the improvements as Special Assessments on any Owner's parcel (and for fees, fines, attorneys fees, costs, interest, late charges and other payment obligations of Owners to Association specified herein) as specified in this Declaration.

6.7 Uniform Rate of Assessment.

Except as otherwise specifically provided in this Declaration, Regular and Special Assessments of the Association must be fixed at a uniform rate for all Owners; and the amount assessed to each Owner shall be determined by multiplying the total amount of the Assessment by a fraction, the numerator of which is the Developable Acreage owned by the Owner, and the denominator of which is the total Developable Acreage owned by all Owners (including the Declarant) within the Property. All Developable Acreage owned by Declarant within the Property shall be subject to Assessments.

6.8 Assessment Period.

The Regular Assessment period shall commence on January 1 of each year and shall terminate on December 31 of such year; and Regular Assessments shall be payable in advance in one installment unless the Board adopts some other basis for collection. However, the initial Regular Assessment for each Lot shall be prorated for the calendar year in which the Assessment becomes due and, if possible, shall be prepaid in escrow on the purchase of the Lot.

6.9 Notice of Assessments; Time for Payment.

The Association will give written notice of Assessments to each Owner, which notice shall specify the amount of the Assessment and the date or dates of payment of the same. Payment shall be due fifteen (15) days after such written notice has been given. Each delinquent Assessment shall bear interest at the rate of eighteen percent (18%) per annum from the date it becomes due, together with a late charge of FIFTY DOLLARS AND NO/100 (\$50.00) for each delinquent installment. Failure of the Association to give notice of the Assessment shall not

affect the liability of the Owner of any Lot for such Assessment, but the date when payment shall become due in such a case shall be deferred to a date fifteen (15) days after such notice shall have been given. Notice shall be deemed given two (2) days after deposit with the U.S. Postal Service, postage prepaid, to the last known address of Owner supplied to Association by Owner (and if none, to the Owner's Lot) and need not be sent by certified or registered mail.

6.10 Statement of Account.

Upon payment of a reasonable fee, and upon written request of any Owner, Occupant or any beneficiary of a deed of trust secured by the Property (or a portion thereof), prospective deed of trust beneficiary, or prospective purchaser of a Lot, the Association shall issue a written statement setting forth the amount of the unpaid Assessments, if any, with respect to such Lot, the amount of the current Regular Assessment, and the date that such Assessment becomes or became due, credit for advanced payments or prepaid items, including, but not limited to, an Owner's share of prepaid insurance premiums, which statement shall be conclusive upon the Association in favor of persons who rely thereon in good faith. Unless such request for a statement of account shall be complied with within twenty (20) days, all unpaid Assessments which became due prior to the date of making such request shall be subordinate to the lien of a deed of trust of the requesting beneficiary which acquired its interest subsequent to requesting such statement.

6.11 Collection of Assessments.

The right to collect and enforce Assessments is vested in the Board acting for and on behalf of the Association. The Board or its authorized representative, may bring suit to enforce the obligations of the Owners to pay Assessments; or the Board may enforce Assessments by other means including the exercise of the power of sale granted to the Board. Suit to recover a money judgment against an Owner for unpaid Assessments together with all other amounts allowed by law or described in this Declaration shall be maintainable without first foreclosing against the Lot subject to the lien for such Assessment or waiving the lien rights granted hereby.

6.12 Lien for Assessments; Priority.

All Assessments to any Lot pursuant to this Article, together with interest, fees, charges, fines and other expenses allowed by law shall be secured by a lien on such Lot in favor of the Association. The nature of the lien and the procedure for foreclosure and sale shall be as specified in NRS 116.3116 to 116.31168, inclusive, and those statutes are incorporated herein by reference; provided that any conflict between the provisions of this Declaration and the provisions of said statutes shall be governed by the provisions of this Declaration. In addition, the Association shall have all other rights and remedies at law or equity to enforce an Owner's obligation to pay Assessments, including lien rights provided by NRS Chapter 108 and equitable liens.

ARTICLE 7 - EASEMENTS

7.1 Drainage.

Declarant and Association hereby reserve to themselves, together with the right to grant and transfer the same to Owners, nonexclusive easements for surface drainage over the Property through the drainage patterns and systems as are established from time to time upon the Property. Except as otherwise set forth as an obligation of Declarant or Association under this Declaration, each Owner shall maintain all such drainage facilities on that Owner's Lot in a neat, orderly and safe condition and in such a manner as to prevent erosion or sliding problems and to facilitate the orderly discharge of water throughout the drainage systems and patterns established from time to time upon the Property.

7.2 Easements for Utilities.

Declarant and Association hereby reserve to themselves, together with the right to grant and transfer the same, nonexclusive easements within the Property for the installation and maintenance of sewer, cable TV, telephone, electric, gas, water (potable and nonpotable), telecommunications, drainage facilities and other utility services as are necessary for Declarant and Association to enjoy its rights and discharge its obligations under this Declaration. Said easements and reservations shall include the right to enter upon the Lots owned by others or to have utility companies enter upon such Lots in or upon which such utilities, connections, lines or facilities or any portion thereof lie, to repair, replace and generally maintain said connections, lines or facilities as and when the same may be necessary; provided, however, that Declarant, Association and each such utility company shall exercise care and consideration in so entering upon another owner's Lot so as not to interfere with the use and enjoyment of same by the Owner and its Occupant and shall promptly repair any damage to any Lot caused by such entry as promptly as possible after completion of the work. Nothing herein shall prevent any Owner of a Lot from relocating any installations or other facilities upon its Lot, at its sole cost and expense, provided such relocation does not interfere with the use and enjoyment of such installations and facilities by Declarant. Each Owner shall be entitled to utilize the surface of the Property in or upon which utilities, connections, lines or facilities lie for paving and landscaping purposes and may construct permanent structures upon said Property provided said Owner relocates such utilities, connections, lines or facilities at its sole cost and expense.

7.3 Cut And Fill Slopes.

Declarant and Association hereby reserve to themselves, together with the right to grant and transfer the same to benefitted Owners, a nonexclusive easement on each and every Lot to cut or fill (no steeper than 3:1) all areas within ten (10) feet of an exterior boundary line of the Lot for the benefit of the Lot or other portion of the Property adjoining said exterior boundary line; provided, however, that this easement shall expire as to any such ten (10) foot area (or portion thereof) in which the Owner burdened by the easement has installed permanent improvements (e.g., drainage facilities, parking lots, driveways, other structures, landscaping, fencing) unless said permanent improvements can be removed, repaired or replaced on the cut or

fill slope by the Owner of the benefitted Lot without unreasonable interference with the use and enjoyment of the Lot Owner burdened by the easement, at the sole cost and expense of the Lot Owner benefitted by the easement. Once the cut or fill slope is constructed, the burdened Lot Owner shall be responsible for all repair and maintenance of easement area.

7.4 Other Easements.

Declarant and Association (together with their agents) shall have an easement for full right of ingress and egress at all times within the Property for the exercise of rights under this Declaration and for the carrying out of their other rights, functions, duties and obligations as set forth in this Declaration. Any such entry by Declarant or Association or their duly appointed agents upon the Property shall be made with as minimum inconvenience to the affected Owner or Occupant as practical.

ARTICLE 8 - ENFORCEMENT

8.1 Enforcement.

Except as expressly limited herein, Association, Declarant or any Owner shall have the right to enforce the provisions of this Declaration or by any proceeding at law or in equity. Failure by the Association, Declarant or by any Owner to enforce any provision shall in no event be deemed a waiver of the right to do so thereafter. The Association may establish and impose administrative procedures for resolving claims or disputes arising from the interpretation, application or enforcement of any provisions stated herein or specified in the Articles, Bylaws, or rules and regulations adopted by the Association or the Committee, in addition to the procedures specified in Subsection 8.2.

8.2 Abatement and Suit.

In addition to other rights and remedies specified herein, or at law or equity, violation or breach of any restriction or covenant herein contained shall give to the Association the right to enter upon the portion of the Property as to which said violation or breach exists and to summarily abate and remove, at the expense of the Owner thereof, any structure, thing or condition that may be or exist thereon contrary to the intent and the meaning of the provisions hereof. In addition, the Association, Declarant and each Owner may commence and prosecute a proceeding at law or in equity against any person or persons who have violated or are attempting to violate any of the provisions of this Declaration to enjoin or prevent them from doing so, to cause said violation to be remedied or to recover damages for said violations.

8.3 Inspection.

Authorized representatives of the Board or the Architectural Committee may from time to time at any reasonable business hour or hours, and upon reasonable notice, enter and inspect any Lot subject to this Declaration to ascertain compliance herewith. Such representatives shall not

enter into any Building pursuant to this Section 8.3 without (i) a good faith belief that entry into such Building is necessary to ascertain compliance herewith, (ii) identifying which portions of the Building require inspection; and, (iii) providing a written explanation of the basis for such belief, at the request of the Owner and/or Occupant. Any inspection in a Building pursuant to this Section shall be limited to those portions of the Building identified in clause (ii) above.

8.4 Failure to Enforce Not a Waiver of Rights.

The failure of the Declarant, the Association, the Architectural Committee or any Owner to enforce any covenant, condition or restriction herein contained shall in no event be deemed to be a waiver of the right to do so thereafter nor of the right to enforce any other covenant, condition or restriction.

8.5 Approvals in Writing.

Whenever in this Declaration the approval or consent of the Association, the Architectural Committee or any Owner is required, such approval or consent shall be effective only if in writing and signed by such party. Unless otherwise specified all approvals or consents shall not be unreasonably withheld.

8.6 Protection of Mortgagees.

A breach of any of the restrictions, conditions, covenants or reservations herein contained shall not defeat or render invalid the lien of any bona fide Mortgage made in good faith and for value as to any Lot, or any portion or portions thereof, but such conditions, covenants and restrictions shall be binding upon and effective against any Owner or Owners of any such Lot, or any portion or portions thereof, whose title is acquired by foreclosure, trustee's sale or otherwise.

8.7 Effect of Foreclosure on Assessment Lien.

If any lien created by any provision hereof is subject and subordinate to the lien of a Mortgage: (a) the foreclosure of any lien created herein or pursuant hereto shall not operate to affect or impair the lien of such Mortgage; and (b) the foreclosure of the lien of such Mortgage, the acceptance of a deed in lieu of foreclosure of such Mortgage or a sale under a power of sale included in such Mortgage shall not operate to affect or impair the lien hereof, except that any persons who obtain an interest through any of the events of foreclosure, and their successors in interest, shall take title free of the lien hereof or any personal obligation for charges as shall have accrued to the time of any of the events of foreclosure, but subject to the lien hereof for all said charges that shall accrue subsequent to the events of foreclosure. Nothing in this Section shall be construed to release any Owner from its personal obligation to pay any Assessment levied pursuant hereto.

8.8 Declarant Enforcement.

Declarant has no right to enforce the provisions of this Declaration, other than to exercise the rights given to any member of the Association or to enforce rights granted expressly to Declarant hereby, and Declarant has no obligation or responsibility to enforce the provisions hereof, and shall not be liable for failure to do so.

ARTICLE 9 - (INTENTIONALLY OMITTED)

ARTICLE 10 - TERM, TERMINATION, AMENDMENT AND ASSIGNMENT

10.1 Term, Amendment and Termination.

This Declaration shall run with and bind the land for a term of forty (40) years from the date this Declaration is recorded, after which time it shall be automatically extended for successive periods of ten (10) years, unless those persons representing at least seventy-five percent (75%) of the voting power of the Members agree to terminate this Declaration, effective at the end of the then current original term or extension period, in which case a notice signed by those persons representing that voting power must be executed and recorded. This Declaration may be amended by an instrument signed by those persons representing over seventy-five percent (75%) of the voting power of the Members; provided that no amendment which imposes obligations or restricts rights of the Declarant, during the period in which Declarant holds fee title or any leasehold interest in any portion of the Property, shall be valid unless approved by the Declarant.

10.2 Assignment.

Under circumstances in which Declarant sells or otherwise conveys all of its remaining fee title to the Property, Declarant may assign all of its rights hereunder to the transferee, but only by an express, written assignment, properly recorded in the office of the Washoe County Recorder, Nevada.

ARTICLE 11 - ANNEXATION

11.1 General Provision. Declarant may at any time or from time to time during the term of this Declaration annex the real property described on Exhibit "B" to the real property which is covered by this Declaration. In addition, Declarant may also annex other real property owned by Declarant, subject to the consent of at least seventy-five percent (75%) of the voting power of the Members. Any said annexation shall require the recording of a certificate of annexation of real property containing the provisions set forth in Section 11.2. This Declaration shall then apply to the annexed real property in the same manner as if it were originally covered by this Declaration, and thereafter, the rights, powers and responsibilities of the parties to this

Declaration with respect to the annexed real property shall be the same as with respect to the real property originally covered by this Declaration, and the rights, privileges, duties and liabilities of the Owners and Occupants of Lots within the annexed real property shall be the same as in the case of the property originally covered by this Declaration, and the term "Property" shall be deemed to include such annexed real property.

11.2 Certificate of Annexation.

The certificate of annexation of real property which is referred in Section 11.1 shall be executed by the Declarant and shall contain, without limitation, the following provisions:

- (a) a reference to this Declaration, which reference shall state the date of recording hereof and the document number hereof in the records of Washoe County, Nevada;
- (b) a statement that the provisions of this Declaration shall apply to the annexed real property in the manner set forth in Section 11.1;
- (c) an exact legal description of the annexed real property;
- (d) any additional or specific restrictive covenants which may be applicable solely to the annexed real property; and
- (e) such additional matters as the Declarant may desire to state in the certificate.

11.3 Increasing Burdens or Declarant Rights.

The annexation of real property under this Article shall be allowed without recourse to or liability of Declarant, even though said annexation may have the effect of increasing burdens on Common Area, increasing Common Expenses, or increasing the rights of Declarant hereunder.

ARTICLE 12 - DEANNEXATION

12.1 General Provision.

In addition to the deannexation provided for in Section 12.3, Declarant may at any time or from time to time during the term of this Declaration remove Property from the real property owned by Declarant which is covered by this Declaration, subject to the consent of at least seventy-five percent (75%) of the voting power of the Members. Upon the recording of a certificate of deannexation of real property containing the provisions set forth in Section 12.2, this Declaration shall no longer apply to the deannexed real property.

12.2 Certificate of Deannexation.

The certificate of deannexation of real property which is referred to in Section 12.1 shall contain, without limitation, the following provisions:

- (a) a reference to this Declaration, which reference shall state the date of recording hereof and the document number hereof in the records of Washoe County, Nevada;
- (b) a statement that the provisions of this Declaration shall no longer apply to the deannexed real property in the manner set forth in Section 12.1;
- (c) an exact legal description of the deannexed real property, and
- (d) such additional matters as the Declarant may desire to state in the certificate.

12.3 Deannexation of Property Subject to Residential Uses.

As provided in Subsections 1.5 and 3.1, certain portions of the Property which are developed and used for residential purposes shall automatically be deannexed from this Declaration upon first commencement of the residential use. In this event, the Owner of said Property or the Association may record a Certificate of Deannexation containing the information specified in Subsection 12.2.

ARTICLE 13 - RESERVATION OF RIGHTS

13.1 Land Use Changes.

Declarant shall have the right and power, from time to time, subject to approval from the County, if required, to request that Washoe County change land use designations, zoning or other entitlements to any portion of the Property owned by Declarant in such manner as Declarant deems appropriate. No Owner or Occupant shall apply for any change in zoning, land use or other entitlements for any portion of the Property unless such zoning, land use or other entitlement change is approved in writing by the Architectural Committee, in its sole discretion.

13.2 Declarant Activities.

Declarant may conduct its sales and marketing activities for the Property from any permanent or temporary sales buildings or trailers and may conduct improvement work and activities on portions of the Property owned by Declarant and do all things necessary or convenient as required to expeditiously commence, continue and complete such improvement work, including, without limitation, the provision of temporary buildings (including trailers), temporary storage of construction materials and equipment and the installation of signage of

such types, in such sizes and at such locations on portions of the Property owned by Declarant as Declarant deems appropriate.

13.3 Successor Declarants.

Declarant and any successor to Declarant may be undertaking the work of constructing Improvements to the Property owned or controlled by Declarant, or any portion thereof. The completion of such construction and the sale or other disposal of Lots is essential to the establishment and welfare of the Property. As provided in Subsection 10.2, Declarant's rights may only be transferred by a written assignment duly recorded from the Declarant to a successor to Declarant, or from a successor to Declarant to another successor to Declarant. Such an express assignment may only pertain to all of Declarant's rights hereunder.

13.4 Construction or Subdivision by Declarant.

Nothing in this Declaration shall limit the right of Declarant to alter or subdivide any of the Lots, or to construct such Improvements as Declarant deems advisable prior to the sale of such Lots by Declarant. Declarant shall not be required to comply with the provisions of Articles 2, 3 or 4 in its construction activities. In addition, nothing in this Declaration shall limit the right of Declarant to construct such Signs on portions of the Property which are owned by Declarant or within any public right-of-way or Common Area as Declarant deemed advisable to identify the location of the Property or give directions to and identify areas within the Property, provided that such Signs shall be in conformity with applicable zoning ordinances and regulations. Further, nothing in this Declaration shall require Declarant to maintain any portion of the Property or any Improvements thereto prior to the sale or lease of such portion of the Property by Declarant.

This Declaration shall not limit the right of Declarant at any time prior to acquisition of title by a purchaser from Declarant to establish on the Property additional licenses, reservations and rights-of-way to itself, to utility companies, or to others as may from time to time be necessary to the development and disposal of the Lots, in Declarant's sole discretion. Declarant reserves the right to alter its construction plans and designs as it deems appropriate.

13.5 Liability.

Declarant or any party exercising the rights of Declarant shall exercise its own judgment to insure compliance with the provisions of the Declaration. Such parties and their employees and agents shall not be liable to any Owner, Occupant or to any other party by reason of a good faith mistake in judgment, negligence or non-enforcement of any of the provisions of this Declaration.

ARTICLE 14 - WATER RIGHTS AND RECLAIMED WATER USE

14.1 Obligation to Conserve.

Water conservation is and will be of concern to Declarant and all Owners or Occupants of the Property or any portion thereof. The Association or Architectural Committee may, from time to time, promulgate certain rules, regulations, or guidelines pertaining to water use. Owners and Occupants expressly covenant and agree that they will abide by and obey any such rules, regulations or guidelines. Without limiting the generality of the foregoing, no Owner or Occupant (or agent thereof) shall waste or unnecessarily use any water or water rights for or appurtenant to the Property or any portion thereof. All Owners and Occupants (or agents thereof) shall utilize such water or water rights reasonably and beneficially and in accordance with existing permit conditions and regulations. Owners and Occupants (or agents thereof) shall take affirmative measures to conserve water, in accordance with applicable state and local requirements, including, without limitation, the following:

- (a) use of water conservation devices, including, without limitation, inline aerators and flow restrictors;
- (b) use of reclaimed effluent where available and appropriate, and installation of separate, dedicated water lines for nonpotable water (e.g., effluent or untreated surface water) for all irrigation needs on the Lot; and
- (c) review and upgrade of water management practices.

14.2 Nonpotable Water/Required Use.

Declarant hereby reserves to itself, together with the right to grant and transfer the same, the right to specify that nonpotable water (e.g., untreated surface water, effluent) shall be utilized for certain purposes, including, without limitation, irrigation of Common Areas, Landscaping and manufacturing uses (e.g., washing, cooling). Each Owner at its sole cost and expense shall be required to connect to the reclaimed water system operated by the City of Sparks and to use reclaimed water for all landscaping uses on the Owner's Lot, subject to the approval of the City of Sparks, Nevada Environmental Protection Agency and the Washoe County Health District as to the allowable areas of irrigation and use of reclaimed water on said Lot.

ARTICLE 15 - SUBSEQUENT PURCHASERS

After the date of recording hereof, any successor in interest of Declarant to any portion of the Property, and any Owner shall take the Property or any interest therein subject to the provisions of this Declaration, the authority of the Association and the Architectural Committee (including, without limitation, any articles of incorporation, bylaws, or rules and regulations promulgated thereby), together with any changes, amendments or alterations to the same.

ARTICLE 16 - MISCELLANEOUS PROVISIONS

16.1 Constructive Notice and Acceptance.

Every person who now or hereafter owns or acquires right, title or interest in and to any portion of the Property is and shall be conclusively deemed to have consented and agreed to every covenant, condition and restriction contained herein, whether or not any reference to this Declaration is contained in the instrument by which such person acquired an interest in said property.

16.2 Mutuality, Reciprocity; Runs With Land.

All restrictions, covenants and agreements herein contained are made for the direct, mutual and reciprocal benefit of each and every part and parcel of the Property; shall create mutual, equitable servitudes upon each portion of the Property in favor of every other portion of the Property; and shall create reciprocal rights and obligations between the respective Owners of all portions of the Property and privity of contract and estate between all grantees of said parcels, their heirs, successors, and assigns.

In addition, all restrictions herein contained shall operate as covenants running with the land for the benefit of the Property and each and every portion thereof and shall inure to the benefit of all grantees of the Property and each and every portion thereof, their heirs, successors and assigns, and shall apply to and bind the grantees of the Property and each and every portion thereof, their heirs, successors and assigns.

16.3 Section Headings.

Section headings where used herein are inserted for convenience only are not intended to be a part of this Declaration or in any way to define, limit or describe the scope and intent of the particular sections to which they refer.

16.4 Effect of Invalidation.

If any provision of this Declaration is held to be invalid by any court of competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof.

16.5 Effect of Declaration.

This Declaration is made for the purposes set forth in the Recitals to this Declaration and Declarant makes no warranties or representations, express or implied, as to the binding effect or enforceability of all or any portion of this Declaration, or as to the compliance of any of these provisions with public laws, ordinances and regulations applicable thereto.

16.6 Personal Covenant.

To the extent the acceptance of a conveyance of a Lot creates a personal covenant between the Owner of such Lot and Declarant, Association or other Owners, such personal covenant shall terminate and be of no further force or effect from and after the date when a person or entity ceases to be an Owner except to the extent this Declaration may provide otherwise with respect to the payment of money to the Association.

16.7 No Surcharge.

The improvement, annexation, division or redivision of the Property shall not be deemed a surcharge of the easements benefitting such Property or the Common Area and any said easements shall at all times be appurtenant to each and every parcel into which the same may from time to time be divided or redivided.

16.8 Not a Public Dedication.

Nothing contained in this Declaration shall be deemed to be a gift or dedication of any portion of the Property to the County or general public, or for the general public or for any public purpose whatsoever, and this Declaration shall be strictly construed to and for the purposes expressly stated herein.

16.9 Notices.

Any notice permitted or required to be delivered as provided herein shall be in writing and shall be delivered either personally or by registered or certified mail, postage prepaid, return receipt requested. Each Notice shall be deemed delivered upon the earlier of (i) if personally delivered, the date of delivery to the address of the party to receive such notice, or (ii) if mailed, three (3) business days after the date of posting by the United State post office.

- (a) If to Declarant, the Association or the Architectural Committee:

550 West Plumb Lane
Suite B, #550
Reno, Nevada 89509

- (b) Notice to any Owner shall be addressed to the most recent address furnished by such Owner in writing to the Association for the purpose of giving notice, or if no such address have been furnished, then to the street address of such Owner's Lot. In the case of co-Owners or on behalf of all such co-Owners, delivery to any co-Owner shall be deemed delivery to all such co-Owners.

Notice of change of address shall be given by written notice in the manner detailed in this Section. Rejection, refusal to accept or the inability to deliver a notice because of changed

address of which no notice was given to Association shall be deemed to constitute receipt of the notice, demand request or communication.

The affidavit of an officer or authorized agent of the Declarant, the Association or the Architectural Committee declaring under penalty of perjury that a notice has been mailed to any Owner or Owners to the address or addresses shown on the records of the Declarant, the Association or the Architectural Committee, shall be deemed conclusive proof of such mailing, whether or not such notices are actually received.

16.10 Use of Gender and Number.

As used in this Declaration, the masculine, feminine or neuter gender, and the singular or plural number, shall each be considered to include the others whenever the context so indicates.

16.11 Binding Effect; Benefits.

This Declaration shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, successors, executors, administrators and assigns. Notwithstanding anything in this Declaration to the contrary, nothing in this Declaration, expressed or implied, is intended to confer on any person other than the parties specified herein or their respective heirs, successors, executors, administrators and assigns any rights, remedies, obligations or liabilities under or by reason of this Declaration.

16.12 Governing Law/Venue.

This Declaration and all issues relating to its validity, interpretation, performance and enforcement (including, without limitation, provisions concerning limitations of action) shall be governed by and construed in accordance with the laws of the State of Nevada, and venue for all actions arising from rights and obligations of this Declaration shall be solely in Washoe County, Nevada.

16.13 Incorporation of Exhibits.

All exhibits attached hereto are by this reference incorporated herein and made a part hereof for all purposes as if fully set forth herein.

16.14 Cumulative Remedies.

All rights, options and remedies of the Association, the Architectural Committee, the Owners and the Declarant under this Declaration are cumulative, and none of them shall be exclusive of any other. The Association, the Architectural Committee, the Owners and the Declarant shall have the right to pursue any one or all of such rights, options and remedies or any other remedy or relief which may be provided by law or equity, whether or not stated in this Declaration.

16.15 Attorneys Fees and Costs.

In any action to enforce or administer the provisions hereof, the prevailing party shall be entitled to reasonable attorneys fees and costs.

16.16 Time.

Time is of the essence regarding interpretation and enforcement of all provisions of this Declaration.

IN WITNESS WHEREOF, the undersigned has executed this Declaration on the date first hereinabove written.

ASSOCIATION:

SPANISH SPRINGS NEIGHBORHOOD ASSOCIATION, a Nevada nonprofit association, hereby approves all provisions hereof.

DECLARANT:

SPANISH SPRINGS ASSOCIATES LIMITED PARTNERSHIP, a Nevada limited partnership

By: Hawco Development Company,
a Nevada corporation,
as General Partner

By: 
JESSE HAW, President

By: 
JESSE HAW, President

STATE OF NEVADA)
)ss:
COUNTY OF WASHOE)

This instrument was acknowledged before me on October 22, 2007, by JESSE HAW as President of SPANISH SPRINGS NEIGHBORHOOD ASSOCIATION, a Nevada nonprofit association.



Tina Ford
Notary Public exp 6-8-10

STATE OF NEVADA)
)ss:
COUNTY OF WASHOE)

This instrument was acknowledged before me on October 22, 2007, by JESSE HAW as President of HAWCO DEVELOPMENT COMPANY, a Nevada corporation, as General Partner of SPANISH SPRINGS ASSOCIATES LIMITED PARTNERSHIP, a Nevada limited partnership.



Tina Ford
Notary Public exp 6-8-10

EXHIBIT "A"

DESCRIPTION
NC ZONED AREA

A parcel of land situate within the E1/2 of Section 34, T21N, R20E, MDM, Washoe County, Nevada, being a portion of Parcel 3A as shown on that Record of Survey Supporting a Boundary Line Adjustment for Spanish Associates and Hometown Health Plan, Inc. and Hometown Health Providers Insurance Company, recorded on May 8, 2007 as Record of Survey Map 4904, Document No. 3529434, Official Records of Washoe County, Nevada, more particularly described as follows:

Beginning at a point on the boundary of said Parcel 3A, said point also being the most southerly corner of Parcel 2A as shown on that Record of Survey Supporting a Boundary Line Adjustment for Spanish Associates and Seven K Properties, recorded on March 31, 2005 as Record of Survey Map 4543, Document No. 3191105, Official Records of Washoe County, Nevada; thence along the westerly boundary line of said Parcel 3 the following nine (9) courses and distances:

N 41°48'08" E, 259.83 feet;
 N 46°26'20" W, 157.63 feet;
 N 44°00'21" W, 30.00 feet;
 N 45°59'39" E, 210.27 feet;
 N 38°44'54" W, 143.43 feet;
 N 56°05'09" E, 105.39 feet;
 N 33°54'51" W, 1370.00 feet;
 N 56°05'09" E, 175.00 feet;
 N 33°54'51" W, 117.29 feet;

thence N 56°00'35" E, 626.38 feet;
 thence N 03°40'34" E, 84.47 feet;
 thence S 86°19'26" E, 65.00 feet;

thence S 84°37'09" E, 595.57 feet to a point on the easterly boundary line of said Parcel 3A;
 thence along the easterly boundary line of said Parcel 3A the following sixteen (16) courses and distances:

S 01°24'54" E, 528.65 feet;
 on the arc of a 295.00 foot radius curve to the left through a central angle of 20°51'00" a distance of 107.35 feet;

S 22°15'54" E, 676.02 feet;

on the arc of a 205.00 foot radius curve to the right through a central angle of 17°46'54" a distance of 63.62 feet;

S 04°29'00" E, 332.69 feet;

S 85°31'00" W, 391.67 feet;

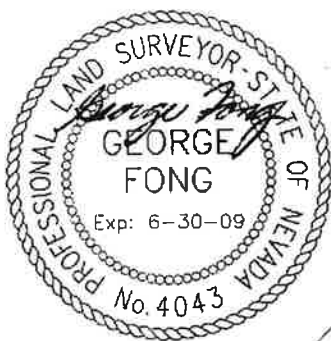
S 07°42'28" E, 82.67 feet;

on the arc of a 863.50 foot radius curve to the right through a central angle of 41°49'52" a distance of 630.43 feet;

S 34°07'25" W, 24.03 feet;

on the arc of a 193.00 foot radius curve to the left through a central angle of $03^{\circ}08'24''$ a distance of 10.58 feet;
S $30^{\circ}59'01''$ W, 116.22 feet;
S $25^{\circ}08'34''$ W, 59.79 feet;
on the arc of a 135.50 foot radius curve to the left through a central angle of $19^{\circ}21'01''$ a distance of 45.76 feet to a point of compound curvature;
on the arc of a 25.50 foot radius curve to the left through a central angle of $21^{\circ}47'36''$ a distance of 9.70 feet;
S $16^{\circ}00'03''$ E, 25.59 feet;
on the arc of a 110.50 foot radius curve to the left through a central angle of $09^{\circ}10'52''$ a distance of 17.71 feet to a point on the westerly boundary line of said Parcel 3A and a point on the northeasterly line of Eagle Canyon Drive;
thence along said westerly boundary line of Parcel 3A and northeasterly line of Eagle Canyon Drive on the arc of a 2824.79 foot radius curve to the right from a tangent bearing N $58^{\circ}11'39''$ W through a central angle of $09^{\circ}59'47''$ a distance of 492.84 feet to the point of beginning.
Containing 50.84 acres, more or less.

Basis of bearings is the Nevada State Plane Coordinate System, West Zone Grid, NAD83/94.



C and M Engineering
9498 Double R Boulevard, Suite B
Reno, NV 89521

10/19/07

COPIES

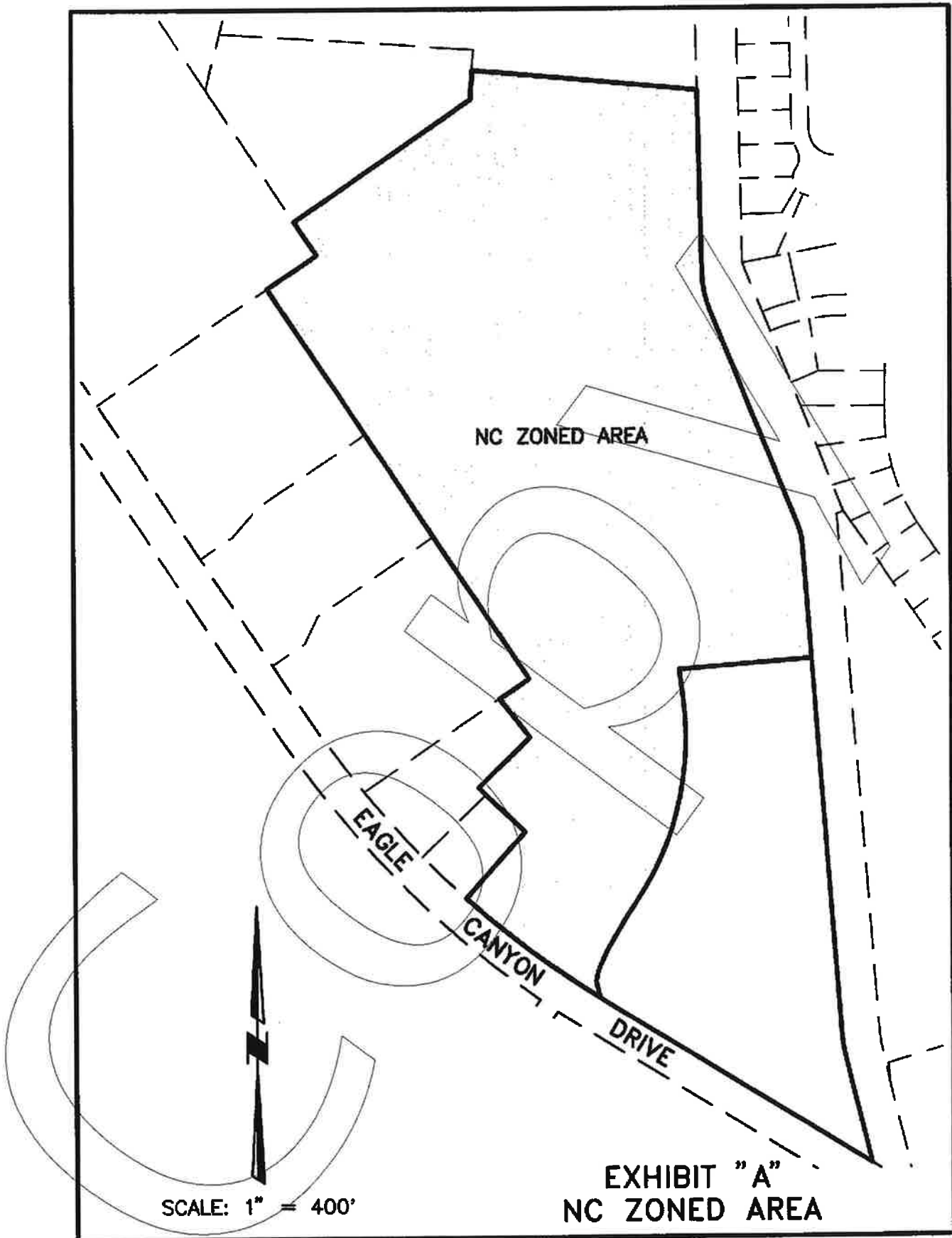


EXHIBIT "B"

DESCRIPTION
ANNEXATION PROPERTY

Parcels of land situate within the E1/2 of Section 34 and the SW1/4 of Section 35, T21N, R20E, MDM, Washoe County, Nevada, being portions of that Record of Survey Supporting a Boundary Line Adjustment for Spanish Associates Limited Partnership, and Hometown Health Plan, Inc. and Hometown Health Providers Insurance Company, recorded on May 8, 2007 as Record of Survey Map 4904, Document No. 3529434, Official Records of Washoe County, Nevada; more particularly described as follows:

TMCC AREA:

A portion of Parcel 3A of said Survey Map 4904 as follows:

Commencing at a point on the boundary of said Parcel 3A, said point also being the most southerly corner of Parcel 2A as shown on that Record of Survey Supporting a Boundary Line Adjustment for Spanish Associates and Seven K Properties, recorded on March 31, 2005 as Record of Survey Map 4543, Document No. 3191105, Official Records of Washoe County, Nevada;

thence along the westerly boundary line of said Parcel 3A the following nine (9) courses and distances:

N 41°48'08" E, 259.83 feet;

N 46°26'20" W, 157.63 feet;

N 44°00'21" W, 30.00 feet;

N 45°59'39" E, 210.27 feet;

N 38°44'54" W, 143.43 feet;

N 56°05'09" E, 105.39 feet;

N 33°54'51" W, 1370.00 feet;

N 56°05'09" E, 175.00 feet;

N 33°54'51" W, 117.29 feet to the Point of Beginning;

thence continuing along the said westerly boundary line of Parcel 3A, N 33°54'51" W, 458.07 feet;

thence N 14°06'59" E, 168.00 feet;

thence S 86°19'26" E, 744.81 feet;

thence S 03°40'34" W, 145.42 feet;

thence S 56°00'35" W, 626.38 feet to the point of beginning.

Containing 6.00 acres, more or less.

RENOWN AREA:

All of Parcel 4A of said Survey Map 4904.

Containing 15.02 acres, more or less.

Basis of bearings is the Nevada State Plane Coordinate System, West Zone Grid, NAD83/94.

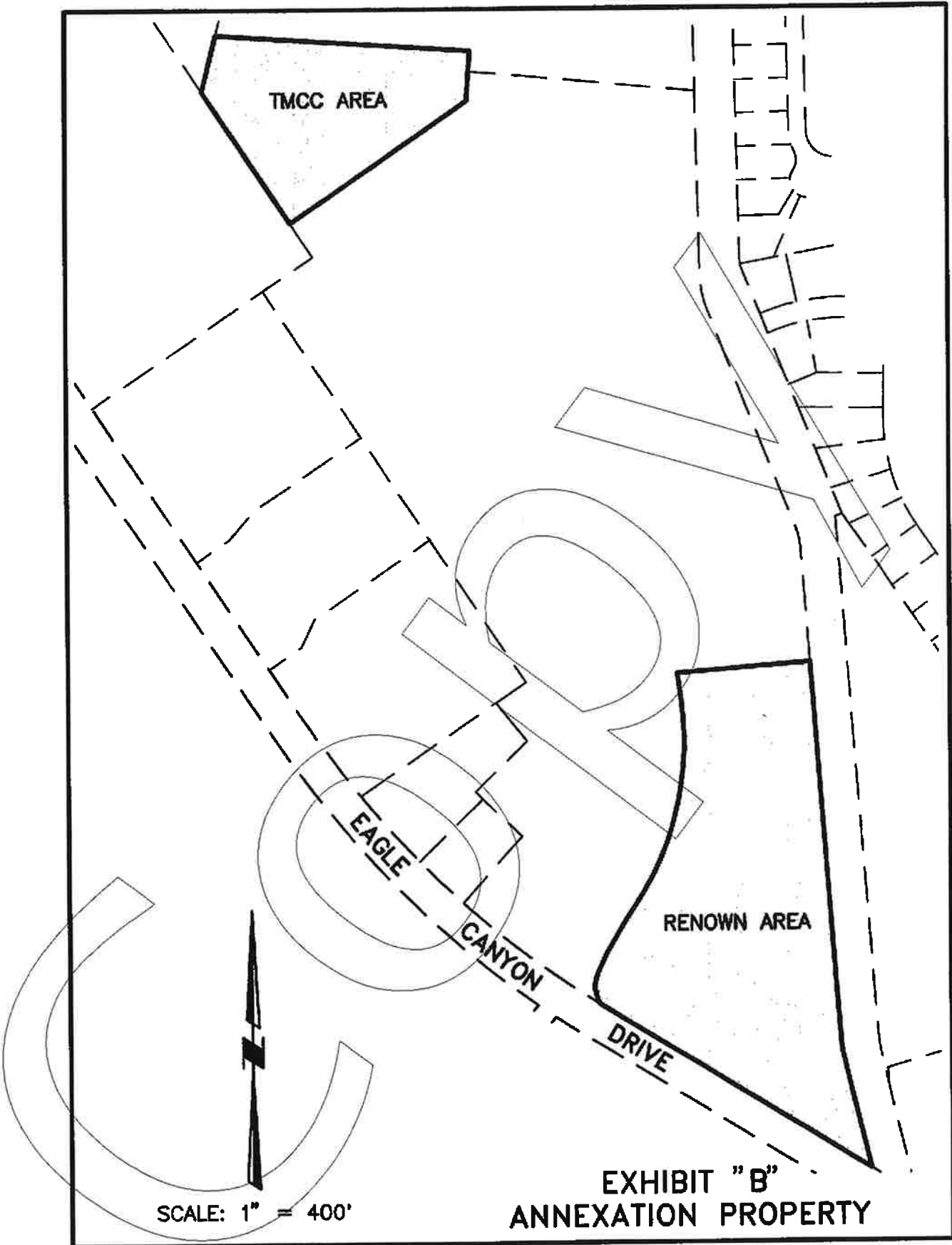
C and M Engineering

9498 Double R Boulevard, Suite B

Reno, NV 89521



10/19/07



SCALE: 1" = 400'

EXHIBIT "B"
ANNEXATION PROPERTY