

Tentative Subdivision Map

SILENT SPARROW SUBDIVISION

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Community Services Department
Planning and Development
TENTATIVE SUBDIVISION MAP
APPLICATION



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

Telephone: 775.328.3600

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Development staff at 775.328.3600.

Project Information		Staff Assigned Case No.: _____	
Project Name: SILENT SPARROW SUBDIVISION			
Project Description: 24 LOT TENTATIVE SUBDIVISION MAP			
Project Address: Silent Sparrow Drive 1,500 feet west of W. Calle de la Plata			
Project Area (acres or square feet): 8.04 acres			
Project Location (with point of reference to major cross streets AND area locator): Silent Sparrow Subdivision is located 1,500 feet west of the intersection of Silent Sparrow Dr. and W. Calle de la Plata and is approx. 2,800 feet west of the intersection of W. Calle de la Plata and Pyramid Highway (SR445).			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No(s):	Parcel Acreage:
532-020-12	22.048		
Section(s)/Township/Range: 23, T21N, R20E			
Indicate any previous Washoe County approvals associated with this application: Case No.(s). RZA application submitted concurrently			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: Spanish Springs Associates L.P.		Name: C&M Engineering and Design	
Address: 550 W. Plumb Lane, # B-505		Address: 5488 Reno Corporate Drive #200 B	
Reno, NV	Zip: 89509	Reno, NV	Zip: 89511
Phone: 775-425-4422	Fax: 775-329-8591	Phone: 775-856-3312	Fax: 775-856-3318
Email: jesse@hawcoproperties.com		Email: lmenante@candmengineering.com	
Cell: 775-560-6922	Other:	Cell:	Other:
Contact Person: Jesse Haw		Contact Person: Lisa Menante	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Same as Owner		Name: Robert M. Sader	
Address:		Address: 8600 Technology Way, Suite 101	
	Zip:	Reno, NV	Zip: 89521
Phone:	Fax:	Phone: 775-329-8310	Fax: 775-329-8591
Email:		Email: rmsader@robertmsaderltd.com	
Cell:	Other:	Cell:	Other:
Contact Person:		Contact Person: Robert M. Sader	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Tentative Subdivision Map Application Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to tentative subdivision maps may be found in Article 608, Tentative Subdivision Maps.

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

Silent Sparrow Subdivision is located 1,500 feet west of the intersection of Silent Sparrow Drive and W. Calle de la Plata, and is a total 2,800 feet from the intersection of West Calle de la Plata and Pyramid Highway (SR445).

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

Silent Sparrow Subdivision

3. Density and lot design:

a. Acreage of project site	8.04 acres
b. Total number of lots	24
c. Dwelling units per acre	3
d. Minimum and maximum area of proposed lots	12,000 s.f. min to 17,027 s.f. max.
e. Minimum width of proposed lots	80 feet
f. Average lot size	12,000 + s.f.

4. Utilities:

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

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

a. Acreage of common open space:

N/A

b. Development constraints within common open space (slope, wetlands, faults, springs, ridgelines):

N/A

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

N/A

d. Average lot size:

N/A

e. Proposed yard setbacks if different from standard:

N/A

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

N/A

g. Identify all proposed non-residential uses:

N/A

h. Improvements proposed for the common open space:

N/A

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

N/A

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

N/A

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

N/A

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

N/A

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

N/A

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?

NO

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. Will a special use permit be required for utility improvement? If so, what special use permits are required and are they submitted with the application package?

NO

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

There are no known archeological sites on the property.

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

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

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

Spanish Springs Associates Limited Partnership and Hawco Development Company have water rights banked with the Truckee Meadows Water Authority for use on this property. See attached letter, Appendix 9.

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

Aspects of the model energy code will be applied including property insulation, energy efficient appliances, energy efficient windows and water saving shower heads, faucets, and toilets. Large lot sizes and generous building footprints will afford the project architects the opportunity to place homes on lots to take advantage of solar heating. Roadway widths will comply with minimum county standards for roadway width to reduce energy consumption associated with asphalt and aggregate production.

13. Is the subject property in an area identified by Planning and Development 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

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

N/A - Streets will be public.

15. Is the subject property located adjacent to an existing residential subdivision? If so, describe how the tentative map complies with each additional adopted policy and code requirement of Article 434, Regional Development Standards within Cooperative Planning Areas and all of Washoe County, in particular, grading within 50 and 200 feet of the adjacent developed properties under 5 acres and parcel matching criteria:

Yes. The proposed subdivision is of the same zoning as adjacent existing and planned Medium Density Suburban residential lots, which are all within the unincorporated area and are over one mile from the Sparks city limits. Proposed and existing lots are of similar size.

16. 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?

Silent Sparrow Subdivision shall comply with all applicable policies of the Spanish Springs Area Plan.

17. 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?

Proof of water rights (see attached, Appendix 9) is provided pursuant to Section 110.216.45. Proposed drainage improvements shall comply with design parameters of the Spanish Springs Water Detention Facility pursuant to Section 110.216.55.

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

No phasing is planned at this time. The project will likely be developed in one phase.

19. 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.

Yes No If yes, include a separate set of attachments and maps.

20. 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.

Yes No If yes, include separate attachments.

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:

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

407 cy

22. 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?

19,300 cy import to be placed as fill. No export is anticipated.

23. 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?

Disturbed areas during construction will be difficult to see. Once the houses and fences are in place there will be no disturbed areas visible. New homes will be at nearly the same finish floor elevations as existing surrounding homes.

24. 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?

Maximum slope will be 3:1 cut for fill, but few if any such slopes are anticipated, since the property is flat.

Revegetation is not anticipated to be needed, since disturbed areas will be paved for streets and lots will be improved with single family dwellings, landscaping, etc.

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

NO

26. 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?

NO

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

No trees on the property.

28. 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?

If revegetation is required, areas will be treated with a native seed mix comprised of native shrubs and grasses per Washoe County requirements. However, no revegetation is planned to be needed.

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

Use of water trucks or temporary sprinkler irrigation lines.

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

N/A

Tahoe Basin

Please complete the following additional questions if the project is within the Tahoe Basin:

31. Who is the Tahoe Regional Planning Agency (TRPA) project planner and what is his/her TRPA extension?

N/A

32. Is the project within a Community Plan (CP) area?

Yes No If yes, which CP?

33. State how you are addressing the goals and policies of the Community Plan for each of the following sections:

- a. Land Use:

N/A

- b. Transportation:

N/A

- c. Conservation:

N/A

d. Recreation:

N/A

e. Public Services:

N/A

34. Identify where the development rights for the proposed project will come from:

N/A

35. Will this project remove or replace existing housing?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, how many units?
------------------------------	--	-------------------------

36. How many residential allocations will the developer request from Washoe County?

N/A

37. Describe how the landscape plans conform to the Incline Village General Improvement District landscaping requirements:

N/A

Request to Reserve New Street Name(s)

The Applicant is responsible for all sign costs.

Applicant Information

Name: Spanish Springs Associates L.P.
Address: 550 W. Plumb Lane, # B-505
Reno, NV 89505
Phone: (775) 425-4422 Fax: (775) 329-8591
 Private Citizen Agency/Organization

Street Name Requests

(No more than 14 letters or 15 if there is an "I" in the name. Attach extra sheet if necessary.)

AVIAN DRIVE	
BIG BIRD DRIVE	

If final recordation has not occurred within one (1) year, it is necessary to submit a written request for extension to the coordinator prior to the expiration date of the original

Location

Project Name: SILENT SPARROW SUBDIVISION
 Reno Sparks Washoe County
Parcel Numbers: 532-020-12 (portion)
 Subdivision Parcelization Private Street

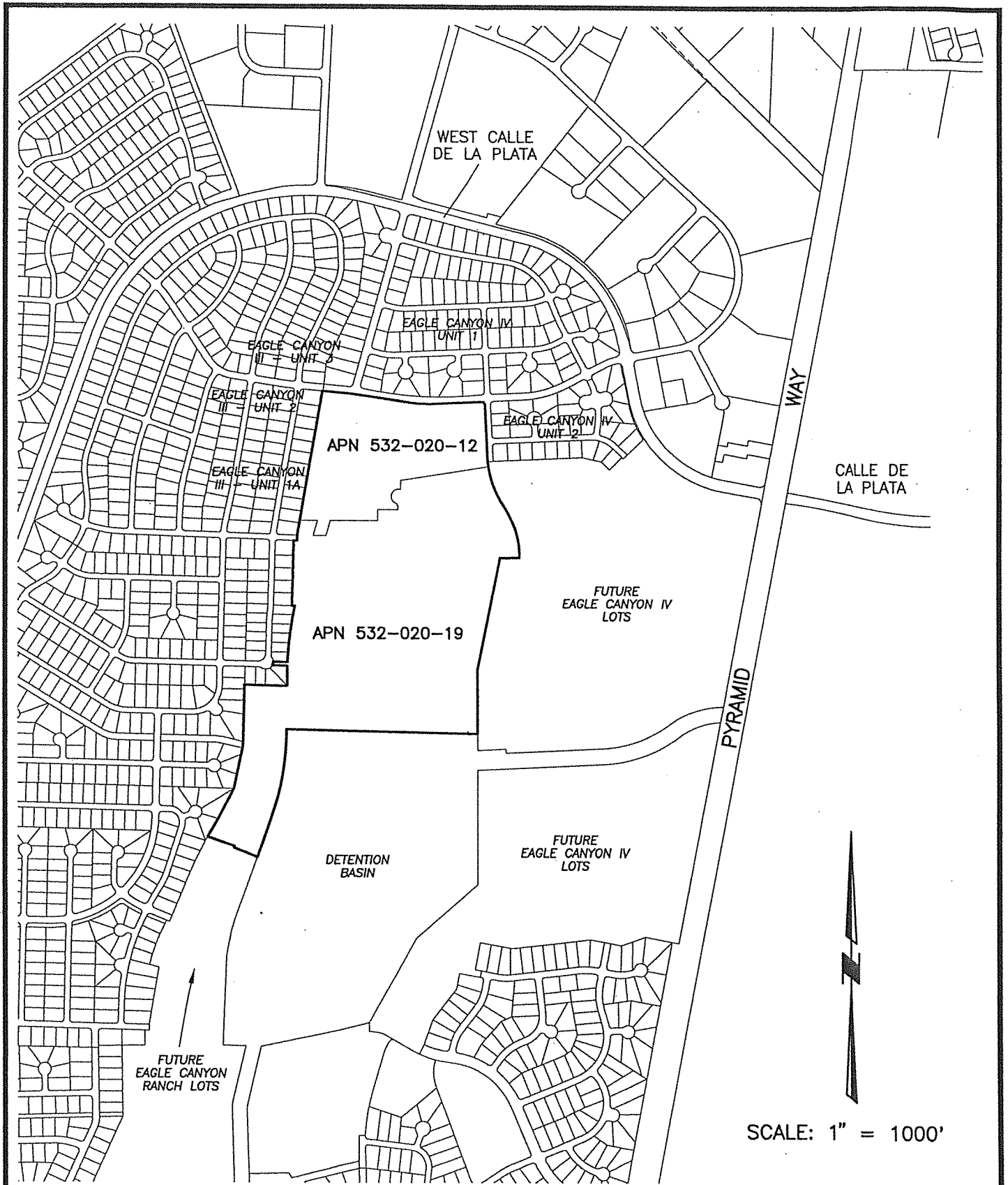
Please attach maps, petitions and supplementary information.

Approved: _____ Date: _____
Regional Street Naming Coordinator
 Except where noted
Denied: _____ Date: _____
Regional Street Naming Coordinator

Washoe County Geographic Information Services

Post Office Box 11130 - 1001 E. Ninth Street
Reno, NV 89520-0027

Phone: (775) 328-2325 - Fax: (775) 328-6133



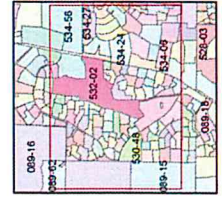
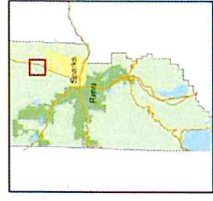
VICINITY MAP

Assessor's Map Number
532-02

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
Michael E. Clark, Assessor
1001 East Ninth Street
Reno, Nevada, 89512
(775) 335-2231



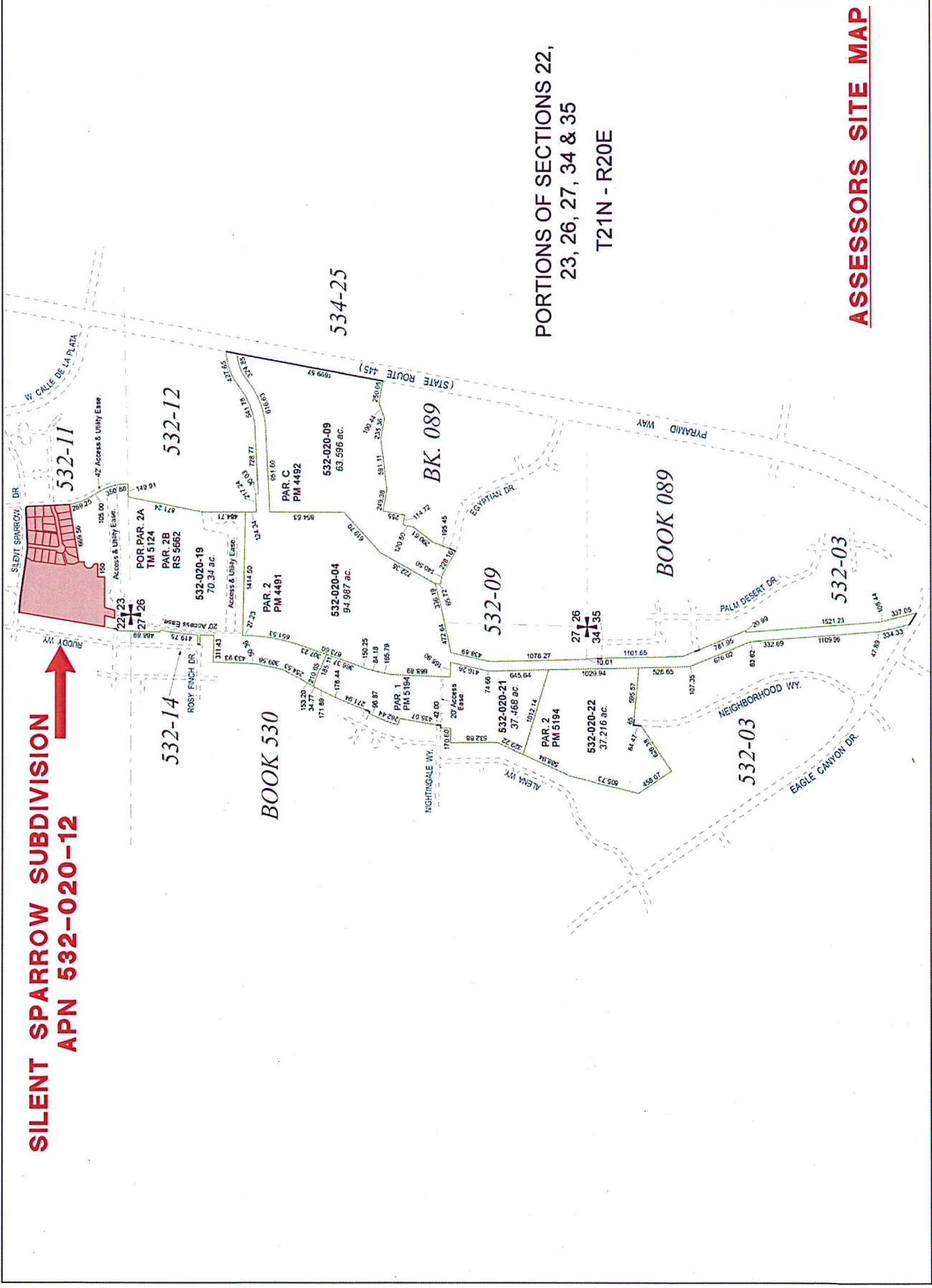
Feet
0 250 500 750 1,000
1 inch = 1,000 feet



created by: KSB 10/30/2013
last updated: KSB 10/20/15 KSB 1/11/16
area previously shown on maps:
530-28, 089-16

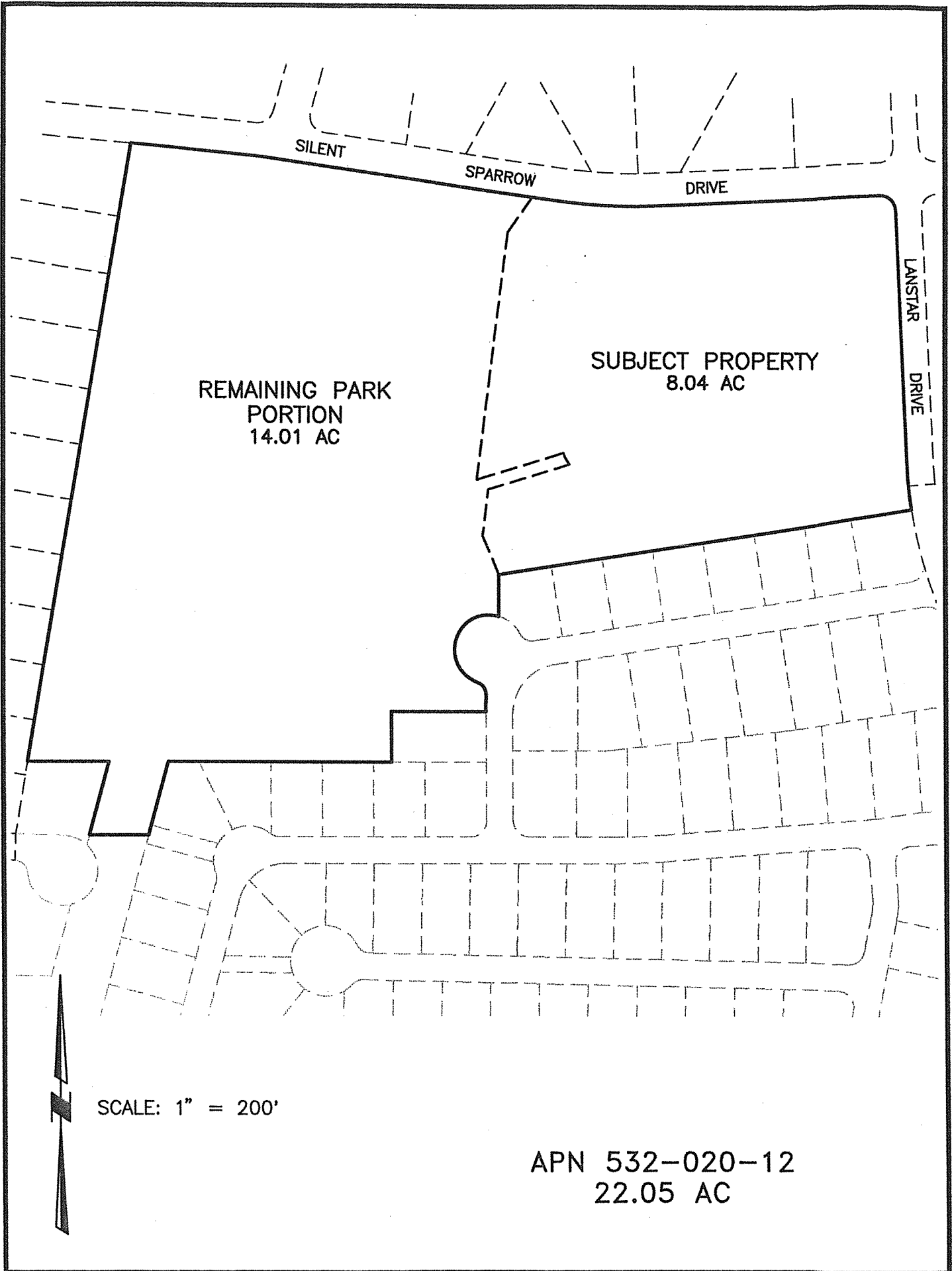
NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and is not intended to be used for any other purpose. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

SILENT SPARROW SUBDIVISION
APN 532-020-12



PORTIONS OF SECTIONS 22,
23, 26, 27, 34 & 35
T21N - R20E

ASSESSORS SITE MAP



SILENT

SPARROW

DRIVE

LANSTAR

DRIVE

REMAINING PARK
PORTION
14.01 AC

SUBJECT PROPERTY
8.04 AC



SCALE: 1" = 200'

APN 532-020-12
22.05 AC

1. ALL AREAS SHOWN ON THIS PLAN ARE TO BE CONSIDERED AS PART OF THE PROJECT AND SHALL BE MAINTAINED AS SUCH PERMANENTLY.

2. THE PROPOSED GRADING SHALL BE IN ACCORDANCE WITH THE CITY ENGINEER'S APPROVED GRADING PLAN.

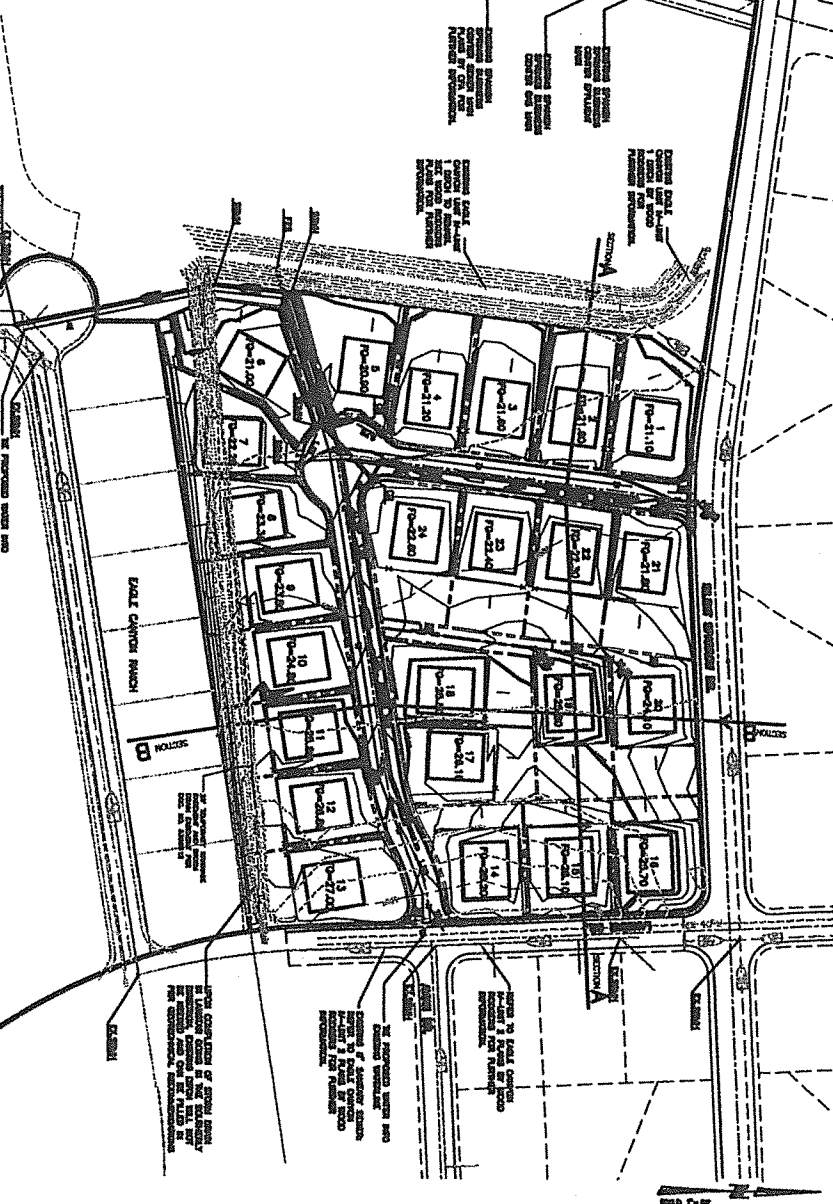
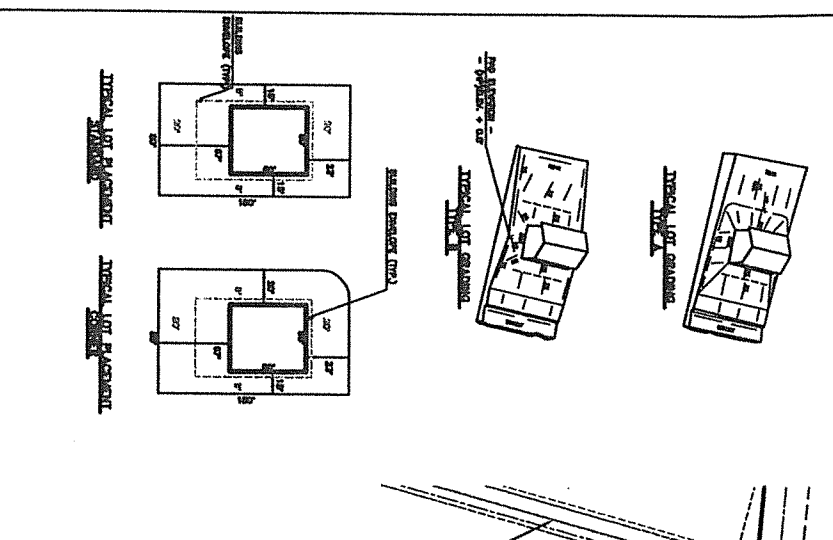
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Washoe County Treasurer
 Tammi Davis

Account Detail

[Back to Search Results](#)
[Change of Address](#)
[Print this Page](#)

Pay Online

No payment due for this account.

\$0.00

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

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

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

Payment Information

Special Assessment District

Installment Date Information

Assessment Information

Washoe County Parcel Information		
Parcel ID	Status	Last Update
53202012	Active	5/27/2016 2:10:36 AM
Current Owner: SPANISH SPRINGS ASSOCIATES		SITUS: 0 PYRAMID WAY WCTY NV
550 W PLUMB LN STE B RENO, NV 89509-3686		
Taxing District 4000	Geo CD:	
Legal Description		
Lot 1 SubdivisionName _UNSPECIFIED Township 21 Range 20		

Tax Bill (Click on desired tax year for due dates and further details)					
Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2015	\$266.92	\$266.92	\$0.00	\$0.00	\$0.00
2014	\$258.64	\$258.64	\$0.00	\$0.00	\$0.00
2013	\$251.10	\$251.10	\$0.00	\$0.00	\$0.00
2012	\$240.98	\$240.98	\$0.00	\$0.00	\$0.00
2011	\$226.48	\$226.48	\$0.00	\$0.00	\$0.00
Total					\$0.00

Important Payment Information

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

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari.

DESCRIPTION

APN 532-020-12:

All that certain real property situate in the County of Washoe, State of Nevada, being portions of Sections 22 and 23, T.21N., R.20E., M.D.M.; more particularly described as follows:

Parcel 1 of 10th Parcel Map for Spanish Springs Associates Limited Partnership, as shown on the plat thereof, recorded on June 8, 2006 as Parcel Map 4569, File No. 3398260, Official Records of Washoe County, Nevada.

Containing 22.05 acres, more or less.

SOLAEGUI
ENGINEERS

June 3, 2016

Clara Lawson
Washoe County Engineering
1001 East Ninth Street
Reno, Nevada 89520

Re: Hawco School Site

Dear Clara:

This letter contains the findings of our traffic engineering review of the proposed single family residential development located at a former school site off Silent Sparrow Drive in Washoe County. The developer plans 24 single family homes on the former 10 acre school site.

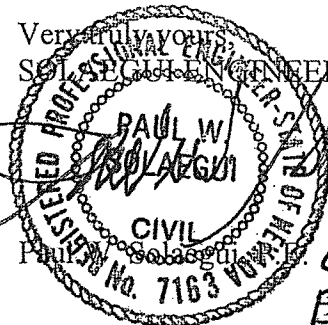
Trip generation calculations are based on the Ninth Edition of *ITE Trip Generation* (2012). The calculation sheet is attached for ITE land uses #210: Single Family Detached Housing. Table 1 shows the trip generation summary for the 24 homes.

TABLE 1
TRIP GENERATION

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Residential 24 Dwelling Units	228	5	13	18	15	9	24

As indicated in Table 1, the average daily trip total for the residential land use is 228 trips with 18 AM peak hour trips and 24 PM peak hour trips. These volumes are below the Washoe County and Nevada Department of Transportation traffic study thresholds which trigger the need for a full traffic study. During the study scoping it was uncertain if lots from the development would front Silent Sparrow Drive. If lots did front the street confirmation regarding the driveway loaded collector street capacity threshold needed evaluation. The attached site plans shows no project lots fronting Silent Sparrow Drive. Since the lots do not front Silent Sparrow that requirement does not apply.

We trust that this information will be adequate for your review. Please contact us if you have any questions or comments.

Very truly yours,
SOLAEGUI ENGINEERS, LTD

PAUL W. SOLAEGUI
CIVIL ENGINEER
6-3-16
EXP 6-30-16

Enclosures
Letters/Hawco School Site

Average Rate Trip Calculations
 For 24 Dwelling Units of Single Family Detached Housing(210) - [R]

Project:
 Phase:

Open Date:
 Analysis Date:

Description:

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	9.52	3.70	1.00	228
7-9 AM Peak Hour Enter	0.19	0.00	1.00	5
7-9 AM Peak Hour Exit	0.56	0.00	1.00	13
7-9 AM Peak Hour Total	0.75	0.90	1.00	18
4-6 PM Peak Hour Enter	0.63	0.00	1.00	15
4-6 PM Peak Hour Exit	0.37	0.00	1.00	9
4-6 PM Peak Hour Total	1.00	1.05	1.00	24
Saturday 2-Way Volume	9.91	3.72	1.00	238
Saturday Peak Hour Enter	0.50	0.00	1.00	12
Saturday Peak Hour Exit	0.43	0.00	1.00	10
Saturday Peak Hour Total	0.93	0.99	1.00	22

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation Manual, 9th Edition, 2012

TRIP GENERATION 2013, TRAFFICWARE, LLC

Assessor's Map Number

532-02

STATE OF NEVADA

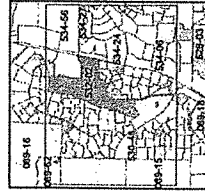
**WASHOE COUNTY
ASSESSOR'S OFFICE**

Michael E. Clark, Assessor

1001 East Ninth Street
Reno, NV 89502
(775) 328-2331



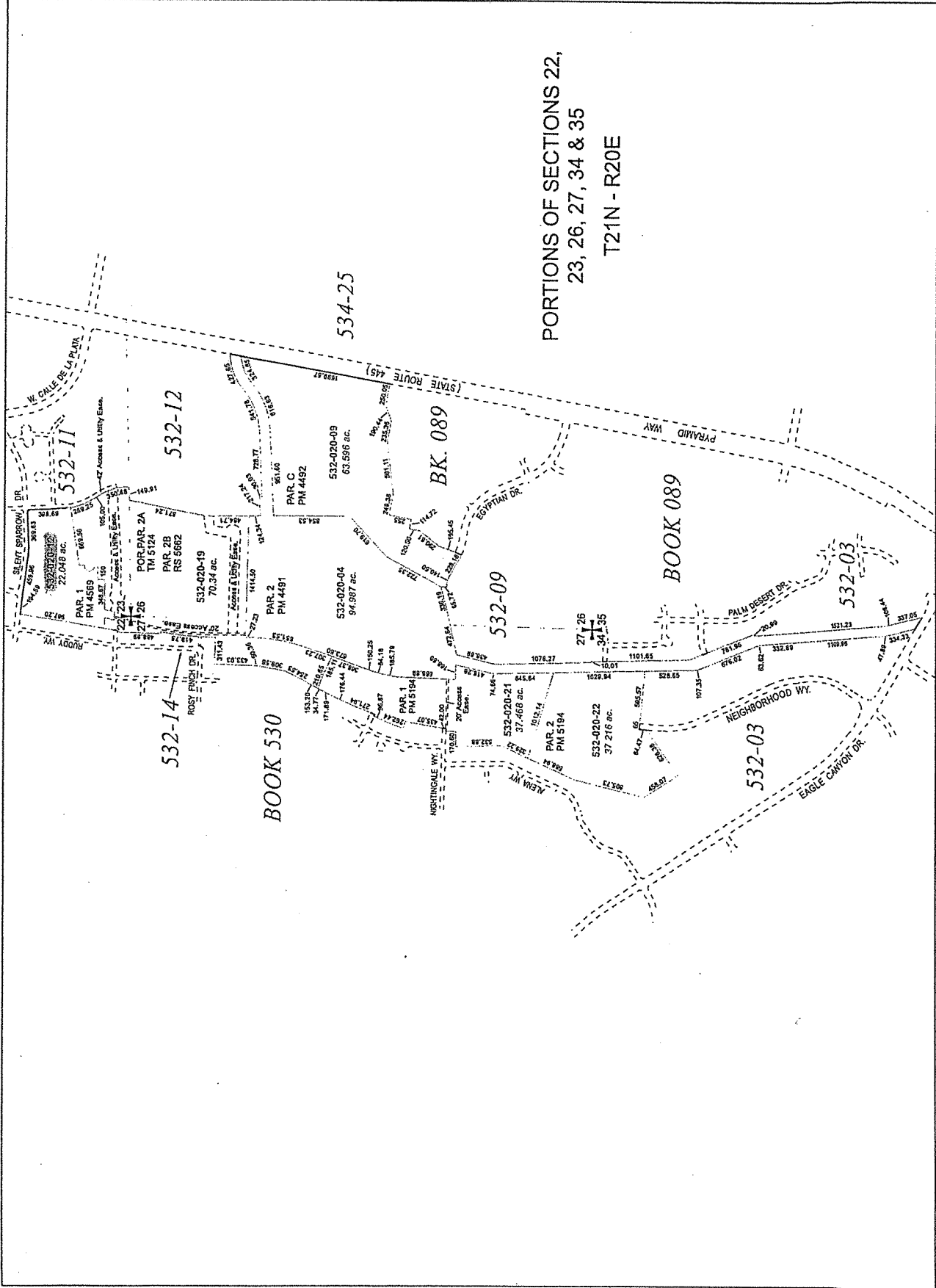
Scale
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1 inch = 1,000 feet

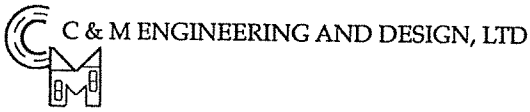


created by: KSB 10/02/2013
last updated: KSB 10/20/15 KSB-11/11/16
area previously shown on map(s):
530-25, 085-19

NOTE: This map was prepared for the use of the Washoe County Assessor's Office for assessment purposes only. It does not represent a survey of the premises. No liability is assumed for any error or omission of any kind or for any damage of any kind resulting from the use of this map.

**PORTIONS OF SECTIONS 22,
23, 26, 27, 34 & 35
T21N - R20E**





May 31, 2016

Washoe County Community Services
1001 E. Ninth Street, Bldg. A
Reno, NV 89520

RE: FEASIBILITY REPORT FOR SILENT SPARROW SUBDIVISION WATER, SEWER, AND STORM DRAIN – 8 ACRES (portion of APN 532-020-12)

Dear Community Services Department,

C & M Engineering and Design has analyzed the water system, sewer system, and storm drain for Silent Sparrow Subdivision in relationship to the potential rezoning of 8 acres of the total 22.048 from Public / Semi-Public Facilities to Medium Density Suburban. This land is located off Silent Sparrow Drive on the west side of Pyramid Highway within Spanish Springs Valley. This 22.048 acre property was originally set aside by the owner at the request of Washoe County in the Spanish Springs Area Plan for a school and a park. The owner, Spanish Springs Associates Limited Partnership, is now initiating a Regulatory Zone Amendment from PSP to MDS and a tentative map application for an 8 acre portion in order to develop a residential subdivision of 24 lots.

DOMESTIC WATER

TMWA, the Truckee Meadows Water Authority, in 2015 became the water purveyor for this proposed re-zoned area. Prior to the merger, Washoe County Department of Water Resources (WCDWR) was the water purveyor. The owner has applied for an annexation of the land into the TMWA service territory. Based upon a preliminary planning meeting with TMWA, it will agree to serve the proposed project and sufficient existing water system capacity should currently be in place. The owner will need to complete a Discovery to determine specific on-site and potential off-site needs to meet TMWA's requirements. Due to Health Department regulations, looping of the system will be necessary. The owner will need to have secured water rights in place to serve this re-zoned land at the time a will-serve commitment is requested, usually when a final map is approved. Approved final improvement plans and a service agreement will be necessary for TMWA to serve the project.

IRRIGATION WATER

All the landscaping will be part of the individual residential units.

SANITARY SEWER

The potentially re-zoned area will be served by a gravity sewer system that eventually drains into the existing county 18" diameter sewer interceptor in two locations. Three lots that front Lanstar Drive will tie directly into the existing 8" sewer within Lanstar Drive, which was constructed with Eagle Canyon Ranch IV, Unit 2 subdivision. The remainder of the lots will tie into this same existing system farther downstream south of the property. Based upon a preliminary planning meeting with Washoe County, the county will agree to serve the proposed project and sufficient existing line capacity should be in place. Washoe County is presently preparing a Discovery for the owner to determine if off-site facilities are necessary to serve the potentially re-zoned parcel. Washoe County is presently reviewing the Spanish Springs Area Plan regarding present connections and its fee structure. The owner will also be responsible for City of Sparks sewer connection fees since the sewage enters into its system.

STORM WATER

All the storm water runoff from the potentially re-zoned area will mimic existing drainage patterns. Runoff from the lots adjacent to Silent Sparrow and Lanstar will continue to flow towards these streets' existing curb and drainage, which is attached to an existing storm drain system. The existing ditch at the potentially re-zoned area's southern boundary is the outfall of this storm drain system. The amount of storm water flow in this existing ditch per the improvement plans prepared by Wood Rodgers titled Eagle Canyon IV-Unit 2 is 28 cfs in the 100-year event. Its present discharge location is just beyond the present terminus of Lanstar Drive and flows along the proposed site's

5488 RENO CORPORATE DR, SUITE 200B RENO, NV 89511 PHONE: (775) 856-3312

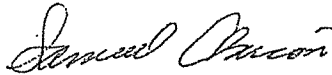
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southern boundary. Wood Rodgers is presently preparing improvement plans to re-route these storm flows into a storm drain system that will convey these flows southerly through future Eagle Canyon IV and then westerly through Eagle Canyon Ranch to the inlet channel of NSSFDF. Improvements to fill this existing ditch will be part of proposed final improvements for the proposed site once the storm drain system extension is complete. The overall offsite drainage is depicted in the Hydrology Master Plan for Eagle Canyon Ranch Subdivision dated March 3, 2016 prepared by DEW Hydrology and the Hydrology Report for the North Spanish Springs Detention Facility, Washoe County, Nevada, dated May 2006, by Quad Knopf. The referenced reports describe the flows within the detention facility inlet channel, which is west of property boundary. The runoff within the inlet channel should not impact the potentially re-zoned project. The remainder and majority of the site's runoff will be discharged on the surface and drain from east to west across the site. Along the western boundary, outside of the proposed project's limits, an existing channel 6' deep and 34' wide conveys storm flows from Eagle Canyon IV, Unit 1. Pursuant to the Hydrology Master Plan for Eagle Canyon Ranch Subdivision dated March 3, 2016 prepared by DEW Hydrology this ditch conveys approximately 109 cfs in the 100-year event while its capacity is 278 cfs. Therefore the ditch has a 2' freeboard and should not impact the potentially re-zoned project.

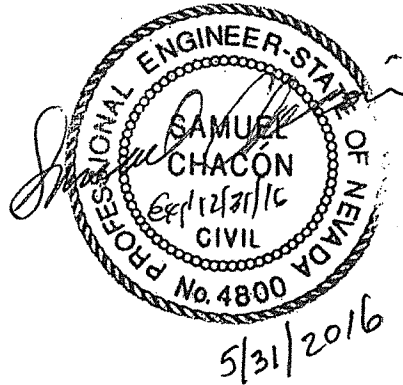
Due to the development of this property, there will be increases in storm water discharge, however, the increase will be minimal and was included in the calculations of North Spanish Springs Flood Detention facilities and Eagle Canyon Master Plan. The analysis of detention and discharge from the detention facility was performed by Nimbus Engineers and AMEC Infrastructure, Inc. The on-site 5 year flows on the proposed site will be intercepted in underground storm drain system, which will discharge into either Eagle Canyon IV and/or Eagle Canyon Ranch. These flows are then conveyed to the inlet channel of NSSFDF previously mentioned.

In summary, the existing domestic water and sanitary sewer systems have the potential to serve the proposed re-zoned land. The 5-year storm drain system will tie into the proposed storm drain system, where flows will be conveyed to the inlet channel of the NSSFDF, which conveys flows to the City of Sparks regional detention facilities.

Sincerely,



Samuel Chacon, P.E.
Principal

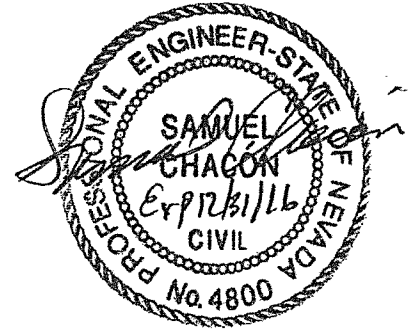


SILENT SPARROW SUBDIVISION

PRELIMINARY DRAINAGE REPORT

June 15, 2016

C&M Engineering and Design, LTD.



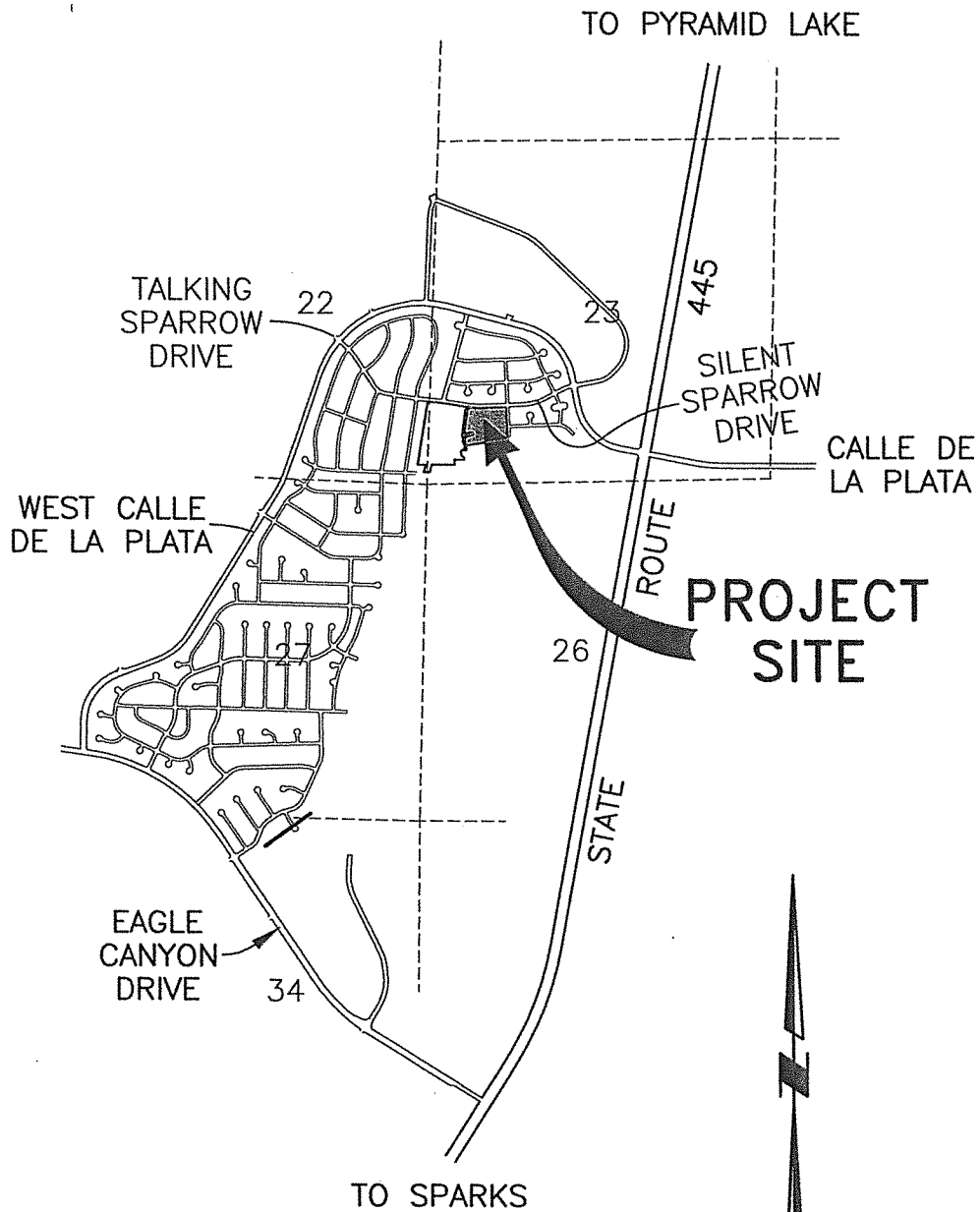
INTRODUCTION

This report presents the preliminary stormwater hydrologic analysis and tentative drainage plan for Silent Sparrow Subdivision in Washoe County, Nevada. The project is located at the intersection of Silent Sparrow Drive and Lanstar Drive. The site was removed from the flood zone after completion of the North Spanish Springs Flood Detention Facility (NSSFDF). The proposed site drains into the inlet channel of the NSSFDF. The Rational Method and reference to previous studies have been utilized in this preliminary drainage study.

This 22.048 acre property was originally set aside by the owner at the request of Washoe County in the Spanish Springs Area Plan for a school and a park. The owner, Spanish Springs Associates Limited Partnership, is now initiating a Regulatory Zone Amendment, from PSP to MDS for an 8-acre portion in order to develop a residential subdivision of 24 lots.

SITE DESCRIPTION

The proposed rezoned site consists of approximately 8.0 acres of undeveloped land located in the Spanish Springs Valley. The remainder of the 22.048 acres will retain its present zoning. The site is basically an infill project since it is surrounded by existing development on the north, west, and east including Eagle Canyon IV, Unit 1; Eagle Canyon 3, Unit 1A; and Eagle Canyon IV, Unit 2 respectively. A recently approved tentative map called Eagle Canyon Ranch exists on the south and presently improvement plans are being prepared to begin that project. See Exhibit1, Vicinity Map for the location of the proposed tentative map. The site is located within



VICINITY MAP
NO SCALE

<p>EXHIBIT_1</p> <p>VICINITY_MAP</p> <p>SILENT_SPARROW_TENTATIVE_MAP</p>	
	<p>C & M ENGINEERING AND DESIGN, LTD</p> <p>5488 RENO CORPORATE DR., SUITE 200B, RENO, NV 89511</p> <p>PHONE: (775) 856-3312</p>

Assessor's Parcel Numbers 532-020-12. This area was created by parcel map. Silent Sparrow Drive and Lanstar Drive are the main access roads for the area. Lanstar Drive ties into Silent Sparrow Drive, which ties into West Calle de la Plata. The proposed tentative map lies within Section 23 Township 21N and Range 20E MDM.

An existing temporary 25' drainage easement resides within the proposed tentative map area. See the geometric plan within the tentative map for its specific location. The temporary drainage easement is to be abandoned once the proposed storm drain system for Eagle Canyon IV, Unit 2 is constructed and its connections to Eagle Canyon Ranch storm drain system.

The site slopes toward the west at grades ranging from 0.6 to 1.0 percent. An existing ditch as mentioned above is located along the southern boundary line sloping from the east to the west. Once the storm drain system mentioned above is complete the ditch will be filled in as part of the final improvements. An existing ditch also resides just beyond the western boundary outside of the proposed project limits. This ditch will remain. Groundcover consists primarily of sagebrush and weeds. According to the Site Feasibility Study by Black Eagle dated May 2016, underlying soils consist of a variety of soil types ranging from sand and gravel to silty clay. According to FIRM Panel 32031C2865G, dated October 20, 2014, the 100-year flood is contained within the NSSFDF and the existing NSSFDF channels. The site is within flood zone X (unshaded).

PROJECT DESCRIPTION

Silent Sparrow Subdivision is a proposed single-family residential subdivision consisting of 24 lots. This proposed tentative map's layout has a gross density of 3.0 units per acre. Silent Sparrow Drive is the major access points to Pyramid Highway. The proposed project is to be constructed in one phase. Streets will be public.

FLOOD ZONE

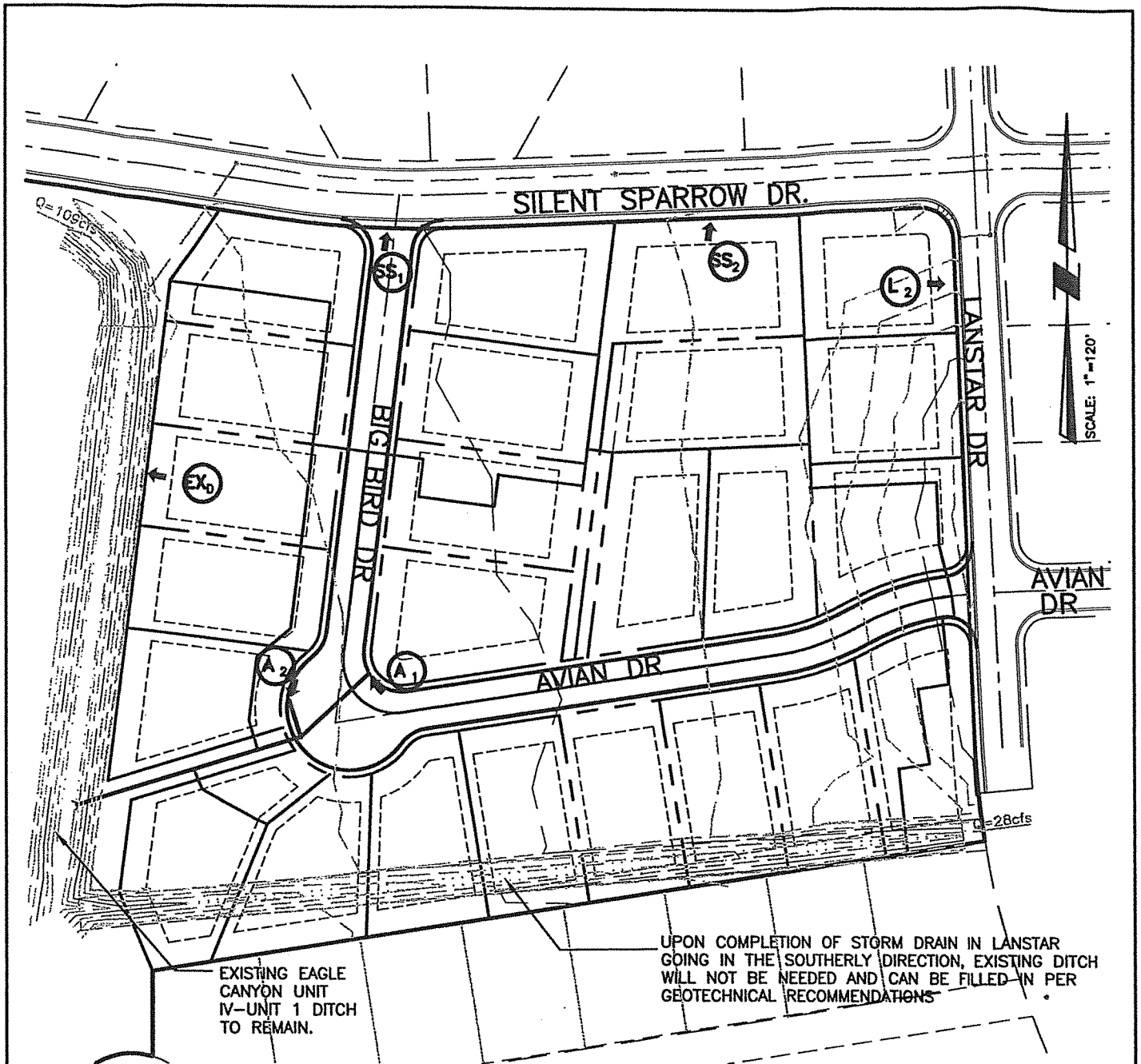
Silent Sparrow Subdivision lies within panel 32031C2865G of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps dated October 20, 2014.. As seen on

Exhibit 2, the tentative map is within a FEMA Flood Zone X, unshaded . NSSFDF's completion removed the proposed site from the Flood Zone AO.

EXISTING HYDROLOGY

Due to the proposed project's location being an infill project, there are two existing drainage systems in the project's vicinity. Eagle Canyon IV Unit 1's system has 48" diameter storm drain system within Silent Sparrow Drive whose terminus is just beyond the proposed project's limits to the west in an existing channel 6' deep and 34' wide. This ditch was designed by Wood Rodgers to convey storm flows from Eagle Canyon IV, Unit 1 southerly. Per Hydrology Master Plan for Eagle Canyon Ranch Subdivision dated March 3, 2016 prepared by DEW Hydrology this ditch conveys approximately 109 cfs in the 100-year event while its capacity is 278 cfs. Therefore the ditch has a 2' freeboard and should not impact the potentially re-zoned project. This existing ditch is to remain. Another existing storm drain system also designed by Wood Rodgers for Eagle Canyon IV, Unit 2 is adjacent to the site to the east. This storm drain system's outlet is to an existing ditch which resides within the proposed project's boundary. The amount of storm water flow in this existing ditch per the improvement plans prepared by Wood Rodgers titled Eagle Canyon IV-Unit 2 is 28 cfs in the 100-year event. Its present discharge location is just beyond the present terminus of Lanstar Drive and flows along the proposed site's southern boundary. Wood Rodgers is recently prepared improvement plans to re-route these storm flows into a storm drain system that will convey these flows southerly through future Eagle Canyon IV and then westerly through Eagle Canyon Ranch to the inlet channel of NSSFDF. Improvements to fill this existing ditch will be part of proposed final improvements for the proposed site once the storm drain system extension is complete.

The amount of storm water flow and discharge locations are found in various improvement plans of the surrounding properties and have been labeled on the Hydrology Map, Exhibit 3. The overall offsite drainage is depicted in the Hydrology Master Plan for Eagle Canyon Ranch Subdivision dated March 3, 2016 prepared by DEW Hydrology and the Hydrology Report for the North Spanish Springs Detention Facility, Washoe County, Nevada, dated May 2006, by



DESIGN POINT	DRAINAGE SUB-AREA	PEAK RUNOFF (cfs)	
		5-YR	100-YR
Silent Sparro	SS1	1.15	2.95
Silent Sparro	SS2	0.69	1.76
Ex Ditch	ED1	1.15	2.94
Lanstar	L1	0.80	2.07
OB1	A1	1.74	4.47
OB2	A2	2.57	6.61

HYDROLOGY LEGEND

(A₃) SUBAREA

➔ DESIGN POINT

Exhibit 3

HYDROLOGY_MAP
SILENT_SPARROW_TENTATIVE_MAP

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 PHONE: (775) 856-3312

Quad Knopf. The referenced reports illustrate the flows within the detention facility inlet channel, which is west of property boundary.

PROPOSED DRAINAGE

The proposed onsite drainage system for Silent Sparrow Subdivision consists of curb and gutter, catch basins, and storm drain system. The onsite 5-year flows will be intercepted in an underground storm drain system. The outfall for this system will be the existing channel constructed with Eagle Canyon IV Unit 1's system. This channel eventually discharges to the NSSFDF inlet channel. The runoff within the inlet channel should not impact the potentially rezoned project. The NSSFDF outlet channel will convey the flow to the Sparks Flood Control Channel, which eventually drains to the Truckee River.

HYDROLOGY

The overall offsite drainage is depicted in the Hydrology Master Plan for Eagle Canyon Ranch Subdivision dated March 3, 2016 prepared by DEW Hydrology and the Hydrology Report for the North Spanish Springs Detention Facility, Washoe County, Nevada, dated May 2006, by Quad Knopf.

A preliminary onsite storm drain system was laid out and analyzed using the Rational Method. The drainage areas are delineated and can be seen on the Preliminary Hydrology Map in the Appendix under the Rational Method section. Detailed hydrologic and hydraulic calculations will be provided during final design.

DETENTION

The existing runoff within the proposed Silent Sparrow Subdivision will increase in storm water discharge. A detention facility will not be necessary for the proposed project as was demonstrated by the existing studies report. With the completion of NSSFDF, there was a reduction in the 100-year flow from 2,420 cfs to 491 cfs and from 231 cfs to 194 cfs during the

5-year storm in the northern Spanish Springs Valley. Therefore no on-site detention will be needed.

CONCLUSIONS

1. Based on this preliminary hydrologic analysis, it appears that Silent Sparrow Subdivision can be developed as planned without adverse impact to downstream properties with respect to storm drainage.
2. A master storm drainage plan should be prepared prior to final design.
3. No detention is needed, as agreed by Washoe County.

REFERENCES

C&M Engineering and Design, LTD, Preliminary Drainage Report for Eagle Canyon IV, April 2003.

DEW Hydrology, Hydrology Master Plan for Eagle Canyon Ranch Subdivision, March 3, 2016.

Wood Rodgers, Preliminary Hydrology/Drainage Report for Eagle Canyon V Tentative Map Application, December 15, 2005.

Nimbus Engineers., Application For Conditional Letter Of Map Revision For Griffith Canyon/Stormy Canyon Washoe County, Nevada, November 2002.

Quad Knopf, Hydrology Report for the North Spanish Springs Detention Facility, Washoe County, Nevada, May 2006.

APPENDIX A

RATIONAL METHOD CALCULATIONS

RATIONAL METHOD - WASHOE COUNTY

The Rational Method is used to estimate the peak runoff resulting from a rain storm of given intensity and frequency falling on a specific watershed. The peak flow is expressed as:

$$Q = C i A$$

where Q = Maximum rate of runoff, cubic feet per second
 C = Runoff coefficient
 i = Average rainfall intensity, inches per hour
 A = Watershed area, acres

Washoe County allows the use of the Rational Method for urban and small watersheds of less than 500 acres. Runoff computations are made using criteria provided by Article 420 of the Washoe County Development Code (1994). Runoff coefficients used are 0.25 - 0.30 for undeveloped areas, 0.35 for rear yards, 0.45 - 0.50 for residential areas, 0.65 for front yards, and 0.85 - 0.90 for paved areas. In Reno, rainfall intensities are determined from the City of Reno Design Manual intensity-duration-frequency curves. In Sparks and Spanish Springs, intensities are determined from the Sparks IDF curves referenced in U.B.C Section 7006 as amended by Washoe County. The initial time of concentration, $T_{c(1)}$, is calculated by the formula:

$$T_{c(1)} = 10 \text{ or } \frac{L}{60xV}$$

where $T_{c(1)}$ = Initial time of concentration, minutes
 L = Length from uppermost point of watershed to design point,
feet
 V = Channel or overland velocity, feet per second

The initial time of concentration models build-up and sheet flow conditions in the uppermost part of the watershed. Except for very small impervious watersheds, the minimum build-up time of 10 minutes is assumed. Therefore, for the first design point, the time of concentration is determined by adding travel time to the build-up time as follows:

$$T_{c(1)} = 10 + \frac{L}{60xV}$$

The time of concentration at successive points downstream is calculated by adding total travel time to the initial build-up time:

$$T_{c(n)} = 10 + \sum \frac{L}{60 \times V}$$

where $T_{c(n)}$ = Time of concentration at design point, minutes
 $\sum \frac{L}{60 \times V}$ = Total travel time to design point, minutes
 L = Length of flow path between design points, feet
 V = Velocity, feet per second

Velocities used are 2 - 3 fps for surface flow and 3 - 5 fps for channel and conduit flow.

Rational Method calculations are performed using a spreadsheet containing the appropriate IDF curves and routing parameters. Hydrologic tabling is done in two parts. In Part A, the peak flow for each drainage area is determined based on the runoff coefficient, initial time of concentration, and area. These flows are used to locate and size the drainage inlets. In Part B, flows are accumulated starting with the initial subarea and proceeding downstream. At each design point travel time is added and the peak flow is computed using the average runoff coefficient, the time of concentration at that point, and the total tributary area. These cumulative flows are used in the design of interceptor channels and storm drains where applicable.

**RATIONAL METHOD HYDROLOGY
WASHOE COUNTY / RENO IDF CURVES
Silent Sparrow Subdivision Tentative Map**

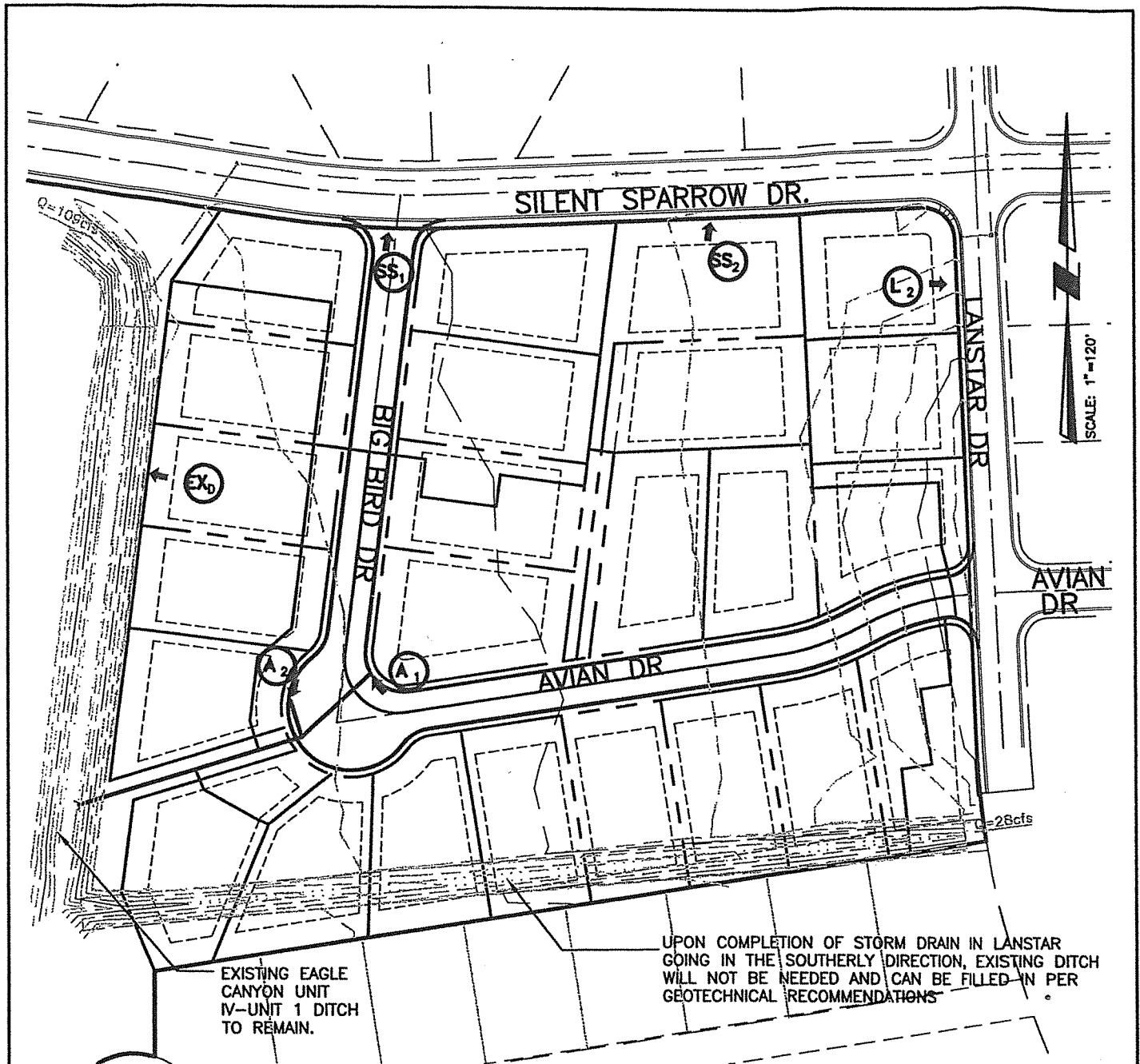
PART A: INDIVIDUAL DRAINAGE AREAS

DESIGN POINT	DRAINAGE SUB-AREA	AREA (acres)	RUNOFF COEFF.	WATERSHED LENGTH (ft)	VELOCITY (ft/sec)	TIME OF CONC (min)	INTENSITY (in/hr)		PEAK RUNOFF (c)	
							5-YR	100-YR	5-YR	100-YR
Silent Sparrow	SS1	1.11	0.70	333	2	10.00	1.48	3.80	1.15	2.95
Silent Sparrow	SS2	0.66	0.70	340	2	10.00	1.48	3.80	0.69	1.76
Ex Ditch	ED1	1.29	0.60	127	2	10.00	1.48	3.80	1.15	2.94
Lanstar	L1	0.84	0.65	208	2	10.00	1.48	3.80	0.80	2.07
CB1	A1	1.68	0.70	495	2	10.00	1.48	3.80	1.74	4.47
CB2	A2	2.48	0.70	667	2	10.00	1.48	3.80	2.57	6.61

PART B: CUMULATIVE AREAS

DESIGN POINT	SUMMED AREAS	AREA (acres)	WEIGHTED COEFF.	TRAVEL LENGTH (ft)	VELOCITY (ft/sec)	Tc (min)	INTENSITY (in/hr)		PEAK RUNOFF (c)	
							5-YR	100-YR	5-YR	100-YR
CB1	A1	1.68	0.70	495	2	10.00	1.48	3.80	1.74	4.47
SDMH1	A1+A2	4.17	0.70	73	3	10.41	1.48	3.80	4.32	11.08
FES	A1+A2	4.17	0.70	183	3	11.42	1.44	3.60	4.19	10.50

TABLE A-1: RATIONAL METHOD CALCULATIONS



DESIGN POINT	DRAINAGE SUB-AREA	PEAK RUNOFF (cfs)	
		5-YR	100-YR
Silent Sparrow	SS1	1.15	2.95
Silent Sparrow	SS2	0.69	1.76
Ex Ditch	ED1	1.15	2.94
Lanstar	L1	0.80	2.07
CB1	A1	1.74	4.47
CB2	A2	2.57	6.61

HYDROLOGY LEGEND

(A₃) SUBAREA

➔ DESIGN POINT

Exhibit 3

HYDROLOGY_MAP

SILENT_SPARROW_TENTATIVE_MAP


C & M ENGINEERING AND DESIGN, LTD
 5488 RENO CORPORATE DR., SUITE 200B, RENO, NV 89511
 PHONE: (775) 856-3312

SPANISH SPRINGS ASSOCIATES LIMITED PARTNERSHIP
550 W. Plumb Lane, Suite B #505
Reno, NV 89509
(775) 425-4425

May 27, 2016

PROJECT NAME: RZA Amendment and tentative map application or MDS and Tentative Map Subdivision Map Application, an 8.04 acre portion of APN 532-020-12

To Whom It May Concern:

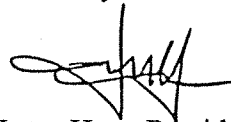
This letter verifies that Spanish Springs Associates Limited Partnership and its General Partner, Hawco Development Company, have adequate water rights for the proposed above-referenced RZA Amendment and tentative map application, which will allow up to 46 homes on 15.574 acres of land with MDS zoning.

The applicant has the following water rights banked with TMWA (previously held with Washoe County):

Permit Number	Acre feet
70702	36.4
70426	40.25
70086	36.2
72270	1.81
70087	0.85
68185	1.24
64639	8.21
62614	5.12
Total	129.22

Thank you for your attention to this matter. Feel free to call me with any questions or concerns.

Sincerely



Jesse Haw, President
Hawco Development Company,
General Partner of Spanish Springs
Associates Limited Partnership

1355 Capital Blvd. • P.O. Box 30013 • Reno, NV 89520-3013
☎ 775.834.8080 • ☎ 775.834.8003

June 9, 2016

Samuel Chacon, P.E.
C & M Engineering and Design
5488 Reno Corporate Drive, Suite 200B
Reno, NV 89511

**RE: Silent Sparrow Subdivision Tentative Map
Acknowledgement of Water Service**
(Tentative Map Review – 24 Units)

Dear Mr. Chacon:

I have reviewed the plans for the above referenced development ("Project") and have determined the Project is outside the Truckee Meadows Water Authority's retail water service area. This letter constitutes an Acknowledgment of Water Service pursuant to NAC 445A.6666, and the Truckee Meadows Water Authority hereby acknowledges that Truckee Meadows Water Authority is agreeable to supplying water service to the Project subject to applicant satisfying certain conditions precedent, including, without limitation, annexation to the Truckee Meadows Water Authority's retail water service territory, the dedication of water resources, approval of the water supply plan by the local health authority, the execution of a Water Service Agreement, payment of fees, and the construction and dedication of infrastructure in accordance with our rules and tariffs. This Acknowledgement does not constitute a legal obligation by Truckee Meadows Water Authority to supply water service to the Project, and is made subject to all applicable Truckee Meadows Water Authority Rules.

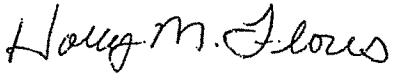
Review of conceptual site plans or tentative maps by Truckee Meadows Water Authority does not constitute an application for service, nor implies a commitment by Truckee Meadows Water Authority for planning, design or construction of the water facilities necessary for service. The extent of required off-site and on-site water infrastructure improvements will be determined by Truckee Meadows Water Authority upon receiving a specific development proposal or complete application for service and upon review and approval of a water facilities plan by the local health authority. Because the NAC 445A Water System regulations are subject to interpretation, Truckee Meadows Water Authority cannot guarantee that a subsequent water facility plan will be approved by the health authority or that a timely review and approval of the Project will be made. The Applicant should carefully consider the financial risk associated with committing resources to their project prior to receiving all required approvals. After submittal of a complete Application for Service, the required facilities, the cost of these facilities, which could be significant, and associated fees will be estimated and will be included as part of the Water Service Agreement necessary for the Project. All fees

Silent Sparrow Subdivision
June 9, 2016
Page 2 of 2

must be paid to Truckee Meadows Water Authority prior to water being delivered to the Project.

Please call me at (775) 834-8026 at your convenience if you have any questions.

Sincerely,

Handwritten signature of Holly M. Flores in black ink.

Holly M. Flores, P.E.
Principal Engineer

cc: James English, Washoe County District Health Dept.
16-5026

Mr. Jesse Haw
Spanish Springs Associates Limited Partnership
550 W Plumb Lane, Suite B, #505
Reno, Nevada 89509

June 8, 2016
Project No. 1012-04-2

**RE: Geotechnical Summary
Silent Sparrow Subdivision
Washoe County, Nevada**

Dear Mr. Haw:

Black Eagle Consulting, Inc. (BEC) is pleased to present this geotechnical summary of the proposed Silent Sparrow Subdivision residential development in northern Spanish Springs Valley, Washoe County, Nevada. The project is in early development, and an application for a new tentative map is planned to be submitted. The project will consist of approximately 24 residential lots served by dedicated streets and underground utilities. The dedicated streets will adjoin Silent Sparrow Drive to the north and Lanstar Drive to the east. This summary is to be used for planning and tentative map submittal purposes and should be updated with field exploration, laboratory testing, and geotechnical analysis before final design.

Site Conditions

The site consists of approximately 8 acres lying within Section 23, Township 21 North, Range 20 East, Mount Diablo Meridian. The site lies just south of Silent Sparrow Drive and west of West Calle De La Plata road in the northwestern portion of Spanish Springs Valley.

The site exhibits a gentle slope from east to west. The overall parcel is bordered by residential subdivisions on the east, open space on the south and west, and Silent Sparrow Drive to the north. A large drainage channel exists along the western perimeter of the site and generally flows to the south and west. The site is presently undeveloped land blanketed by moderate growth of sagebrush. Occasional jeep trails traverse the site.

Geologic and General Soil Conditions

The site is mapped by the Nevada Bureau of Mines and Geology (NBMG) as lying in Holocene age alluvium deposits of Spanish Springs Valley (Garside, L.J. and Nials, F.L., 1998). The site soils are described by the NBMG as *Unconsolidated, predominately arkosic, sand and gravelly sand deposited as sheet wash and wash alluvium in Holocene to modern channels or as broad, low-gradient alluvial plains. Locally contains abundant medium sand reworked with older aeolian deposits...No soil development except on vary localized Holocene terraces, where weak 10-15 cm grey-brown A horizon is present in some places. Includes undifferentiated alluvial fan and colluvial deposits in upland areas.*

Based on BEC's previous explorations in the general area of the subject site lying in the same alluvium deposits, the site soils are expected to be clayey and silty sand soils with a variable percentage of non-plastic to medium plasticity fines. Near-surface clay soils should also be expected in at least some portions of the site. The groundwater table is expected to lie at sufficient depths that will not affect design or construction of the project.



Black Eagle Consulting, Inc.
Geotechnical & Construction Services

1345 Capital Boulevard, Suite A
Reno, Nevada 89502-7140

Tel: 775/359-6600 Fax: 775/359-7766
Email: mail@blackeagleconsulting.com

Geologic Hazards

No fault hazard map is available for the project site. However, the NBMG *Quaternary Fault Map of Nevada, Reno Sheet* (Bell, 1984) does not indicate the presence of any fault structures within the site. Pleistocene faults are mapped as lying to the east and west of the site, closer towards the foothills of the Spanish Springs Valley. The faults will have no impact on planning and design of this project. The area is mapped as Zone X, or areas determined to be outside the 500-year flood plain (Federal Emergency Management Agency, 2009). The site should exhibit a moderate potential for dust generation during dry months. No other geologic hazards were identified.

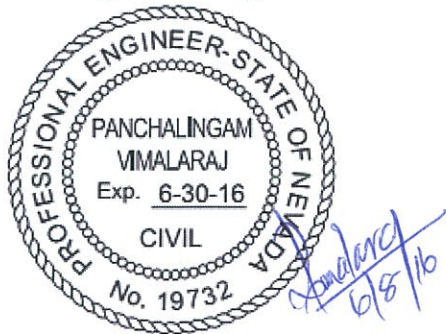
Discussion and Conclusion

The subject 8-acre parcel is geotechnically suitable for the proposed residential development. Granular silty sand soils with non-plastic to low plasticity fines will provide adequate foundation support for residential structures and adequate subgrade support for concrete slabs and asphalt pavement. Native clay soils and clayey sand soils with a higher percentage of plastic fines (clay-rich soils) may be present within the parcel and would require separation from improvements with structural fill. During design, the geotechnical constraints associated with the presence of clay and clay-rich soils should be addressed via field exploration, laboratory testing, and appropriate geotechnical recommendations for the adequate performance of the proposed improvements. When excavated, native granular soils can be reused as structural fill.

If you require any clarification of our findings, please contact us.

Sincerely,

Black Eagle Consulting, Inc.



Vimal P. Vimalaraj, P.E.
Engineering Division Manager

Jeff Wilbrecht, P.E.
Project Engineer

JW:PV:LJ:cjr

Copies to: Addressee (1 copy and PDF via email)
Ms. Lisa Menante, C&M Engineering and Design, LTD (3 copies and PDF via email)



Mr. Jesse Haw
Spanish Springs Associates Limited Partnership
June 8, 2016

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References:

Bell, J. W., 1984, *Quaternary Fault Map of Nevada, Reno Sheet*: Nevada Bureau of Mines and Geology, Map 79.

Federal Emergency Management Agency (FEMA), 2009 (March 16, 2009), *Flood Insurance Rate Map 32031C2865G, Washoe County, Nevada*.

Garside, L. J. and Nials, F. L., 1998, *Geologic Map of the Griffith Canyon Quadrangle, Nevada*, Nevada Bureau of Mines and Geology, Open File Report 99-4.



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TENTATIVE MAP FOR SILENT SPARROW SUBDIVISION

OWNER/DEVELOPER

SPANISH SPRINGS ASSOCIATES LIMITED PARTNERSHIP
550 W. PLUMB LANE, SUITE B, #505
RENO, NEVADA 89509

CIVIL ENGINEER

C & M ENGINEERING AND DESIGN, LTD.
5488 RENO CORPORATE DRIVE, SUITE 200B
RENO, NEVADA 89511

GENERAL NOTES:

1. BASED ON FLOOD INSURANCE RATE MAP NO. 32031C2865 G (DATED 10/21/2014). PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), THE PROJECT SITE LIES IN FLOOD ZONE X (UNSHADED) INDICATING AREAS "OUTSIDE THE 500-YEAR FLOODPLAIN".
2. ALL STREETS TO BE PUBLIC UNLESS OTHERWISE NOTED.
3. ALL SLOPES ARE 3:1 MAX. UNLESS OTHERWISE NOTED.
4. MECHANICAL SLOPE STABILIZATION FOR SLOPES STEEPER THAN 3:1 - WHEN ROCK RIPRAP IS USED FOR SLOPE STABILIZATION, IT SHALL CONTAIN A MINIMUM OF FOUR FRACTURED FACES AND BE PLACED TO A MINIMUM DEPTH OF 12 INCHES. A MINIMUM OF 75% OF THE RIPRAP SHALL BE 8 INCH DIAMETER ROCK OR GREATER.
5. ALL AREAS DISTURBED AND LEFT UNDEVELOPED FOR A PERIOD OF MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED BY THE APPLICATION OF DUST PALLIATIVE AND IF LEFT MORE THAN NINETY (90) DAYS PLANTED AS FOLLOWS:
FERTILIZER - (16-20-0) 300#/acre
GRASS, THE BROADCAST SEEDING RATE SHALL BE 12#/AC. OF SODAR WHEATGRASS AND 8#/AC. OF FARWAY CREATE WHEATGRASS. IF DRILLED, THE RATE SHOULD BE 6#/AC. OF SODAR WHEATGRASS AND 5#/AC. OF FARWAY CREATED WHEATGRASS. STRAW MULCH 3000#/AC. ANCHORED BY A STRAW PUNCHING TOOL OR COVERED WITH NETTING AND STAPLED.

LAND USE DATA:

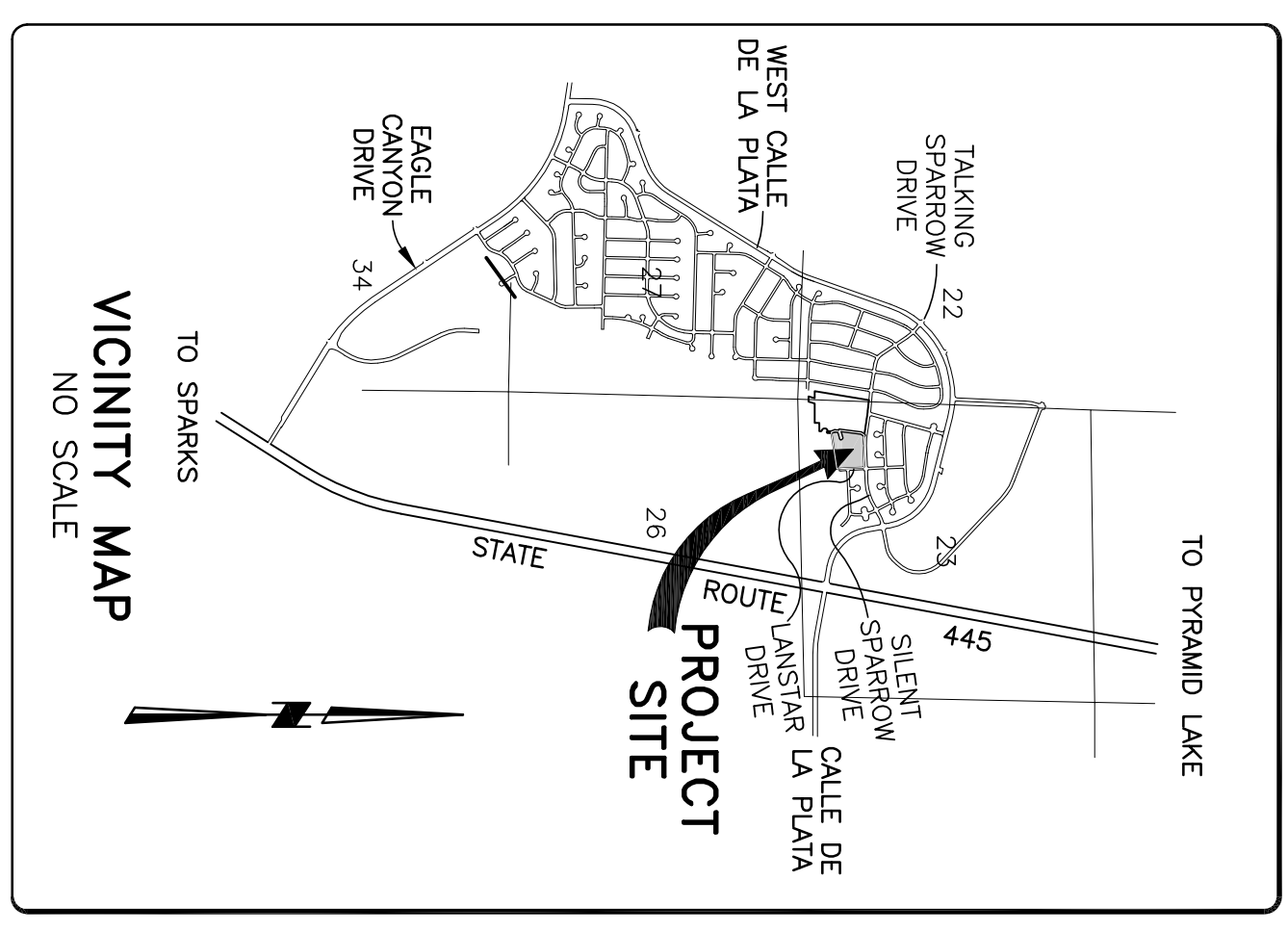
1. PRESENT LAND USE CLASSIFICATION: PSP
2. PROPOSED LAND USE CLASSIFICATION: MDS
3. TOTAL LAND AREA: 8.0 AC.; LOT AREA: 7.0 AC
STREETS: 1.0 AC.; COMMON AREA: 0 AC
4. NUMBER OF UNITS: 24; DENSITY: 3.0 DU/AC
5. REQUIRED MINIMUM LOT SIZE: 12,000 SF MIN.
6. MINIMUM LOT SIZE SHOWN: 12,000 SF; MAXIMUM LOT SIZE SHOWN: 14,862 SF
7. REQUIRED MINIMUM LOT WIDTH: 80'
8. MINIMUM SETBACK REQUIREMENTS:
FRONT: 20'
REAR: 20'
SIDE: 8'

UTILITIES:

- CABLE - CHARTER COMMUNICATIONS
- ELECTRICAL - NEVADA ENERGY
- SEWAGE DISPOSAL - WASHOE COUNTY COMMUNITY SERVICES, CITY OF SPARKS
- SOLID WASTE - RENO DISPOSAL
- TELEPHONE - AT&T
- GAS - NEVADA ENERGY
- WATER - TWMA

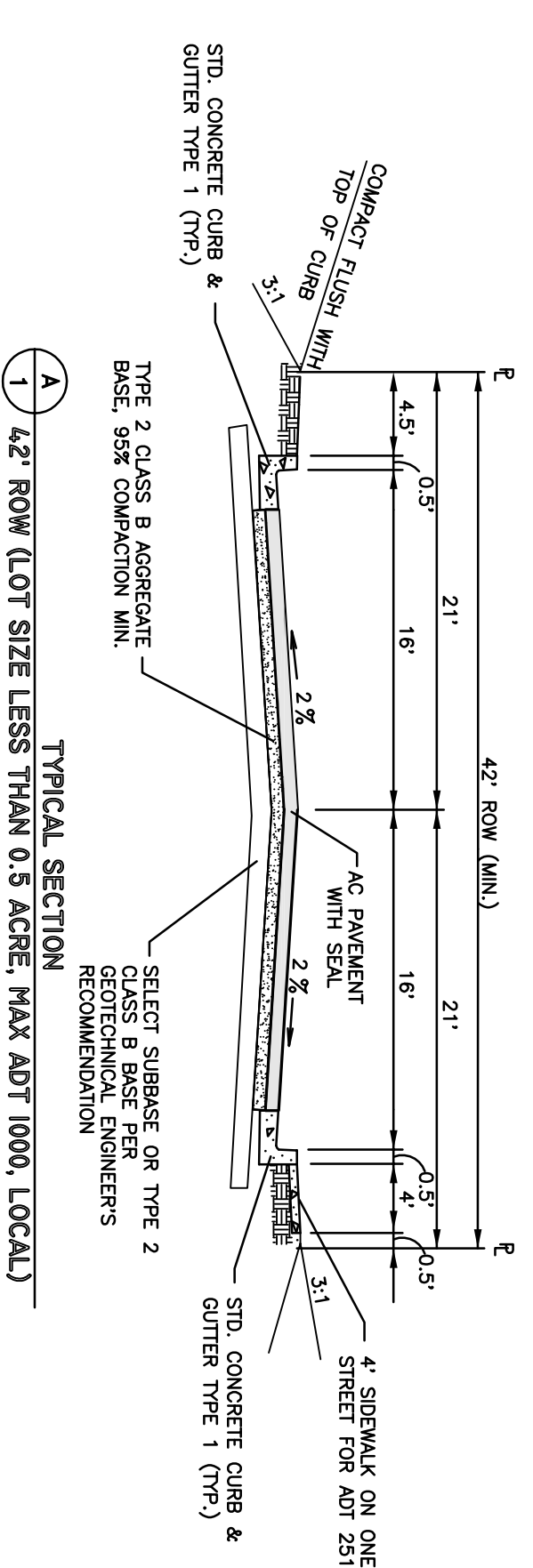
LEGEND

	NEW PAVEMENT		RETAINING WALL
	NEW SLOPE/AS SHOWN		FENCE ON RW
	EXISTING CURB & GUTTER		BLOCK WALL
	NEW CURB & GUTTER		STONE WALL
	EXISTING 1' CONTOUR		TRENCH/STONE
	EXISTING 5' CONTOUR		SHEET BOUNDARIES
	DIRECTION OF FLOW		TALUS/TOE
	NEW STORM DRAIN W/MANHOLE		PIPELINE
	EXISTING STORM DRAIN		WATER EDGE
	NEW SANITARY SEWER W/MANHOLE		INTERMITTENT DRAINAGE
	EXISTING SANITARY SEWER		DITCH
	GRADE BREAK		TREE LINE
	CLEANOUT		BRUSH LINE
	NEW CATCH BASIN/MANHOLE		BUILDING
	EXISTING CATCH BASIN		DECK
	STREET SIGN		COVERED AREA
	STREET LIGHT		SHED
	END OF ROAD MARKER		MISCELLANEOUS BOUNDARIES
	NEW WATER LINE W/VALVE		RAILROAD
	EXISTING WATER LINE W/VALVE		N.E.Z CONTROL POINT
	FLUSH VALVE ASSEMBLY		Z ONLY CONTROL POINT
	AIR RELEASE ASSEMBLY		SURVEY MONUMENT
	FIRE HYDRANT ASSEMBLY		POWER POLES
	WATER SERVICE (SINGLE)		POLE ANCHOR
	WATER SERVICE (DOUBLE)		TRANSMISSION TOWER
	WATER LINE W/REDUCER		LIGHT POLE
	EXIST. SPOT ELEVATION		POST/POLE
	ROCK RIPRAP		SIGN
			FIRE HYDRANT
			MANHOLE
			VALVE COVER
			TRAFFIC SIGNAL
			RR XING SIGNAL
			MAIL BOX
			MISC. OBJECT
			METER
			MARSH
			EXCAVATION
			SHAFT
			UTIL. VAULT/BOX
			METER BOX



SHEET INDEX

- 1 TITLE SHEET
- S-1 GEOMETRICS
- G-1 GRADING/CROSS SECTIONS



TYPICAL SECTION
42' ROW (LOT SIZE LESS THAN 0.5 ACRE, MAX ADT 1000, LOCAL)

BASIS OF BEARINGS

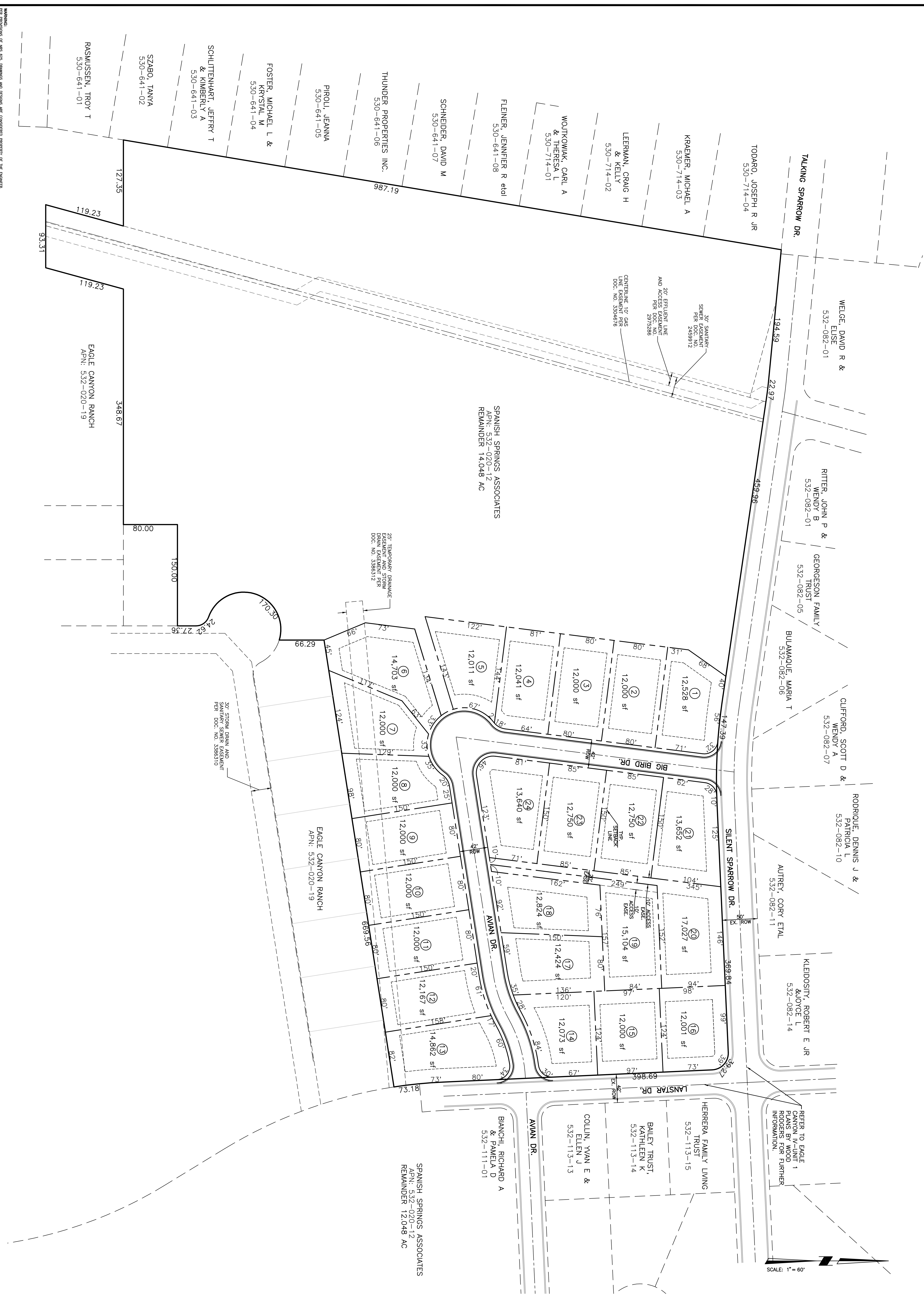
NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE
GND, NAD83/94

BASIS OF ELEVATION

NEVADA DEPARTMENT OF TRANSPORTATION BENCHMARK
ALUMINUM CAP ON REBAR STAMPED 277006
ELEVATION=4527.81 (NAD 1929)

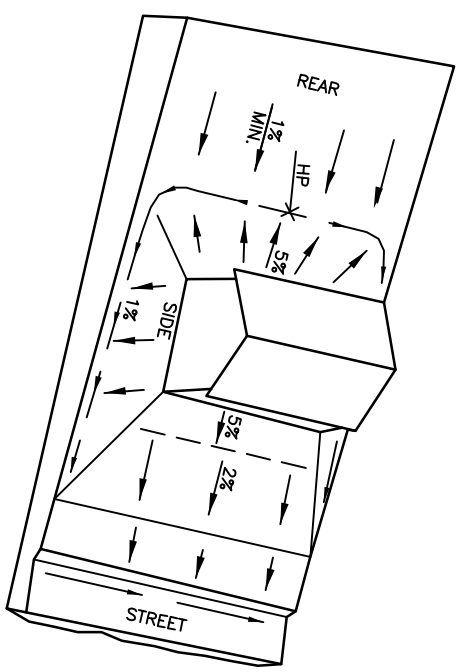
NOTES: THE PROVISIONS OF NRS 624, 624B AND 624C ARE CONSIDERED PROPERTY OF THE ENGINEER.

<p>DESIGNED BY: SC LCM DRAWN BY: LCM PROJECT NUMBER: 04-009.96</p>		<p>C & M ENGINEERING AND DESIGN, LTD. 5488 RENO CORPORATE DR, SUITE 200B, RENO, NV 89511 PHONE: (775) 856-3312</p>	
<p>DATE: 02 JUN 2016 TIME: 8:41 AM</p>		<p>FILE: P:\04-009.96 Eagle Canyon mapping\dwg\silentparrowtentmap\ TITLE.dwg</p>	
<p>WASHOE COUNTY</p>	<p>NEVADA</p>	<p>MARK</p>	<p>DATE</p>
<p>SHEET 1 OF 3</p>	<p>TITLE SHEET</p>	<p>REVISION DESCRIPTION</p>	<p>BY</p>

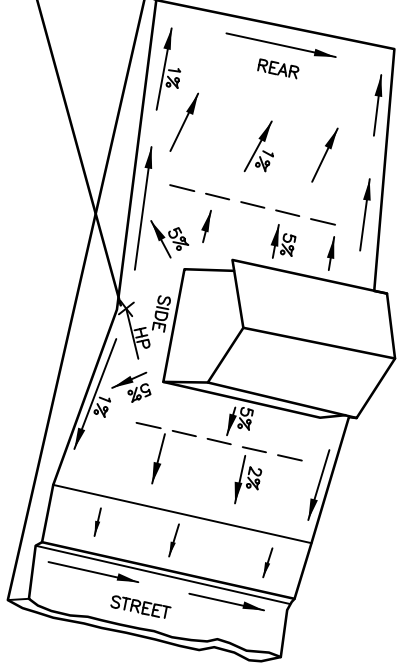


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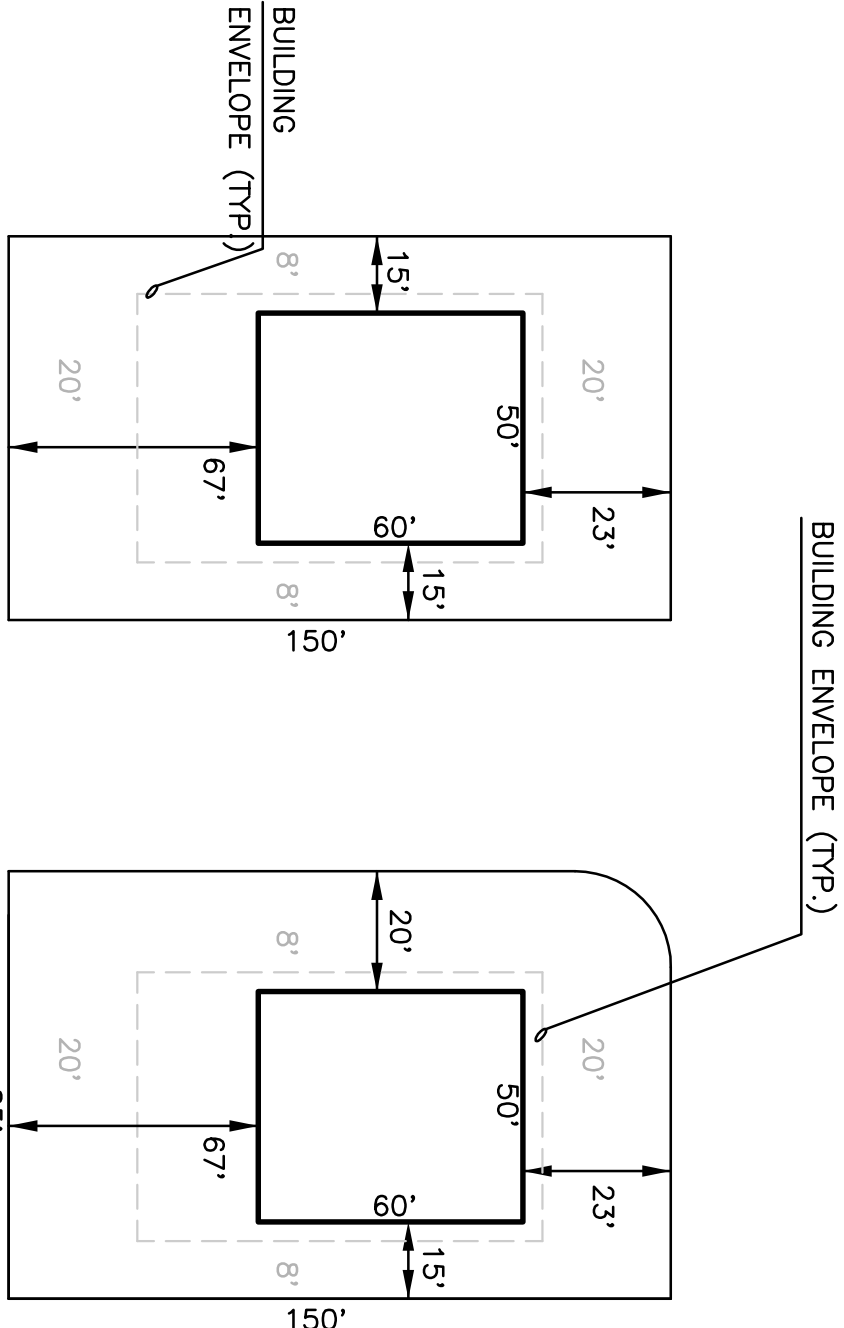
S-1 SHEET OF 3	SILENT SPARROW SUBDIVISION GEOMETRICS	C & M ENGINEERING AND DESIGN, LTD 5488 RENO CORPORATE DR., SUITE 200B, RENO, NV 89511 PHONE: (775) 856-3312		
	WASHOE COUNTY NEVADA	MARK DATE REVISION DESCRIPTION	BY DATE	STATUS PREPARED BY: [Blank] CHECKED BY: [Blank] DATE: [Blank]



TYPICAL LOT GRADING
TYPE A



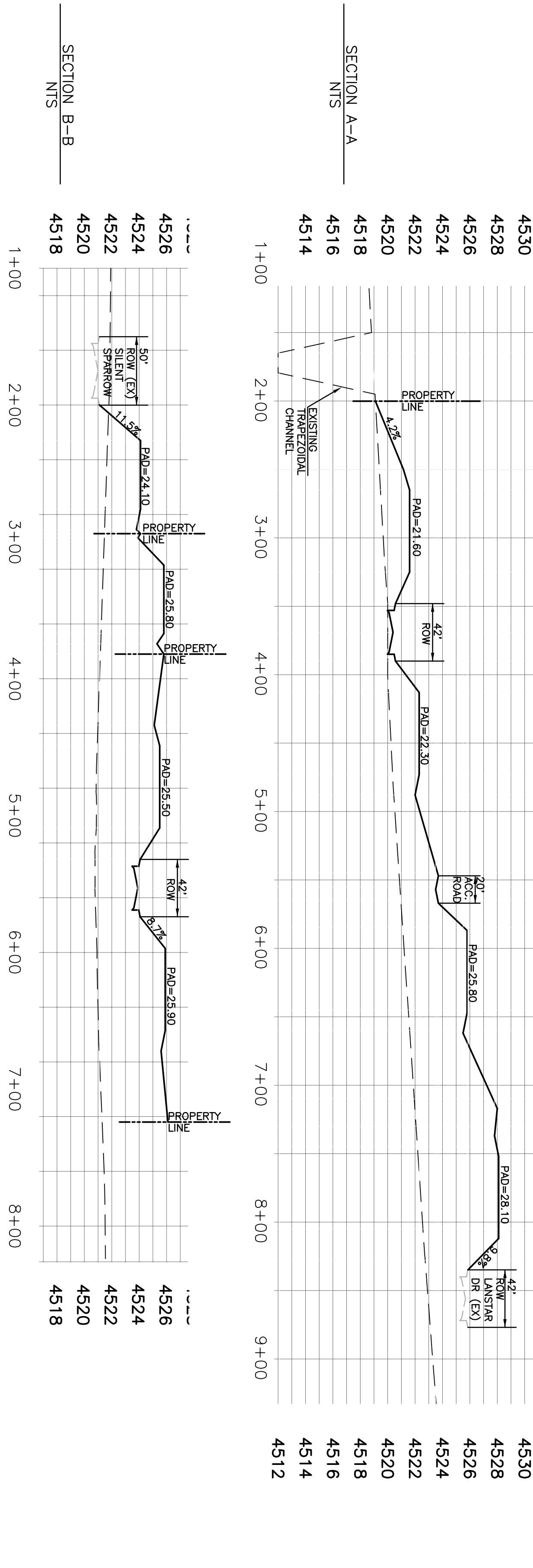
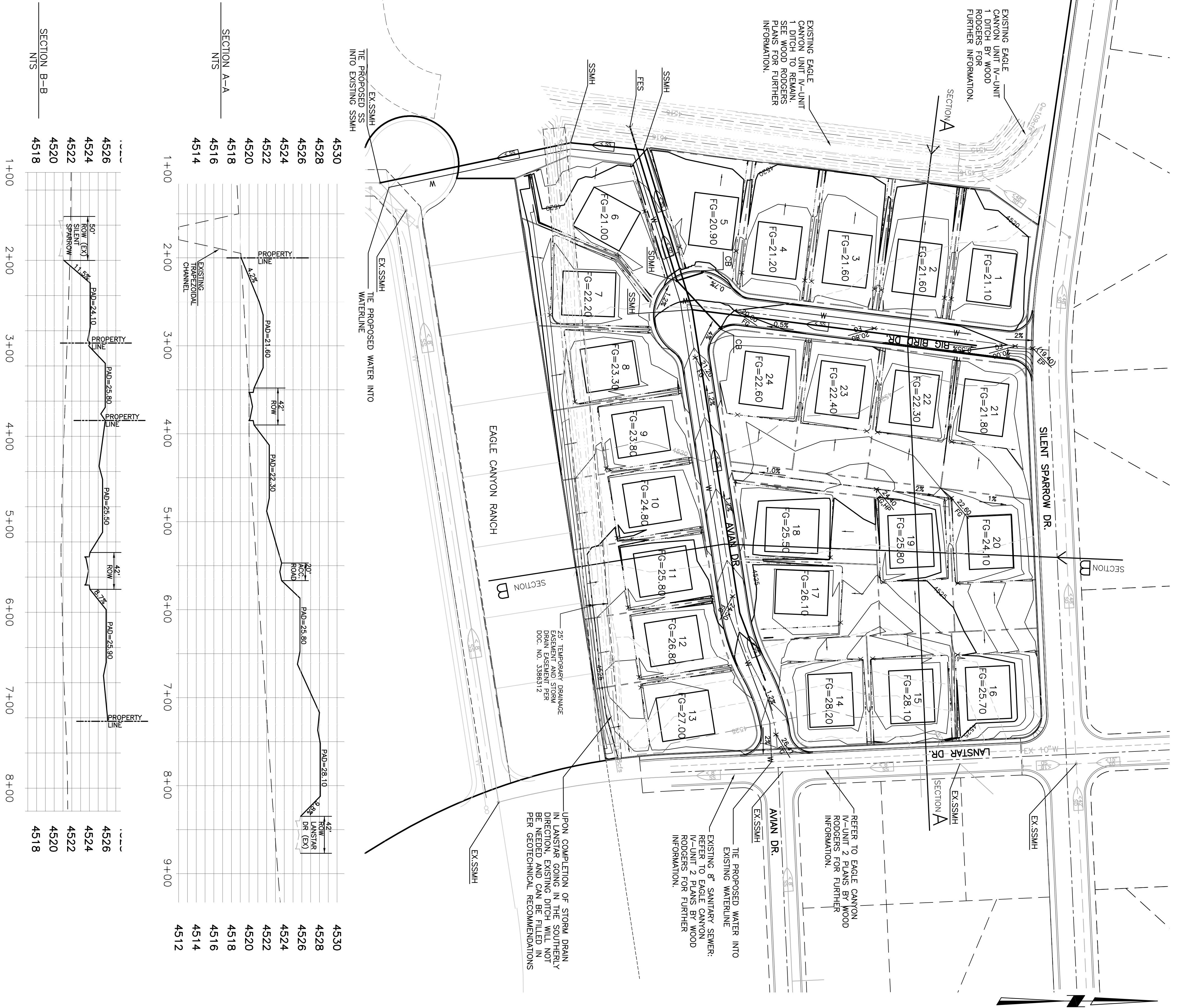
TYPICAL LOT GRADING
TYPE B



TYPICAL LOT PLACEMENT
STANDARD

TYPICAL LOT PLACEMENT
CORNER

- SILENT SPARROW SUBDIVISION NOTES:**
1. DISTURBED AREAS: APPROXIMATELY 8.0 ACRES WILL BE DISTURBED
 2. APPROXIMATE IMPROVEMENTS NEEDED: 19,300 CY (SOURCE TO BE DETERMINED)
 3. ALL AREAS DISTURBED AND LEFT UNDEVELOPED FOR A PERIOD OF MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED BY THE APPLICATION OF DUST PALLIATIVE AND IF LEFT MORE THAN NINETY (90) DAYS PLANTED AS FOLLOWS:
PERMUTER (10-20-0) 300#/ACRE
GRASS: THE BROADCAST SEEDING RATE SHALL BE 12#/AC OF SODAR WHEATGRASS AND 8#/ACRE OF PERMUTER
OF PANS: THE GREAT WHEATGRASS SEEDING RATE SHOULD BE 8#/ACRE OF SODAR WHEATGRASS AND 4#/ACRE OF PERMUTER
ANCHORED BY A STRAW PUNCHING TOOL OR COVERED WITH NETTING AND STAPLED
 4. PRIOR TO CONSTRUCTION OR AS SOON AS PRACTICABLE, THE LOW PERIMETER OF ALL AREAS TO BE GRADED SHALL HAVE A SILT FENCE. IN ADDITION, ALL STORM DRAIN INLETS TO HAVE FIBER ROLLS. WASHOE COUNTY BEST MANAGEMENT PRACTICES TO BE FOLLOWED.



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SHEET G-1 OF 3	SILENT SPARROW SUBDIVISION GRADING/CROSS SECTIONS		MARK DATE REVISION DESCRIPTION BY
	WASHOE COUNTY	NEVADA	
	C & M ENGINEERING AND DESIGN, LTD 5488 RENO CORPORATE DR., SUITE 200B, RENO, NV 89511 PHONE: (775) 856-3312		