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PLANNING DEPARTMENT

EL DORADO COUNTY PLANNING AND BUILDING DEPARTMENT

APPLICATION FOR: **TENTATIVE SUBDIVISION MAP** **FILE #** TM18-1536

ASSESSOR'S PARCEL NUMBER(S) 123-040-11

PROJECT NAME/REQUEST (Describe proposed use) Serrano Village J7

IF SUBDIVISION MAP: Create 65 lots, ranging in size from 3,600 sf to 6,058 sf acre(s)/square feet

IF ZONE CHANGE: From NA to

IF GENERAL PLAN CHANGE: From NA to

IF TIME EXTENSION, REVISION, CORRECTION: Original approval date NA Expiration date

APPLICANT/AGENT Serrano Associates, LLC / Attn: Kirk Bone

Mailing Address 4525 Serrano Parkway, Suite 100 (P.O. Box or Street) El Dorado Hills (City) CA (State) 95762 (ZIP)

Phone 916-939-4060 Email: kbone@parkerdevco.com ahoward@parkerdevco.com

PROPERTY OWNER Same

Mailing Address (P.O. Box or Street) (City) (State) (ZIP)

Phone Email:

LIST ADDITIONAL PROPERTY OWNERS ON SEPARATE SHEET, IF APPLICABLE

ENGINEER/ARCHITECT REY Engineers / Attn: Don McCormick

Mailing Address 905 Sutter Street, Suite 200 (P.O. Box or Street) Folsom (City) CA (State) 95630 (ZIP)

Phone 916-366-3040 Email: dmccormick@reyengineers.com

LOCATION: The property is located on the south (N/E/W/S) side of Bass Lake Road (Street or Road)

300 feet feet/miles south (N/E/W/S) of the intersection with Bridlewood Drive (Major Street or Road)

in the El Dorado Hills area. PROPERTY SIZE 10.08 acres (Acre(s) / Square Feet)

X [signature] (Signature of property owner or authorized agent) Date 6/13/18

FOR OFFICE USE ONLY

Date 13 June 18 Fee $ 14,772.20 Receipt # R1506 Rec'd by Isaac Wolf Census

Zoning R1 GPD AP Supervisor District 1 Sec 32 Twn 10N Rng 9E

Application completed by: Date completed:

ACTION BY _____PLANNING COMMISSION

Hearing Date _____

Approved _____ Denied _____
Findings and/or conditions attached

_____
Executive Secretary

ACTION BY BOARD OF SUPERVISORS

Hearing Date _____

Approved _____ Denied _____
Findings and/or conditions attached

APPEAL:
Approved _____ Denied _____

TM18-1536

PROJECT ID: TM XMT RECEIPT SEARCH: _____
CHARGE ID: _____ QUOTE: 0002281

PROJECT /CHARGE ID	PROJ STATUS	CHARGE AMOUNT	MULTI PROJ%	TOTAL CHARGE	PYMTS/ ADJSTMTS	AMOUNT DUE
TM - -XMT	QUOTE	13,041.00	100	13,041.00		13,041.00
PD - -XMT	QUOTE	2,164.00	080	1,731.20		1,731.20

reduction

TOTAL

TOTALS	15,205.00	14,772.20	14,772.20

DATE PAID: 05 03 18 USER ID: _____
RCPT STATUS: CHECK NBR: _____ CHECK AMT: _____
PAID BY: _____ CASH: _____
COPIES: _ PRINTER ID: P424

LMC223A

F1=HELP 2=CLR 3=QUIT 4=D 5=U 6=A F9=PRINT RECEIPT 10=SUMMARY 12=X

For J7-TM/PD

Fee quote

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TM18-1536

PROJECT ID: PD __ _____ PLANNED DEVELOPMENT STATUS:
MISC: _ CHARGE ID: 0000000 QUOTE ID: 0002281 05/03/18 MULTI PROJ %: 100
ALL FEE SCHEDULE: 07 02 16 XMT DOC
RELATED: _ TM
PROJECTS:

SERVICE	FOR AGENCY	FLAT FEE	NBR OF ITEMS	PER AMT	SRVC TOT
PLANNED DEV	COUNTY ENGIN	2000.00			2000.00
	CUR PLN-T&M-				
	ENV MGMT	164.00			164.00

_____ LOTS _____ HOURS _____ PARCELS _____ SQ. FT.

LMC222A

F1=HELP 2=CLR 3=QUIT 4=DIS 5=UPD 6=ADD 7/8=SCROLL 10=RECEIPT 12=X

TM18-1536

PROJECT ID: TM _____ SUBDIVISION STATUS:
MISC: _ CHARGE ID: 0000000 QUOTE ID: 0002281 05/03/18 MULTI PROJ %: 100
ALL FEE SCHEDULE: 07 02 16 XMT DOC
RELATED: _ PD
PROJECTS:

SERVICE	FOR AGENCY	FLAT FEE	NBR OF ITEMS	PER AMT	SRVC TOT
TENTATIVE MAP 50-99	ENV MGMT	541.00			541.00
TENTATIVE MAPS	COUNTY ENGIN	5000.00			5000.00
	CUR PLN-T&M-	7500.00			7500.00

_____ LOTS _____ HOURS _____ PARCELS _____ SQ. FT.

LMC222A

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COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667
Phone: (530) 621-5355 www.edcgov.us/Planning/

TENTATIVE SUBDISVIONS MAP

REQUIRED SUBMITTAL INFORMATION

The following information must be provided with all applications. **If all the information is not provided, the application will be deemed incomplete and will not be accepted.** For your convenience, please use the check (√) column on the left to be sure you have all the required submittal information. **All plans and maps MUST be folded to 8 ½" x 11". All plans required in PDF format should have Optical Character Recognition (OCR), be Optimized, and be in a reduced file size.**

NOTE: APPLICATIONS WILL BE ACCEPTED BY APPOINTMENT ONLY. TO MAKE YOUR APPOINTMENT IN ADVANCE, PLEASE CALL PLANNING SERVICES AT (530) 621-5355.

NOTE: Submittal of the materials required in this application packet does not necessarily constitute a complete application for purposes of the California Permit Streamlining Act; the County may require further submittals or clarification of materials in order for staff to begin processing the project. If so, you will receive a letter within 30 days stating what additional materials must be submitted. Discretionary project applications (a project considered by the Zoning Administrator, Planning Commission, and/or Board of Supervisors) will need to be deemed **complete** for processing before the environmental review of the project can be started in accordance with the California Environmental Quality Act. In order to prepare an environmental document to comply with CEQA, the County may require the applicant to submit additional information or studies after the application has been deemed **complete** for processing. Note that studies may be required to analyze potential impacts from off-site improvements. Studies typically required for a **complete** application (e.g.: traffic study) would be deferred when an environmental impact report is to be prepared and said EIR would address the impact.

FORMS AND MAPS REQUIRED

Check (√) Applicant	County		
☒	☐	1)	Application form completed and signed. All application forms shall be completed in ink or typed.
☒	☐	2)	Agreement for Payment of Processing Fees completed and signed by the applicant (form available on Planning Services website under Applications and Forms).
☐ n/a	☐	3)	Letter of Authorization: When there are multiple owners, a Letter of Authorization is required from the other property owner(s) authorizing the applicant to act as their agent; or when the applicant is not the property owner.

TM18-1536

Check (√) Applicant	County		
☐ n/a	☐	4)	One copy of a Title Report (no more than six months old) for the project. Proof of ownership (Grant Deed), if the property has changed title since the last tax roll.
☒	☐	5)	Provide name, mailing address, and phone number of all property owners and their agents.
☒	☐	6)	If public sewer or water service is proposed, obtain and provide a Facilities Improvement Letter if the project is located within the EID service area, or a similar letter if located in another sewer and/or water district.
☐ n/a	☐	7)	If on-site wastewater treatment systems are proposed to serve the project, provide a wastewater feasibility report as described in the adopted design and improvement standards manual.
☐ n/a	☐	8)	If off-site sewer or water facilities are proposed to serve the project, provide four copies of a map showing location and size of the proposed facilities.
☐ n/a	☐	9)	If groundwater is to be used for domestic water, provide proof of a safe and reliable water source as described in the adopted Design and Improvement Standards Manual.
☒	☐	10)	One hard copy plus an electronic PDF copy (CD-ROM or other medium) of a preliminary grading, drainage plan and report. The plan should be of sufficient detail to identify the scope of grading, including quantities, depths of cut and fills for: roads, driveways where cuts/fills exceed six feet, retaining walls, and mass pad graded lots. Show location of existing drainage, proposed modifications, and impacts to downstream facilities. (See Section 110.14 of County Grading Ordinance for submittal detail of grading plan. See Section 1.8.3 of County Drainage Manual for submittal requirements of the drainage plan and report.)
☒ see EIR	☐	11)	One hard copy plus an electronic PDF copy (CD-ROM or other medium) of a Preliminary Geotechnical Engineering Study as described in the adopted Design and Improvement Standards Manual.
☐ see EIR	☐	12)	An on-site biological study shall be required to determine if the site contains special status plant or animal species or natural communities and habitats, including riparian vegetation and plant habitat. The report should include proposed mitigation measures if applicable. Such survey can only occur from March 15 through August 15 when plants are identifiable. One hard copy plus an electronic PDF copy (CD-ROM or other medium), with attachments, shall be submitted. The biological study shall include a plant survey to determine the extent and location of rare plants on the project site if located within Mitigation Area 0 ("EP" overlay designation on the General Plan land use map) or Mitigation Area 1 (within the gabbro soils area as shown on maps on file at the Development Services Division). The Mitigation Area for each parcel may be determined by accessing the Parcel Data Information page on Planning Service's website.

Check (√) Applicant	County		
☒	☐	13)	Name and address of Homeowners' Association, CSA 9 Zone of Benefit, or other road maintenance entity, if it exists in the project area.
☐ See EIR	☐	14)	A record search for archeological resources shall be conducted through the North Central Information Center located at CSU-Sacramento, 6000 J Street, Adams Building, Suite #208, Sacramento, CA 95819-6100, phone number (916) 278-6217. If the record search identified a need for a field survey, a survey shall be required. Archaeological surveys shall meet the Guidelines for Cultural Resources Studies approved by the Board of Supervisors, available at Planning Services. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☐ See EIR	☐	15)	A site-specific wetland investigation shall be required on projects with wetlands as determined by the biological study. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☒	☐	16)	An acoustical analysis shall be provided to demonstrate consistency with General Plan Policies (see policies following General Plan Objective 6.5.1). The analysis shall define the existing and projected (2025) noise levels and define how the project will comply with standards set forth in the Zoning Ordinance Chapter 130.37. The analysis should include description of construction noise, traffic noise generated from the project, and impacts of traffic noise to the residences within the project. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☐ See EIR	☐	17)	An air quality impact analysis shall be provided utilizing the Air Quality Management District's *AQMD Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under the California Environmental Quality Act* (February 2002) available at: http://www.edcgov.us/Government/AirQualityManagementDistrict/Guide_to_Air_Quality_Assessment.aspx Emissions modeling should utilize the statewide land use emissions computer model CalEEMod available at: www.caleemod.com to quantify potential criteria pollutant and greenhouse gas (GHG) emissions. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☑ See EIR and TIS memo for Vlg. J dated 4-11-17.	☐	18)	If required by the El Dorado County Transportation Division (TD) based on submittal of a Traffic Impact Study – Initial Determination Form, a traffic study shall be provided utilizing their Traffic Impact Study Protocol and Procedures or other latest traffic study requirements, as determined by TD. Applications shall: a. Demonstrate consistency with 2004 General Plan Transportation and Circulation Element Policies. b. Identify access to County Road(s); describe proposed road and intersection improvements (on-site and off-site). One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.

Check (√) Applicant	County		
☐ n/a	☐	19)	A Snow Removal and Storage Plan for subdivisions above 3,000 feet elevation (Design and Improvement Standards Manual (DISM) Volume I, Section 5, A. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☑	☐	20)	A discussion of passive solar opportunities for proposed lots having 20,000 square feet or less (DISM Volume I, Section 5, B.). One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☒	☐	21)	Copy of previous parcel map, subdivision map, or record of survey, if applicable.
☑	☐	22)	Application Fees pursuant to the adopted fee schedule.
☒	☐	23)	Five copies plus an electronic PDF copy (CD-ROM or other medium) of the site plan detailing what exists on the site at time of application shall be submitted on 24" x 36" sheets, drawn to scale, and of sufficient size to clearly show all details and required data. **All plans MUST be folded to 8½" x 11", plus one 8½" x 11" reduction that includes a graphic scale. NO ROLLED DRAWINGS WILL BE ACCEPTED.**
phasing notice on TM. ☒	☐	24)	Five copies plus an electronic PDF copy (CD-ROM or other medium) of a Phasing Plan, if proposed; and one 8½" x 11" reduced copy **that includes a graphic scale**.
☒	☐	25)	One full-sized copy plus an electronic PDF copy (CD-ROM or other medium) of a slope map noting the following slope range categories: 10 to 15 percent; greater than 15 to 20 percent; greater than 20 to 25 percent; greater than 25 to less than 30 percent; and 30 percent or greater; and one 8½" x 11" reduced copy.
☒	☐	26)	One full-sized copy plus an electronic PDF copy (CD-ROM or other medium) of an aerial photograph with the tentative map overlaid. Scale should be 1" = 100' or the same scale as tentative map.
☐ in process	☐	27)	A Fire Safe Plan approved by the applicable fire district and Cal Fire shall be submitted if project is located in a high or very high wildland fire hazard area; or in an area identified as "urban wildland interface communities within the vicinity of Federal lands that are a high risk for wildfire," as listed in the most current Federal Register. One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.
☒	☐	28)	A description of all proposed deviations or waivers to County design standards. The four findings required for approval of the deviation(s) or waiver(s) listed in County Code Section 120.40.010.A.2.a through d must be addressed by the applicant to justify granting the request(s). One hard copy plus an electronic PDF copy (CD-ROM or other medium) shall be submitted.

OAK TREE/OAK WOODLAND REMOVAL

The following supplemental information shall be required if any Oak Woodlands, Individual Native Oak Trees, or Heritage Trees, as defined in Section 130.39.030 (Definitions) will be impacted by the project (i.e. cut down) consistent with Section 130.39.070 (Oak Tree and Oak Woodland Removal Permits – Discretionary Development Projects).

Check (√) Applicant	County		
☐	☐	29)	Oak Resources Code Compliance Certificate.
☐	☐	30)	Oak Resources Technical Report prepared by a Qualified Professional consistent with Section 2.5 (Oak Resources Technical Reports) of the Oak Resources Management Plan.
☐	☐	31)	Completed Oak Resources Technical Report Checklist, including supplemental data for impacted Individual Native Oak Trees within Oak Woodlands, as applicable
☐	☐	32)	Security deposit for on-site oak tree/oak woodland retention and/or replacement planting (if proposed as part of project mitigation) consistent with Section 130.39.070.F (Security Deposit for On-Site Oak Tree/Oak Woodland Retention and Section 130.30.070.G (Security Deposit for On-Site Oak Tree/Oak Woodland Replacement Planting).
☐	☐	33)	Reason and objective for Impact to oak trees and/or oak woodlands.

REQUIRED INFORMATION ON TENTATIVE MAP

Check (√) Applicant	County		
☒	☐	1)	Proposed subdivision name.
☒	☐	2)	North arrow and Scale.
☒	☐	3)	Project boundaries with dimensions.
☒	☐	4)	The approximate dimensions and area of all lots (gross and net). Net area of lots excludes non-buildable areas such as road rights-of-way, bodies of water, and areas of 30 percent or greater slope. Parcel sizes must be consistent with General Plan and Zoning standards unless the application is accompanied by a General Plan, Rezone, and/or Planned Development application.
☒	☐	5)	Adjacent ownership with book and page number of recorded deeds or parcel map references.
☒	☐	6)	Location and names of rights-of-way width of adjacent streets, highways, and alleys.
☐ n/a	☐	7)	Access easements to a connection with a public road, together with deed or map reference that documents the access.

☐ n/a	☐	8)	Existing encroachments to the public road on adjacent parcels. If a new access is proposed through adjacent parcels, provide a letter of authorization (if available) and a description of the access easement.
☒	☐	9)	Purpose, width, and approximate location of all proposed and existing easements (other than roads) together with the deed or map reference that documents the easement.
☒	☐	10)	Approximate radii of centerline on all street curves.
☒	☐	11)	Names of adjacent subdivisions with the recording reference.
☒	☐	12)	Grades and widths of proposed and existing roads or road easements, showing typical improvement cross-section for all proposed and existing roads, including cul-de-sac roads and turnarounds.
☐ n/a	☐	13)	All existing structures, buildings, utility, transmission lines and dirt roads, and distances to existing and proposed property lines. Show structures within 50 feet of property.
☐ n/a	☐	14)	Show location of all structures for which permits have either been applied for or granted, but not yet constructed.
☐ future	☐	15)	Fire hydrant location, existing and/or proposed.
☒	☐	16)	Existing water and sewer line locations.
☒	☐	17)	Contour lines shown at 5-foot intervals if any slopes on the property exceed 10 percent (contours not required if all slopes are 10 percent or less). Contours may be shown at 10-foot or 20-foot intervals on parcels of 10 acres or larger (using USGS interpolation or field survey), <u>if said contours reasonably identify significant site features</u> (e.g., benches or abrupt topographical changes, etc.).
☒	☐	18)	Areas of 30 percent or greater slope shall be identified.
☐ n/a	☐	19)	The location, if present, of rock outcropping, lava caps, drainage courses, ponds, lakes, canals, reservoirs, rivers, perennial streams, creeks, spring areas subject to inundation and wetlands. Show respective 100-foot and 50-foot septic system setbacks when a septic system is proposed. Setbacks from riparian and wetland areas consistent with Section 130.30.030.G of the Zoning Ordinance shall be shown on the tentative map.
☐ n/a	☐	20)	Identify areas subject to a 100-year flood; and show high water level (100-year) on map. Where this data is not readily available, January 1997 flood level can be shown if known.
☐ n/a	☐	21)	Show any other subdivision-related improvements such as: street lighting, subdivision signage, landscaping, parking, storm drains, catch basins, storm water quality treatment areas, parks, and utility facilities (e.g.: electric, gas, phone, cable TV). The depiction of these improvements may be submitted on a separate exhibit map if appropriate.
☒	☐	22)	The following information is to be listed on the tentative map in the following consecutive order:
☒	☐		a. Owner of record (name and address)
☒	☐		b. Name of applicant (name and address)
☒	☐		c. Map prepared by (name and address)

☒	☐	d.	Scale
☐	☐	e.	Contour interval (if any)
☐	☐	f.	Source of topography
☐	☐	g.	Section, Township and Range
☐	☐	h.	Assessor's Parcel Number(s)
☐	☐	i.	Present and proposed General Plan land-use designation(s)
☐	☐	j.	Present and proposed zoning district(s)
☐	☐	k.	Total area
☐	☐	l.	Total number of lots
☐	☐	m.	Total number of lettered lots
☐	☐	n.	Minimum parcel area
☐	☐	o.	Water supply
☐	☐	p.	Sewage disposal
☐	☐	q.	Proposed fire protection district or agency
☐	☐	r.	Date of preparation
☒	☐	s.	In the lower right-hand corner of each map, a signature block should be shown, giving space for:

Planning Commission: _____

Approval/Denial Date: _____

Board of Supervisors: _____

Approval/Denial Date: _____

Planning reserves the right to require additional project information as provided by Section 15060 of the California Environment Quality Act, or as required by the General Plan development policies, or when such is necessary to complete the environmental assessment.

NOTE: APPLICATION WILL BE ACCEPTED BY APPOINTMENT ONLY. MAKE YOUR APPOINTMENT IN ADVANCE BY CALLING (530) 621-5355.

SERRANO

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June 13, 2018

Mel Pabalinas
El Dorado County Planning Services
2850 Fairlane Court
Placerville, CA 95667

RE: ***Serrano Village J7 Tentative Subdivision Map (65 Lots)***

Dear Mel,

Please accept this letter as a supplement to the above-referenced tentative subdivision map application to specially address requested deign waivers, modifications to development standards, and passive solar opportunities and required by the County's submittal form.

Modified Development Standards

Please refer to Exhibit A attached for a description of the requested amendments to the R1 development standards.

Design Waivers

1. Modify Standard Plan 101B standards for roadway right-of-way and improvement widths (including sidewalks and curbs) as shown on the tentative subdivision map.

2. Reduction of 100-foot centerline curve radii to 49' on A Street at Lot 7.

3. Modification of the standard road encroachment under Standard Plan 110 to allow for an entry gate and landscaping median.

4. Reduction of standard lot frontage width of 60 feet to 45 feet or as otherwise dimensions on the tentative map.

SUITE 100
SERRANO ASSOCIATES, LLC 4525 SERRANO PARKWAY EL DORADO HILLS, CALIFORNIA 95762-7510
916.939.4060 FAX 916.939.4116

TM18-1536

Justification:

There are special conditions or circumstances peculiar to the property that justifies the waivers. The project site is located within the El Dorado Hills Specific Plan that adheres to different architectural design features than the rest of the County. Construction of the proposed improvements is typical of the existing private roadway systems and lotting patterns in the Serrano development, with all roadway improvements commonly owned and maintained by the Serrano El Dorado Owners' Association. The modified improvements are necessary to maintain a common design theme throughout the Specific Plan area.

Strict application of the standard design or improvement requirements would cause additional unnecessary grading effects, impacts to resources and conflict with existing similar improvements within the Serrano villages. Standard design or improvement requirements would result in an atypical design in the Specific Plan Area and would create a hardship that disrupts the harmonious designs utilized throughout the Specific Plan area.

The design waivers would not be injurious to adjacent properties or detrimental to the health, safety, convenience or welfare of the public. The improvements are designed to sufficiently meet the vehicular and pedestrian circulation and safety needs of the future residents of this village and the public in general as reviewed by the local fire protection district and County DOT.

Granting of the waivers would not have any effect of nullifying the objectives of the Subdivision Ordinance or other applicable subdivision development standards. The modified improvements have previously been used in other Serrano villages. The roadway and lot designs sufficiently serve the subdivision and provide aesthetic amenities for the subdivision. Granting of the design waivers would not nullify the objectives of the Subdivision ordinance. Other applicable provisions of the DISM remain in effect.

Passive Solar

The shape and orientation of the Village J7 site is generally linear, running north-south. Due to its limited frontage along Bass Lake Road and proximity to the Bridlewood subdivision, the J7 subdivision entry gate is essentially fixed at Bass Lake Road and the need to provide for secondary access to Village J6 to the west limits flexibility in the street pattern and resulting lot layout. The resulting lot configuration places the lots in either north-south or generally east-west orientations. Consistency with Title 24 regulations will be addressed by merchant builders during the design phase and building permit issuance.

Application Deemed Complete

As soon as you are able to deem the application complete for processing, please send a brief letter for my files.

Thank you in advance for your time to review Serrano's proposal. If you have any questions or need additional information, please contact me or Kirk Bone at (916) 939-4060.

Sincerely,

SERRANO ASSOCIATES, LLC

Andrea Howard
Principal Planner

Exhibit A
Village J7 Development Standards

Standard	Required by Zoning Ordinance	Proposed Modifications	Notes
Maximum Building Coverage (all buildings)	35%	Maximum 65% coverage	
Minimum Lot Area	6,000 sf	3,600 sf	
Minimum Lot Width	60 feet	45 feet or as shown on tentative map	
Maximum Building Height	40 feet	35 feet	
Front Yard Setback	20 feet	10 feet for living space 10 feet for side-load garage 18 feet for front-load garage	
Rear Yard Setback	15 feet	10 feet	
Side Yard Setback	5 feet	3 feet	
Setback for AC/Pool Equipment	Up to 50% encroachment, but not less than 3' from any property line	Side: 2.5' Rear: 2.5'	Shall be screened by solid fence
Setback for Solid Fences and Walls over 40 inches tall	Solid Fence Walls not to exceed 40" in height with in front yard	Front: 5' Side, and Rear: 0'	
Setback for Open fences and walls (50% or more) and over 40 inches tall and less than 7' tall	Front Yard with fence/wall 50% open or more, below 7' tall	Front, Side, and Rear: 0'	
Setback for any structure such as a permanent BBQ or spa, not over 40 inches high	Front: 20 feet Rear: 10 feet Side: 5 feet	Front: 0' Side and Rear: 2.5'	
Setback for Pergola/ Trellis	Side: 5' Rear: 15'	Side: 2.5' Rear: 2.5'	
Setback for any structure over 30 inches high.	Rear: 15'	Rear: 5'	Subject to Building Code

Minimum Side and Rear Yard Setback: Swimming pool (underground)	Side:5 feet Rear: 5 feet	Side and Rear: 5'	As measured from edge of footing
Minimum Side and Rear Yard Setback: Portable sheds (120 square feet or less)	Side and Rear: 5'	Side and Rear: 5'	
Setback for architectural extensions of the dwelling (uninhabitable space)	Up to 50% encroachment, but not less than 3' to side property line	Side and Rear: 2.5'	
Setback for chimneys – attached or detached	Front and Rear: 3' into setbacks Side: 3' into setbacks, but remainder setback not less than 3'	Side: 3' Rear: 7'	

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Open Space and Golf Course Accounting								
SERRANO ASSOCIATES, LLC								
June 2017								
	Assessor's							
ID	Book	Page	Parcel	Description	Acreage		Type	Comments
3.1	123	020	18	por. Lot BB, EDHSP#2	14.880		Public Open Space	
3.2	123	340	18	Vlg. M1, Lot N	2.436		Private Open Space	
3.3A	123	020	05	Vlg. M1, por. Lot G	44.410		Public Open Space	
3.3B	123	020	12	Vlg. M1, por. Lot G	25.924		Public Open Space	
3.3C	121	220	07	Vlg. M1, por. Lot G	190.108		Public Open Space	Excludes EID Oakridge tanks.
3.4				M Lg Lot 5	27.594		Private Open Space	
3.5				M Lg Lot 3	15.678		Private Open Space	
3.6				M Lg Lot 8	45.622		Private Open Space	Less 7.51 acres for K1/K2 Phase 4 plus 1.17 ac for M3 Lot A
3.7A				intentionally blank				
3.7B				intentionally blank				
3.8				Vlg. M5 Tent. Map, Lot C	0.473		Public Open Space	
3.9	123	020	02	por. Lot BB, EDHSP#2	18.730		Public Open Space	
3.10				intentionally blank				
3.11				intentionally blank				
3.12	123	030	70	PM 47/120/4	53.293		Golf Course	Not owned by Serrano Associates.
3.13	123	030	75	PM 47/130/4	12.930		Golf Course	Not owned by Serrano Associates.
3.14				intentionally blank				
3.15	123	200	20	Vlg. H6B, Lot A	0.524		Public Open Space	
3.16	123	220	05	Vlg. I-A, Remainder	3.770		Public Open Space	
3.17	123	230	41	Vlg. I-FGH, Remainder	2.713		Private Open Space	
3.18	123	270	-21,-23	PM 49 / 94 / 1	122.944		Golf Course	Not owned by Serrano Associates.
3.19	to be assigned			PM 49 / 146 / 2	19.676		Private Open Space	
4.1				Archery Range	45.000		Public Open Space	
4.2				Village D1 Lots C and D OS	83.600		Public Open Space	
4.3	122	010	06	Lot K, EDHSP #1	9.170		Public Open Space	
4.4	121	120	14	PM 47/63/A	32.255		Public Open Space	
4.5	121	120	19	TRACT 2 ROS 25-148	79.289		Public Open Space	excludes D2 park and Hwy 50 ROW
4.6	122	130	41	TRACT A ROS 27-93	93.545		Public Open Space	excludes Vlg A cul BLAs and Lara BLA
4.7				Vlg. C2 Lot B	34.700		Public Open Space	
4.8	122	140	01	Vlg. C1-8, Lot N	12.096		Public Open Space	
4.9	122	140	02	Vlg. C1-8, Lot O	4.063		Public Open Space	
4.10				Vlg. C2 Lot C	0.600		Public Open Space	
4.11	122	170	40	Vlg. C1-1, Lot E	5.799		Public Open Space	
4.12	122	170	45	Tract B ROS 26-15	4.274	(1)	Public Open Space	
4.13	122	190	24	Vlg. C1-7, por. Lot L	2.530		Public Open Space	
4.14	122	190	25	Vlg. C1-7, Lot M	2.466	(1)	Public Open Space	
4.15	122	190	27	Vlg. C1-7, por. Lot L	2.078		Public Open Space	
4.16	122	200	24	Vlg. C1-6, Lot J	4.237		Public Open Space	
4.17	122	200	25	Vlg. C1-6, Lot K	2.788	(1)	Public Open Space	
4.18	122	210	44	Vlg. C1-5, Lot H	1.178		Public Open Space	
4.19	122	210	48	Vlg. C1-5, Lot I	4.705	(1)	Public Open Space	
4.20				intentionally blank				
4.21	122	220	25	Vlg. C1-9A, Lot Q	5.212	(1)	Public Open Space	

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Open Space and Golf Course Accounting								
SERRANO ASSOCIATES, LLC								
June 2017								
	Assessor's							
ID	Book	Page	Parcel	Description	Acreage		Type	Comments
4.22	122	230	27	Vlg. C1-9B, Lot V	1.094	(1)	Public Open Space	
4.23	122	240	27	Vlg. C1-9C, Lot S	0.620	(1)	Public Open Space	
4.24	122	240	28	Vlg. C1-9C, Lot T	7.503	(1)	Public Open Space	
4.25	122	250	26	Vlg. C-9D, Lot U	0.620	(1)	Public Open Space	
4.26	122	260	31	Vlg. C1-2, Lot A	9.084		Public Open Space	
4.27	122	260	32	Vlg. C1-2, Lot B	0.653	(1)	Public Open Space	
4.28	122	270	23	Vlg. C1-4, por. Lot C	4.300		Public Open Space	
4.29	122	280	26	Vlg. C1-4, por. Lot C	4.329		Public Open Space	
4.30	122	300	53	Vlg. E1-1, Lot A	1.551	(1)	Public Open Space	
4.31	122	32	44	Vlg. E1-2, Lot B	7.173	(1)	Public Open Space	
4.32	122	340	31	Vlg. E1-3, Lot C	4.657	(1)	Public Open Space	
4.33	122	350	22	Tract 2 ROS 26-56	4.623	(1)	Public Open Space	excludes Vlg E Lot 259 BLA
4.34	122	360	33	Vlg. E1-7, Lot A	5.553	(1)	Public Open Space	
4.35	122	400	41	Vlg. E1-6, Lot A	0.791	(1)	Public Open Space	
4.36	122	420	52	Vlg. E1-9, por. Lot A	5.991	(1)	Public Open Space	
4.37	122	430	24	Vlg. E1-9, por. Lot A	17.855	(1)	Public Open Space	
4.38	122	441	24	Vlg. E1-12, Lot C	1.081	(1)	Public Open Space	
4.39	122	470	9, 14	Vlg. F Large Lot, Lot 9	42.815	(1)	Public Open Space	
4.40	122	700	04	PM 48/137/D	16.537	(1)	Public Open Space	
4.41	122	370	1	Village J Lot H	1.010		Private Open Space	
4.42	122	460	03	PM 48/72/2	16.097		Public Open Space	Excludes Vlg C park & Taylor BLA
4.43				Vlg. C2 Lot A	4.500		Public Open Space	
4.44				Vlg. C2 Lot D	21.900		Public Open Space	Exlcludes title overlap for Ruminson, Grado, Hardy et al
					1211.627			

SUMMARY OF ACTUAL TO DATE:		
Public Open Space	907.731	
Private Open Space	114.729	
Subtotal Open Space	1,022.460	
Golf Course (1)	189.167	
TOTAL OPEN SPACE TO DATE		**1,211.627**
APPROVED SPECIFIC PLAN:		
Open space	808.000	
Golf Course	370.000	
Subtotal		1,178.00

33.627 Acres Over / (Under)

NOTE:

(1) In April 2000, the Planning Commission voted to approve abandonment of the 2nd golf course described in the Specific Plan in favor of open space accessible to the public.

Oak Canopy Removal Analysis for the El Dorado Hills Specific Plan

SERRANO ASSOCIATES, LLC

2018 JUN 13 PM 4:07
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Prepared March 21, 2007
Updated June 2017

	Net Acres	% Cover	Worst case removal (in acres)
Approved Tentative Maps:			
Village A	*102.50*	*0.00%*	*0.00*
Village B	*58.00*	*0.33%*	*0.19*
Village C1	*124.15*	*0.09%*	*0.11*
Village C2	*41.30*	*33.27%*	*13.74* (2)
Village D1 Phases 1 and 2	*103.60*	*0.09%*	*0.09*
Village D2	*112.20*	*0.40%*	*0.45*
Village E	*190.00*	*0.00%*	*0.00*
Village F	*74.20*	*2.86%*	*2.12*
Village G (including J4)	*83.00*	*12.05%*	*10.00*
Village H1, H2, H3, H4, H6A	*154.55*	*1.26%*	*1.94*
Village H5 and H6B	*63.00*	*50.00%*	*31.50*
Village I and L Phase 1	*88.90*	*0.89%*	*0.79*
Village I Lot A1	*1.10*	*0.00%*	*0.00*
Village I Lot A2	*15.00*	*0.00%*	*0.00*
Village I Lot B	*2.40*	*0.00%*	*0.00*
Village I Lot C	*8.90*	*0.00%*	*0.00*
Village I Lots D & E	*8.60*	*1.63%*	*0.14*
Village I - Lots F, G and H	*21.10*	*100.00%*	*21.10*
Village J3A	*22.60*	*22.12%*	*5.00*
Village J3B	*42.70*	*80.00%*	*34.16*
Village J7	*9.80*	*0.00%*	*0.00*
Village K1 & K2	*192.20*	*90.00%*	*172.98*
Village K3 and K4	*43.50*	*0.14%*	*0.06*
Village K5 Phase 1	*10.20*	*0.88%*	*0.09*
Village K5 Phase 2	*31.70*	*0.76%*	*0.24* (4)
Village K6	*46.00*	*50.00%*	*23.00*

TM18-1536

Village L2 and L3/4	*56.00*	*60.00%*	*33.60*	
Village M1	*14.36*	*7.17%*	*1.03*	
Village M2 and M3	*88.00*	*40.00%*	*35.20*	
Village M4	*46.24*	*42.15%*	*19.49*	(1)
Village M5	*8.36*	*2.27%*	*0.19*	
Subtotal	*1,864.16*		*407.21*	
Pending Tentative Maps:				
Village J5/J6	*32.15*	*17.20%*	*5.53*	(3)
Village J5 Retail	*11.70*	*7.20%*	*0.85*	(6)
Village J Lot H	*25.27*	*30.87%*	*7.80*	(2)
Village A14	*9.07*	*0.00%*	*0.00*	
Subtotal	*78.19*		*14.18*	
TOTAL	***1,942.35***		***421.39***	
Impacts in Residential Areas Analyzed by the EDHSP EIR			*477.00*	
SURPLUS / (DEFICIT) - Without Village D1 Lots C and D			***55.61***	
Village D1 Lot C	*32.60*	*61.50%*	*20.05*	(5)
Village D1 Lot D	*18.00*	*5.56%*	*1.00*	(5)
Subtotal	*50.60*		*21.05*	
SURPLUS / (DEFICIT) - With Village D1 Lots C and D			***34.56***	

(1) Total impacted canopy as calculated by ECORP Consulting on 4/1/08.

(2) Total impacted canopy as calculated by REY Engineers on 5/27/08 (C2) and 6/26/17 (J Lot H). Includes park impacts.

(3) Total impacted canopy as calculated by REY Engineers on 1/7/13; added 0.33 ac Sept-2016 to include increase in cul-de-sac turnarounds requested by EDHFD (40' to 50' radius).

(4) Total impacted canopy as calculated by Serrano Associates.

(5) These projects will be converted to open space upon approval of the Central El Dorado Hills Specific Plan.

(6) Calculated by REY Engineers on 1/28/15.

NOTE: The purpose of this schedule is to provide a conservative, worst-case analysis of tree canopy impacts, which assumes 100% of the existing canopy within the subdivision limits (defined as roads and lots) is removed during construction activities. Using this methodology ensures canopy removal is not underestimated with respect to the impact criteria contained in the EIR. Actual impacts from construction activities do not result in 100% impacts.

SMUC

El Dorado Irrigation District

2018 JUN 13 PM 4:07
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PLANNING DEPARTMENT

Letter No.: DS0418-070

April 26, 2018

VIA FIRST-CLASS MAIL

Andrea Howard
Serrano Associates, LLC
4525 Serrano Parkway
El Dorado Hills, CA 95762

Subject: Facility Improvement Letter (FIL), Serrano Village J7 – Revised V2
Assessor's Parcel No.: 123-040-11 (El Dorado Hills)

Dear Ms. Howard:

This letter is in response to your request dated March 28, 2018 and supersedes the letter issued April 25, 2018. This letter is valid for a period of three years. If a Facility Plan Report (FPR) for this project is not submitted to El Dorado Irrigation District (EID or District) within three years of the date of this letter, a new Facility Improvement Letter will be required.

Design drawings for your project must be in conformance with the District's *Water, Sewer and Recycled Water Design and Construction Standards*.

This project is a 66-lot residential subdivision on 9.86 acres. Water service, sewer service, and fire hydrants are requested. The property is within the District boundary.

This letter is not a commitment to serve, but does address the location and approximate capacity of existing facilities that may be available to serve your project.

Water Supply
As of January 1, 2017, there were approximately 15,591 equivalent dwelling units (EDUs) of water supply available in the El Dorado Hills Water Supply Region. Your project as proposed on this date would require 68 EDUs of water supply.

Water Facilities
An 18-inch water line exists along the western property line of the property to be developed. There are also 12-inch water lines located in Bridlewood Drive, Dorchester Way and Birmingham Way (see enclosed System Map). The El Dorado Hills Fire Department has determined that the minimum fire flow for this project is 1,000 GPM for a 2-hour duration while maintaining a 20-psi residual pressure. According to the District's hydraulic model, the existing

TM18-1536

system can deliver the required fire flow. In order to provide this fire flow and receive service, you must construct a water line extension connecting to at least two of the 12-inch waterlines previously identified. The hydraulic grade line for the existing water distribution facilities is 1,463 feet above mean sea level at static conditions and 1,458 feet above mean sea level during fire flow and maximum day demands.

The 18-inch water line (Gold Hill Intertie) located along the western boundary of the proposed project will need to be assessed for adequate easement protection and access before the District will approve improvement plans for this project. The project shall not connect distribution lines to this 18-inch transmission main; all connections shall be made to the existing 12-inch waterlines discussed above.

The flow predicted above was developed using a computer model and is not an actual field flow test.

Recycled Water Facilities
Recycled water is not requested or available to serve irrigation demands within the proposed development.

Sewer Facilities
There is a 15-inch sewer line abutting the southern property line in Birmingham Way. This sewer line has adequate capacity at this time. In order to receive service from this line, an extension of facilities of adequate size must be constructed. The FPR will need to address coordination with the off-site sewer portion of the proposed Silver Springs project that requires access to the same gravity sewer point of connection. Your project as proposed on this date would require 66 EDUs of sewer service.

Facility Plan Report
An FPR will be required for this project. The FPR shall address the expansion of the water and sewer facilities, and the specific fire flow requirements for all phases of the project. A meeting to discuss the content of the report will be required. Please contact this office to arrange the meeting. A preliminary utility plan, prepared by your engineer, must be brought to the meeting.

Two copies of the FPR will be required along with a $3,000.00 deposit. You will be billed for actual time spent in review and processing of your FPR. Please submit the FPR and fee to our Development Services Department. Enclosed is the FPR description and transmittal form for your use. The items listed under content in the description and the completed transmittal form must be bound in each copy of the FPR.

Easement Requirements

Proposed water lines, sewer lines and related facilities must be located within an easement accessible by conventional maintenance vehicles. When the water lines or sewer lines are within streets, they shall be located within the paved section of the roadway. No structures or large plantings will be permitted within the easements of any existing or proposed facilities. The District must have unobstructed access to these easements at all times, and does not generally allow water or sewer facilities along lot lines.

Easements for any new District facilities constructed by this project must be granted to the District prior to District approval of water and/or sewer improvement plans, whether onsite or offsite. In addition, due to either nonexistent or prescriptive easements for some older facilities, any existing onsite District facilities that will remain in place after the development of this property must also have an easement granted to the District.

Environmental

The County is the lead agency for environmental review of this project per Section 15051 of the California Environmental Quality Act Guidelines (CEQA). The County's environmental document should include a review of both offsite and onsite water and sewer facilities that may be constructed by this project. You may be requested to submit a copy of the County's environmental document to the District if your project involves significant off-site facilities. If the County's environmental document does not address all water and sewer facilities and they are not exempt from environmental review, a supplemental environmental document will be required. This document would be prepared by a consultant. It could require several months to prepare and you would be responsible for its cost.

Summary

Service to this proposed development is contingent upon the following:

- The availability of uncommitted water supplies at the time service is requested;
- Approval of the County's environmental document by the District (if requested);
- Approval of an extension of facilities application by the District;
- Approval of a Facility Plan Report by the District;
- Executed grant documents for all required easements;
- Approval of facility improvement plans by the District;
- Construction by the developer of all onsite and offsite proposed water and sewer facilities;
- Acceptance of these facilities by the District; and
- Payment of all District connection costs.

Services shall be provided in accordance with El Dorado Irrigation District Board Policies and Administrative Regulations, as amended from time-to-time. As they relate to conditions of and

fees for extension of service, District Administrative Regulations will apply as of the date of a fully executed Extension of Facilities Agreement.

If you have any questions, please contact Marc Mackay at (530) 642-4135.

Sincerely,

Michael J. Brink, P.E.
Supervising Civil Engineer

MB/MM:lv

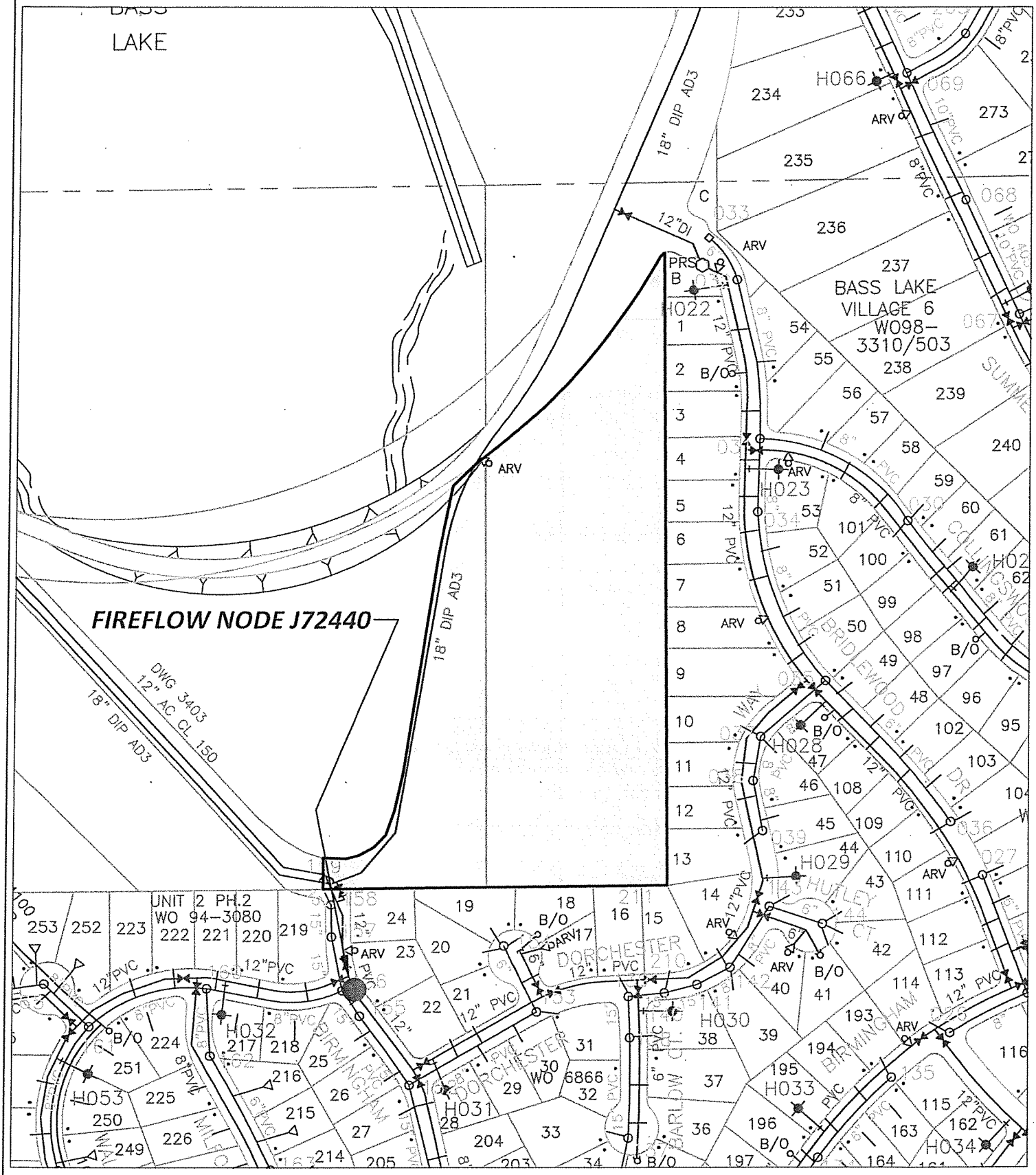
Enclosures: System Map
FPR Guidelines and transmittal

cc w/ System Map:

Marshall Cox – Fire Marshal
El Dorado Hills Fire Department
Via email - mcox@edhfire.com

Roger Trout, Director
El Dorado County Development Services Department
Via email - roger.trout@edcgov.us

Don McCormick
REY Engineers
Via email –DMcCormick@REYENGINEERS.com



El Dorado Irrigation District
System Map

WARNING: For schematic purposes only. Exact pipe location must be field verified.

WATERLINE

SEWERLINE

Scale: 1" = 250'

DATE: April 24, 2018

Serrano Village J7

APN: 123-040-11

El Dorado Irrigation District

ENGINEERING FACILITY PLAN REPORT (FPR) GUIDELINES

PURPOSE

The District requires the submittal of an engineering Facility Plan Report (FPR) for the extension of District facilities for subdivisions, commercial projects and industrial developments. The purpose of the report is to establish an understanding between the developer and the District on what system improvements the developer must construct prior to receiving service. This will help avoid misunderstandings and costly revisions in the plan review process, and will help the developer determine the costs that will be incurred for water and wastewater service.

For most development projects, the FPR includes a detailed analysis of all proposed water, sewer and recycled water facilities. However, a Master Plan FPR is often appropriate for large, multi-phased developments. Master Plan FPRs focus on major trunk sewers and water transmission facilities and do not include minor subdivision and collection facilities. One or more subsequent detailed FPRs would be required after the overall master plan has been approved.

PROCEDURE

1. The developer's engineer will submit a packet containing a completed EID FPR Transmittal Form (template attached), two copies of a Draft FPR, an additional electronic copy (pdf format) of the report on CD, and the required deposit to an EID Development Services Section representative. For the current FPR deposit amount, please contact Development Services at 530-642-4028 or services@eid.org.

   All FPRs must be bound and conform to the outline describe in the FPR CONTENT section of this document. If the project is to be constructed in phases, the number of parcels and the number of EDUs for each phase must be indicated in the FPR.

2. An initial screening for completeness will be conducted by the Development Engineer. If the report is found to be unacceptable because it is not substantially complete, it will be returned to the developer's engineer without a review.

3. Complete FPRs will be reviewed by the Development Engineer **within approximately six weeks** and returned with comments, if necessary. If there are no comments, the Final FPR will be approved and returned to the engineer along with a review letter. The FPR must be approved prior to the first submittal of facility improvement plans for District review. Any re-submittal of an FPR must contain two hardcopies and one .pdf electronic copy of the revised report and also include a copy of the previous review letter(s) in the FPR appendix.

4. After approval of the FPR, the developer's engineer may submit the facility improvement plans for review. If significant changes are required to the improvement plans during the review process, which affect the Final FPR, such changes must be reflected in an addendum to the Final FPR.

Any questions regarding FPRs or facility improvement plan reviews should be directed to the District's Development Engineer.

El Dorado Irrigation District

EXPIRATION

The approved FPR is valid for two years from the date of approval.

FPR CONTENT

The complexity of the report will depend upon the size of the project, the number of phases and the extent of improvements that are required. The report must conform to the following outline, which is based on Section 2 of the District's Water Design and Construction Standards (Design Standards). All FPR's will be bound and, at a *minimum*, include:

Section I – General

- Completed EID FPR Transmittal Form (A hardcopy is attached, and electronic copies are available on request. Please use this form as a master for future transmittals.)
- Cover page containing the project name; the name, address and telephone number of the engineer and owner/developer; the date of submittal and the Assessor's Parcel Number(s)
- Introduction
- Background including:
    a. Statement of whether or not the property is within the District's service area boundary
    b. Existing County zoning designation(s)
    c. Identification of the CEQA document prepared for the project and a statement regarding whether the entire project, including offsite water and/or sewer lines, are addressed
- Project description
- Vicinity map
- Project phasing (if applicable)
- A general project boundary map, showing adjacent developments and their existing or proposed
- EDU's
- Description of adjacent developments impacting or having the potential to impact this project
- Typical street cross section showing all utilities and separations

Section II – Water

- Contour map showing the location and size of all water facilities, including pressure reducing stations and pump stations (if applicable)
- Contour map showing proposed pressure zone boundaries (if applicable)
- Proposed sources(s) of water (existing District facilities, individual wells)
- Description of water demands based upon the equivalent dwelling unit (EDU) concept and maximum demand criteria as provided in the Design Standards
- Description of any storage requirements and proposed pressure zones
- Description of pumping and pressure reducing facilities (if applicable)
- Demand table with average day, peak hour, and maximum day demands detailed by junction node

Section III – Sewer

- Proposed sewage treatment location (such as El Dorado Hills WWTP, Deer Creek WWTP,
- Camino Heights)
- Description of average dry weather flow (ADWF) sewage generation, based upon the equivalent dwelling unit (EDU) concept; and peak wet weather flow (PWWF) sewage generation, based upon criteria as provided in the Design Standards

- Contour map showing all sewer facilities, including the size and slope of sewer mains, the location of sewage lift stations, pumped lots and offsite contributions (if applicable)
- Description of sewage lift station facilities, including capacity and head, and any proposed individual hours pump installations (if applicable)
- Table showing proposed sewer hydraulics, such as capacities, flows, velocities, depth of flow

Section IV – Recycled Water

- Contour map showing the location and size of all reclaim water facilities, including pressure reducing stations and pump stations (if applicable)
- Proposed source(s) of water (such as existing District facilities, irrigation wells)
- Description of reclaimed water demands based upon the equivalent dwelling unit (EDU) concept and maximum demand criteria as provided in the Design Standards
- Descriptions of any reclaimed water storage requirements and proposed pressure zones
- Description of pumping and pressure reducing facilities (if applicable)
- Demand table with average day, peak hour, and maximum day demands detailed by junction node
- Preliminary irrigation plan

Appendix

- Copy of Facility Improvement Letter(s)
- Letter from appropriate Fire Department stating required fire flow and duration for the project
- Copy of the tentative map (if applicable)
- Copy of pertinent calculations and hydraulic modeling analysis
- Water, sewer and recycled water exhibits

El Dorado Irrigation District

FACILITY PLAN REPORT (FPR) TRANSMITTAL FORM

Submittal Requirements: Two (2) copies of Facility Plan Report (FPR) and one (1) electronic copy in pdf format, payment of the applicable deposit (refer to AR 11010-Attachment A), and this completed transmittal form.

Project Name: _____

Contact Person: _____

Address: _____

Telephone Number: _____ FAX Number: _____

1. Assessor's Parcel No(s): _____
2. Location: _____
3. This development will be constructed in _____ phases.
4. The property requires Annexation to EID _____Yes, _____ No.
5. The total acreage of the development is _____ acres.
6. The number of parcels proposed is _____.
7. The number of water EDU's requested is _____.
8. The number of sewer EDU's requested is _____.
9. The estimated maximum day water demand is _____ gpm and peak hour demand of _____ gpm.
10. The fire flow requirement is _____ gpm for _____ hours duration at _____ psi.
11. Pressure reducing stations are required? _____Yes, _____No.
12. The estimated average dry weather sewer flow is _____ gpm.
13. The estimated peak wet weather sewer flow is _____ gpm.
14. Recycled water proposed for irrigation _____Yes, _____No. Number of EDU's _____.
15. Estimated maximum day recycled demand is _____ gpm and peak hour demand of _____ gpm.
16. The engineer's cost estimates for all facilities to be built is attached ___Yes, ___ No.
17. Are any lift stations, pump stations or water tanks proposed? If so provide the following for each:
    latitude: _____ longitude: _____ elevation: _____

Exceptions:_____

_____

_____

FPR submitted by:

_____
Developer's Engineer
RCE # _____
Date: _____

Final FPR approved by:

_____
EID Development Engineer
RCE# _____
Date _____

Serrano Village J7 Tentative Subdivision Map
June 2018

Homeowner's Association:

Serrano El Dorado Owners' Association
4525 Serrano Parkway, Suite 110
El Dorado Hills, CA 95762
Phone: (916) 939-1728

TM18-1536

Environmental Noise Assessment

2018 JUN 13 PM 4:07
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Serrano Village J7 Residential Development

El Dorado County, California

BAC Job # 2018-065

Prepared For:

Parker Development Company

Ms. Andrea Howard
4525 Serrano Parkway
El Dorado Hills, CA 95762

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

May 24, 2018

BOLLARD
Acoustical Consultants

TM18-1536

Introduction

The Serrano Village J7 Residential Development (project) is located south of Bass Lake Road and west of Bridlewood Drive in El Dorado County, California. The project proposes the construction of 65 single-family residential units on approximately 10 acres of undeveloped land. The project area and site plan are shown on Figures 1 and 2, respectively.

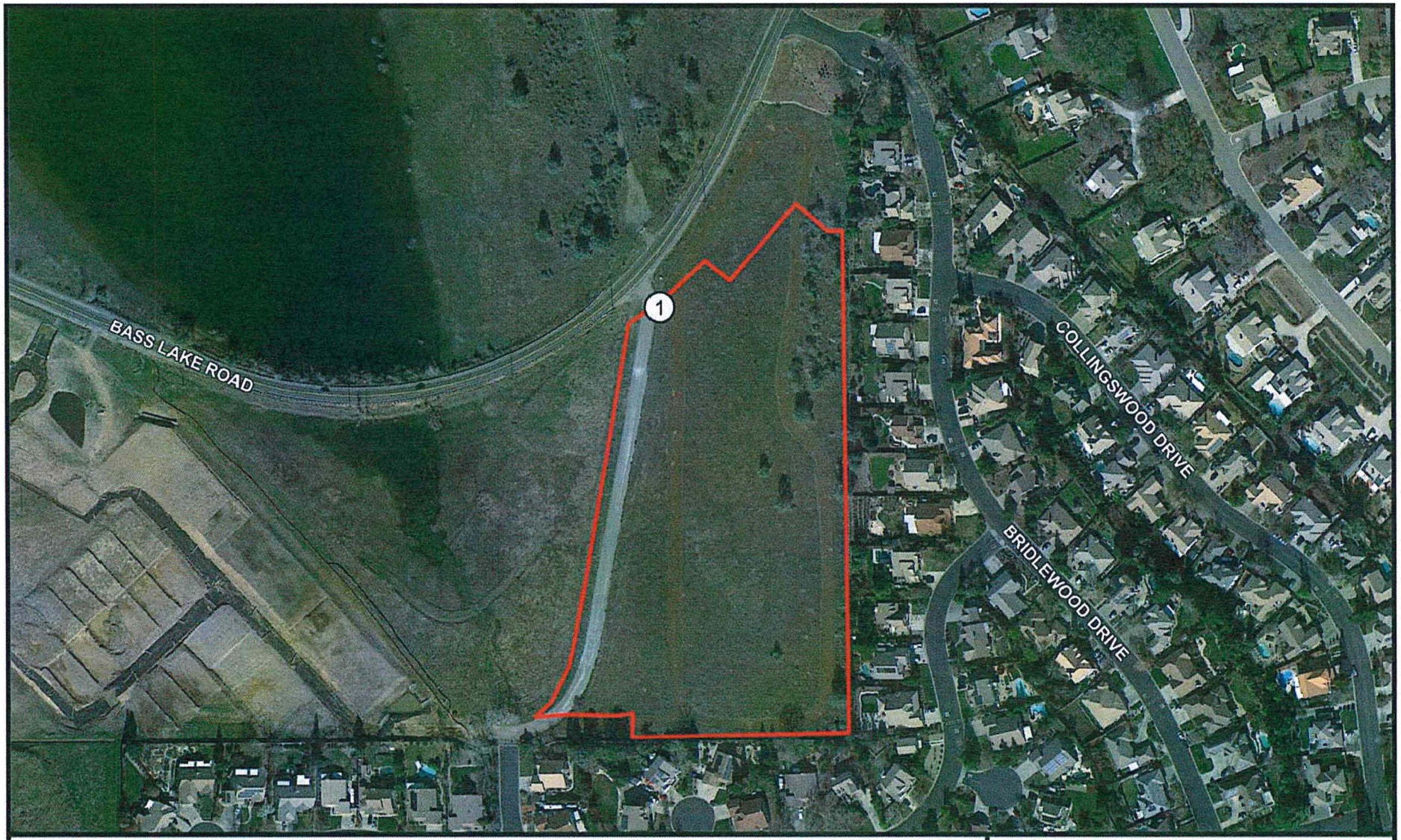
Due to the proximity of the project site to the Bass Lake Road, Bollard Acoustical Consultants, Inc. (BAC) was retained by the project applicant to prepare this noise assessment. Specifically, the purposes of this assessment are to quantify noise levels associated with traffic on Bass Lake Road, and to compare those noise levels against the applicable El Dorado County standards applicable to new residential uses.

Noise Fundamentals and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Figure 3 shows common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn}, and shows very good correlation with community response to noise.



Legend

Project Border (Approximate)

(#) Long-Term Noise Level Measurement Location

N

Scale (feet)

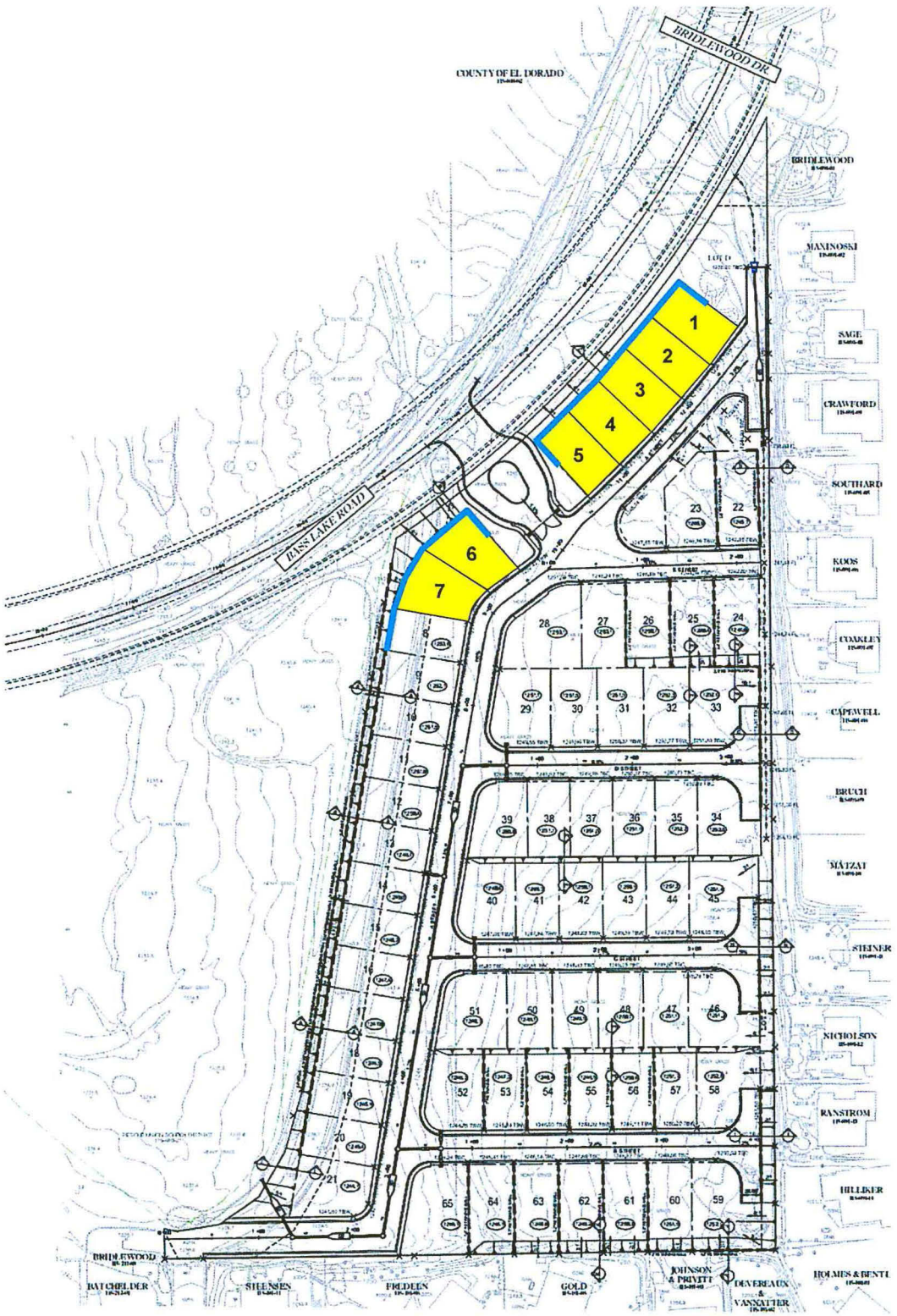
0 100 200

Serrano Village J7 Residential Development
El Dorado County, California

Project Area

Figure 1

BOLLARD Acoustical Consultants



Legend

- Noise Barrier Locations
- STC 32 | Upper-Floors

N

Scale (Feet)

0 80 160

Serrano Village J7 Residential Development
El Dorado County, California

Project Site Plan

Figure 2

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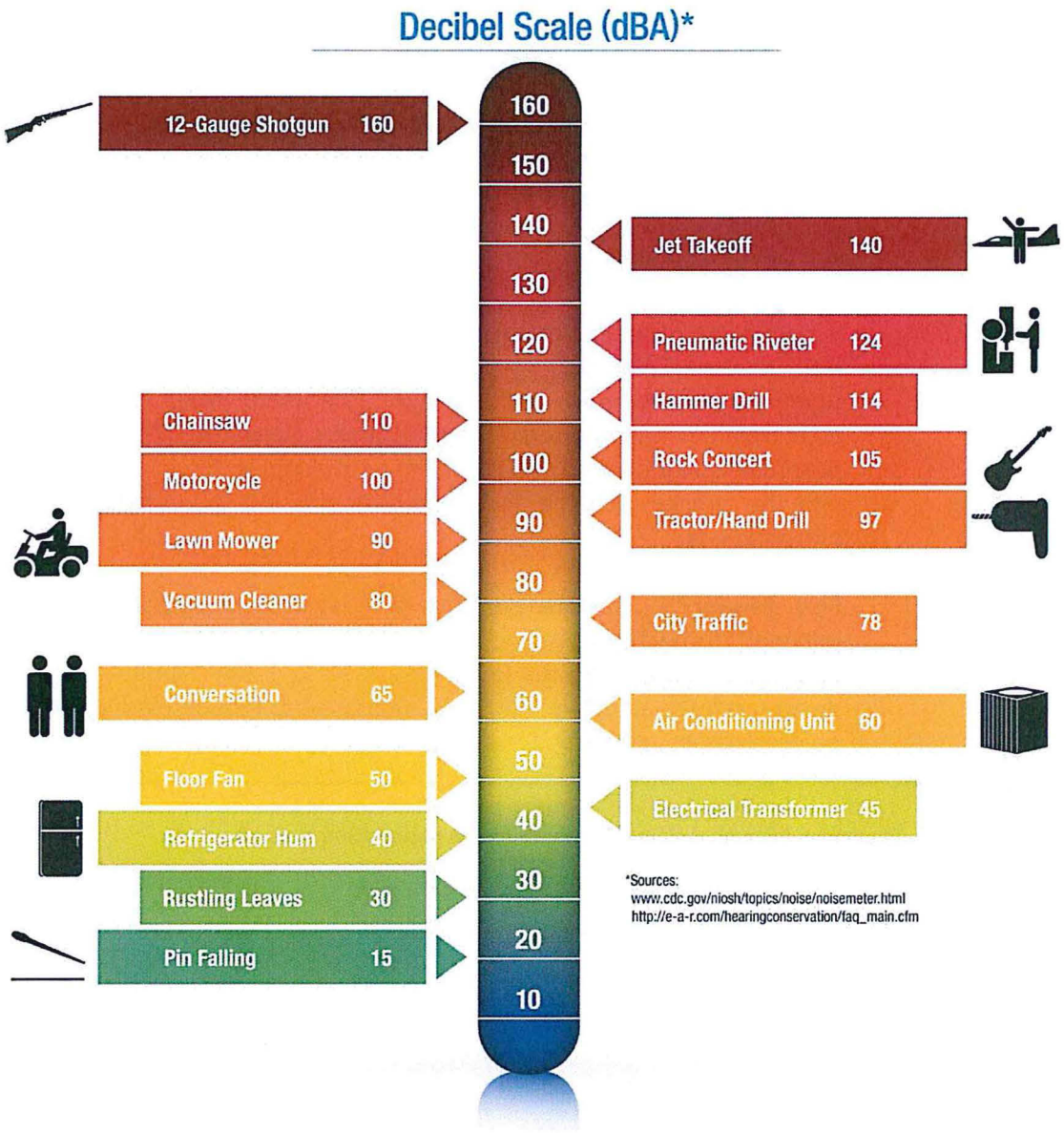
Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



The Day-Night Average Level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. L_{dn}-based noise standards are commonly used to assess noise impacts associated with traffic, railroad and aircraft noise sources.

Criteria for Acceptable Noise Exposure

The Noise Element of the El Dorado County General Plan contains policies to ensure that County residents are not subjected to noise beyond acceptable levels. The specific policies which are generally applicable to this project are reproduced below.

Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 1 (GP Table 6-1) or the performance standards of Table 6-2, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.3 Where noise mitigation measures are required to achieve the standards of Tables 1 and Table 6-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

Policy 6.5.1.8 New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 1 unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 1.

Table 1
Maximum Allowable Noise Exposure for Transportation Noise Sources

Land Use	Outdoor Activity Areas[1] Ldn/CNEL, dB	Interior Spaces	
		Ldn/CNEL, dB	Leq, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60[3]	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

1 In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

2 As determined for a typical worst-case hour during periods of use.

3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

As noted in footnote 3 of Table 1, where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance.

Existing Ambient Noise Environment at the Project Site

The existing ambient noise level environment at the project site is primarily defined by traffic on Bass Lake Road. To quantify the existing ambient noise environment at the project site, BAC conducted long-term (48-hour) noise level measurements on the project site from April 21-22, 2018. The noise measurement site is shown on Figure 1. The purpose of the continuous noise level survey was to determine existing traffic noise exposure on the project site in terms of the day/night average level (L_{dn}), and to determine the typical changes in noise environment which occur at the project site over a 24-hour period.

A Larson Davis Laboratories (LDL) Model LxT precision integrating sound level meter was used for the noise level survey. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). The results of the measurements are shown numerically and graphically in Appendices B and C, and are summarized in Table 2. Photographs of the measurement site are provided in Appendix D.

Table 2
Summary of Long-Term Ambient Noise Monitoring Results
Serrano Village J7 Residential Development – El Dorado County, California
April 21-22, 2018

Site[1]	Date	L_{dn}, dB	Average Measured Hourly Noise Levels (dB)					
			Daytime (7 a.m. to 10 p.m.)			Nighttime (10 p.m. to 7 a.m.)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
1	April 21, 2018	61	60	55	78	52	39	71
	April 22, 2018	59	58	53	77	50	35	71

Notes:
[1] Long-term ambient noise monitoring site is identified on Figure 1.
Source: Bollard Acoustical Consultants, Inc. (2018)

The Table 2 data indicate that existing ambient noise levels at the project site exceeded the El Dorado County 60 dB L_{dn} exterior noise level standard (4/21/18). As a result, a detailed analysis of future traffic noise levels was conducted and that analysis is presented in the following section.

Evaluation of Future Traffic Noise Levels at the Project Site

Traffic Noise Prediction Methodology

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to predict traffic noise levels at the project site. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly L_{eq} values for free flowing traffic conditions, and is considered to be accurate within 1.5 dB in most situations.

Predicted Future Exterior Traffic Noise Levels at the Nearest Residences

The FHWA Model was used with future (2035) traffic data obtained from the El Dorado County Traffic Model to predict future Bass Lake Road traffic noise levels at the project site. The FHWA Model Inputs and predicted future traffic noise levels at the project site are shown in Appendix E, and are summarized in Table 3.

The results presented in Table 3 reflect predicted traffic noise levels at the project site resulting from the future re-alignment of Bass Lake Road, as indicated in the project site plans (Figure 2). Because vertical design information for the future re-alignment of Bass Lake Road was not available at the time of writing this report, future roadway elevations were estimated based on existing grade.

Table 3
Predicted Future Exterior Traffic Noise Levels at Lots Nearest to Bass Lake Road[1]
Serrano Village J7 Residential Development – El Dorado County, California

Roadway	Predicted L_{dn} at Proposed Outdoor Activity Areas, dB					
	Lots 1-5	Lot 6	Lot 7	Lot 8	Lot 9	Lot 10
Bass Lake Road	66	65	64	62	60	59

Notes:
[1] A complete listing of FHWA Model inputs and results are provided in Appendix E.
Source: Bollard Acoustical Consultants, Inc. (2018)

Traffic Noise Compliance Evaluation for Outdoor Activity Areas

The Table 3 data indicate that future Bass Lake Road traffic noise levels within the outdoor activity areas (backyards) of Lots 1-8 are predicted to exceed the El Dorado County 60 dB L_{dn} normally acceptable exterior noise level standard. In addition, future Bass Lake Road traffic noise exposure is also predicted to exceed the County's 65 dB L_{dn} conditionally acceptable exterior noise level standard at Lots 1-5. As a result, further consideration of additional traffic noise mitigation measures would be warranted for the proposed backyard areas of these lots.

Traffic Noise Mitigation for Outdoor Activity Areas

Noise mitigation measures for outdoor activity areas of residential developments can take several forms, including setbacks, lot orientation and noise barriers. An analysis of noise barrier effectiveness was conducted for this project and is summarized in Table 4. The noise barrier effectiveness prediction worksheets are provided as Appendix F.

The barrier analysis results presented in Table 4 take into consideration the proposed retaining walls and lot elevations as indicated on the tentative grading plan provided by the client.

Table 4
Traffic Noise Barrier Analysis Results[1]
Serrano Village J7 Residential Development – El Dorado County, California

Barrier Height, ft.	Predicted Future Traffic Noise Level at Nearest Outdoor Activity Areas, L_{dn} (dB)							
	Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 6	Lot 7	Lot 8
No barrier	66	66	66	66	66	65	64	62
6	60	59	59	59	58	57	56	54
7	58	58	57	57	56	56	55	53

Notes:
[1] A complete listing of noise barrier effectiveness inputs and results are provided in Appendix F.
Source: Bollard Acoustical Consultants, Inc. (2018)

As shown in Table 4, the results of the noise barrier analysis indicate that 6-foot tall noise barriers would reduce future Bass Lake Road traffic noise levels to 60 dB L_{dn} or less, satisfying the County's 60 dB L_{dn} normally acceptable and 65 dB L_{dn} conditionally acceptable exterior noise level standards. The locations of the noise barriers are shown on Figure 2.

Traffic Noise Mitigation for Residential Interiors

After construction of the recommended noise barriers, future traffic noise levels are predicted to be approximately 59 dB L_{dn} or less at the first-floor facades of buildings constructed nearest to Bass Lake Road. To achieve compliance with the El Dorado County 45 dB L_{dn} interior noise level standard within first-floor rooms, a building facade noise reduction of at least 14 dB would be required of the first-floor exterior wall construction.

Due to reduced ground absorption at elevated positions, upper-floor traffic noise levels are predicted to be approximately 3 dB higher than first-floor levels. In addition, upper-floor facades would not be shielded by the recommended noise barriers. As a result, upper-floor exposure of the residences proposed nearest to Bass Lake Road would be approximately 69 dB L_{dn}. Therefore, a building facade noise reduction of at least 24 dB would be required of the upper-floor exterior wall construction.

Standard residential construction typically results in an exterior to interior noise reduction of about 25 dB with windows closed, and approximately 15 dB with windows open. Therefore, standard construction practices would be adequate for both first and upper-floor facades of all residences

constructed within this development. However, in order to satisfy the El Dorado County 45 dB L_{dn} interior noise level standard with a margin of safety, it is recommended that all upper-floor bedroom windows of residences constructed on Lots 1-7 from which Bass Lake Road is visible be upgraded to a minimum STC rating of 32. The locations of the recommended window upgrades are shown on Figure 2. In addition, mechanical ventilation (air conditioning) should be provided for all residences within this development to allow the occupants to close doors and windows as desired for additional acoustical isolation.

Conclusions

Portions of the Serrano Village J7 Residential Development will be exposed to future Bass Lake Road traffic noise exposure in excess of El Dorado County General Plan exterior noise level criteria. In order to comply with the El Dorado County General Plan exterior noise level criteria, and to satisfy the County's interior noise level criteria with a margin of safety, the following noise mitigation measures are recommended for this project:

1) Traffic noise barriers should be constructed at the locations indicated on Figure 2. A noise barrier measuring 6-feet in height relative to backyard elevation would result in the satisfaction of El Dorado County's 60 dB L_{dn} normally acceptable and 65 dB L_{dn} conditionally acceptable exterior noise level standards.

   Suitable materials for the traffic noise barrier include masonry and precast concrete panels. Other materials may be acceptable but should be reviewed by an acoustical consultant prior to use.

2) All upper-floor bedroom windows of residences constructed on Lots 1-7 from which Bass Lake Road would be visible (i.e., north, west, and east-facing bedroom windows) should be upgraded to a minimum STC rating of 32 in order to comply with the El Dorado County 45 dB L_{dn} interior noise level standard with a margin of safety. Figure 2 shows the locations where such window upgrades are recommended.

3) Mechanical ventilation (air conditioning) should be provided for all residences in this development to allow occupants to close doors and windows as desired to achieve compliance with the applicable interior noise level criteria.

These conclusions are based on the Bass Lake Road traffic assumptions cited in Appendix E, the tentative site grading plan provided by the client (dated May 2018), and on noise reduction data for standard residential dwellings. Deviations from the Appendix E data, or the project site plan shown in Figure 2, could cause future traffic noise levels to differ from those predicted in this analysis. In addition, Bollard Acoustical Consultants, Inc. is not responsible for degradation in acoustic performance of the residential construction due to poor construction practices, failure to comply with applicable building code requirements, or for failure to adhere to the minimum building practices cited in this report.

This concludes BAC's noise assessment for the proposed Serrano Village J7 Residential Development project in El Dorado County, California. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions regarding this assessment.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Appendix B-1
Serrano Village J7 Residential Development
Ambient Noise Monitoring Results - Site 1
Saturday, April 21, 2018

Hour	Leq	Lmax	L50	L90
0:00	46	71	33	29
1:00	48	71	33	29
2:00	45	68	28	26
3:00	48	70	32	28
4:00	52	69	41	33
5:00	55	80	47	37
6:00	57	73	51	41
7:00	66	92	55	44
8:00	59	77	56	46
9:00	59	73	57	48
10:00	60	76	57	46
11:00	59	74	55	46
12:00	60	85	56	47
13:00	59	74	56	45
14:00	59	77	56	46
15:00	59	77	56	46
16:00	60	78	56	48
17:00	58	75	54	46
18:00	58	73	53	43
19:00	64	95	52	43
20:00	56	73	51	41
21:00	55	69	51	41
22:00	54	72	47	37
23:00	50	67	40	32

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	66	55	60	57	45	52
Lmax (Maximum)	95	69	78	80	67	71
L50 (Median)	57	51	55	51	28	39
L90 (Background)	48	41	45	41	26	32

Computed Ldn, dB	61
% Daytime Energy	91%
% Nighttime Energy	9%

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Appendix B-2
Serrano Village J7 Residential Development
Ambient Noise Monitoring Results - Site 1
Sunday, April 22, 2018

Hour	Leq	Lmax	L50	L90
0:00	49	69	35	30
1:00	47	70	32	29
2:00	43	65	31	27
3:00	46	67	29	25
4:00	48	67	36	30
5:00	52	77	40	33
6:00	54	76	45	36
7:00	57	74	53	40
8:00	58	76	54	43
9:00	59	73	55	45
10:00	59	76	54	43
11:00	59	74	56	45
12:00	59	77	55	45
13:00	59	79	56	45
14:00	59	75	55	45
15:00	59	79	55	45
16:00	60	84	55	46
17:00	59	79	55	47
18:00	58	76	54	45
19:00	57	78	53	43
20:00	56	75	49	37
21:00	53	72	44	33
22:00	52	76	37	32
23:00	48	72	33	28

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	60	53	58	54	43	50
Lmax (Maximum)	84	72	77	77	65	71
L50 (Median)	56	44	53	45	29	35
L90 (Background)	47	33	43	36	25	30

Computed Ldn, dB	59
% Daytime Energy	92%
% Nighttime Energy	8%

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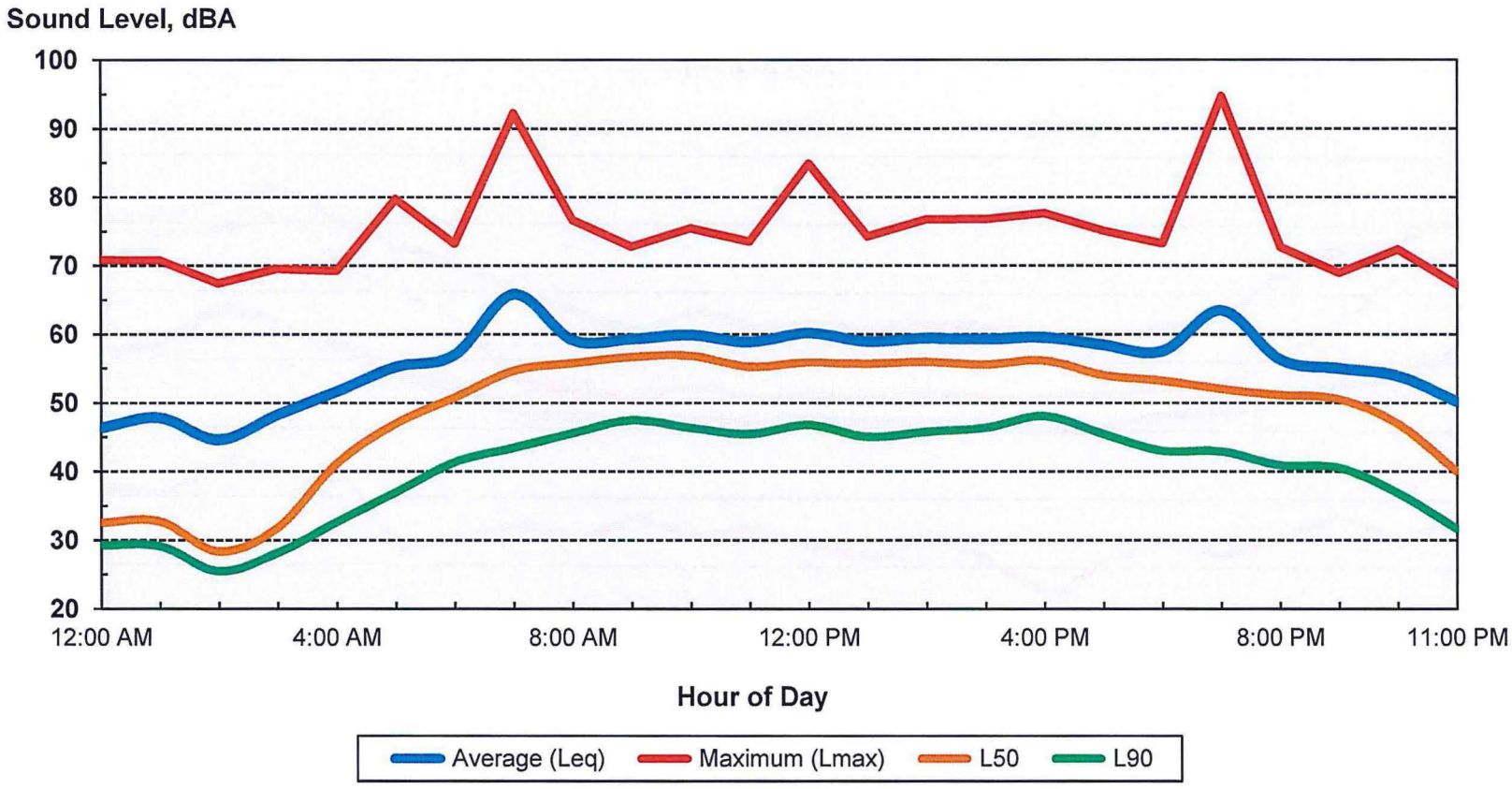
Appendix C-1
Serrano Village J7 Residential Development
Ambient Noise Monitoring Results - Site 1
Saturday, April 21, 2018



Ldn: 61 dB

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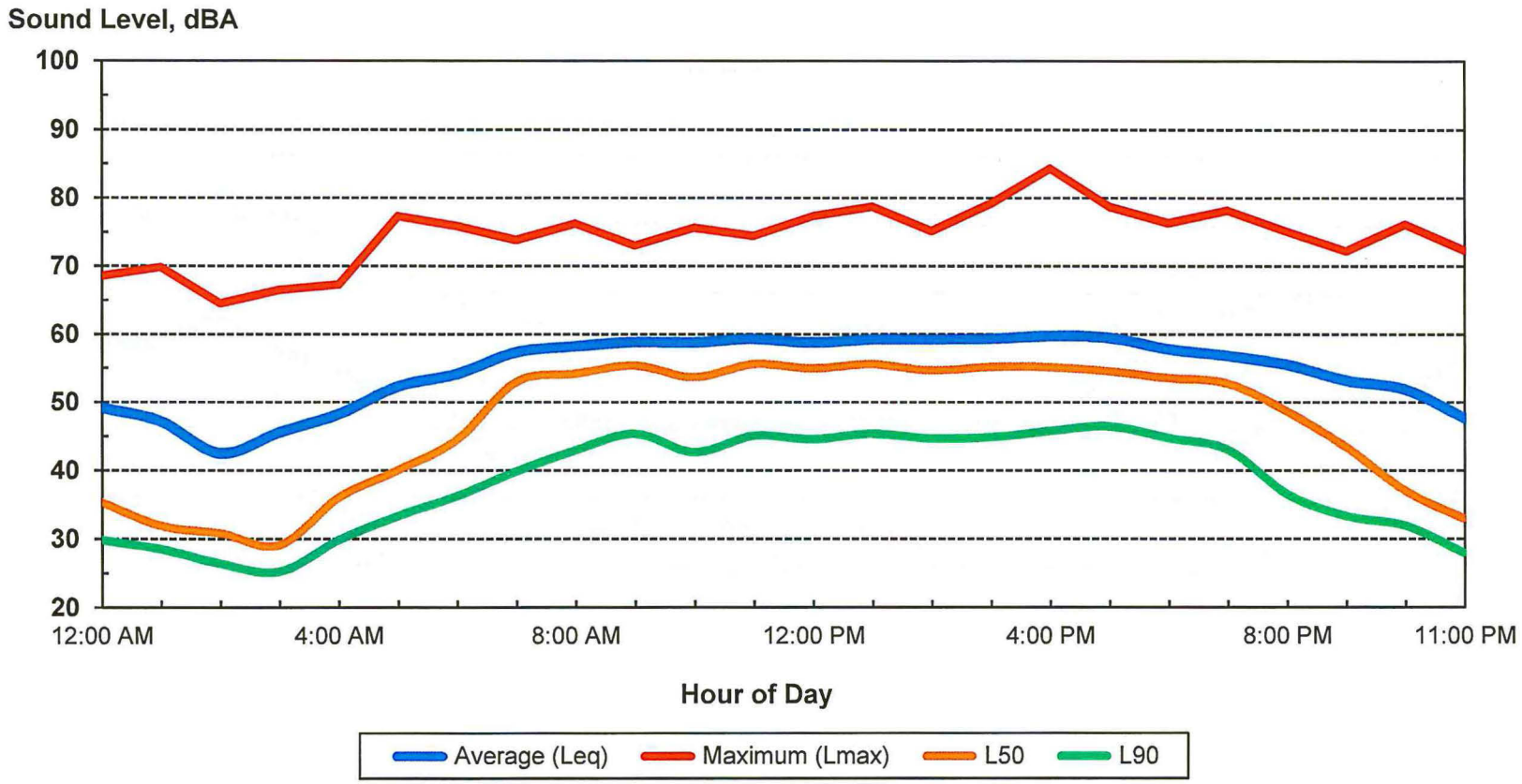
Appendix C-2
Serrano Village J7 Residential Development
Ambient Noise Monitoring Results - Site 1
Sunday, April 22, 2018



Ldn: 59 dB

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Notes:

Long-term noise measurement site 1, facing north towards Bass Lake Road

Serrano Village J7
Residential Development
El Dorado County, California

Long-Term Noise Measurement Site

Appendix D

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Appendix E

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road

Traffic Data:

Year:	2035
Average Daily Traffic Volume[1]:	7,900
Percent Daytime Traffic:	76
Percent Nighttime Traffic:	24
Percent Medium Trucks (2 axle):	2
Percent Heavy Trucks (3+ axle):	1
Assumed Vehicle Speed (mph):	50
Intervening Ground Type (hard/soft):	**Soft**

Traffic Noise Levels:

				----------L_{dn}, dB----------			
Location	Nearest Backyards	Distance	Offset (dB)	Autos	Medium Trucks	Heavy Trucks	Total
1	Lots 1-5	80		65	55	56	66
2	Lot 6	90		64	55	56	65
3	Lot 7	105		63	54	55	64
4	Lot 8	145		61	51	53	62
5	Lot 9	180		59	50	51	60
6	Lot 10	215		58	49	50	59

Traffic Noise Contours (No Calibration Offset):

L_{dn} Contour, dB	Distance from Centerline, (ft)
75	19
70	41
65	87
60	188

Notes: [1] Future (2035) ADT volume for Bass Lake Road was obtained from the El Dorado County Trafic Model.

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Appendix F-1

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 1

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 65
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 1 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 70
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1239
Medium Truck Elevation: 1241
Heavy Truck Elevation: 1247
Pad/Ground Elevation at Receiver: 1238
Receiver Elevation[1]: 1243
Base of Barrier Elevation: 1238
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1244	6	58	50	51	**60**	Yes	Yes	Yes
1245	7	57	48	50	**58**	Yes	Yes	Yes
1246	8	55	46	49	**57**	Yes	Yes	Yes
1247	9	54	45	47	**55**	Yes	Yes	Yes
1248	10	53	44	46	**54**	Yes	Yes	Yes
1249	11	52	43	45	**53**	Yes	Yes	Yes
1250	12	51	42	44	**52**	Yes	Yes	Yes
1251	13	50	41	43	**52**	Yes	Yes	Yes
1252	14	50	41	42	**51**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

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Appendix F-2

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 2

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 65
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 2 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 70
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1240
Medium Truck Elevation: 1242
Heavy Truck Elevation: 1248
Pad/Ground Elevation at Receiver: 1242
Receiver Elevation[1]: 1247
Base of Barrier Elevation: 1242
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB Autos	Medium Trucks	Heavy Trucks	Total	Barrier Breaks Line of Sight to... Autos?	Medium Trucks?	Heavy Trucks?
1248	6	58	49	51	**59**	Yes	Yes	Yes
1249	7	56	47	50	**58**	Yes	Yes	Yes
1250	8	55	46	48	**56**	Yes	Yes	Yes
1251	9	54	45	47	**55**	Yes	Yes	Yes
1252	10	53	44	46	**54**	Yes	Yes	Yes
1253	11	52	43	45	**53**	Yes	Yes	Yes
1254	12	51	42	44	**52**	Yes	Yes	Yes
1255	13	50	41	43	**51**	Yes	Yes	Yes
1256	14	50	41	42	**51**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-3

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 3

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 65
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 3 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 70
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1241
Medium Truck Elevation: 1243
Heavy Truck Elevation: 1249
Pad/Ground Elevation at Receiver: 1245
Receiver Elevation[1]: 1250
Base of Barrier Elevation: 1245
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1251	6	57	49	51	**59**	Yes	Yes	Yes
1252	7	56	47	49	**57**	Yes	Yes	Yes
1253	8	54	46	48	**56**	Yes	Yes	Yes
1254	9	53	45	46	**55**	Yes	Yes	Yes
1255	10	52	43	46	**54**	Yes	Yes	Yes
1256	11	51	42	44	**53**	Yes	Yes	Yes
1257	12	51	42	43	**52**	Yes	Yes	Yes
1258	13	50	41	43	**51**	Yes	Yes	Yes
1259	14	49	41	42	**50**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

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Appendix F-4

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 4

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 65
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 4 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 70
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1243
Medium Truck Elevation: 1245
Heavy Truck Elevation: 1251
Pad/Ground Elevation at Receiver: 1248
Receiver Elevation[1]: 1253
Base of Barrier Elevation: 1248
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1254	6	57	48	51	**59**	Yes	Yes	Yes
1255	7	56	47	49	**57**	Yes	Yes	Yes
1256	8	54	45	48	**56**	Yes	Yes	Yes
1257	9	53	44	46	**55**	Yes	Yes	Yes
1258	10	52	43	45	**53**	Yes	Yes	Yes
1259	11	51	42	44	**52**	Yes	Yes	Yes
1260	12	50	41	43	**52**	Yes	Yes	Yes
1261	13	50	41	42	**51**	Yes	Yes	Yes
1262	14	49	41	42	**50**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-5

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 5

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 65
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 5 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 70
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1243
Medium Truck Elevation: 1245
Heavy Truck Elevation: 1251
Pad/Ground Elevation at Receiver: 1252
Receiver Elevation[1]: 1257
Base of Barrier Elevation: 1252
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1258	6	57	48	50	**58**	Yes	Yes	Yes
1259	7	55	46	48	**56**	Yes	Yes	Yes
1260	8	54	45	47	**55**	Yes	Yes	Yes
1261	9	53	44	46	**54**	Yes	Yes	Yes
1262	10	52	43	45	**53**	Yes	Yes	Yes
1263	11	51	42	44	**52**	Yes	Yes	Yes
1264	12	50	41	43	**51**	Yes	Yes	Yes
1265	13	50	41	42	**51**	Yes	Yes	Yes
1266	14	49	40	42	**50**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

BOLLARD
Acoustical Consultants

Appendix F-6

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 6

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 64
Medium Truck L_{dn}, dB: 55
Heavy Truck L_{dn}, dB: 56

Site Geometry:

Receiver Description: Lot 6 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 80
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1243
Medium Truck Elevation: 1245
Heavy Truck Elevation: 1251
Pad/Ground Elevation at Receiver: 1254
Receiver Elevation[1]: 1259
Base of Barrier Elevation: 1254
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1260	6	56	47	49	**57**	Yes	Yes	Yes
1261	7	54	45	48	**56**	Yes	Yes	Yes
1262	8	53	44	46	**54**	Yes	Yes	Yes
1263	9	52	43	45	**53**	Yes	Yes	Yes
1264	10	51	42	44	**52**	Yes	Yes	Yes
1265	11	50	41	43	**51**	Yes	Yes	Yes
1266	12	49	40	42	**50**	Yes	Yes	Yes
1267	13	49	40	41	**50**	Yes	Yes	Yes
1268	14	48	39	41	**50**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-7

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 7

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 63
Medium Truck L_{dn}, dB: 54
Heavy Truck L_{dn}, dB: 55

Site Geometry:

Receiver Description: Lot 7 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 95
Barrier to Receiver Distance (C_2): 10
Automobile Elevation: 1243
Medium Truck Elevation: 1245
Heavy Truck Elevation: 1251
Pad/Ground Elevation at Receiver: 1253
Receiver Elevation[1]: 1258
Base of Barrier Elevation: 1253
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1259	6	55	46	48	**56**	Yes	Yes	Yes
1260	7	54	45	47	**55**	Yes	Yes	Yes
1261	8	52	43	45	**54**	Yes	Yes	Yes
1262	9	51	42	44	**53**	Yes	Yes	Yes
1263	10	50	41	43	**51**	Yes	Yes	Yes
1264	11	49	40	42	**51**	Yes	Yes	Yes
1265	12	49	40	41	**50**	Yes	Yes	Yes
1266	13	48	39	41	**49**	Yes	Yes	Yes
1267	14	47	38	40	**49**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

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Acoustical Consultants

Appendix F-8

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2018-065
Project Name: Serrano Village J7 Residential Development
Roadway Name: Bass Lake Road
Location(s): Lot 8

Noise Level Data:

Year: 2035
Auto L_{dn}, dB: 61
Medium Truck L_{dn}, dB: 51
Heavy Truck L_{dn}, dB: 53

Site Geometry:

Receiver Description: Lot 8 - Outdoor Activity Area
Centerline to Barrier Distance (C_1): 120
Barrier to Receiver Distance (C_2): 25
Automobile Elevation: 1243
Medium Truck Elevation: 1245
Heavy Truck Elevation: 1251
Pad/Ground Elevation at Receiver: 1253
Receiver Elevation[1]: 1258
Base of Barrier Elevation: 1253
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB				Barrier Breaks Line of Sight to...		
		Autos	Medium Trucks	Heavy Trucks	Total	Autos?	Medium Trucks?	Heavy Trucks?
1259	6	53	44	47	**54**	Yes	Yes	Yes
1260	7	52	43	46	**54**	Yes	Yes	Yes
1261	8	51	42	45	**53**	Yes	Yes	Yes
1262	9	50	41	44	**52**	Yes	Yes	Yes
1263	10	50	41	43	**51**	Yes	Yes	Yes
1264	11	49	40	42	**50**	Yes	Yes	Yes
1265	12	48	39	41	**49**	Yes	Yes	Yes
1266	13	47	39	41	**49**	Yes	Yes	Yes
1267	14	47	38	40	**48**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

BOLLARD
Acoustical Consultants

FEHR & PEERS
Improving Communities Since 1985

2018 JUN 13 PM 4:07
RECEIVED
PLANNING DEPARTMENT

MEMORANDUM

Date: April 11, 2017

To: Andrea Howard, Parker Development

From: David B. Robinson, Fehr & Peers

Subject: Serrano Village J (LOT H), J5, J6 and J7

RS10-2829

Fehr & Peers has completed a trip generation evaluation of the land use changes proposed for Serrano Villages J5 and J6. This memorandum outlines the proposed land use modifications, our evaluation methodology, and findings.

Land Use Modifications

Table 1 compares approved and proposed land use for Serrano Village J5 and J6. Figure 1 shows the proposed changes. Villages J5 and J6 are located east of the Bass Lake Road/Serrano Parkway Intersection. As proposed, the Village J5 (Phase 2) neighborhood retail would be changed to single family residential and combined with Village J6.

TABLE 1
PROPOSED LAND USE – SERRANO VILLAGES J5 AND J6

Village	Approved Land Use	Proposed Land Use
J5	Neighborhood Retail (151,426 Square Feet)	Neighborhood Retail (118,842 Square Feet)
J6	Single Family Residential (204 Halfplex Units)	Single Family Residential (148 Dwelling Units)

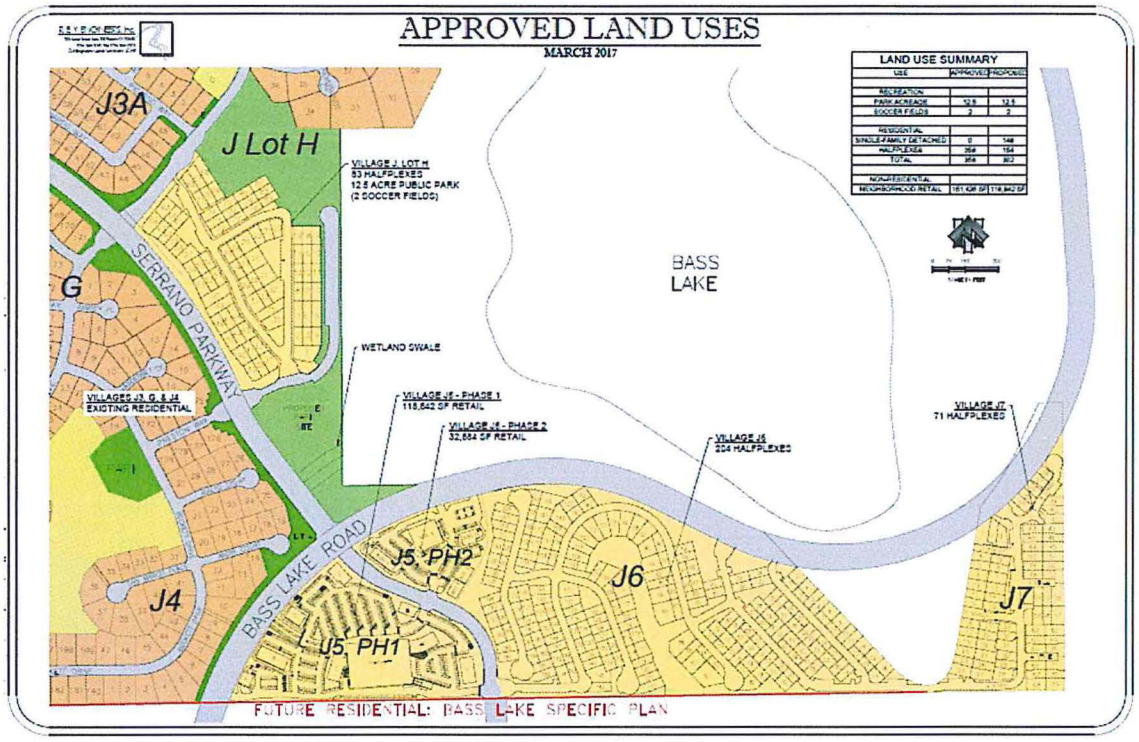
Source: Fehr & Peers, 2017

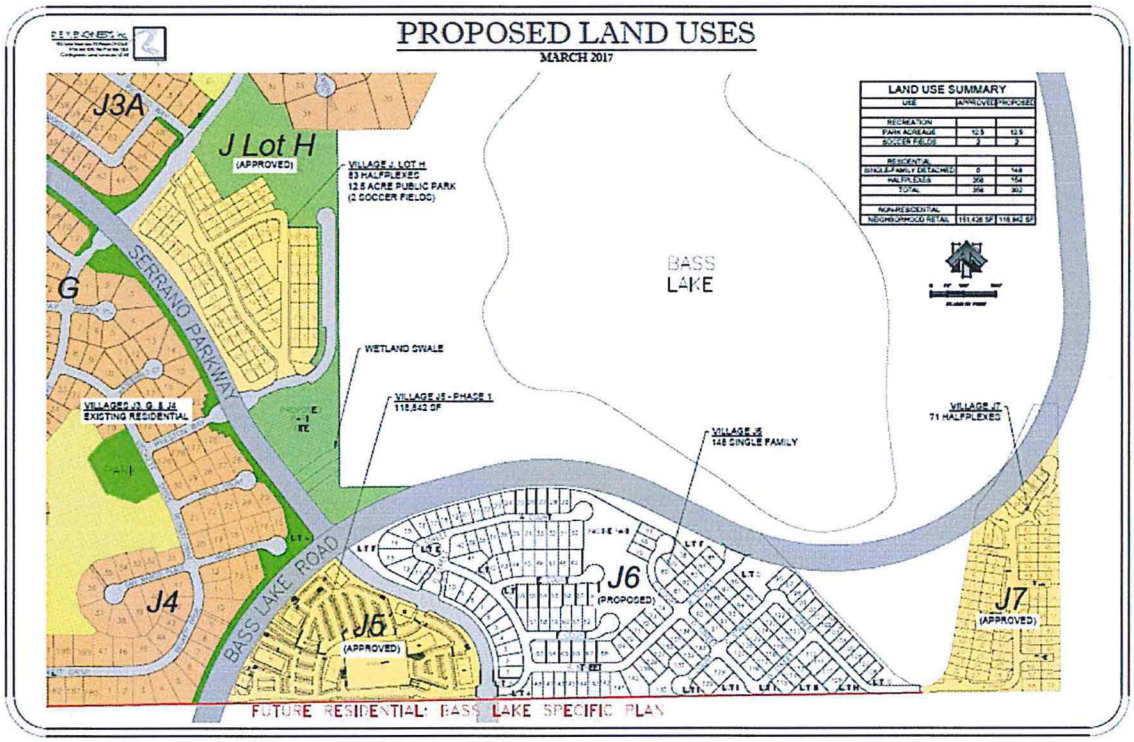
Evaluation Methodology

We prepared trip generation estimates for the approved and proposed land use summarized in Table 1, based on methodologies and trip generation rates presented in *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012), field-measured trip generation rates for the public park land use (for AM peak hour and daily conditions) and park use descriptions provided by El Dorado Hills CSD Recreation Director (for PM peak hour conditions).

TM18-1536

Figure 1: Approved and Proposed Land Uses





Trip Generation Evaluation

Table 2 compares AM peak hour, PM peak hour, and daily trip generation for the approved and proposed land use. Detailed calculations and trip rate descriptions are included in Exhibit A. The comparison include trip generation for Village J (Lot H), Village J5, Village J6, and Village J7. As shown in Table 2, the proposed land use will result in fewer trips than the approved land use.

TABLE 2
TRIP GENERATION – WITH PROPOSED LAND USE

Land Use	Peak Hour		Daily
	AM	PM	
Approved	423	1,024	12,459
Proposed	361	886	10,674
Difference (Proposed – Approved)	- 62	- 139	- 1,785

Source: Fehr & Peers, 2017

Exhibit A
Trip Generation Comparison - Serrano Villages J (Lot H), J5, J6, J7

Village	Land Use	ITE Code	Amount	Units	Peak Hour AM Trip Rates In	AM Trip Rates Out	AM Trip Rates Total	AM Trip Generation In	AM Trip Generation Out	AM Trip Generation Total	PM Trip Rates In	PM Trip Rates Out	PM Trip Rates Total	PM Trip Generation In	PM Trip Generation Out	PM Trip Generation Total	Daily Trip Rates Total	Daily Trip Generation Total
Approved Land Use																		
J, Lot H	Single Family Residential[1]	210	83	DU	0.19	0.56	0.75	16	47	62	0.63	0.37	1.00	52	31	83	9.52	790
	Public Park[2,4]	-	12.5	Acres	0.60	0.48	1.08	8	6	14	6.26	2.81	9.07	78	35	113	36.55	457
J5	Neighborhood Retail[3]	820	151.4	1,000 Square Feet	0.82	0.50	1.33	124	76	201	2.51	2.72	5.22	380	411	791	58.73	8,892
J6	Single Family Residential[1]	210	204	DU	0.19	0.56	0.75	38	115	153	0.63	0.37	1.00	129	75	204	9.52	1,942
J7	Single Family Residential[1]	210	71	DU	0.19	0.56	0.75	13	40	53	0.63	0.37	1.00	45	26	71	9.52	676
				Subtotal				199	284	483				683	579	1,262		12,757
				Passby Trips (30% Applied to Neighborhood Commercial)				30	30	60				119	119	238		299
				Total (Net New Trips)				**169**	**254**	**423**				**564**	**460**	**1,024**		**12,459**
Proposed Land Use																		
J, Lot H	Single Family Residential[1]	210	83	DU	0.19	0.56	0.75	16	47	62	0.63	0.37	1.00	52	31	83	9.52	790
	Public Park[2,4]	-	12.5	Acres	0.60	0.48	1.08	8	6	14	6.26	2.81	9.07	78	35	113	36.55	457
J5	Neighborhood Retail[3]	820	118.8	1,000 Square Feet	0.90	0.55	1.46	107	66	173	2.72	2.94	5.66	323	350	672	63.94	7,596
J6	Single Family Residential[1]	210	148	DU	0.19	0.56	0.75	28	83	111	0.63	0.37	1.00	93	55	148	9.52	1,409
J7	Single Family Residential[1]	210	71	DU	0.19	0.56	0.75	13	40	53	0.63	0.37	1.00	45	26	71	9.52	676
				Subtotal				172	242	413				591	497	1,088		10,928
				Passby Trips (30% Applied to Neighborhood Commercial)				26	26	52				101	101	202		254
				Total (Net New Trips)				**146**	**216**	**361**				**490**	**396**	**886**		**10,674**
				Difference (Proposed Land Use - Approved Land Use)				**-24**	**-38**	**-62**				**-74**	**-64**	**-139**		**-1,785**

NOTES:

[1]Trip rates are from *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012)

[2]AM peak hour and daily trip generation for the public park land use is based on field measured trip generation at the Promontory (Alexandra Drive) and El Dorado Hills Community Pare (El Dorado Hills Boulevard at Harvard Way).

[3]Trip generation for Neighborhood Retail use the Fitted Curve Equations from the Shopping Center (820) AM, PM and Weekday curves from the Trip Generation Manual, *9th Edition* (Institute of Transportation Engineers, 2012). AM and PM are based on weekday, peak hour of adjacent street traffic, one hour between 7 and 9 a.m. and 4 and 6 p.m.

[4]PM peak hour trip generation for the public park land use is based use descriptions provided by El Dorado Hills CSD Recreation Director (March 4, 2015 email correspondence). Trip generation assumes four soccer teams practicing on large fields and three team practicing on small field, 20 players per team [(8x20 + 6x20) = 280 players] gives 280 players. No reduction for carpools was assumed, so the trip generation assumes 280 vehicles with inbound and outbound trips based on field meassured trip generation discussed in Footnote 2.

EL DORADO HILLS SPECIFIC PLAN, UNIT NO. 2

POR. OF SEC. 1, 2 & THE N1/2 OF SEC. 11, T.9N., R.8E., M.D.M., &
POR. OF SEC. 25, 26, 35 & 36, T.10N., R.8E., M.D.M. &
POR. OF THE SW1/4 OF SEC. 30, SEC. 31 &
THE SW1/4 OF SEC. 32, T.10N., R.9E., M.D.M.
BEING POR. OF TRACT 1 OF R.S. 16-147
COUNTY OF EL DORADO STATE OF CALIFORNIA
SEPTEMBER 1993
GENE E THORNE & ASSOCIATES, INC.

2018 JUN 13 PM 4:07
RECEIVED
PLANNING DEPARTMENT

18-H

NOTICE OF RESTRICTION:

BOOK 4222 PAGE 419 FOR NOTICE OF RESTRICTION AFFECTING THIS SUBDIVISION.

OWNER'S STATEMENT:

THE UNDERSIGNED, OWNER OF RECORD TITLE INTEREST, HEREBY CONSENTS TO THE PREPARATION AND FILING OF THIS MAP AND HEREBY CONVEYS AND OFFERS FOR DEDICATION TO THE COUNTY OF EL DORADO THOSE PORTIONS OF BASS LAKE ROAD SHOWN HEREON AS LOTS MM, NN AND PP, INCLUDING THE UNDERLYING FEE THERETO, FOR ANY AND ALL PUBLIC PURPOSES.

WHERE ROAD SLOPES EXTEND BEYOND THE BOUNDARIES OF SAID LOTS MM, NN AND PP, THE UNDERSIGNED ALSO OFFER TO THE COUNTY OF EL DORADO, SLOPE AND DRAINAGE EASEMENTS TO FIVE FEET BEYOND THE TOP OF CUT OR TOE OF FILL.

ALL OFFERS MADE HEREIN ARE IRREVOCABLE AND SHALL REMAIN OPEN IN PERPETUITY DESPITE A REJECTION OF SUCH OFFER BY THE APPLICABLE PUBLIC ENTITY.

EL DORADO HILLS DEVELOPMENT COMPANY,
A CALIFORNIA GENERAL PARTNERSHIP

W.R. PARKER, INC.
GENERAL PARTNER

BY: _____
WILLIAM R. PARKER
ITS PRESIDENT

NOTARY'S ACKNOWLEDGEMENT:

STATE OF CALIFORNIA
COUNTY OF El Dorado } S.S.

ON January 14, 1994 BEFORE ME, Sharon Redmond

PERSONALLY APPEARED, WILLIAM R. PARKER,
PERSONALLY KNOWN TO ME (OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S) OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE: Sharon Redmond

SHARON REDMOND
COMM #989161
NOTARY PUBLIC
EL DORADO COUNTY CALIFORNIA
My Commission Expires March 24, 1997

ENGINEER'S STATEMENT:

I HEREBY STATE THAT THE SURVEY AND FINAL MAP OF THIS SUBDIVISION WERE MADE UNDER MY DIRECTION IN SEPTEMBER 1993 AND ARE TRUE AND COMPLETE AS SHOWN; ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

GENE E. THORNE R.C.E. 20462

REG. EXP. DATE: 09/30/97

COUNTY ENGINEER'S STATEMENT:

I, ~~RON BUTLER~~ KEN PAYNE, HEREBY STATE THAT THERE WERE NO PUBLIC IMPROVEMENTS REQUIRED TO BE MADE PRIOR TO FILING THIS FINAL MAP.

Steven K. Payne (STEVEN K. PAYNE)
~~RON BUTLER~~ R.C.E. ~~47110~~ 33427

Acting COUNTY ENGINEER
DEPARTMENT OF TRANSPORTATION
COUNTY OF EL DORADO, CALIFORNIA

REG. EXP. DATE: 6/96

COUNTY TAX COLLECTOR'S STATEMENT:

I, C.L. RAFFETY, HEREBY STATE THAT, ACCORDING THE RECORDS OF THIS OFFICE, THERE ARE NO LIENS AGAINST THIS SUBDIVISION OR ANY PART THEREOF FOR UNPAID STATE, COUNTY, MUNICIPAL, OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES, EXCEPT TAXES OR SPECIAL ASSESSMENTS NOT YET PAYABLE, PROVIDED THAT THE FINAL MAP IS ACCEPTED FOR RECORD AND FILED PRIOR TO THE NEXT SUCCEEDING LIEN DATE.

DATE: 2/22/94

C.L. Raffety
C.L. RAFFETY
TAX COLLECTOR
COUNTY OF EL DORADO, CALIFORNIA

BY: Judith A. Smith
DEPUTY

PLANNING DIRECTOR'S STATEMENT:

I, THOMAS A. PARILO, HEREBY STATE THAT THIS FINAL MAP CONFORMS SUBSTANTIALLY TO THE TENTATIVE MAP OF THIS SUBDIVISION APPROVED ON NOVEMBER 3, 1992, BY THE BOARD OF SUPERVISORS AND THAT ALL CONDITIONS IMPOSED UPON SAID APPROVAL HAVE BEEN SATISFIED.

Thomas A. Parilo DATE: 2/25/94

THOMAS A. PARILO
PLANNING DIRECTOR
COUNTY OF EL DORADO, CALIFORNIA

COUNTY SURVEYOR'S STATEMENT:

I, DANIEL S. RUSSELL, HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP; THAT IT IS SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP OF THIS SUBDIVISION APPROVED ON NOVEMBER 3, 1992, BY THE BOARD OF SUPERVISORS, THAT IT IS TECHNICALLY CORRECT AND THAT ALL THE PROVISIONS OF THE SUBDIVISION MAP ACT AND APPLICABLE COUNTY ORDINANCES HAVE BEEN COMPLIED WITH.

Daniel S Russell DATE: 2-25-94

DANIEL S. RUSSELL L.S. 5017
COUNTY SURVEYOR
COUNTY OF EL DORADO, CALIFORNIA

LIC. EXP. DATE: 12-31-97

BY: _____
DEPUTY
CHARLES E. BISHOP L.S. 5638

BOARD CLERK'S STATEMENT:

I, DIXIE L. FOOTE, HEREBY STATE THAT THE BOARD OF SUPERVISORS, BY ORDER, ON 2-15-94, ADOPTED AND APPROVED THIS FINAL MAP OF THIS SUBDIVISION AND ACCEPT, SUBJECT TO IMPROVEMENT FOR PUBLIC PURPOSES, THOSE PORTIONS OF BASS LAKE ROAD SHOWN HEREON AS LOTS MM, NN AND PP, AND THE EASEMENTS AS OFFERED FOR DEDICATION.

Dixie L. Foote DATE February 24, 1994

DIXIE L. FOOTE
CLERK OF THE BOARD OF SUPERVISORS
COUNTY OF EL DORADO, CALIFORNIA

BY: Margaret E. Mosely

RECORDER'S STATEMENT:

I, L. JEAN BELL, HEREBY CERTIFY THAT Placer Title Company TITLE CERTIFICATE NO. 0791 WAS FILED WITH THIS OFFICE AND THAT THIS FINAL MAP WAS ACCEPTED FOR RECORD AND FILED IN BOOK H, PAGE 81, DOCUMENT NO. 1271, ON January 25, 1994 AT 34 MINUTES PAST 2 O'CLOCK P.M.

L. JEAN BELL
COUNTY RECORDER, CLERK
COUNTY OF EL DORADO, CALIFORNIA

BY: Cindy Carver
DEPUTY

EXISTING ASSESSOR'S PARCEL NO. [103-010-22, 23 & 29, 107-010-08, 111-020-11, 12 & 15; AND 111-610-06, 09, 11, 13 & 15]

93015.06

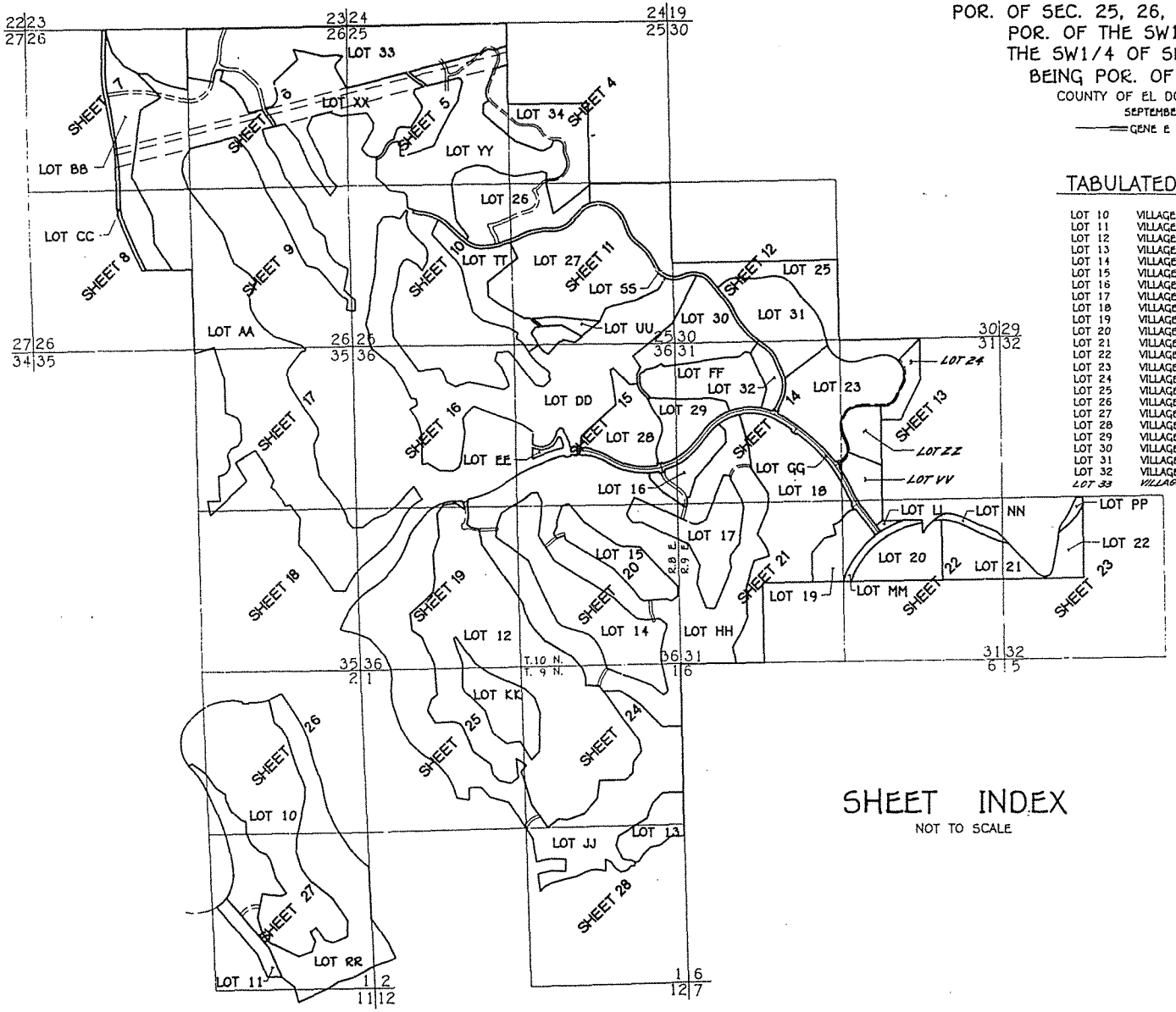
18-H

TM18-1536

EL DORADO HILLS SPECIFIC PLAN, UNIT NO. 2

POR. OF SEC. 1, 2 & THE N1/2 OF SEC. 11, T.9N., R.8E., M.D.M., &
POR. OF SEC. 25, 26, 35 & 36, T.10N., R.8E., M.D.M. &
POR. OF THE SW1/4 OF SEC. 30, SEC. 31 &
THE SW1/4 OF SEC. 32, T.10N., R.9E., M.D.M.
BEING POR. OF TRACT 1 OF R.S. 16-147

COUNTY OF EL DORADO STATE OF CALIFORNIA
SEPTEMBER 1993 SCALE: AS SHOWN
GENE E THORNE & ASSOCIATES, INC.

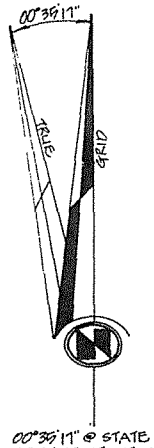


TABULATED LOT DESCRIPTIONS

LOT 10	VILLAGE D2	LOT AA	OPEN SPACE
LOT 11	VILLAGE D4	LOT BB	OPEN SPACE
LOT 12	VILLAGE C1	LOT CC	SILVA VALLEY PARKWAY
LOT 13	VILLAGE C2	LOT DD	GOLF COURSE
LOT 14	VILLAGE E1	LOT EE	GOLF COURSE
LOT 15	VILLAGE E2	LOT FF	GOLF COURSE
LOT 16	VILLAGE F1	LOT GG	VILLAGE GREEN PARKWAY
LOT 17	VILLAGE F2	LOT HH	GOLF COURSE
LOT 18	VILLAGE G	LOT JJ	OPEN SPACE
LOT 19	VILLAGE J4	LOT KK	OPEN SPACE
LOT 20	VILLAGE J5	LOT LL	OPEN SPACE
LOT 21	VILLAGE J6	LOT MM	BASS LAKE ROAD (NEW)
LOT 22	VILLAGE J7	LOT NN	BASS LAKE ROAD (NEW)
LOT 23	VILLAGE J3	LOT PP	BASS LAKE ROAD (NEW)
LOT 24	VILLAGE J2	LOT RR	OPEN SPACE
LOT 25	VILLAGE J1	LOT SS	ROAD AND P.U.E.
LOT 26	VILLAGE K1	LOT TT	OPEN SPACE
LOT 27	VILLAGE K2	LOT UU	OPEN SPACE
LOT 28	VILLAGE K3	*LOT VV*	*PARK SITE*
LOT 29	VILLAGE K4	*LOT XX*	*OPEN SPACE*
LOT 30	VILLAGE K5	*LOT YY*	*OPEN SPACE*
LOT 31	VILLAGE K6	*LOT ZZ*	*SCHOOL SITE*
LOT 32	VILLAGE J3		
LOT 33	*VILLAGE M1*	*LOT 34*	*VILLAGE M2*

SHEET INDEX

NOT TO SCALE



00°39'17" @ STATE OF CALIFORNIA DIVISION OF HIGHWAYS, MONUMENT 28-111, GRID COORDINATES: (N) 358,028.48 (E) 2,206,364.01

SHEET 3 OF 29

93015.06

H-81B

H-81B

H-81B

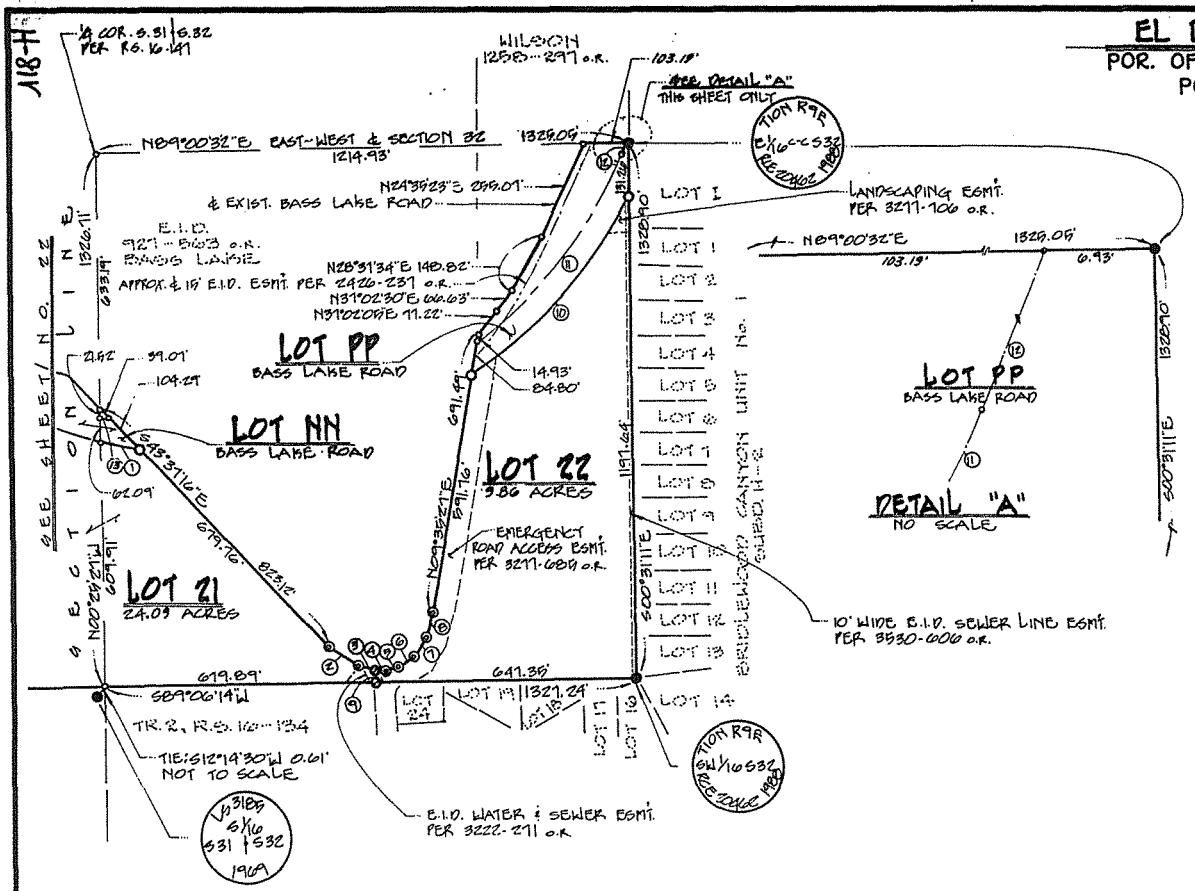
H-81B

TM18-1536

EL DORADO HILLS SPECIFIC PLAN, UNIT NO. 2

POR. OF SEC. 1, 2 & THE N1/2 OF SEC. 11, T.9N., R.8E., M.D.M., &
POR. OF SEC. 25, 26, 35 & 36, T.10N., R.8E., M.D.M. &
POR. OF THE SW1/4 OF SEC. 30, SEC. 31 &
THE SW1/4 OF SEC. 32, T.10N., R.9E., M.D.M.
BEING POR. OF TRACT 1 OF R.S. 16-147

COUNTY OF EL DORADO STATE OF CALIFORNIA
SEPTEMBER 1993 SCALE: 1"=200'
GENE E THORNE & ASSOCIATES, INC.



BASIS OF BEARINGS

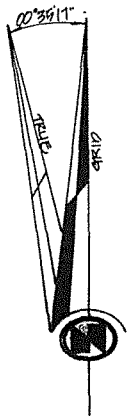
THE MERIDIAN OF THIS SURVEY IS IDENTICAL TO THAT OF R.S. 16-147 AND IS GRID NORTH. ROTATE BEARINGS CLOCKWISE 00°35'17" TO OBTAIN TRUE NORTH BEARINGS. ALL DISTANCES ARE GROUND DISTANCES.

NOTES

1. ALL DISTANCES ALONG CURVED LINES ARE CHORD DISTANCES.
2. ALL LOTS SHOWN HEREON ARE SUBJECT TO THE REQUIREMENTS OF THE EL DORADO HILLS SPECIFIC PLAN AND THE PROVISIONS OF THE DEVELOPMENT AGREEMENT ENTERED INTO BETWEEN EL DORADO HILLS INVESTORS, LTD., AND THE COUNTY OF EL DORADO ON JANUARY 3, 1989, RECORDED IN BOOK 3108 AT PAGE 105 O.R.
3. LOTS CC & GG ARE NON-EXCLUSIVE ROAD AND PUBLIC UTILITIES EASEMENTS CREATED HEREON AND ARE RESERVED FOR FUTURE DEDICATION TO THE COUNTY OF EL DORADO FOR ROAD AND PUBLIC UTILITY PURPOSES.

LEGEND

∘	COMPUTATION POINT ~ NO MONUMENTATION
◪	FOUND MONUMENT AS SHOWN HEREON
●	FOUND 1-1/2" C.I.P. STAMPED AS SHOWN HEREON
⊕	FOUND 3/4" C.I.P. STAMPED "RCE 20462-1986"
◎	FOUND 3/4" C.I.P. STAMPED "RCE 20462-1989"
⊕	FOUND 3/4" C.I.P. STAMPED "RCE 20462-1992"
⊙	FOUND 1-1/2" C.I.P. STAMPED "RCE 20462-1992"
○	SET 3/4" C.I.P. STAMPED "RCE 20462-1993"
⊘	SET 1-1/2" C.I.P. STAMPED "RCE 20462-1993"
⌇⌇⌇⌇⌇	NON-VEHICULAR ACCESS



00°35'17" @ STATE OF CALIFORNIA DIVISION OF HIGHWAYS, MONUMENT 29-117, GRID COORDINATES: (N) 398,628.48 (E) 2,266,364.01

REFERENCES

R.S. 16-147 SUBD. H-2
SUBD. H-17
SUBD. H-7B

TABULATION - THIS SHEET ONLY

(1)	ch. S18°24'01"E 100.33'	R:11600'	Δ:04°57'26"
(2)	S81°54'31"E 87.01'		
(3)	S18°22'19"E 43.77'		
(4)	S18°22'19"E 13.04'		
(5)	N80°38'23"E 45.65'		
(6)	N59°23'56"E 50.63'		
(7)	N30°11'48"E 84.92'		
(8)	N18°59'04"E 61.60'		
(9)	S00°03'46"E 31.96'		
(10)	ch. N41°17'19"E 874.01'	R:11600'	Δ:29°40'26"
(11)	ch. N31°22'29"E 896.71'	R:11100'	Δ:31°28'18"
(12)	N21°39'52"E 22.01'		
(13)	ch. S75°49'53"E 27.63'	R:1100	Δ:01°26'22"

93015.06

SHEET 23 OF 29

TM18-1536