SAN RAFAEL AIRPORT
RECREATIONAL FACILITY

397-400 Smith Ranch Road, San Rafael, CA
Assessor's Parcel No's. 155-230-10, 11, 12, 13, 14, 15 and 16

Initial Study/Mitigated Negative Declaration

Lead Agency:

City of San Rafael
Community Development Department
1400 Fifth Avenue (P.O. Box 151560)
San Rafael, CA 94915-1560

Contact: Raffi Boloyan, Senior Planner

January 26, 2006

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CITY OF San Rafael

DATE: January 26, 2006

TO: California State Clearinghouse
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Transportation Authority of Marin
Federated Indians of Graton Rancheria
Las Gallinas Valley Sanitary District
Marin Municipal Water District
Golden Gate Bridge, Highway, and Transportation District
San Rafael City School District
Dixie School District
Marin Conservation League
Marin Audubon Society
Contempo Marin Homeowner's Association
Captain's Cove Homeowner's Association
Santa Venetia Neighborhood Association
Marin Lagoon Homeowner's Association
N.S.R. Coalition of Residents
Federation of San Rafael Neighborhoods

FROM: Raffi Boloyan, Senior Planner

SUBJECT: **NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION**

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Department of Community Development of the City of San Rafael has prepared an Initial Study for the following project:

Project: San Rafael Airport Recreational Facility

Location: 397-400 Smith Ranch Road, San Rafael, CA
APNs: 155-230-10, 11, 12, 13, 14, 15 and 16

Property Description:

The San Rafael Airport is comprised of Assessor's Parcel Numbers (APNs 155-230-10, 11, 12, 13, 14, 15 and 16, consisting of 119.5 acres, referred to as "airport site." The new recreational facility and associated site improvements are proposed to be located on APN 155-230-12, a 16.6-acre potion of the airport site, referred to as the "project site."

The San Rafael Airport property is comprised of 119.5 acres of land located in the North San Rafael area and is bordered by a mix of residential, light industrial, commercial and recreational developments. To the south of the site are Santa Venetia and Northbridge, residential neighborhoods in unincorporated Marin County, the Marin County Civic Center, Marin Bay Lagoon, Vista Marin and Gables residential developments, Embassy Suites Hotel, Autodesk office building and other various office buildings. To the west are Contempo Marin and Captains Cove residential developments, numerous office buildings and a multi-screen movie theater along Smith Ranch Road, Northgate Industrial Park, the Sonoma-Marin Railroad right-of-way and various multi-family residential developments along Professional Center Parkway, Channing Way, and Sterling Way. To the north are Smith Ranch Road, a regional County park known as McInnis Park and golf course, Smith Ranch Care Center, a medical-care facility, the Las Gallinas Valley Sanitary District sanitation facility and lands, and dyked wetlands. To the east are portions of McInnis County Park, dyked wetlands and the San Francisco Bay.

Project Description:

The applicant has applied for following planning entitlements:

1) A Rezoning from Planned Development – Wetland Overlay (PD1764-WO) District to a revised Planned Development District with appropriate development standards to allow for the indoor and outdoor recreational facility on a portion of the San Rafael Airport property;
2) A revision to the Master Use Permit to allow recreational uses in addition to the existing uses allowed by the current Master Use Permit; and
3) An Environmental and Design Review Permit to allow the construction of a new 85,700-square-foot indoor recreational facility, two outdoor sports fields, a paved parking lot, unpaved parking area, extension of a private roadway, site landscaping, site and building lighting and other associated site improvements. The proposed building would be 33.5 feet in height (as measured by the California Building Code) and contain one story with a portion of the building including a mezzanine level.

Environmental Issues:

The proposed project would result in potentially significant impacts in Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology/Water Quality, Noise and Transportation/Traffic. The project impacts would be mitigated to less-than-significant levels through implementation of recommended mitigation measures or through compliance with recommended conditions of project approval. Recommended measures are summarized in the attached Mitigation Monitoring and Reporting Program (MMRP) and Initial Study/Draft Mitigated Negative Declaration. The Initial Study/Mitigated Negative Declaration document has been prepared in consultation with local and state responsible and trustee agencies and in accordance with Section 15063 of the California Environmental Quality Act (CEQA). Furthermore, the Initial Study/Mitigated Negative Declaration will serve as the environmental compliance document required under CEQA for any subsequent phases of the project and for permits/approvals required by a responsible agency.

A thirty-day (30-day) public review period shall commence on **Friday, January 27, 2006**. Written comments must be received by the City of San Rafael, Community Development Department, Planning Division, hand delivered at 1400 Fifth Avenue, San Rafael CA 94901 or via mail at P.O. Box 151560, San Rafael, CA 94915-1560 or via email at raffi.boloyan@ci.san-rafael.ca.us **by Tuesday February 28, 2006**. The City of San Rafael Planning Commission will hold a public hearing on the Initial Study/Mitigated Negative Declaration and project merits on **Tuesday, February 28, 2006, 7:00 PM** in the San Rafael City Council Chambers at City Hall (address listed above). Correspondence and comments can be delivered to Raffi Boloyan, project planner, phone: (415) 485-3095, email: raffi.boloyan@ci.san-rafael.ca.us**.**

MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM
San Rafael Airport Recreational Facility

	Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
III. AIR QUALITY						
III.b.1	All active construction areas shall be watered at least twice daily. A water truck or equivalent method shall be in place prior to commencing grading operations.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project	
		Project contractor completes watering consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project	
III.b.2	All trucks hauling soil, sand, and other loose materials shall be covered and maintain at least one foot of freeboard.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project	
		Project contractor covers trucks consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project	
III.b.3	All unpaved access roads, parking areas and staging areas at construction sites shall be paved, watered three times daily, or applied with non-toxic soil stabilizers.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project	
		Project contractor completes watering consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project	
III.b.4	All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers and adjacent	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project	

	public streets shall be swept if visible soil material is carried onto them. This shall also include Smith Ranch Road (from the entrance to the site west ¼ mile daily (with water sweepers) if visible soil material is carried onto adjacent public streets.	Project contractor completes watering /sweeping consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project
III.b.5	All inactive construction areas (previously graded areas inactive for ten days or more) shall be treated with hydroseed or non-toxic soil stabilizers.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Project contractor completes treatment consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project
III.b.6	Any exposed stockpiles (dirt, sand, etc.) shall be enclosed, covered and watered twice daily or non-toxic soil binders shall be applied to any exposed stockpiles.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Project contractor completes watering consistent with requirement	Building Division	Inspections during grading/ building construction	Stop project
III.b.7	All construction traffic on unpaved roads shall be limited to speeds of 15 mph. Prior to the commencement of any grading, appropriate signs shall be placed on site to identify the maximum speed.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Project contractor installs signs consistent with requirement	Planning Division	Inspections prior to grading/ building construction	Stop project
		Construction traffic complies with posted limits	Building Division	Inspections during grading/ building construction	Stop project
III.b.8	Excavation and grading activity shall be suspended when wind gusts exceed 25 miles per hour.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Enforce during grading/building construction	Building Division	Inspections during grading/ building construction	Stop project

III.d.9	Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Enforce during grading/building construction	Building Division	Inspections during grading/ building construction	Stop project
III.b.10	The project sponsor shall inform the contractor, general contractor or site supervisor of these requirements and shall be responsible for informing subcontractors of these requirements and for implementing these measures on the site.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Enforce during grading/building construction	Building Division	Inspections during grading/ building construction	Stop project
III.b.11	A dust control coordinator shall be designated for the project. The name, address and telephone number of the dust coordinator shall be prominently posted on site, and shall be kept on file at the Planning Division. The coordinator shall respond to dust complaints promptly (within 24 hours) and shall have the authority to take corrective action.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Review sign	Planning Division	Review and approve sign	Require plan to be submitted prior to issuance of building permit
		Applicant to install sign	Planning Division	Verify sign installed	Delay issuance of grading/building permit
		Enforce during grading/building construction	Building Division	Monitor site to ensure sign is up	Stop project
III.b.12	The above requirements shall be noted on the grading plans or building permit plans prepared for the project prior to issuance of any permit.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Applicant to include on building permit plans	Planning Division	Ensure these notes included on plans	Delay issuance of grading/building permit
IV. BIOLOGICAL RESOURCES					
IV.a.1	Prior to any tree removal or ground disturbing activities during the nesting season (March to August), pre-construction surveys shall be	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project

	conducted to avoid impacting any nesting birds protected under the Migratory Bird Treaty Act. This survey shall include potential raptor nesting habitat within 250 feet of the study area. This survey shall be conducted by a qualified biologist and the reports and findings shall be submitted to the City of San Rafael Community Development Department. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities will be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.	Project Biologist submits survey for review by Planning Division	Planning Division	Review survey	Stop Construction
		Halt activity if nesting birds are encountered during survey	Project Sponsor/ Planning Division	Site inspections during construction	Stop construction until young birds have fledged
		Avoid activities that have potential to cause abandonment of nests until birds have fledged nests	Project Sponsor/ Biologist/ Planning Division	Complete site inspections following nesting period to verify young birds have fledged	Stop construction until young birds have fledged
V. CULTURAL RESOURCES					
V.b.1	In the event that archaeological features, such as concentrations of artifacts or culturally modified soil deposits including trash pits older than fifty years of age, are discovered at any time during grading, scraping, or excavation within the property, all work shall be halted in the vicinity of the find, the Planning Division shall be notified, and a qualified archaeologist shall be contacted immediately to make an evaluation. If warranted by the concentration of artifacts or soils deposits, further work in the discovery area shall be monitored by an archaeologist.	Require as a condition of approval	Planning Division	Draft and incorporate condition as part of project approval	Deny project
		Halt activity if archeological resources are encountered during grading/excavation	Site supervisor/ Project Sponsor/ Building Division	Site inspections during construction	Stop construction until discovery can be investigated
		If necessary, archeologist hired by project sponsor to complete an archeological investigation	Project Sponsor/ Archeologist	Report submitted with recommended measures	Stop construction/ deny project sponsor ability to proceed with grading and construction
		Implement appropriate mitigation measures	Building Division/ Archeologist	Complete site inspections following implementation of remediation measures	Stop construction/ deny project sponsor ability to proceed with

				grading and construction
VI. GEOLOGY AND SOILS				
VI.c.1 Prior to the issuance of the building permit or grading permit, the following recommendations contained in the Geotechnical Report prepared by John Hom, dated May 9, 2005 and November 23, 2005, shall be incorporated into the project design. Prior to issuance of a grading or building permit, written verification of conformance with these recommendations shall be submitted by the project geotechnical engineer to the City of San Rafael.	Require as a condition of approval	Planning Division	Draft and incorporate condition as part of project approval	Deny project
	Plans submitted for grading/building permit shall include measures as identified in John Hom Geotechnical Reports	Building Division/ Project Geotechnical Engineer	Review of plans submitted for grading /building permit	Delay issuance of building/grading permit
a) A soil profile Type S_e in accordance with the 1997 Uniform Building Code shall be used in the design of the proposed project.	Verification Letter submitted to the City of San Rafael	Project Geotechnical Engineer / Building Division/	Review letter	Delay issuance of building/grading permit
b) All areas to be graded should be stripped of any debris and organic materials. The organic material should be removed off-site and disposed of. Excavation should then be performed to achieve any finished grades.	Project Sponsor/ contractor adheres to approved building/grading plans.	Project sponsor/ Building Division	Site inspections during grading and construction.	Stop construction
c) Where fill is required, the exposed surface should be scarified to at least 6 inches, moisture-conditioned and compacted to at least 90-percent relative compaction per ASTM D-1557 test procedure. Where soft soils are encountered, treatment of the soft soils with lime maybe required. The fill should be placed in lifts of 8 inches or less in loose thickness, moisture conditions and compacted to at least 9 percent compaction. The fills materials	Test and verify that recommendations are implemented during grading and construction	Project Geotechnical Engineer/ Building Division	Site inspections during grading construction	Stop construction
	Project Geotechnical Engineer submits written verification o compliance with recommendations	Project Geotechnical Engineer/ Building Division	Submittal of letter by project geotechnical engineer	Delay issuance of occupancy of building

should be should have a plastic index of 15, or less, and be no larger than 6 inches.

d) Finished slopes are to be no steeper than 2-horizontal to 1-vertical (2:1). If steeper slopes are necessary, they should be retained. The finished slops should be planted with deep-rooted ground cover.

e) The proposed structure should be supported by 10-12 inch square driven piles which are pre-cut and pre-stressed concrete or steel piles. These piles should be driven continuously through the Bay Mud, the stiff soils and to refusal in bedrock (penetrate into bedrock no more than 10 feet). Ten and 12-inch piles should be driven with a hammer and maintained in good operating condition with a minimum rated energy of 20,000 and 30,000-foot pounds per blow, respectively. The piles should not deviate from vertical by more than ¼ inch per foot. Indicator piles should be driven near the corners o the building and interior of the building to determine pile depths and production piles should be ordered based on the indictor piles. The refusal blow count would depend on the hammer that is utilized and the structural capacity of the pile. The piles should be driven at least 5 feet into bedrock. The pile driving subcontractor should submit to the Soils Engineer specification of the pile hammer and equipment to be used.

f) Pile driving may cause vibration that

could result in cosmetic damage to adjacent properties. The owner or contractor should visit the adjacent property owners to map out the existing conditions and that vibration monitors be installed to monitor pile driving vibrations.

g) Down draft would occur on the piles due to consolidation of Bay Mud. The down drag forces should be deducted from the structural capacity of the piles. For 10 and 12-inch concrete piles, drag loads should be 22 and 28 tons respectively. For different sized piles, the down draft should be proportionate with the cross sectional perimeter of the pile.

h) To resist lateral loads, a passive pressure of 250 pcf should be used.

i) Slab on grade should not be used for the mezzanine structure. Instead, supported slabs should be used. The slab subgrade should be firm and non-yielding. The slab on grade should be tied to foundations and reinforced to span at least 8 feet in both directions. The upper 6 inches of slab subgrade should be compacted to at least 90 percent relative compaction. Slabs should be underlain by at least 4 inches of clean, free-draining crushed rock or gravel. If migration of moisture through the slabs would be objectionable, a vapor barrier should be installed between the slab and the rock. Two inches of sand may be provided above the vapor barrier.

j) Surface water drainage should be diverted away from slopes and foundations. Gutters should be provided on the roofs and downspout should be connected to closed conduits discharging on to the pavement, where possible.

k) Roof downspouts and surface drains must be maintained entirely separate from sub-drains and foundation drains. The outlets should discharge onto erosion resistant areas such as the roadway pavement, where possible.

l) The project geotechnical engineer shall conduct inspections during construction of the project to confirm that the recommendations are properly incorporated. Prior to final occupancy of the building, the project geotechnical engineer shall submit written verification that the project was constructed in accordance with the recommendations identified in the geotechnical reports.

VII. HAZARDS AND HAZADRDOUS MATERIALS

VII.f.1	The applicant shall implement the guidelines in the Federal Aviation Administration's Advisory Circular 150/5370-2E, Operational Safety on Airports, during construction of the proposed project.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Project sponsor submits letter from CalTrans, Division or Aeronautics	CalTrans Division of Aeronautics/ Planning Division	Verification of compliance with guidelines	Delay issuance of grading/building permit
		Incorporate any measures into building permit plans	Planning Division	Review plans to ensure measures are includes	Delay issuance of grading/building permit

		Implement any measures	Building Division	Inspections during construction	Stop construction
VIII. HYDROLOGY AND WATER QUALITY					
VIII.i.1	All portions of the building that are below the +7' NGVD 1929 as indicated on the proposed plan shall be wet flood-proofed. Where wet flood-proofing is required, the building materials must be of the type resistant to floodwater.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Plans submitted for building permit shall comply with these standards.	Public Works Dept	Review plans	Delay issuance of grading/building permit
		Ensure construction of appropriate wet flood-proofing.	Building Division	Inspections during construction	Stop project
		Written verification from project engineer that building built in accordance with standards.	Project Engineer/ Building Division	Inspections during construction and letter documenting compliance	Delay issuance of final occupancy
VIII.i.2	The construction plans must be signed and stamped by either a registered engineer or architect certifying that the building(s) and materials are designed to comply with the requirements and guidelines of the flood-proofing methods established by FEMA	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Plans submitted for building permit shall comply with these standards	Public Works Dept	Review plans	Delay issuance of grading/building permit
		Ensure construction of appropriate wet flood-proofing	Building Division	Inspections during construction	Stop project
XI. NOISE					
XI.b.1	Construction, alteration, demolition, maintenance of construction equipment, deliveries of materials or equipment, shall be limited to between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. All such activities shall be precluded outside of the allowable hours on Monday to Friday and anytime on Saturdays, Sundays or holidays.	Require as condition of approval	Planning Division	Incorporate as condition of approval	Deny project
		Project contractor comply with limits	Building Division	Review building permit plan for compliance	Stop project

XI.b.2	Prior to driving any piles, each hole shall be pre-drilled.	Require as a condition of approval	Planning Division	Incorporate as condition of approval	Deny project
		Project sponsor	Building Division	Review building permit plan for compliance	Delay issuance of grading/building permit
		Pre-drill all holes for piles	Project Sponsor/ Building Division	Site inspections prior to pile driving	Stop construction
XI.b.3	Prior to any pile driving, the project applicant shall notify all neighbors within 450 feet of the site (as determined by the City of San Rafael) of the upcoming pile driving. Notification shall be mailed at least 7 days prior to the start of pile driving providing notification of when pile driving will occur.	Require as a condition of approval	Planning Division	Incorporate as condition of approval	Deny project
		Applicant requests mailing list from Planning Division	Planning Division	Review building permit plan for compliance	Stop construction
		Applicant mails notice and provide copy to Planning Division	Planning Division	Ensure mailing of notice	Stop construction
XI.b.4	All construction equipment shall utilize all available noise suppression devices and all equipment shall maintain and muffle loud construction equipment. Prior to the issuance of the building permit, the applicant shall provide the City with written verification from the acoustical engineer that this measure has been incorporated.	Require as a condition of approval	Planning Division	Incorporate as condition of approval	Deny project
		Applicant to submit verification of these measures on construction equipment	Planning Division	Review letter	Delay issuance of grading/building permit
		Applicant to utilize the approved measure on construction equipment	Building Division	Inspections during grading/ building construction	Stop construction
XI.b.5	Prior to the issuance of a building permit, the applicant shall designate a noise disturbance coordinator. This coordinator will be	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project

	responsible for responding to any local complaints about construction noise. The disturbance coordination shall determine the cause of the noise complaint and require that reasonable measure be implemented to correct the problem. The construction schedule, allowable hours of operation, and name and telephone number of the disturbance coordinator and telephone number shall be posted and maintained at the entrance to the site (southwest corner of Smith Ranch Road and entrance to airport driveway).	Review information and sign	Planning Division	Review and Approve sign	Require information to be submitted prior to issuance of building permit
		Applicant to install sign	Planning Division	Verify sign installed	Delay issuance of grading/building permit
		Enforce during grading/building construction	Building Division	Monitor site to ensure sign is up	Stop project
XV. TRANSPORTATION/TRAFFIC					
XV.a.1	A traffic mitigation fee of $4,246.00 dollars shall be paid for each new A.M. and P.M. peak hour trip generated by the project. Total fees paid for this project shall be $441,574.00, adjusted according to the Lee Saylor Construction Index to take into account changes in construction costs. This fee amount is based on a fee of $4,246.00 times 104 total A.M. and P.M. peak hour trips in November 2004 dollars.	Require as a condition of approval	Planning Division	Incorporate as a condition of project approval	Deny project
		Collect fee prior to issuance of a building permit	Planning Division	Collect mitigation fees	Delay issuance of grading/building permit

ENVIRONMENTAL CHECKLIST

1. Project Title	San Rafael Airport Recreational Facility
2. Lead Agency Name & Address	City of San Rafael Community Development Department Planning Division 1400 Fifth Avenue (P.O. Box 151560) San Rafael, California 94915-1560
3. Contact Person & Phone Number	Raffi Boloyan, Senior Planner Phone number: (415) 485-3095 Email: raffi.boloyan@ci.san-rafael.ca.us
4. Project Location	The site is located in the City of San Rafael, Marin County, California at 397-400 Smith Ranch Road, San Rafael, CA; APNs: 155-230-10, 11, 12, 13, 14, 15 and 16 (Refer to "San Rafael Airport - Map of Parcels" on page 23).
5. Project Sponsor's Name & Address	San Rafael Airport, LLC Robert Herbst 2165 Francisco Blvd, Suite A San Rafael, CA 94901
6. General Plan Designation	Airport/Recreation
7. Zoning	Planned Development – Wetland Overlay (PD1764-WO) District

8. Description of Project

Environmental Setting

The San Rafael Airport is comprised of Assessor's Parcel Numbers (APNs) 155-230-10, 11, 12, 13, 14, 15 and 16 consisting of 119.5 acres of land, referred to as "airport site." (See "Map of Parcels at San Rafael Airport" on page 23). The new recreational facility and associated site improvements are proposed on to be located on a portion of APN 155-230-12, referred to as the "project site." (See "San Rafael Airport - Map of Parcels."

The entire airport site is 119.5 acres located in the North San Rafael area and is bordered by a mix of residential, light industrial, commercial and recreational developments. To the south of the site is Santa Venetia and Northbridge, residential neighborhoods in unincorporated Marin County, the Marin County Civic Center, Marin Bay Lagoon, Vista Marin and Gables residential developments, Embassy Suites Hotel and various office buildings. To the west is Contempo Marin and Captains Cove residential developments, numerous office buildings and a movie theater off of Smith Ranch Road, Northgate Industrial Park, the Sonoma-Marin Railroad right-of- way and multi-family residential developments along Professional Center Parkway, Channing Way, and Sterling Way. To the north is Smith Ranch Road, a regional County park known as McInnis Park and golf course, Smith Ranch Care Center, a medical-care facility, the Las Gallinas Valley Sanitary District lands and sanitation facility, and dyked wetlands. To the east are portions of McInnis County Park, dyked wetlands and the San Francisco Bay. For identification of the features discussed throughout this document, see "Vicinity Map/Map of Key Features" on page 22.

The project site is located on a portion of APN 155-230-12, which is approximately 16.6 acres of the overall 119.5-acre airport site, and is located at the northeastern portion of the airport site. The project site is currently undeveloped and contains maintained grasslands, two drainage swales and un-maintained dirt road. To the north of the project site, the North Fork of the Gallinas Creek is situated on an adjacent property. To the south of the project site, the San Rafael Airport runway is located on a separate property that is part of the airport site.

Smith Ranch Road provides access to the airport site as well as the project site. The sole entry to the airport is immediately opposite of the intersection of Smith Ranch Road and Silvera Parkway to the north. Access to the site is through a private paved two-lane road that winds south and west from Smith Ranch road, then south across an existing bridge across the North Fork of Gallinas Creek and into the airport and non-aviation light industrial uses. The primary purpose of this private roadway is to provide access to the San Rafael Airport and light industrial uses. The first portion of the private roadway, from Smith Ranch Road to the south side of the bridge, is over property that is not owned in fee title by the San Rafael Airport, but over which the Airport has easement rights. Once past the southern side of the bridge, the roadway passes two single-family residential properties and then enters the 119.5-acre airport site. The existing paved road currently ends at the light industrial area and from that point, the road is surfaced with gravel. Through the previous approvals for the airport rehabilitation project, the Airport has received approvals to pave the entry and roadway up until the end of the light industrial buildings.

The entire 119.5-acre (5,205,420 square feet) San Rafael Airport site is designated as Planned Development Zoning District. The majority of the airport site is undeveloped. Currently, there are 210,000 square feet of aircraft hangers, 22,500 square feet of light industrial buildings, and 418,000 square feet of impervious surfaces on the site. There is an additional 1,000,000 square feet of pervious surfaces on the site, including roadway, taxiway, and clear zones on both sides of the runway that are maintained in a compacted drivable condition and are kept clear of vegetation and obstructions. The airport site is bordered by the North and South Forks of the Gallinas Creek. The borders with the creeks include a maintained perimeter levee system that extends from the southwest corner of the site along the southern perimeter, wrapping back to the west along the northern border of the site. The airport property includes over 12,000 linear feet of perimeter levees along the North and South Forks of Gallinas Creek. The land within the levees is situated at 0 – 3 feet elevation above mean sea level and the levees are 9 feet above mean sea level. The undeveloped area between the levees is characterized as non-native grassland fields that are mowed, grazed by sheep or disced annually.

Existing site development on the airport site includes a 3,500-foot long. 50-foot wide paved aircraft runway and over-run taxiway oriented from the southwest to the northeast, 100 individual airplane hangars, commercial hangars used by on-site fixed base operator (FBO) providing commercial aviation services, a security guard's residence at the entrance to the airport, a caretaker's residential unit located near to the taxiway, and 9-12 non-aviation. Light-industrial businesses (e.g. storage, warehouse, and contractor's uses located on the northern portion of the property). Undeveloped areas adjacent to the existing and former runways and runway clear zones are grasslands.

Portions of the airport property contain wetlands under the jurisdiction of the U.S. Army Corps of Engineers that have been delineated. This delineation was prepared in 2000 by the U.S. Army Corps of Engineer and includes areas on the outsides of the levees along the southern perimeter and northern perimeters of the overall Airport property. The airport property includes over 12,000 linear feet of perimeter levees along the North and South Forks of Gallinas Creek. These levees connect to the levee system surrounding Contempo Marin and as a whole, these levees provides flood protection to the area

Drainage in the eastern portion of the airport site is handled through an existing drainage system that collects run-off and site drainage and conveys it to a vegetated swale that parallels the north side of the runway. This swale system then conveys water to the northeast to an existing pump house located at the northeastern corner of the airport site. From this point, run-off is pumped into the creek. There is also an existing earthen swale along the north edge of the project site that also directs drainage towards the pump house.

For drainage in the western portion of the site (around the portion of the property that includes the aircraft hangers), there are six drainage inlets within the easterly drive aisles that serve the airplane hangars on the eastern portion of the site. In addition, three grease and sediment traps are in place to collect such materials prior to entering the existing open drainage ditch. The driveway and parking lot at the project entry is drained into an open swale that runs parallel to the North Fork of Gallinas Creek in an east/west direction. At the east end of the drainage swale, a grease and sediment trap has been installed.

History

The airport was established as a "ranch-style airport" for three to four small private aircraft in the early 1950's. At that time, the airport runway was located parallel to the Northwestern Pacific Railroad right-of-way. In 1969, the County of Marin issued a Use Permit to legalize the maintenance and operation of the existing airport. The County authorized facilities for 35 private planes and facilities necessary for the protection of the premises, such as office space for the airport manager. The Use Permit specifically prohibited flight training, helicopters, charter flights and public activities such as "fly-ins." Commercial uses, including mechanical repairs or services (fixed-based operators), and sales were also prohibited.

The property was annexed into the City in the early 1970's and zoned U (Unclassified) District. After the property was annexed to the City of San Rafael, numerous complaints were filed citing violations of the airport's Use Permit. The City formed a committee to study the violation issues. In 1974, the airport owners filed a Master Use Permit application to replace the county-issued Use Permit. On February 5, 1974, a Use Permit was approved by the San Rafael Planning Commission allowing the airport use to continue as a "temporary use." The 1974 Use Permit included the following provisions and restrictions as conditions of approval:

- No commercial flight activity.
- No student pilot training.
- No use by heavy airplanes.
- No change in existing facilities or erection of new or different structures.
- No maintenance or service of aircraft except for authorized users.
- Continuance of existing traffic patterns.
- No new non-aviation related uses other than those existing at the time of Use Permit approval.
- Authorization for up to 75 based aircraft.
- No additional uses shall be permitted which were prohibited under the County Use Permit except that 75 aircraft are permitted.
- Permit shall expire in one year or February 1, 1975.

On February 25, 1975 the Planning Commission approved a one-year time extension (UP74-6[b]), imposing the same conditions as indicated above. On March 9, 1976 the Planning Commission granted a three-year time extension (UP74-6[c]) of the Use Permit until March 9, 1979 with no changes in the use or conditions. In 1979 another Use Permit time extension was filed (UP74-6[d]), requesting a five-year time extension, with an additional automatic 5-year extension. Under this request, no change in the operation of the facility was proposed, except a request to increase the based aircraft to 100. The Use Permit amendment was approved with an expiration of April 10, 1984. The following conditions were modified:

- Except for an authorization for 100 aircraft, uses that were prohibited under the County use permit shall continue to be prohibited.
- Approval of the Use Permit was deemed not to constitute acknowledgement of the airport as a permanent use. Should a permanent use be applied for in the future, improvement to the levee; and to the location, appearance, and seismic safety of the structures; landscaping, and permanent road access would be required.
- The applicant was required to provide a hold harmless agreement removing the City's liability for possible or actual damage caused by a breach of the levee system.

- The Use Permit was granted for a period of five years or until April 10, 1984 with the provision that the Use Permit may be further extended for an additional three years by the Zoning Administrator.

In 1984, the applicant noted no other changes in the operation or use of the airport. The Use Permit was extended, with the conditions as revised above, until April 10, 1987 by the Planning Commission. Subsequently, the 1987 Use Permit time extension request included legalization of existing contractors' storage yard uses located on the northwest portion of the property, and sheep grazing for maintenance purposes. A site plan was submitted indicating a general area to be used as "contractors' storage uses." A Use Permit time extension, which included the previous conditions was granted for three years, and was valid until May 27, 1990. In January 1992, the Planning Commission approved a new Use Permit that was valid until April 6, 1995.

On January 3, 2001, Rezoning, Master Use Permit, and Environmental and Design Review Permit applications were filed to allow the permanent operation of San Rafael Airport with aviation and non-aviation, light-industrial uses; the construction of 40 new single airplane hangars (making a total of 100 hangers), two modular homes for a caretaker and security guard, a modified entry/parking lot, new site landscaping and a new 2,450-square-foot non-aviation building. This Master Use Permit did not authorize any expansion of airport operations or number of based aircraft. These applications were ultimately approved by the City Council on March 19, 2001, following the review and recommendation by the Design Review Board and Planning Commission. The summary of the major component of the Master Use Permit are identified below:

- The private airport use is limited to 100-based aircraft.
- The following airport uses or activities are specifically prohibited: flight training and the use of the landing strip for practice purposes by flight instructors; helicopters, charter flights, Uses or activities of a public or semi-public nature, commercial flight activity or student pilot training, and non-based aircraft performing landings or departures.
- Maintenance or servicing of aircraft shall be limited to aircraft based at San Rafael Airport
- The non-aviation uses are limited to those uses approved by the Use Permit and there shall be no increase in the amount of square footage An Administrative Use Permit shall be required for changes in tenancy.
- The non-aviation hours of business are limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, excluding holidays.
- The two new modular residences shall be used exclusively as on-site residences for the airport security guard and caretaker.
- All run-ups shall occur at the east end of the runway, or in a designated run-up area in the vicinity of the intersection of the taxiway and runway.
- The airport runway shall be identified with a symbol that the airport is private.

Declaration of Restrictions

In December 1983, restrictive covenants were recorded for the airport site as part of the development and subdivision approvals for the contiguous property, of the former lands of the First National State Bank of New Jersey (Civic Center North and Smith Ranch Airport sites). The City of San Rafael, Marin County and the then property owner entered into a Declaration of Restrictions for the airport property that limits the site to the following uses:

a. Existing uses consisting of the airport and related uses.
b. Future utility uses as approved by the appropriate government agencies, including flood control, sanitary sewer, gas and electricity, and public safety facilities.
c. Airport and airport-related uses.
d. Roadways.
e. Open Space.
f. Private and public recreational uses.

Existing Uses and Operations

The private airport is governed by both the City of San Rafael through the Use Permit process, and the State of California, Department of Transportation – Aeronautics Division. The state requires the airport to maintain an active state permit that dictates the location of the runway, traffic pattern and specifications for the runway.

In accordance with their airport rehabilitation plan, there are currently 85 aircraft based at the airport and these are located within the 99 existing hangers. The Airport Rehabilitation project approved up to 100 hangers, however the last one has not yet been constructed. In conjunction with the airport use, two caretakers residential units are under construction (for a security guard and caretaker) and a portion of one of the hangers has been permitted to be made into an office for the airport administration. In addition to the aviation uses, 12 non-aviation, light-industrial uses were approved to operate at this site. Currently, there are 9 non-aviation tenants on the property, including contractor's storage yards and warehouses, auto repair, an engineering company, and a tree service.

Project Description

The applicant proposes construction of a new private indoor and outdoor recreational facility on a 4.4-acre portion of the 119.5-acre airport site. Applications have been submitted for a Rezoning to revise the Planned Development Zoning, an Environmental and Design Review Permit to allow the construction of the new recreational facility and associated site improvements, and an amendment to the Master Use Permit for the proposed recreational uses.

Use

The proposed recreational facility would be composed of an 85,700-square-foot building, two outdoor sports fields, two parking lots and associated site improvements. The building would be divided into three primary recreational uses - soccer, baseball and gymnastics and would share the common locker room and restroom facilities. As part of the Master Use Permit, the applicant has requested that recreational uses other than the soccer, baseball and gymnastics be allowed through the amendment to the Master Use Permit.

The facility would be broken into two major elements. The largest and primary element would be the indoor soccer component. This portion of the building would be 33.5 feet tall (measured to the mid point of the highest gable roof) and would include a field level (44,000 square feet) with two indoor soccer fields and locker rooms and a mezzanine level (14,400 square feet) with a viewing area, meeting room, café, restrooms, sports shop and administrative offices. The cafe would include a kitchen and a counter area that would accommodate 20 persons. The proposed café would serve a full menu of hot and cold food and beverages, including beer and wine. The second element of the building would host the baseball and gymnastics components. This portion of the building would be 31.5 feet tall and would include indoor multi-use space for baseball training and gymnastics classes (26,000 square feet).

The three recreational uses at this facility would all have different hours of operation. The soccer facility is proposed to operate from 9:00 a.m. to 11:00 p.m., Sunday through Thursday, and from 9:00 a.m. to 12:00 a.m. Friday and Saturday. The baseball and gymnastics uses would operate from 9:00 a.m. to 9:00 p.m., seven days a week.

Site Plan/Access

The proposed project would be generally located on the northeastern portion of the 119.5-acre site. Access to the proposed new recreational facility would be through an extension to the existing roadway currently serving the airport property. The existing roadway currently ends at the non-aviation buildings. From that point, a new 30-foot wide paved roadway would continue south then east towards the subject portion of the property. The roadway would terminate at a new, 184-car paved parking lot. The parking lot would include a circular drop-off zone at the end of the paved parking lot and near the entry at the southeast corner of the building. Access to the building from the parking lot would be through concrete sidewalks that wrap around the front and west side of the

building. The southern edge of the new parking lot would be 160 feet north of the runway centerline. Just past the end of the main (paved) parking lot, a gravel parking lot is proposed to be constructed and this would provide overflow parking facilities as well as access to the two outdoor fields (soccer and baseball fields).

The proposed building would be located immediately north of the parking lot. The northwest corner of the building would be the portion of the building closest to the existing property line at a setback of approximately 11 feet. With respect to setbacks from the top of creek banks, the rear (northern elevation) of the proposed structure would be setback between 150 and 208 feet from the top of bank of the North Fork Gallinas Creek, the west side would be setback between 200 and 400 feet from the top of bank of the North Fork Gallinas Creek and the east side would be setback approximately 850 feet from the top of bank of the South Fork of the Gallinas Creek. The south side of the building would be setback approximately 350 feet from the runway. There would be three entry points to the building, the southwest corner, southeast corner and west sides of the building.

The outdoor soccer field would maintain a minimum of 173-foot setback from the top of creek bank and the baseball field would maintain a minimum 118-foot setback from the top of creek bank.

As part of this project, the applicant has also proposed to install a new 25-foot wide steel truss bridge deck over the existing bridge that crosses the North Fork of the Gallinas Creek. The rails attached to the existing bridge would be removed to make room for the new bridge deck. The existing bridge structure would remain in place to serve as a platform for maintenance and carry the utility lines crossing the creek. The proposed new bridge would clear span over the existing bridge and would be attached to new concrete abutments on both sides of the creek. No new piles would be driven into the creek nor is any work proposed within the creek itself or creek banks. The proposed new bridge would accommodate two, 10-foot wide vehicular travel lanes and one 5-foot wide pedestrian/bicycle lane. The bridge is neither located on the airport site nor the project site, but is located on land over which the airport has access rights and has historically accessed their property.

A new accessible pedestrian/bicycle path of travel is also proposed from Smith Ranch Road, over the new bridge and then leading to the proposed new building. This new path would entail striping along the existing portion of the roadway as well as on the new roadway extension.

Architecture

The proposed new building would be 200 feet wide (north to south) by 350 feet long (east to west) and would be broken into two major elements, with the taller portion over the eastern half of the building and the lower portion over the western half of the building. The proposed structure would total 41 feet above grade measured to the highest point of the structure (roof vent over the center of the structure), 38 feet above grade to the highest point of the roof over the indoor soccer portion of the structure (eastern half of the structure) and 34 feet above grade to the highest point of the roof at the lower portion of the building (western half of the structure). However, the City of San Rafael defines height of a structure based on the Uniform Building Code definition of height. This definition measures height of a building as the vertical distance above a reference datum measured to the average height of a gable roof. As measured by the Uniform Building Code, the eastern portion of the structure (indoor soccer portion) would be 33.5 feet in height and the western portion would step down to 30.0 feet in height. Furthermore, the roof vent over the center of the building and the plumbing and mechanical flues are not included in height calculations based on the City's Zoning Ordinance.

The frame of the building would be a clear span structure and is proposed to be clad with a variety of building materials, including a combination of textured metal panels along the base of the structure, vertical metal panels on the corners of the building, flush metal fascia panels, and a sloped metal roof. Building colors are proposed to primarily be shades of darker green with some tan and dark accent colors.

Mechanical equipment would be recessed within the roof of the structure. Mechanical units for heating and ventilation would be located within the structure and not visible from off-site. The proposed equipment room

would be covered by a separate roof with vents and is located in the center of the building and indicated as "roof vent" on the project elevations.

Nine story poles have been erected, one at each of the four corners, two on the north and south sides of the building to distinguish between the two elements of the building, and three illustrating the high points of the ridge of the roof. The story poles have been colored and the tops of the poles have been connected to illustrate the eaves and ridge.

In addition to the City's zoning and building requirements, the Division of Aeronautics of the California Department of Transportation requires aviation clear zones and clear ascending zones on both sides of the runway. The clear zone is a 125-foot area on both sides of the runway (measured from the center of the runway) in which no structure, site improvement or landscaping is allowed. From the end of the 125-foot clear zone, there is a clear ascending zone, a horizontal plane that rises 1-foot every 7 feet of linear distance, in which no obstructions, structures, landscaping, lighting, or fencing is allowed to encroach. As designed, the proposed structure, fencing, landscaping, lighting and other site improvements would comply with the clear zone and clear ascending zone requirements (illustrated on A-1 and A-5 of the project plans).

The project has been designed to comply with the California Department of Transportation, Division of Aeronautics requirements pertaining to clear zones and clear ascending zones. No structures, improvement or landscaping are proposed to be located in the 125-foot clear zone (from the center of the runway) and no structure, improvement, or landscaping would encroach into the 1:7 clear ascending zone.

Landscaping

Existing Eucalyptus trees along the rear (north) of the building and around the levees to the south of the site are proposed to remain. The project proponent has proposed to add additional Eucalyptus trees along both the south and northern levees to fill in gaps of existing Eucalyptus trees. Additionally, landscaping has been proposed within and around the new paved parking lot, around the front and west sides of the building, and around the new outdoor fields. Proposed landscaping would consist of trees (She-oak), large trees and shrubs (California Lilac, Toyon, and Pacific Wax Myrtle), shrubs (Howard McMinn Manzanita, California sagebrush, California Lilac, California Grey Rush, Tree Mallow, Fuchsia Flowering Gooseberry, Cleveland Sage, and Black Sage), and ground cover and vines (Manzanita Emerald Carpet, Dwarf Coyote Brush, Carmel Creeper and California Wild Grape). The landscape plan proposes new planting within and around the parking lot, on the south and west sides of the building, on the south and east sides of the outdoor soccer field, and on the northwest side of the outdoor baseball field. The southern border of the parking lot and outdoor fields is proposed to include a 5-foot tall black vinyl chain link fence with black screening fabric installed on the south side of the fence. Additional Eucalyptus trees have also been proposed to be planted along the southern and northern levees to complete gaps that currently exist in the existing Eucalyptus trees. All planted areas would be irrigated by multi-zone automatic drip systems controlled by "smart" water controllers that adjust daily watering schedules based on local weather data.

Lighting

Site and building lighting is proposed for this project. The new lighting would include lighting along the entire length of the existing and proposed roadway and within and around the new building and parking lot. No lighting to allow nighttime play on either outdoor field is proposed as part of this project. Proposed lighting would be composed of three types of lights, wall lights on the building, pole-mounted lights for the parking lot, and bollard lights for the existing and new roadway and the southern portion of the parking lot. In terms of building light, eight under-canopy lights are proposed at the three building entries (triple tube compact fluorescent) and 23 building mounted lights (14-inch square, 150-watt metal halide) would be located on all four building elevations and would be mounted to the wall at a height of 14 feet and shielded to direct light downward. The site lighting would be composed of two different fixtures, (15) 14-foot tall double-head standards (150-watt metal halide) in the area of the parking lot closest to the building and (31) 42-inch tall bollard lights (70-watt metal halide) along the entry to the parking lot and the entire southern edge a portion of the eastern edge of the parking lot. Additional bollard lights are proposed along the entire length of the existing roadway from Smith Ranch Road and proposed

roadway extension leading to the new building. A photometric study has been prepared for the lighting plan and this identifies that the minimum lighting level would be 0.0 candle-feet and the maximum lighting level would be 12.2 candle-feet, with an average of 1.82 candle-feet.

Grading and Drainage

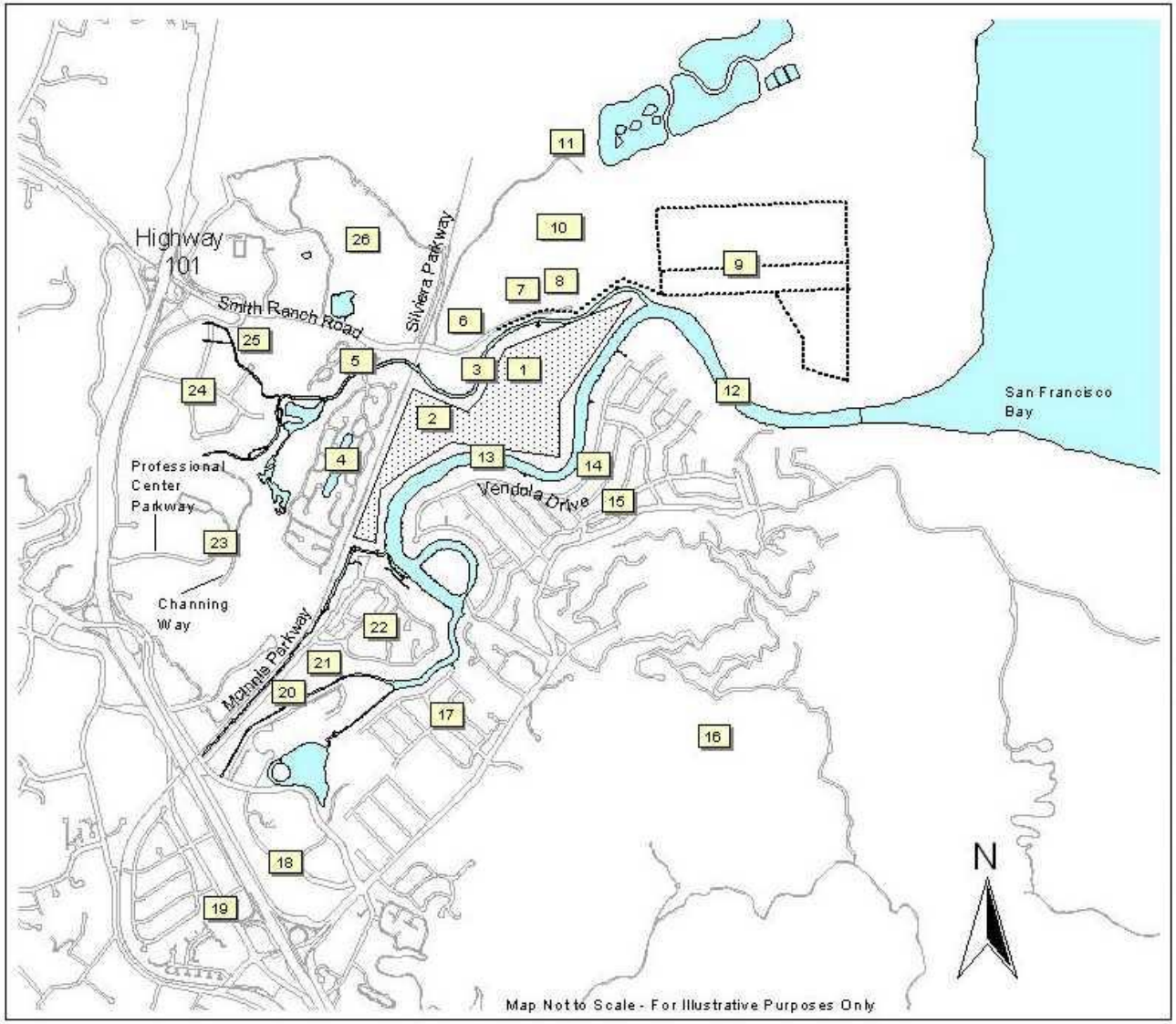
The site is completely flat. The proposed grading plan indicates that 3,000 cubic yards of earth would be cut and 35,000 cubic yards of fill would be used for the construction of the building and site improvements. No placement of fill for any development would be placed within 50 feet of any wetland or potential wetland.

The drainage plan identifies that all new drainage generated by this project would be directed to either the existing drainage swale along the northern property line or the existing drainage ditch between the proposed parking lot and the runway. These drainage facilities would utilize bio-swales and grass lined drainage trenches to naturally filter contaminants as storm water flows across the property. The drainage lines would then convey water to the existing pump house located to the northeast of the proposed outdoor soccer field. All roof leaders from the new structure would be directed through the landscaped areas, and then any remaining drainage from the roof would be directed to the bio-swales. The main parking lot would be paved with impervious materials and drainage would be directed to the grass lined drainage ditch to the south and north.

Other Public Agencies Whose Approval Is Required:

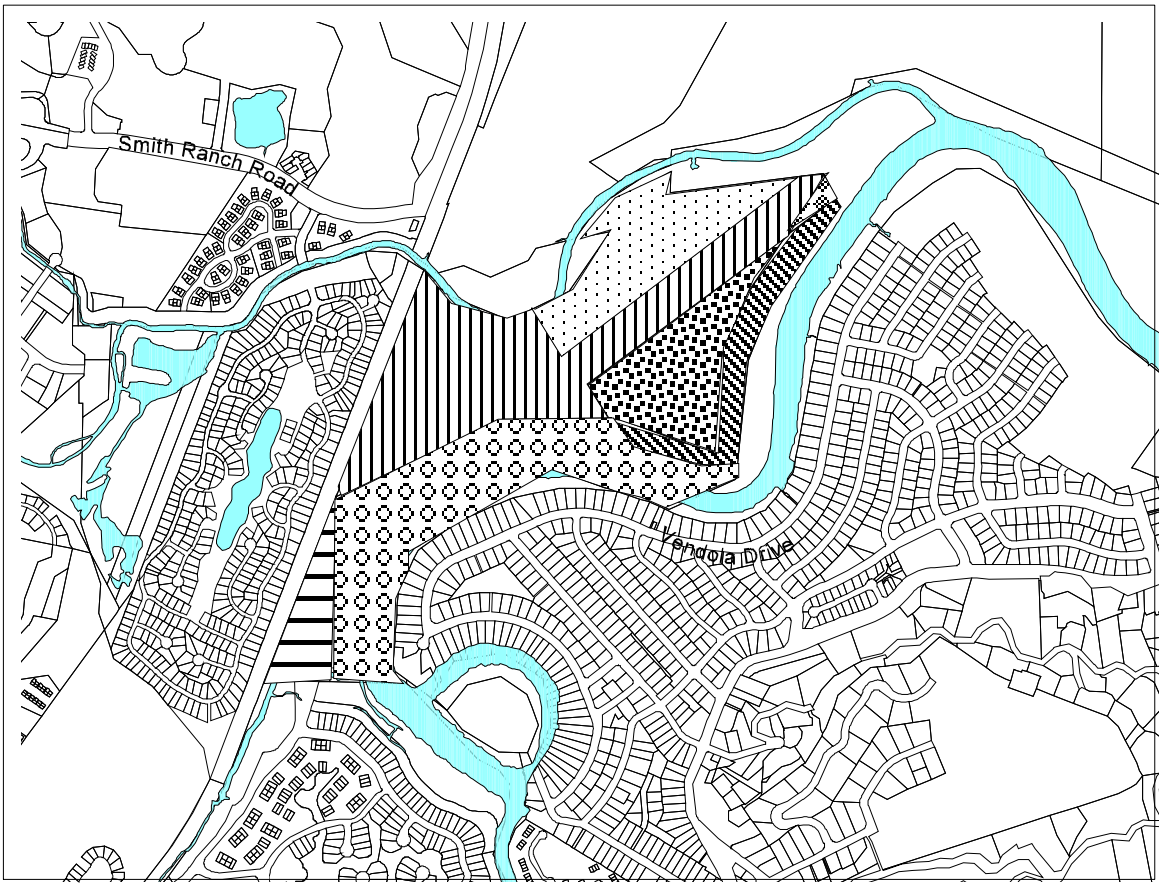
1) Marin Municipal Water District
2) Las Gallinas Valley Sanitary District
3) California Department of Transportation, Aeronautics Division
4) San Francisco Bay Area Regional Water Quality Board

LOCATION MAP OF KEY FEATURES



1 Project Site
2 San Rafael Airport
3 North Fork Gallinas Creek
4 Contempo Marin Neighborhood
5 Captains Cove Neighborhood
6 Softball Fields At McInnis Park
7 McInnis Park and Clubhouse
8 McInnis Park Golfcourse and Driving Range
9 Levee Trail System
10 Hillside/Ridgeline North of McInnis Park
11 Las Gallinas Sanitary District Lands
12 Main Stem of Gallinas Creek
13 South Fork Gallinas Creek
14 Homes Along Vendola Drive
15 Santa Venetia Neighborhood
16 Hillside/Ridgeline South of Santa Venetia
17 Northbridge Neighborhood
18 Marin County Civic Center
19 Mt. Tamalpais (approximatley 9 miles southwest)
20 Embassy Suites Hotel
21 Autodesk Building
22 Marin Lagoon Neighborhood
23 Multi-family Residences and Church on Hillside/Ridgeline
24 Northgate Industrial Park
25 Commerical Area (Theater and Offices)
26 Hillside/Ridgline North of Smith Ranch Road
Entire San Rafael Airport Property

SAN RAFAEL AIRPORT - MAP OF PARCELS



San Rafael Airport Illustration of Parcels

APN 155-230-10

APN 155-230-11

APN 155-230-12
Project Site

APN 155-230-13

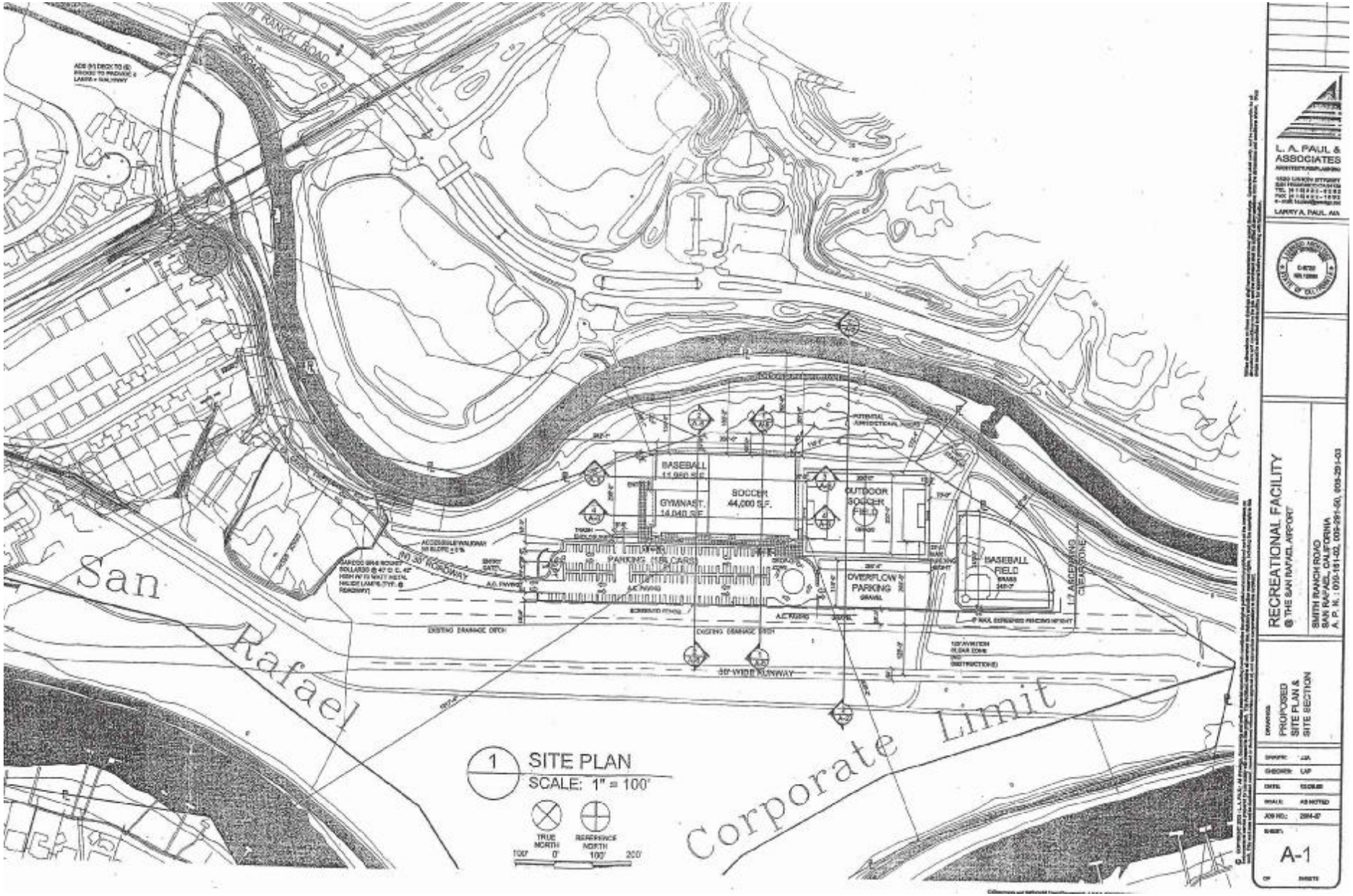
APN 155-230-14

APN 155-230-15

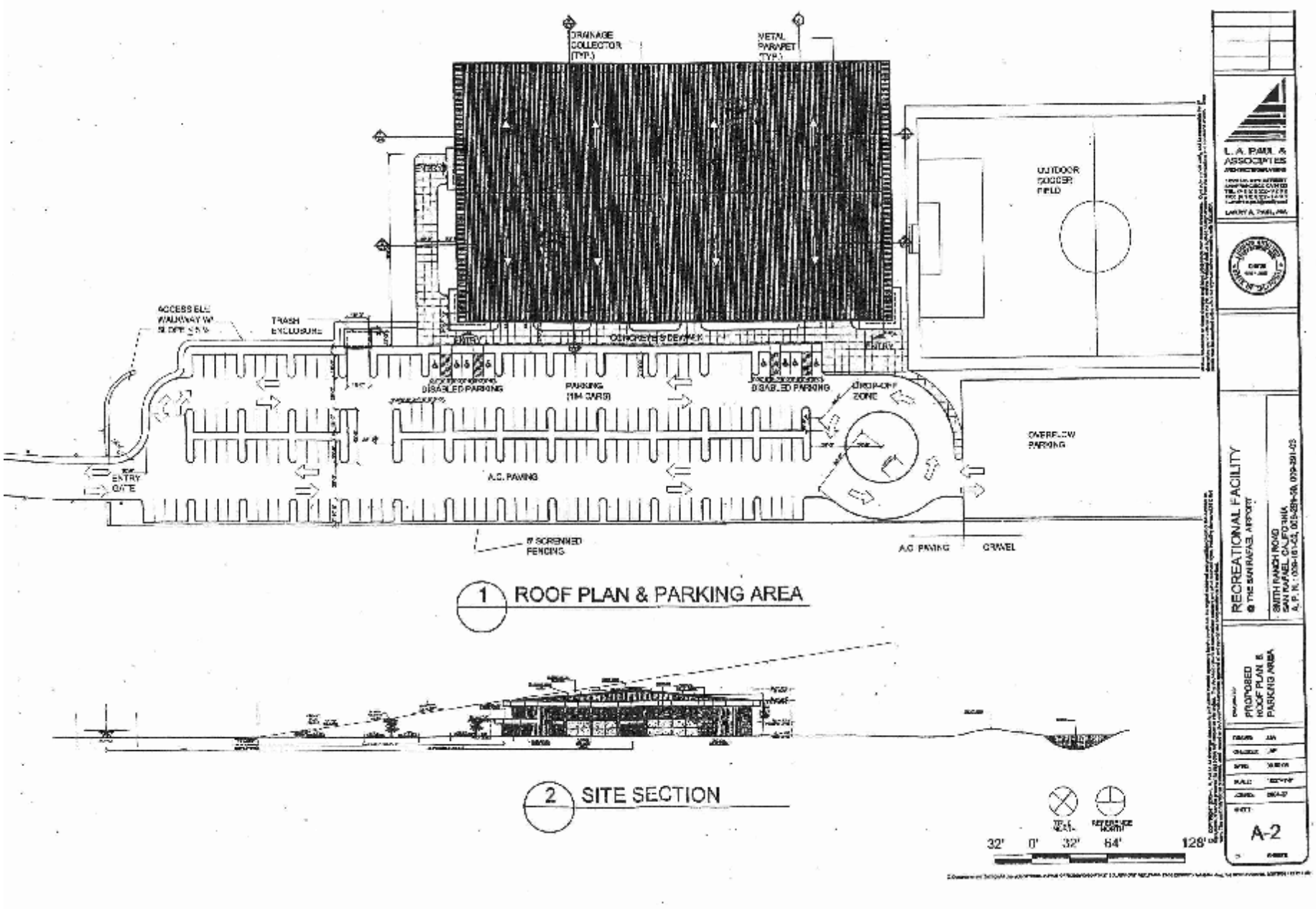
APN 155-230-16

N

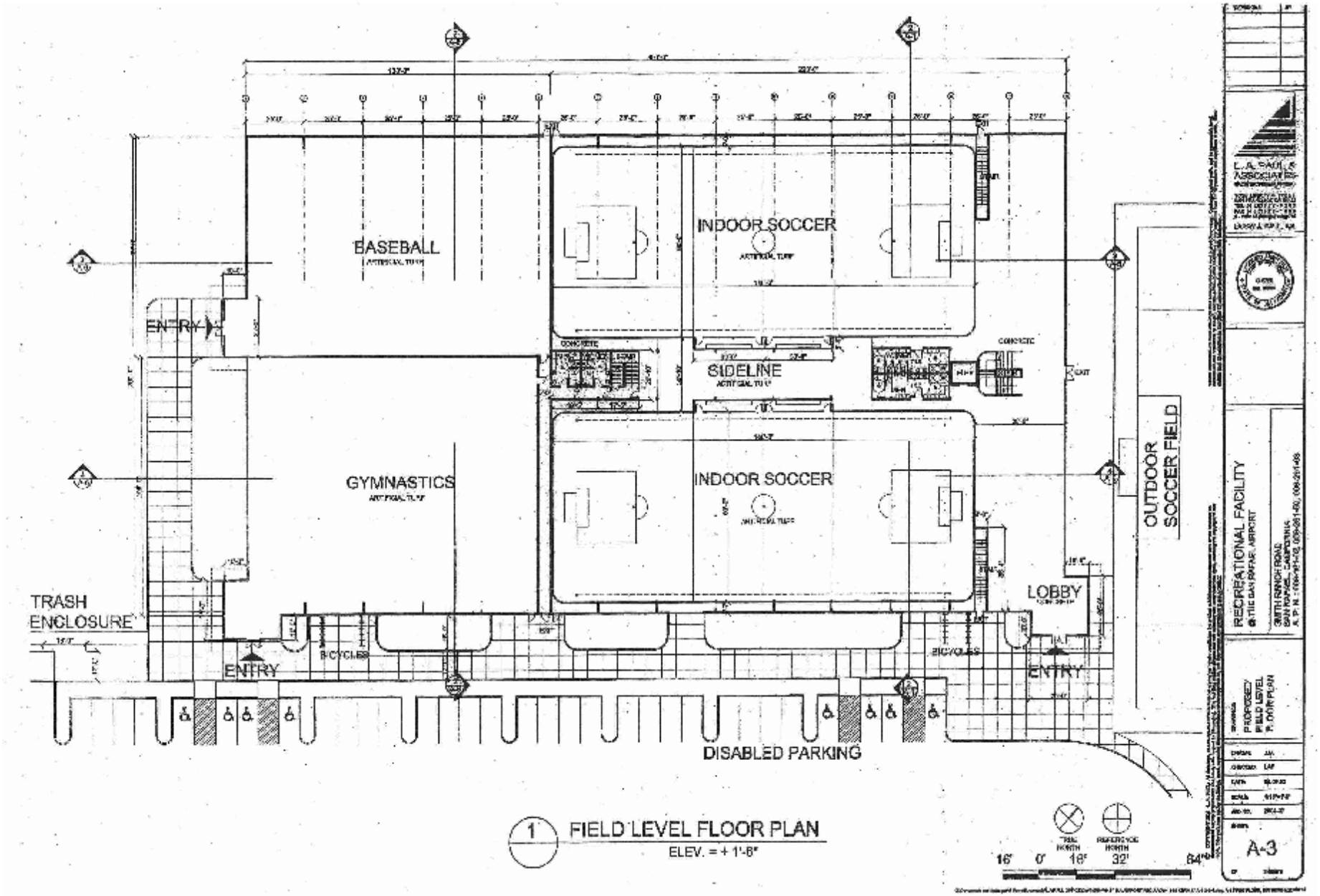
PROJECT PLANS - SITE PLAN



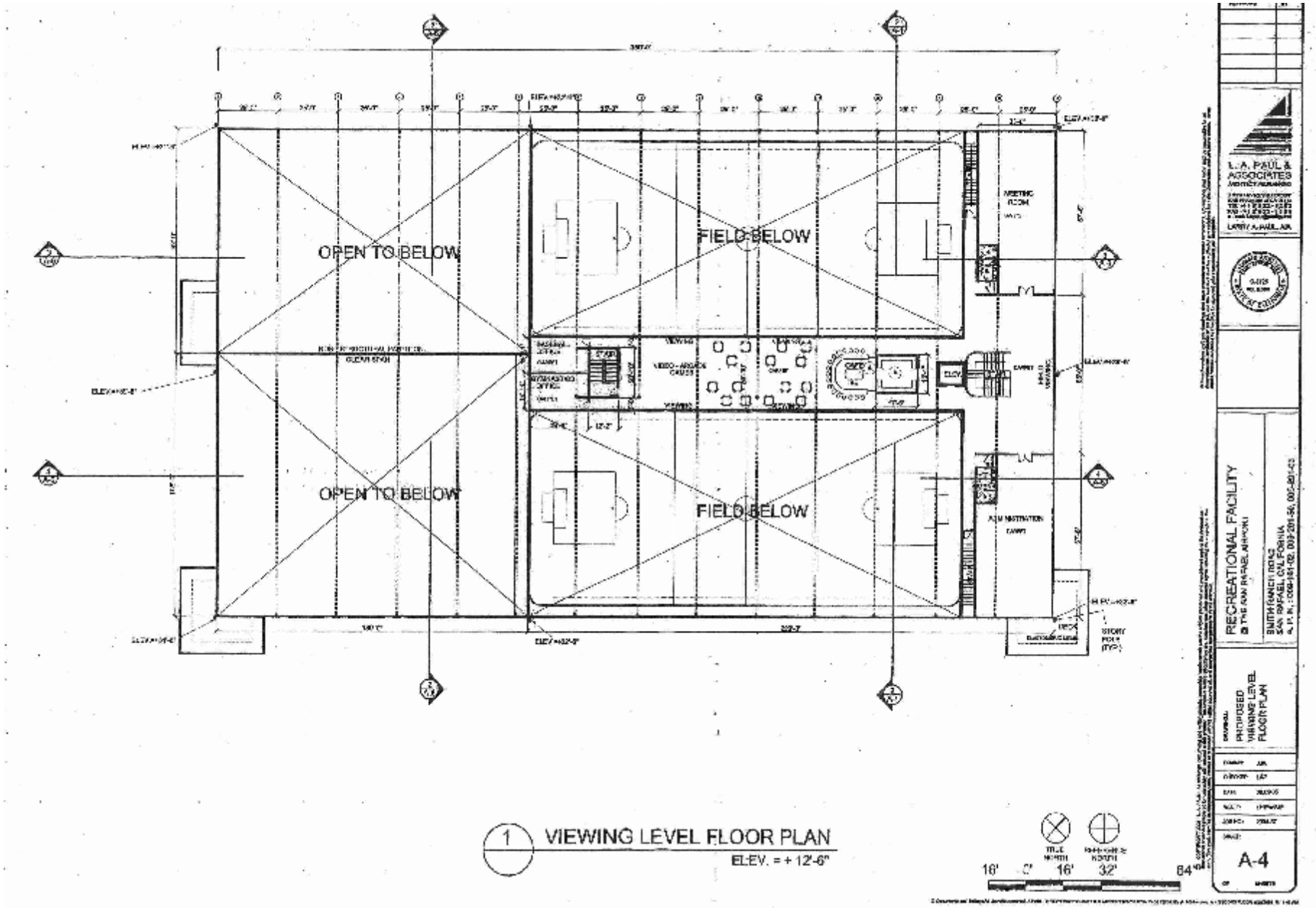
PROJECT PLANS - ROOF PLAN AND PARKING PLAN



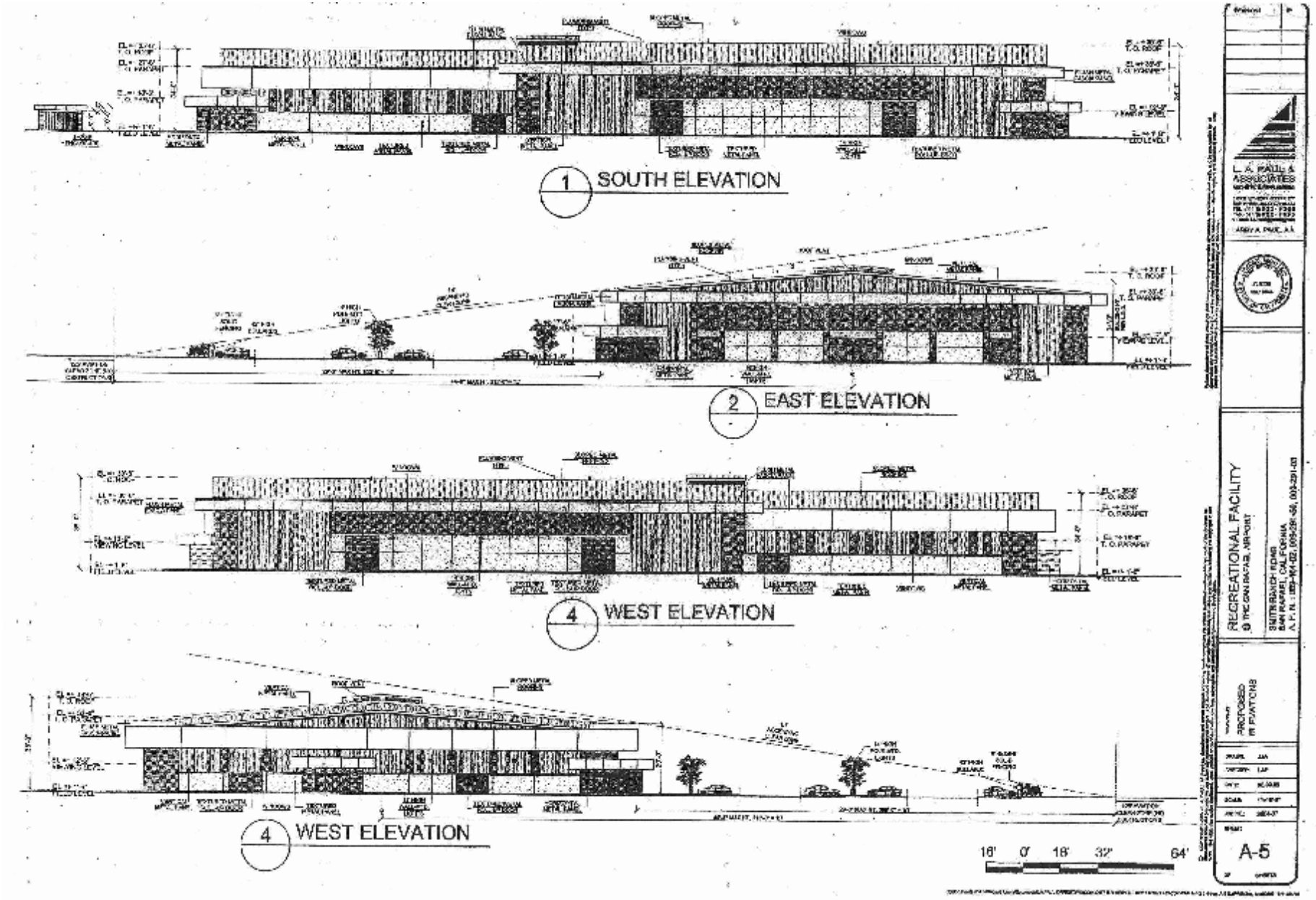
PROJECT PLANS - FIELD LEVEL FLOOR PLAN



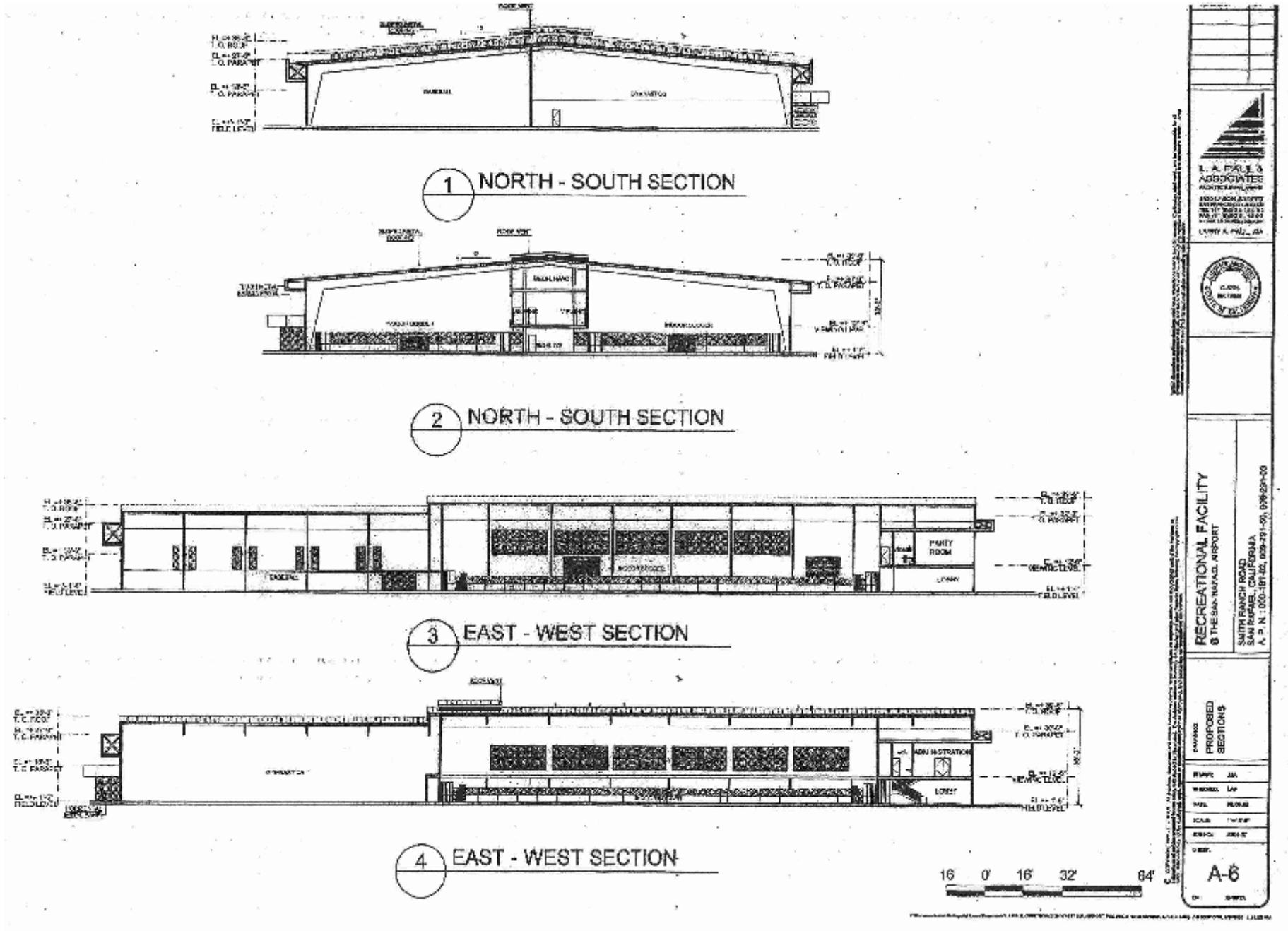
PROJECT PLANS – VIEWING LEVEL FLOOR PLAN



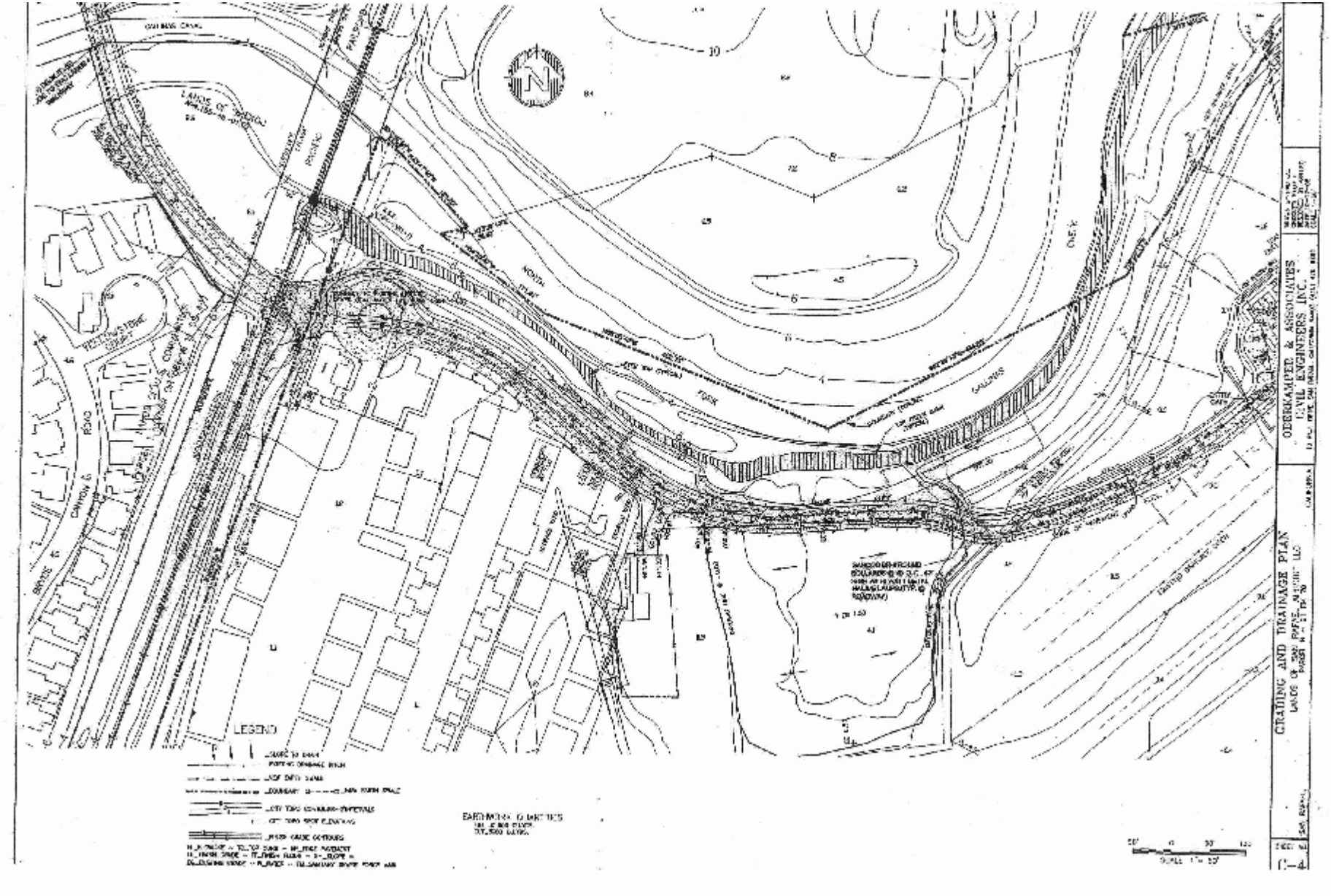
PROJECT PLANS – ELEVATIONS



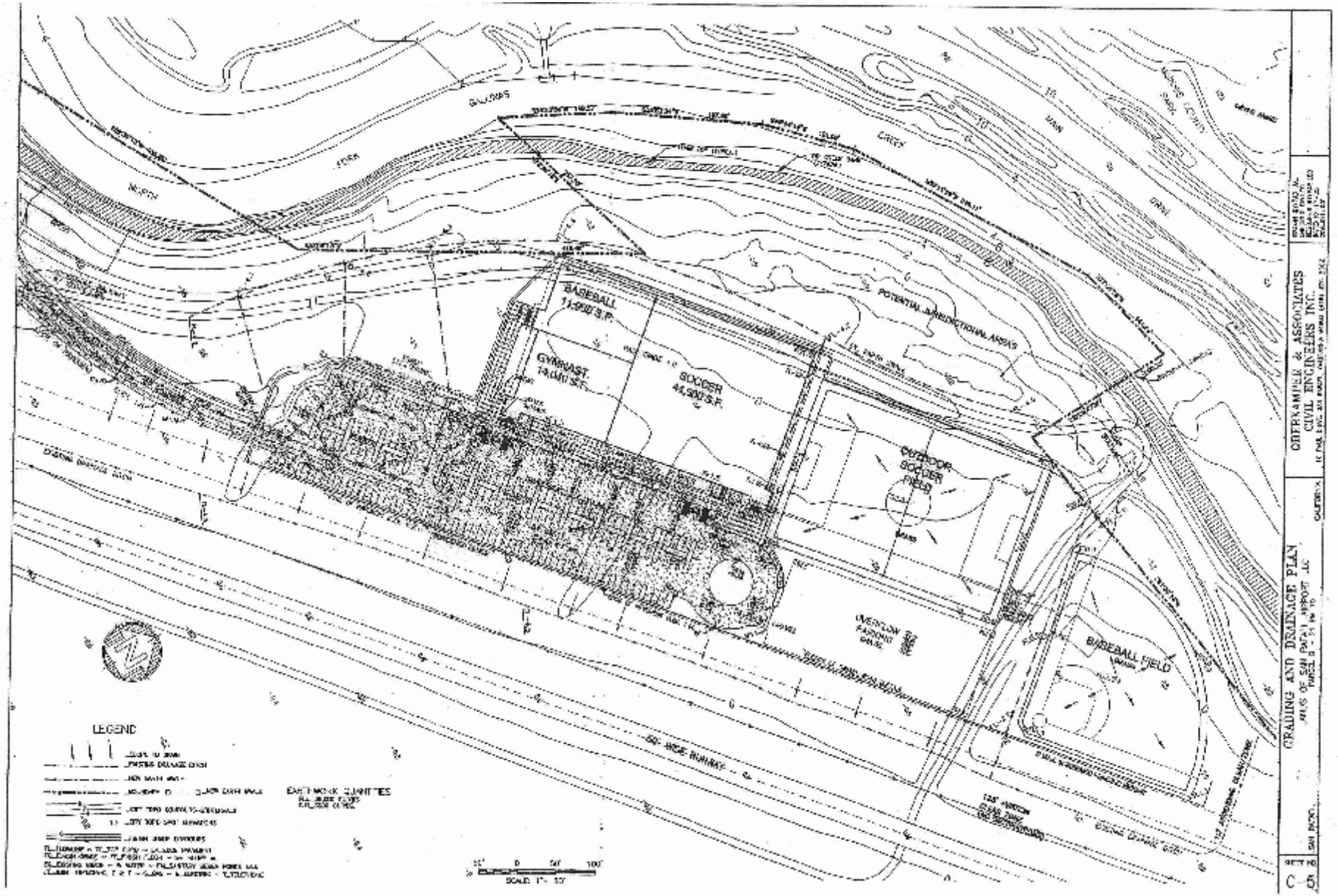
PROJECT PLANS – ELEVATIONS (CONT'D)



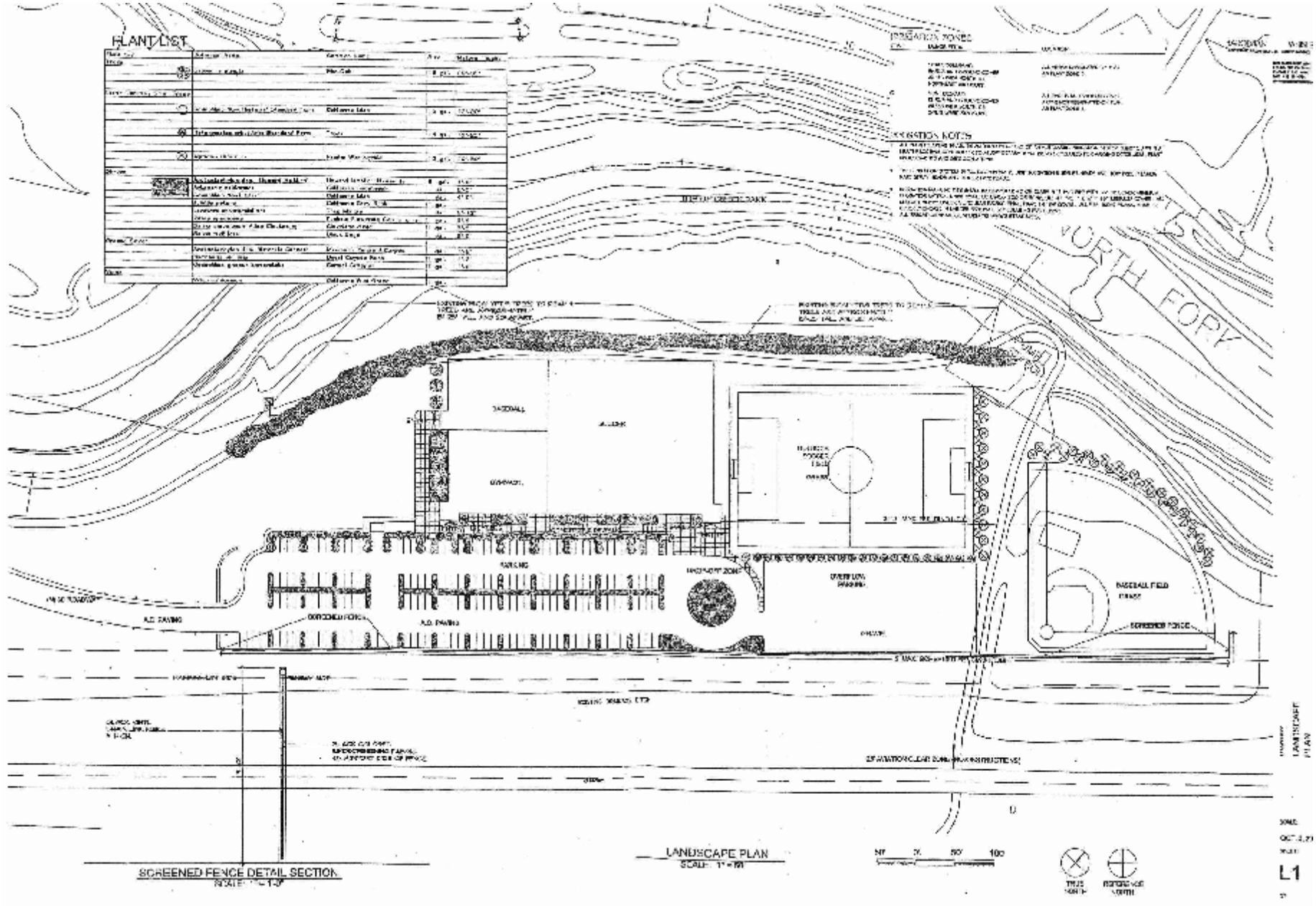
PROJECT PLANS – GRADING AND DRAINAGE PLAN



PROJECT PLANS – GRADING AND DRAINAGE PLAN (CONT'D)



PROJECT PLANS – LANDSCAPING PLAN



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Finding of Significance	

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated" impact on the environment, but at lest one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an EARLIER EIR or NEGATIVE DECLARATION pursuant to applicable legal standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: _____ Date: January 26, 2006

Raffi Boloyan
CITY OF SAN RAFAEL
Senior Planner

EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
I. AESTHETICS				
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Existing Conditions:

For a map of the following discussion, please see the "Vicinity Map/Map of Key Features" on page 22.

Visual Character of the Project Site:
The project site is located in a flat portion of a valley that is surrounded by hills and ridgelines to the north, south and west sides. Mt. Tamalpais, the highest peak in Marin County, is located to the southwest of the site and can be viewed from various points on this site and from sites to the north and west of the project site. Additionally, there are views of portions of the Marin County Civic Center from portions of the site and from the McInnis County Park located to the north and east. The project site is a portion of the 119.5 acres of land known as the San Rafael Airport. On the entire airport site, approximately 650,500 square feet, or 12%, is currently developed with structures and site improvements, including 100 single-story metal hangers, various light-industrial/commercial structures, fencing, a paved runway and taxi area, two residential structures, paved and unpaved roadways, unpaved runway-taxiway clear zones and native and non-native landscaping.

The airport site is bordered by the North Fork of the Gallinas Creek to the north and the South Fork of the Gallinas Creek to the south. The border with the creeks includes over 12,000 linear feet of a maintained perimeter levee system that extends from the southwest corner of the site along the southern perimeter, then wrapping back to the west along the northern border of the site. The land within the levees exhibits an elevation of approximately 0- to 3-foot above mean sea level and the levees that border the site extend to 9 feet above mean sea level. Eucalyptus trees that range between 10 and 25 feet in height are currently planted along side much of the levee system along the northern and southern sides of the airport site. There are no State-designated scenic highways on this site or in the surrounding area.

Visual Character of the Project Site's Surroundings:
North - Across Gallinas Creek, the site is bordered by McInnis Park, a regional park operated by Marin County. This park contains numerous outdoor sports fields, buildings and structures. A majority of the park is located at a higher elevation than the airport site, ranging from 0 feet along the North Fork of the Gallinas Creek and extending to approximately 60 feet at the rear of the miniature golf course. The Park contains a softball field to the northwest that includes 70 to 80-foot tall light standards, a miniature golf course to the north, a golf course to the north and east of the site that includes a club house peaking at 27.5 feet tall, a two-story, 16-foot tall structure containing the tee boxes and 40 to 60-foot tall fencing on the south side of the driving range. There is a public trail system maintained by the County that begins at the parking lot of the golf course and parallels the North Fork of the Gallinas Creek and eventually leads the San Francisco Bay to the east. Further north from the park there is a ridgeline that runs from west to east and peaks at approximately 150 feet elevation. To the northwest of the airport site, there is another ridgeline that runs from Highway 101 to Silvera Parkway and peaks at approximately 190 feet elevation.

South - Across the Gallinas Creek to the south, the site is bordered by the residential communities of Santa Venetia and Northbridge (both area located in unincorporated Marin County), Marin Lagoon and commercial/office development (Embassy Suites and Autodesk office buildings). The closest portion of the residential communities to the south would approximately range from 1,300 feet to 1,900 feet from the edge of the proposed project. Many of the commercial and office buildings in this area are multiple stories and reach or exceed 36 feet in height. Vendola Drive is a public street that parallels the South Fork of the Gallinas Creek in Santa Venetia and primarily hosts single-family residential structures. The entire northern edge of Vendola Drive is developed with primarily one-story residential structures. Further south from the Santa Venetia neighborhood, there is a ridgeline that runs from west to east and peaks at approximately 1,000 feet of elevation. Mt. Tamalpais is the highest point in Marin County and is located approximately 9 miles to the southwest

West - There is a mixture of residential developments (Contempo Marin and Captains Cove,) and office/commercial development (Smith Ranch Office Park, Regency Theater and Northgate Industrial Park). The Marin County Civic Center is also located approximately 1.4 miles southwest of the subject site. The Captain's Cove neighborhood is a medium density neighborhood that is developed with two story residences. Contempo Marin is a medium density mobile home park that is developed with single story structures. The office/commercial development in this area includes a wide range of multistory structures, with many of those reaching or exceeding 36 feet in height. About one mile to the southwest, there is a hillside that peaks at approximately 300 feet of elevation. Professional Center Parkway, Channing Way and Sterling Way are public streets that are located on this hillside and ridgeline and provide access to the existing multi-family residential development and church that are located along this ridgeline. Many of these structures are two to three stories in height and are built on top of the ridgeline.

View from the Public Park and Open Space:
Portions of the County Park, golf course and trail system afford views of the Marin County Civic Center and Mt. Tamalpais and the hills and ridgelines surrounding this valley. The primary views from the County Park are to the south and the hills behind Santa Venetia and to the southwest to Mt. Tamalpais. The Park also hosts easterly views toward the San Francisco Bay and southerly views to the hills south of Santa Venetia. There is a trail along the North Fork of the Gallinas Creek that parallels the creek until the confluence of the North and South Forks of Gallinas Creek. From that point, there are a series of other trails that lead to the east and north toward the San Francisco Bay and surrounding wetlands. Of this trail system, approximately 10,500 feet, or 2.1 miles, affords views of the entire Las Gallinas Valley, including Marin Civic Center and Mt. Tamalpais. Additionally, the County Park includes a boat launch from which the public can navigate towards the Bay. Some of the airport property is shielded from view from the park and the creek itself through existing 9-foot tall levees bordering the airport property and Eucalyptus trees that are planted along the northern levee.

Views form Surrounding Areas:
The primary view of homes in Santa Venetia is across the South Fork of the Gallinas Creek and San Rafael Airport property towards McInnis Park and the hills north of Smith Ranch Road. The primary view of the Contempo Marin and Captain's Cove residential developments is to the south and southwest, toward the hills behind Santa Venetia, the Marin Civic Center and Mt. Tamalpais. Given their location and existing vegetation in the area, these neighborhoods do not have direct views toward the Bay to the east.

Environmental Analysis

Thresholds of Significance:
The following thresholds of significance are based on Appendix G of the CEQA Guidelines and were utilized to assess the potential visual impacts of this proposed project. For the purposes of this analysis, an aesthetic impact resulting from this project could be considered significant if it would.

I.a Have a substantial adverse effect on a scenic vista
I.b Substantially damage a scenic resource, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway
I.c Substantially degrade the visual character or quality of the site and its surroundings
I.d Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Analysis of the project's impacts on these thresholds of significance is provided in the applicable section of the Initial Study, Sections I.a to I.d.

In addition to the thresholds of significant established by CEQA, the City of San Rafael General Plan 2020 contains a Community Design Element which identifies the City's polices relating to design and aesthetics. In this element, the following policy establishes a threshold of significant for evaluating views and aesthetics.

> *Community Design Policy C-5, states "Respect and enhance to the greatest extent possible, views of the Bay and its islands, Bay wetlands, St. Raphael's church bell tower, Canalfront, marinas, Mt. Tamalpais, Marin Civic Center and hills and ridgelines from public streets, parks and publicly accessible pathways."*

Methodology:
The potential visual impacts of the proposed new recreational facility on a portion of the San Rafael Airport were assessed through a comprehensive analysis of both existing and anticipated future conditions. The analysis considered the existing setting of the project site and its surrounding area, the existing visual character of the proposed project site, the nature and makeup of present views toward the site from surrounding areas, how the site's visual character and present views would be affected by the proposed project and how the changes compare to the specific criteria that have been established for determining visual impacts (thresholds of significance above).

Private views, or those views that are from private property, are not protected resources under CEQA. Neither the San Rafael General Plan 2020 nor the City's Municipal Code contain any policies or ordinances that protect or preserve views from private vantage points. All view related polices of the City of San Rafael relate to public views. However, for the purposes of this assessment, the City has evaluated impacts to private views as part of this Initial Study.

The study began with field visits to the project site and the surrounding areas. An inventory of existing conditions, viewing opportunities, and use landscape character, and scenic quality was developed. Site photographs were taken to establish a baseline and provide reference for analysis.

An important component of the visual analysis of the proposed project involved depicting the proposed project through photo simulations. Furthermore, story poles of the proposed project were erected to visually represent the height, mass and location of the proposed structure and to help staff identify the number and location of the photo simulations. The photo simulations show what the proposed project would look like in views from various points

surrounding the project site. Most of the visual simulations were prepared from public viewpoints, however some private viewpoints were also utilized. Ultimately, six photo simulations were used, four from public view points and two from private viewpoints.

The photo simulations were prepared by eStudioDat for the project applicant and reviewed by City staff and the City's Design Review Board. The six photo simulations, each including existing and proposed conditions, and a key to the locations of the photo simulations are attached as Exhibit 1 of this Initial Study. A "Vicinity Map/Location of Key Features" illustrates the location of the features discussed in this section and has been included in this Initial Study on page 22.

Analysis:
The development of this site would have a less-than-significant effect on a scenic vista. The Community Design Map in General Plan 2020 (Exhibit 17) illustrates the community design elements for the City of San Rafael. There are no gateways, historically or architecturally significant buildings or areas, transportation corridors or visually significant hillside, ridges or landforms located on this site. The Community Design Map does illustrate that some areas surrounding the site contain creeks and streams (to the north, south, and east), visually significant hillsides, ridges, and landforms (to the southwest, and northwest) and a historically and architecturally significant building and areas (Marin Civic Center) (to the southwest).

As mentioned above, the Community Design Element policy CD-5 states that to the greatest extent possible, views of the Bay, Bay wetlands, Mt. Tamalpais, Marin Civic Center and hills and ridgelines from public streets, or publicly accessible pathways should be respected and enhanced. Although there are no specific scenic vistas identified by the Community Design Map of the General Plan on or around this site, the views of the surrounding hills and ridges, including Mt. Tamalpais, as well as the Marin Civic Center, which are beyond this site, may be considered a scenic vista and therefore have been analyzed below. Of these, the predominant view that could be considered a scenic vista is from McInnis Park located to the north that is directed towards the natural environment in the Las Gallinas Creek Valley and the hills and ridgelines to the south above Santa Venetia. Furthermore, the southwestern view from the County Park toward the Marin Civic Center and Mt. Tamalpais are public views that could be considered as a scenic vista since the Civic Center is considered a historically and architecturally significant building and Mt. Tamalpais is the tallest peak in the County. In analyzing this policy, it has to be read in context of all policies contained in the General Plan. General Plan 2020 assumes certain development that would occur by build-out in the year 2020 and this development would by its nature pose some impact to views. Therefore, this policy is not intended to preclude all development that would have some impact on a view of the listed sites, but rather as a tool to evaluate the significance of the impact.

Public Views #1 and 2
The first two public views analyzed are two views from the parking lot at the McInnis Park clubhouse. The first, Public View #1, is located at the entrance to the levee trail system, approximately 375 feet from the proposed structure and the second, Public View #2, is from the middle of the parking lot at the McInnis Park clubhouse approximately 550 feet from the proposed structure.

The project site is at a lower elevation than the surrounding County Park and is bordered by a levee that is at +9 feet elevation above mean sea level. With the 9-foot tall levee that exists to the rear of the proposed new building, the lower 9 feet of the proposed structure (33.5 feet tall as defined by the Uniform Building Code or 38 feet tall to the top of the roof) would not be visible from off-site. Furthermore, the rear of the proposed building would be approximately 350 feet from the closest portion of the public trail at the County Park. Given the amount of separation from the new building to the closest public area to the north and the distance and height of the hills and ridges to the south, the proposed building would affect only a small portion of the scenic vista to the south. As illustrated on the photo simulations s prepared for the project, the new building would block approximately the

bottom 1/3 of the view of the hills to the south and this is considered a less-than-significant impact. Furthermore, as illustrated by site visits and photo simulations s prepared for this project, the proposed green, tan and brown colors, in combination with the existing Eucalyptus trees alongside the levees, would allow the new building to blend into the hillside, not stand out or create contrast to the hillside backdrop and would neither break the ridgeline or skyline of the hills to the south and west.

With respect to the views of the Civic Center, the proposed project would not impact any of the limited views from these locations given that the Civic Center is situated to the southwest of the proposed structure and would be out of the line of site. Furthermore, these views of the Civic Center from this vantage point are already extremely limited due to existing vegetation on the McInnis Park site and on other properties, off the airport site, to the southwest.

Public View #3 and 4

As previously mentioned, a portion of the levee trail system along the North Fork of the Gallinas Creek also hosts a southwesterly view from which the Marin Civic Center and Mt. Tamalpais can be seen. The two photo simulations to illustrate these views were taken from two different points along the levee trail. The first, Public View #3, was taken from the levee trail approximately 720 feet east of the trailhead and directly north of the pump house on the airport property. The second, Public View #4, was taken further east along the levee trail at the creek bend, approximately 2,000 feet east of the trailhead and just north of the confluence of the North and South Forks of the Gallinas Creeks.

As designed, the project would not impact any existing views of Mt. Tamalpais from any off-site public vantage point. There is a 600-foot portion of the levee trail system that provides public views of the Marin County Civic Center (Public View #3) that would be affected by the proposed project. The majority of these existing views of the Civic Center along this 600-foot stretch are already mostly blocked by the existing 15- to 25-foot tall Eucalyptus trees (that would grow to 50-100 feet at maturity) that are planted on the north side of the project site as well as other development further southwest of the site, leaving only the top or small portions of the Civic Center buildings and steeple visible from the trail. As documented in the photo simulations and verified by field observations of erected story poles, the proposed new structure would only impact an very small amount of the existing views. Furthermore, this 600-foot section is a small portion of the existing levee trail which encompasses approximately 10,500 feet, or 2.1 miles, of trails with views of the Civic Center and Mt. Tamalpais. There would still be ample opportunities for views of the Civic Center from the remaining miles of the public trail system. Considering the amount of the view of the Civic Center that is already blocked or will become blocked by existing tree growth, the amount of new impact by the addition of the proposed structure, and the small portion of the overall public trail system which is impacted, a less-than-significant impact would occur.

With respect to Public View #4, the proposed structure would neither break nor silhouette the ridgeline to the south on which Professional Center Parkway and Channing Way are located. Furthermore, the proposed new structure would only block the lower ¼ of this hillside. Additionally, the design of the project includes colors, materials and landscaping that would effectively blend the structure in with its background. The project proposes to plant trees along the eastern edge of the building and the outdoor fields. These new trees would be located in front of the structure, and thereby screen a majority of the new building from this vantage point. With the addition of the trees, the primary view from this vantage point would be of trees, rather than the building. Lastly, from this vantage point, the structure would neither impede nor block any views of the Civic Center given that the Civic Center is located to the south of the proposed building. Therefore, impacts to this view are considered less-than-significant.

Private Views #1 and 2

Although the City does not have any policies or regulations relating to private views, the City has evaluated impacts to private views as part of this Initial Study. The primary private view that is applicable to this project is the northerly view towards McInnis Park and the hillside and ridgelines behind the park from the residential neighborhood to the south (Santa Venetia). Two photo simulations were prepared to illustrate the project's impacts on these views. The first, Private View #1, is from the backyard of a private residence at 501 Vendola Drive and the second, Private View #2, is from the second floor of a residence at 825 Vendola Drive. In regard to these views, the proposed project would not break or silhouette any of the hillside or ridgelines that are to the north, behind McInnis Park. Furthermore, the new building would block less than the bottom 1/3 of the view of the hills to the north. Additionally, the proposed building colors, which are green, tan and brown, would effectively blend in with the predominant colors in the natural setting that surround the new structure and minimize the visibility of the structure. Furthermore, the building would be situated within an area of the site where the existing levees and Eucalyptus trees would screen much of the view of the new structure. The project has included a proposal to add additional Eucalyptus trees along the southern levee to complete any gaps in the trees that currently exist. This would further shield the building from views from the south. The City's Design Review Board (DRB), in their review of the project, found that additional trees along the southern perimeter were necessary to further screen the proposed building and they recommended that native, fast growing trees be used rather than Eucalyptus trees. If the project is approved, this would be required as a condition of approval. Given this discussion, impacts to these two private views are considered less-than-significant.

City of San Rafael Design Review Board

The City of San Rafael Design Review Board (DRB) has reviewed the design of the proposed recreational facility on two occasions. On July 19, 2005, the DRB reviewed the proposed new recreational facility, accepting the staff report and presentation by staff and accepting public testimony on the design-related matters. At the conclusion of this meeting, the Board continued the item to allow the applicant to consider the comments made by the public and prepare photo simulations from McInnis Park and Vendola Drive. The project applicant had erected story poles prior to the DRB's meeting to illustrate the proposed height and mass of the structure. However, the Board determined that photo simulations from various public vantage points were necessary to better understand and evaluate the potential visual impacts of the project. On November 8, 2005, the project returned to the DRB for a second review and the Board recommended approval of the project design to the Planning Commission and City Council. The Board reviewed the proposed project and the photo simulations and recommended that the architecture was well designed and appropriate for the site. They found the building massing, scale and colors appropriate for the site and that the proposed design would effectively integrate with the surrounding natural environment. In terms of the project's potential impact to views on the surrounding areas (Mt. Tamalpais, Civic Center, and hillside and ridgelines) from the public vantage points, the Board felt that the building was of a low-profile design that would not block any view of Mt. Tamalpais and not alter the aesthetics of the ridgeline or silhouette any ridgelines given that the project would only block a small portion (lower one-third) of the hills to the south. Furthermore, the majority of the Board found that although the proposed structure may block some portions of views of the Civic Center from a 600-foot portion of the County trail along the creek, this view was already compromised by existing vegetation and only represents a small portion of views of the 2.1 miles of public trails and vantage points with view of the Marin Civic Center. As part of their recommendation for approval, the Board identified a few components of the project for which they wanted to have a follow-up review. The Board wished to further review the architectural details of the proposed new bridge deck, landscaping around the building, and more detailed architectural plans of the building, a final lighting plan, and final drainage plan. They also recommended that: a) a perpetual maintenance agreement be required for on-going maintenance of the property; b) the overflow parking lot be paved and not remain as a gravel surface as currently proposed; c) more fast growing native trees be used to fill in gaps of the Eucalyptus screening tress along the southern and northern perimeter of the site (near the levees); and d) color scheme for the building be muted slightly to reduce any

potential reflectivity. The DRB recommendations for final a review would be included as a condition of approval should this project be approved.

In summary, this project would have a less-than-significant effect on a scenic vista given that the proposed project would: a) neither break nor silhouette any ridgelines, including Mt. Tamalpais; b) be partially screened from off-site view by the existing 9-foot tall levees and perimeter landscaping; c) only affect views of the Marin County Civic Center from a 600-foot section of the public trail system to the north and this 600-foot section is a small segment of the 2.1 mile trail system with views of the Marin Civic Center; and d) would add a small amount of new view blockage to views of the Civic Center from the 600-foot section of trail given that this view is already partially blocked by existing vegetation on the project site, airport site and off-site on other properties to the west.

(Sources: 1, 2, 3, 4, 5, 6, 9, 10, and 14)

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐

Discussion:
The project site is not identified as a scenic resource by the San Rafael General Plan 2020 and does not include, nor is surrounded by any scenic resources such as rock outcroppings, trees, or a state scenic highway. As previously mentioned, the City of San Rafael General Plan 2020 includes a policy that states "Respect and enhance to the greatest extent possible, view of the Bay and its islands, Bay wetlands, St. Raphael's church bell tower, Canalfront, marinas, Mt. Tamalpais, Marin Civic Center and hills and ridgelines from public streets, parks and publicly accessible pathways." The natural ridgelines that are situated south and west of the site as well as the Marin Civic Center and Mt. Tamalpais to the southwest may be considered scenic resources and therefore have been evaluated.

Refer to Section I.a for further discussion on the setting and analysis. The proposed structure would not significantly impact any significant resource in the area given that: a) the building is set below the existing levee which lowers the effective building height viewed from the north and south by 9 feet; b) the proposed building, given its distance and separation from public vantage points to the north and the lower elevation of the site, would not block more than the bottom 1/3 of the hillside setting to the south and would neither break ridgeline of any hills or the skyline, nor impact any portion of views of Mt. Tamalpais; c) the building colors proposed would blend with the colors of the natural hillside backdrop; d) the existing Eucalyptus trees along the north and south side of the proposed building would screen a majority of the structure, effectively eliminating any contrast and reducing its mass and bulk; e) the publicly accessible levee trail system to the north contains many miles of trails with views of the Civic Center and Mt. Tamalpais and this building would only partially impact a 600-foot section of that trail and of that 600 feet, a majority already hosts trees that reduce and impact the views of the Civic Center; f) the 600-foot section of trail represents a small portion of the overall public trail system at the County Park and even with the addition of the proposed structure, many miles of views of the Civic Center would remain; g) the distance of the proposed project site from public vantage points result in long distance view of the surrounding hillsides and ridgelines, including Mt Tam; and h) the City's Design Review Board has reviewed the proposed structure and its design and found the project to be consistent with the design policies contained in the San Rafael General Plan 2020. Based on the analysis above, a less-than-significant impact would occur.

(Sources: 1, 2, 3, 4, 5, 6, 9, 10, and 14)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

Discussion:
Refer to Setting section in Items I.a above and Discussion sections in Items I.a and I.b above. The City of San Rafael Design Review Board has reviewed the design of the proposed recreational facility on two occasions and found that the architecture would be consistent with City's design criteria. The Board reviewed the proposed design in context with the subject site as well existing visual character of the surroundings and determined that the proposed structure would integrate well with the surrounding environment and is designed in such a manner to minimize its visibility from off-site. The project site is surrounded by a regional park that includes numerous structures, tall fencing for the driving range and large light standards for the golf course and softball fields. Furthermore, the project site is surrounded by development on the west, north and south and when this project is viewed in context with the surrounding development, it would not degrade the visual character of the surrounding area. The existing development on the airport site includes metal airport hangers and light industrial buildings that are fairly utilitarian in their architectural design. This new building would be an improvement over the architectural character of the surrounding buildings. It would provide a new structure with a variety of materials and colors and ample articulation and interest in the building elevations. The DRB recommended that the proposed structure is well designed and an improvement to the architectural character of other structures in the area. The Board also found that colors proposed for the building would blend with the predominantly green, brown and tan colors that are found on the hillsides that serve as a southern backdrop to this proposed project. Furthermore, the existing Eucalyptus trees along side the levees to the north and south sides of the airport site provide partial screening of the area and would thereby reduce the visual impact and mass of the proposed structure. The landscape plan would include the planting of additional fast growing trees along the northern and southern perimeter levees to screen the building from off-site view and allow the structure to blend with the natural setting. As illustrated in the photo simulations prepared for the project, the proposed new building would be significantly lower than the hills and ridgeline located to the south of this site and the proposed structure would not silhouette any ridgeline.

When viewed in context with the massing and height of the structures found on the entire airport site, the adjacent County Park and visible commercial areas, a less-than-significant visual impact to the existing visual character or quality of the site or its surroundings would occur.

(Sources: 1, 2, 3, 4, 5, 6, 9, 10, and 14)

d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion:
Refer to Setting section in Item I.a above. The proposed recreational facility building and site improvements would include low-level building mounted lighting and site lighting for the parking lot and driveway leading to the site. No exterior lighting of any sort is proposed for either of the outdoor fields. All lighting would be shielded and would not create a substantial source of light or glare. A photometric study was prepared for the proposed project and demonstrated that the lighting levels would range from 0 foot-candles to 12.2 foot-candles on the site, with an average of 1.84 foot-candles. The photometric study indicates that all proposed lighting would be focused on the building, driveway, and parking lot areas and would not spillover onto adjacent properties or the creek. The existing McInnis County Park to the north contains light standards ranging from 60 –80 feet tall for the driving range and softball field and these facilities operate until 10 or 11 p.m. Furthermore, the

aforementioned light standards at the softball fields and driving range are not completely downshielded and operate at higher lighting levels than that proposed at this site.

Additionally, the proposed materials for the recreational facility include a combination of metal panels and roofing. The proposed metal roof is designed to minimize reflectivity and all windows or glass surfaces would include glare reducing and color harmonizing finishes. The entire building would be painted in earthtone colors that blend with the surrounding natural environment.

Furthermore, the biological assessment prepared for the project and peer reviewed by an independent third-party, found that the proposed lighting would not have an effect on any biological resources in the surrounding area.

The Design Review Board reviewed the proposed lighting plan and found that the lighting levels were appropriate and would be at an acceptable level. The Board recommended approval of the project design to the Planning Commission and City Council. In regard to lighting, the DRB recommended a condition of approval requiring that the final lighting plan return. The Board also determined that the materials and colors proposed are appropriate for the site and would not be reflective or glare producing. However, they recommended that prior to issuance of any building permit, the proposed building materials and colors be looked at to ensure that they are not reflective or glare producing. These requirements would be included as a condition of approval should the project be approved.

In conclusion, the proposed project would not create a new source of substantial light and glare given: a) the low level of site and building lighting; b) the use of glare and reflectivity reducing building materials; and c) the high existing light levels in the surrounding area. Impacts would be less-than-significant.

(Sources: 1, 2, 3, 4, 5, 6, 9, 10, 14, 17 and 20)

II. AGRICULTURE

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

Discussion:
Both Marin County and the City of San Rafael have permitted the airport use on this site since 1969. Agricultural activity on-site has been limited to sheep grazing, which has been primarily implemented as a means of weed abatement. However, no portion of the site is actively farmed. Because the proposed project would not result in the conversion of farmland or land that is presently in agricultural use, no impact would result.

(Sources: 1, 2, 4, 5, 7 and 9)

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Discussion:
The proposed project would be constructed on a site that for decades has been predominantly used as an airport with ancillary non-aviation commercial uses. No farming or agricultural uses have ever occurred on this site for over 40 years, and as such the proposed project would not convert prime or unique farmland or farmland of statewide importance to non-agricultural uses. Over the years, there has been some grazing by sheep that has occurred on this site. Grazing has not been conducted in numerous years, and when it has occurred, it has been for weed abatement purposes. Grazing is a use that is allowed by the Master Use Permit for the property and this project does not propose to modify the allowance for grazing. Regardless, grazing for weed abatement purposes is not considered an agricultural use. Likewise, the site is not presently encumbered by an agricultural (Williamson Act) contract. Therefore, no impact would result.

(Sources: 1, 2, 4, 5, 7 and 9)

c. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Discussion:
Refer to the discussion of Checklist Items II.a. and II.b., above. Neither the subject property nor surrounding properties are farmland. Therefore, development of this project would not involve changes that could result in conversion of farmland to a non-agricultural use. No impacts would result.

(Sources: 1, 2, 4, 5, 7 and 9)

III. AIR QUALITY

Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Discussion:
The Bay Area Air Quality Management District (BAAQMD) is the regional agency responsible for overseeing compliance with State and Federal laws, regulations, and programs within the San Francisco Bay Area Air Basin. The BAAQMD has prepared and /or implements specific plans to meet the applicable laws, regulations, and programs, including Bay Area Clean Air Plan (2000) and the Ozone Attainment Plan (2001). The BAAQMD has also developed California Environmental Quality Act (CEQA) Guidelines to assist lead agencies in evaluating the significance of air quality impacts.

In formulating its compliance strategies, the BAAQMD relies on planned land uses established by local general plans. Projects proposed in jurisdictions with general plans that are consistent with the BAAQMD's Clean Air Plan and projects, which conform to those general plans, would not have significant cumulative impacts.

The project site is a portion of the airport site and the entire property is designated for Airport/Recreation land uses in the City of San Rafael General Plan 2020. The existing airport site is developed with a private airport with 100 hangers and 22,500 square feet of light industrial buildings. The proposed project would add an 85,700-square-foot indoor recreational facility and two outdoor sports fields consistent with the Airport/Recreation land use designation that was used to formulate the air quality projections of the Bay Area Clean Air Plan. The

BAAQMD CEQA Guidelines provides a table (Table 6) that identifies the size or activity levels of various land uses which based on default assumptions would result in mobile source emissions exceeding the District's threshold of significance for total emissions. Although this table does not identify a specific land use that matches the proposed recreational land use, the BAAQMD CEQA Guidelines state that projects generating more than 2,000 vehicle trips per day could generate potentially significant emissions and must undergo detailed air quality analysis. According to the traffic study prepared for this project, the proposed recreational project would generate 948 daily trips, and is therefore well below the threshold of significance for total emissions. Therefore, the proposed project would not conflict with the applicable Clean Air Plan and would result in a less-than-significant impact.

In terms of cumulative impacts, since this project is consistent with the San Rafael General Plan 2020, the development of the proposed recreational facility would not have a significant cumulative impact and no further analysis regarding cumulative impacts is necessary. Therefore, a less-than-significant impact would occur.

(Sources: 1, 2, 4, 9, 15, 33 and 34)

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐

Setting and Impacts:
The Bay Area is considered a non-attainment zone for ozone under both the Federal Clean Air Act and the California Clean Air Act. The Bay Area is also considered non-attainment for small particulate matter less than ten microns (also known as PM_{10}) under the California Clean Air Act, but not the Federal Clean Air Act. The Bay Area was previously considered a non-attainment area for carbon monoxide, but has attained both the State and Federal standards. As a result, the Bay Area is considered a carbon monoxide maintenance area under the Federal Clean Air Act.

The Bay Area is considered to have attained standards for all other regulated air pollutants (e.g., nitrogen oxide, sulfur dioxide, and lead). Attainment signifies that the region normally does not violate air quality standards. Although ozone and PM_{10} concentrations are almost always below air quality standards in San Rafael, emissions from the area could be contributing to air quality violations in other parts of the Bay Area. To attain and maintain ambient air quality standards, the BAAQMD has established thresholds of significance for air pollutants. These thresholds are for air pollutants, ozone precursors (reactive organic gases and nitrogen oxides), and PM_{10}, for which the BAAQMD has not attained ambient air quality standards. Projects with substantial carbon monoxide emissions or which generate substantial traffic that affect congested intersections must undergo detailed carbon monoxide analysis to predict local concentrations of that air pollutant. These concentrations are compared with applicable State and Federal ambient air quality standards.

In regard to long-term impacts to air quality, the proposed recreational facility does not include a land use that would generate long-term air pollutants or the types of activities or use that would generate any "point source" emissions. Point source emissions include equipment or devices that would create emissions or significant amounts of "area source" emissions which are sources of air pollutants that individually emit relatively small quantities of air pollutants, but which cumulatively may emit large quantities of emissions. The principal source of air pollutant emissions for this type of project would be from motor vehicle trips generated by the project, otherwise known as "indirect sources." The proposed recreational facility is not a common land use to which an Institute of Traffic Engineers trip rate can be assigned; therefore a traffic study was prepared for this project using other similar facilities as a model. The City Traffic Engineer has reviewed the traffic report prepared for the proposed project and accepted the traffic generation estimates. The traffic report identifies that the proposed

project would generate 948 total vehicular trips a day. The BAAQMD CEQA Guidelines includes Table 6 which dictates the size or activity levels for various land uses that would result in mobile source emissions exceeding the District's threshold of significance. Generally, projects which generate less than 2,000 vehicle trips per day are determined to not exceed the threshold of significance for total emissions. The 948 vehicle trips per day estimated for the proposed recreational facility is less than half the number of trips per day identified by the threshold of significance.

Furthermore, traffic generated from the development of this proposed project would neither cause the nearby intersections or roadways to decline to Level of Service D, E or F, nor increase traffic volumes on nearby roadways by more than 10% (Impacts to Level of Service are discussed below in the Section XV – Transportation/Circulation). Lastly, the proposed project is consistent with the Airport/Recreation land use designation and the intensity of development identified for this site in the General Plan 2020 and therefore has been considered in the Bay Area Clean Air Plan. Relative to long-term impacts, as stated above, the proposed project would not generate substantial traffic and therefore would not generate substantial amounts carbon monoxide emissions nor violate air quality standards. Therefore, a less-than-significant impact would occur.

In terms of short-term impacts, construction of the proposed project would involve grading that is expected to entail 35,000 cubic yards of fill and 3,000 cubic yards of cut. Although the grading would be temporary in duration, it can be substantial and can represent a significant impact on air quality, particularly in regards to emissions of PM_{10}. This item in the checklist has been identified as a less-than-significant impact with mitigation incorporation solely because of the anticipated short-term construction impacts associated with the development of this project. The BAAQMD identifies feasible control measures for construction emissions that if incorporated into the project, would reduce the short-term, construction-related, air quality impacts to a less-than-significant level. Therefore, the following mitigation measures are recommended:

Recommended Mitigation Measures:

III.b.1 All active construction areas shall be watered at least twice daily. A water truck or equivalent method shall be in place prior to commencing grading operations.

III.b.2 All trucks hauling soil, sand, and other loose materials shall be covered and maintain at least one foot of freeboard.

III.b3 All unpaved access roads, parking areas and staging areas at construction sites shall be paved, watered three times daily, or applied with non-toxic soil stabilizers.

III.b.4. All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers and adjacent public streets shall be swept if visible soil material is carried onto them. This shall also include Smith Ranch Road (from the entrance to the site west ¼ mile daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

III.b.5 All inactive construction areas (previously graded areas inactive for ten days or more) shall be treated with hydroseed or non-toxic soil stabilizers.

III.b.6 Any exposed stockpiles (dirt, sand, etc.) shall be enclosed, covered and watered twice daily or non-toxic soil binders shall be applied to any exposed stockpiles

III.b.7 All construction traffic on unpaved roads shall be limited to speeds of 15 mph. Prior to the commencement of any grading, appropriate signs shall be placed on site to identify the maximum speed.

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

III.b.8 Excavation and grading activity shall be suspended when wind gusts exceed 25 miles per hour.

III.d.9 Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.

III.b.10 The project sponsor shall inform the contractor, general contractor or site supervisor of these requirements and shall be responsible for informing subcontractors of these requirements and for implementing these measures on the site.

III.b.11 A dust control coordinator shall be designated for the project. The name, address and telephone number of the dust coordinator shall be prominently posted on site, and shall be kept on file at the Planning Division. The coordinator shall respond to dust complaints promptly (within 24 hours) and shall have the authority to take corrective action.

III.b.12 The above requirements shall be noted on the grading plans or building permit plans prepared for the project prior to issuance of any permit.

(Sources: 1, 2, 3, 4, 9, 15, 33 and 34)

c. Result in a cumulatively considerable net increase any criteria pollutant for which the project region is non – attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

Discussion:
See the discussion of Checklist Item III.b (above). The project would conform to the 1997 *Clean Air Plan* (the regional clean air plan). Under the *BAAQMD CEQA Guidelines*, this project is not considered to have a significant cumulative impact on air quality. Project emissions of ozone precursors (ROG and NO_x) and PM_{10} would be less than applicable significance thresholds established by the BAAQMD which define a considerable net increase.

(Sources: 1, 2, 3, 4, 9, 15, 33 and 34)

d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Discussion:
The BAAQMD CEQA Guidelines define sensitive receptors as facilities that house or attract children, the elderly, people with illness or others who are especially sensitive to air pollutants. Such uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics.

Nearby land uses which host sensitive receptors include a skilled nursing facility that is located approximately ¼ mile to the northwest of this site on McInnis Parkway and a regional park that is located approximately 1/8 to ¼ mile to the north of this site on Smith Ranch Road. The proposed recreational facility would not generate substantial pollutant concentrations as discussed above.

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

The project would not involve the demolition of a building or structure, therefore there is no potential for substantial dust emissions of asbestos, lead-based paint and other potentially hazardous building materials to be released or created while a structure is demolished or as debris is loaded into trucks for disposal. Furthermore, the proposed recreational facility would use building materials which are up to current codes and do not contain hazardous materials.

With implementation of mitigation measures identified for Checklist Item III.b above, less-than-significant impacts to sensitive receptors would occur as a result of the project.

(Sources: 1, 2, 4, 5, 9, 10, and 15)

e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:
The BAAQMD CEQA Guidelines list examples of land uses which represent potential sources of objectionable odors, including asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, coffee roasters, composting facilities, painting and coating operations (auto body shops), petroleum refineries, rendering plants, sanitary landfills, transfer stations, and wastewater treatment plants. Screening distances within which these land uses could expose the public to objectionable odors are one mile (two miles for petroleum refineries).

The proposed recreational facility does not include any activities or uses that are known to generate objectionable odors. Project construction could result in dust emissions and other temporary odors during grading and construction that could affect surrounding residential and users of the adjacent McInnis Park. With the mitigation measures identified in III.b above, impact would be less-than-significant level.

(Sources: 1, 2, 4, 5, 9, 10, and 15)

IV. BIOLOGICAL RESOURCES

Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Setting and Impact:
The overall airport site is relatively level, consisting of filled upland, marsh and submerged lands. Upland portions of the airport site are developed with a private airport servicing small airplanes and light industrial uses. The North Fork of Gallinas Creek borders the north property boundary. The airport site is bordered on the east and south by the South Fork of Gallinas Creek. Both the North and South Forks of Gallinas Creek contain potential habitat for two special status species, the salt marsh harvest mouse and the California clapper rail. Portions of the site also contain wetlands potentially subject to jurisdiction of the U. S. Army Corps of Engineers.

The airport facility is developed with 100 airplane hangars, a runway and taxiway, 22,500 square feet of structure for non-aviation related, light industrial uses, two residential structures providing housing for the site caretaker and security personnel and associated site improvements, landscaping and lighting. The area of the proposed development for the indoor and outdoor recreational facility is approximately ¼ mile to the east of the airport hangers and light industrial uses and to the north of the existing runway. The project site is located in a flat, undeveloped area that hosts annual grasslands. The distance of the proposed new structure from the top of bank of the North Fork of the Gallinas Creek would be 150 to 208 feet and the distance of the outdoor fields from the top of bank of the North Fork of the Gallinas Creek would be 118 to 173 feet. As designed, this project would not fill any wetlands or potential wetland areas on either the project site or the overall airport property. Additionally, the proposed project maintains a minimum 50-foot buffer from the nearest wetlands and these wetlands have been identified by the biological assessment and jurisdictional delineation as marginal quality. For further discussion on wetlands, see IV.c below.

The North and South Forks of the Gallinas Creek border the north and south of the entire airport property and then join together approximately one-half mile to the east of the proposed site and continue flowing to the Bay. Although the properties that compose the lands known as the San Rafael Airport are bordered by both forks of the Gallinas Creek, this project is being proposed on a portion of those properties. The actual site of the proposed new recreational facility is located to the north of the existing runway and south of the North Fork of the Gallinas Creek. The City of San Rafael General Plan 2020 Map 38 (*Threatened and Endangered Species*) illustrates the generalized location of rare or endangered species within the City of San Rafael's planning area. According to this map, the California clapper rail and salt marsh harvest mouse may be found in areas around the northern, eastern and southern borders of the airport site, within and along the banks of the South Fork and North Fork of the Gallinas Creeks. These waterways and wetland areas adjacent to these waterways are identified in General Plan 2020 Map #38 to be potential California clapper rail and salt marsh harvest mouse habitat.

In February 2005, Wetland Research Associates (WRA) prepared a biological site assessment for the proposed project (included as part of Exhibit 2). The biological assessment describes the existing plant communities, potential wildlife use on the project site and addresses the potential for sensitive plant, plant communities and wildlife to be present in the area. The assessment concludes that there are no sensitive plant or plant communities on the project site and that a majority of the 39 special status wildlife species recorded within the vicinity are not likely to occur on this site. Of the 39 special status wildlife species, 23 are not likely to be present, 7 have a low potential for occurrence, 7 have a moderate potential for occurrence and 2 have a high potential for occurrence (white-tailed kite and Cooper's hawk). The two species identified to have a high potential for occurrence were observed on and around the site during the site reconnaissance conducted by WRA. Both of these species are protected by the Migratory Bird Treaty Act, which prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. To avoid impacts to nesting birds protected under the Migratory Bird Treaty Act, the report identified a mitigation measure that prior to any tree removal or ground disturbing activities during the nesting season (March to August), a pre-construction survey be conducted on the site and within 250 feet of the study area. This mitigation measure has been included in the recommended mitigation measure section below. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities will be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.

Given that the City's General Plan illustrates that the California clapper rail and salt marsh harvest mouse occur in the general vicinity, WRA prepared a follow-up evaluation of the potential effects of the proposed project on the California clapper rail and salt marsh harvest mouse and these findings are documented in a letter-report prepared by WRA and dated October 10, 2005 (included as part of Exhibit 2). WRA concluded that the creek and wetland areas on both sides of the creeks to the north and south of the airport site do not contain prime habitat for either

the California clapper rail or salt marsh harvest mouse. This is due to the lack of appropriate habitat at this location in Gallinas Creek (habitat size and plant type), distance from areas that are prime habitat, and existing disturbance from noise generated by the San Rafael Airport and impacts from the fields and lights and users of the County Park that is developed right up to the edge of this portion of the creek. It is expected that the clapper rail may occasionally forage or pass through these areas, however, this area is not considered to be prime habitat. The prime habitat for this species is located approximately ½ mile to the east of the project site, just east of the confluence of the North and South Forks of the Gallinas Creek and continues to the tidal wetlands where Gallinas Creek enters the San Francisco bay. The California Department of Fish and Game Natural Diversity Database indicates the confluence of the two forms of the Gallinas Creek is the nearest recorded occurrence for the California clapper rail in this area. Furthermore, the proposed project would not have a significant adverse affect on either species given that: a) either species does not have an established presence in this location due to lack of appropriate habitat and distance from prime habitat; b) the proposed building is sited so that it provides a minimum of 150 to 208 feet setback from the top of bank of the North Fork of the Gallinas Creek and the proposed outdoor fields are sited so that they provide 118 and 173 feet setback from the top of bank of the North Fork of the Gallinas Creek; c) all development is in the upland portions of the site and is separated from Gallinas Creek by a 9-foot tall levee and row of Eucalyptus trees; and d) would not include lighted outdoor fields that would cast light or glare into the creek. Lastly, the U.S., Fish and Wildlife Service issued a letter of "no effect" on the California clapper rail and salt marsh harvest mouse for the a project located just upstream (to the west) of the subject site that proposed the development of two single-family homes with a 50-foot setback from the creek. A copy of this letter is attached as part of Exhibit 2.

Both of the WRA reports were peer reviewed by Zander Associates, a third-party environmental consultant selected by the City of San Rafael. Zander Associates conducted a site visit and reviewed the proposed project plans and the two reports prepared by WRA to determine if the effects of the proposed project on biological resources were accurately identified and discussed (included as part of Exhibit 2). Zander Associates concluded that the biological studies prepared by WRA accurately described the existing biological resources on the site and in the vicinity and concurred with the conclusion that the project as proposed would not have a significant adverse affect on either the California clapper rail or the salt marsh harvest mouse.

As part of the peer review comments, a recommendation was made to evaluate the potential impact of run-off from the project on habitat in Gallinas Creek. Given that the project proposes to convey all run-off through the vegetated swales before being discharged into the creek, that would provide adequate filtration of pollutants and reduce potential to degrade habitat quality in Gallinas Creek to a less-than-significant level. Furthermore, this drainage plan is consistent with the Storm Water Pollution Prevention standards that are established by the Regional Water Quality Board and enforced by the City of San Rafael. For further analysis on water quality impacts, see discussion in Section VIII below.

As part of this project, the applicant has also proposed to widen the existing bridge deck over the North Fork of the Gallinas Creek. This bridge provides the sole access to the site and in its current state does allow two vehicles to cross the bridge at one time. The proposed expansion of the bridge would entail installing a new 25-foot wide clear span steel truss bridge deck over the existing bridge. No new piles or footings would be installed into the creek or the creek bed. The clear span would be attached to new concrete abutments on the upland portion of both sides of the creek, therefore, there would be no impacts to the creek or creek bed. Furthermore, since the new bridge deck would be the same width as the existing bridge structure, including a catwalk and utility chaseway, it would not create any new shadow onto the creek. Based on the biological evaluation identified above and fact that the proposed bridge would clear span the existing bridge and not impact the creek or creek banks, no significant adverse affect would occur to any species identified as a candidate, sensitive, or special status species. The widening of the bridge is not required by the City o San Rafael. But has been proposed by the project sponsor in response to neighborhood concerns.

Based on the evaluation by WRA and the third party peer review conducted by Zander Associates, the project as proposed, including its siting and setbacks from the creek and wetlands, would not have a significant adverse affect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. The only reason that this item has been identified to have a less-than-significant impact with mitigation incorporation is the project's potential impact to nesting birds. Although no nesting birds were identified during the biological assessments, it is probable that they may there be present during some times of the year. To mitigate any potential impacts associated with impacts to nesting birds protected under the Migratory Bird Treaty Act, the following mitigation measure is recommended.

Recommended Mitigation Measure:

IV.a.1Prior to any tree removal or ground disturbing activities during the nesting season (March to August), pre-construction surveys shall be conducted to avoid impacting any nesting birds protected under the Migratory Bird Treaty Act. This survey shall include potential raptor nesting habitat within 250 feet of the study area. This survey shall be conducted by a qualified biologist and the reports and findings shall be submitted to the City of San Rafael Community Development Department. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities will be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.

(Sources: 1, 2, 4, 5, 7, 8, 9, 10, 16, 17, 18,19 and 20)

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐

Discussion:

The project site is currently undeveloped and is bordered to the south by a runway for the San Rafael Airport. Over the years, the site has undergone annual discing, mowing and grazing. This annual maintenance is done on the airport site consistent with Federal Aviation Administration (FAA) recommendations which are established to prevent dangerous wildlife-aircraft collisions. These recommendations suggest that open unimproved areas within 5,000 feet of aircraft movement areas be maintained in such a manner to discourage wildlife populations, particularly birds, from habitating or moving through areas.

Site visits and review of General Plan 2020 Exhibit 34 (*Biotic Habitat*), Exhibit 36 (*Baylands*), and Exhibit 37 (*Watersheds and Creeks*) identify that the biotic habitat on the subject site is grasslands with wetlands on the outside of the levees bordering the overall airport site and that the airport property site is considered a diked marsh. The North and South Forks of the Gallinas Creeks parallel the northern and southern borders of the entire airport property and ultimately join just east of the site. Although, the San Rafael Airport property is bordered by the two forks of the Gallinas Creek, the project site is located between the existing runway and the levee along the North Fork of the Gallinas Creek. As documented in the biological assessment prepared for the subject site and confirmed by the independent peer review, there are no plant communities considered to be sensitive. Wetlands could be considered sensitive plant communities and for discussion on the three potential wetlands identified on the project site, see Section IV.c below. Furthermore, the historical agricultural maintenance and farming activities, isolation from sensitive habitats and poor soil type makes the subject site unlikely to support sensitive plants. Lastly, the proposed new recreational facility would be sited to provide 118 to 173 feet buffer from the

creek to the north, and 50 feet buffer from potential jurisdictional wetlands to the north and would not be located on a portion of the site that contains any riparian habitat. Therefore, less-than-significant impacts in this category would result.

(Sources: 1, 2, 4, 5, 7, 8, 9, 10, 16, 17, 18,19 and 20)

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐

Discussion:
As identified in IV.a above, two biological studies were prepared for this proposed project. Additionally, WRA prepared a jurisdictional area delineation for area around the proposed project site (Jurisdictional Area Delineation – San Rafael Airport Recreational Facility, dated September 2005) and this report is included as part of Exhibit 2. Based on these studies, three potential jurisdictional wetland areas were found around the area of the proposed new recreational facility. Two of these are seasonally wet areas located in vegetated swales and the third area is a wet area that is caused by seepage through the levee along the North Fork of the Gallinas Creek.

Both the San Rafael General Plan 2020 (Conservation Element) and Chapter 13 of the San Rafael Zoning Ordinance (Wetland Overlay District) contain policies encouraging the protection of wetlands as an environmental resource. General Plan and Zoning policies also encourage avoidance of wetland areas and establish a minimum 50-foot development free setback from wetlands. Setbacks greater than 50 feet may be required on lots of two or more acres as determined through the City's development review process. The General Plan and Zoning Ordinance define wetlands as those areas which meet the jurisdictional wetland criteria established by the U.S. Army Corps of Engineers.

The WRA report concluded that all three of these potential jurisdictional wetland areas are considered to be of low quality due to their relatively small size, seasonal nature and the level of disturbance that has been caused by annual discing. This proposed project would avoid filling or earth disturbance in these three areas or within 50 feet of these areas and the project does not propose any development within the 50-foot buffer. The analysis concluded that given the low quality of the potential wetlands, a larger setback is not necessary to protect these potential jurisdictional areas from any indirect impacts. Lastly, the limited activity that would occur at the rear of the building facing the jurisdictional areas and unlighted outdoor fields would ensure adequate protection of the potential jurisdictional areas. The report and conclusions contained in the WRA report were also peer reviewed by Zander Associates, a third-party environmental consultant selected by the City of San Rafael. Based on their review and analysis, Zander Associates concurred with the conclusions of the WRA report that the potential jurisdictional wetland areas would be adequately protected from indirect impacts through the proposed 50-foot setback. In the site reconnaissance conducted by the peer reviewer, it was discovered that the existing storm water drainage ditches and associate pump house were not described in detail nor identified as potential wetlands. In Zander's analysis of these ditches found that they are used to direct surface runoff from the airport to the pump station and ultimately into the Gallinas Creek. These ditches are regularly maintained and do not contain vegetation. Furthermore, these ditches are not directly connected to the Gallinas Creek and are separated by the levee and pump house. Given that these ditches are clearly man made, excavated in upland portions of the site, and do not support wetland vegetation, they are not considered wetlands. Therefore, a less-than-significant impact would occur because the project would not result in filling of wetlands.

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Given the analysis above, the proposed project would have a less-than-significant impact on federally protected wetlands defined by Section 404 of the Clean Water Act.

(Sources: 1, 2, 4, 5, 7, 8, 9, 10, 16, 17, 18, 19 and 20)

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

Discussion:
The subject site is bordered to the north by a maintained 9-foot tall levee separating the site from the North Fork of the Gallinas Creek. To the south, the site is also bordered by a runway for the San Rafael Airport and beyond the runway, a 9-foot levee separates the site from the South Fork of the Gallinas Creek. The area between the levees is a flat field with a runway and is characterized by non-native annual grasslands with rows of planted Eucalyptus trees along the southern and northern borders of the entire airport site. The field has historically been disced, mowed or grazed on an annual basis in accordance in FAA recommendations in order to prevent dangerous wildlife-aircraft collisions.

Biotic studies (Biological Site Assessment - San Rafael Airport Recreational Facility, dated February 2005 and October 10, 2005) were prepared for the proposed development by WRA Environmental Consultants and area attached as Exhibit 2. The studies were also peer reviewed by Zander Associates, a third party environmental firm selected by the City, to verify that that the methodology and conclusions reached by these reports are sound. The peer review by Zander Associates found that the biological site prepared by WRA adequately assesses the biological conditions on and around the site and concurs with their findings (included as part of Exhibit 2).

The proposed project does not propose any new improvements in the creek or within the creek banks that border the site, therefore no impact to any resident or migratory fish would occur. In regard to the site itself, there are no known wildlife corridors. Additionally, the proposed project would be located between the airport runway and the levee on the northern border of the site. The presence of planes and activity in conjunction with the existing airport does not allow for significant habitat for resident or migratory wildlife populations. The studies conclude that the subject site has limited value as upland habitat given the disturbed nature of the site and lack of vegetative cover. As discussed in Section IV.a above, two special-status species were identified to have a high potential for occurrence in the area and were observed on and around the site during the site reconnaissance conducted by WRA; white-tailed kite and Cooper's hawk. Both of these species are protected by the Migratory Bird Treaty Act, which prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. To avoid impacts to nesting birds protected under the Migratory Bird Treaty Act, the report identified a mitigation measure that prior to any tree removal or ground disturbing activities during the nesting season (March to August), a pre-construction survey be conducted on the site and within 250 feet of the study area. This mitigation measure has been included in the recommended mitigation measure section below. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities will be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.

Given the discussion above and the inclusion of the mitigation measure previously identified in IV.a, the proposal would not substantially interfere with migratory wildlife corridors.

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

(Sources: 1, 2, 4, 5, 7, 8, 9, 10, 16, 17, 18,19 and 20)

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

Discussion:
There are no protected trees located on the project site or on the entire airport site and the proposed project will not result in the removal of any trees. There are rows of existing Eucalyptus trees on the perimeter of the airport site. The proposed project would maintain all existing trees along the perimeter of the airport site and proposes to fill in any gaps in the existing Eucalyptus trees along to perimeter to further screen the project from off-site view. The City of San Rafael's Design Review Board reviewed the proposal to fill in the gaps using additional Eucalyptus trees and recommended that native species should be used rather than Eucalyptus trees. This recommendation would be incorporated as a condition of approval should the project be approved.

The San Rafael General Plan and Zoning Ordinance encourage avoidance of wetland areas, and recommend setbacks at least 50-foot development free setbacks from these areas to provide adequate buffers. As noted above, there are three potential jurisdictional wetlands areas located along northern side of the proposed building. None of the proposed work would result in filling or modification to the wetland areas. Development would be a minimum of 50 feet from any wetlands on-site, consistent with General Plan and Zoning policies and regulations. As discussed biological assessment of the site prepared by WRA and peer-reviewed by Zander Associates, there are no native or sensitive habitats, threatened/ endangered species or special status species on the portion of the site on which the recreational facility project is proposed. The project site does not have suitable habitat for most of the special status species given existing airport operation on the site and historical disturbance of the fields through annual discing. Furthermore, the siting of the proposed development was found to be adequate to protect biological resources found on and around the site and therefore the project would be consistent with the policies pertaining to biological resources contained in the General Plan 2020. Therefore, impacts to biological resources would be less-than-significant.

(Sources: 1, 2, 3, 4, 5, 7, 8, 9, 10, 16, 17, 18,19 and 20)

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion:
The project site is not located within or near an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

(Sources: 1, 2 and 3)

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒

Discussion:
According to the Cultural Resources Evaluation prepared for this site by Archeological Resource Service (February 8, 2005), there are no historic buildings or other known historic resources on the subject property. Therefore, the project would not result in impacts on historic resources.

(Sources: 1, 3, 4, 5, 7, 9, 21, 22 and 44)

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	☐	☐	☐	☒

Discussion:
The existing site does not contain any architectural resources that are: a) listed in the local City of San Rafael historical survey; or b) listed, or eligible to be listed, in the California Register of Historical Resources. Therefore, no impact would occur.

(Sources: 1, 3, 4, 5, 7, 9, 21, 22 and 44)

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Setting and Impacts:
There are no unique geologic features on this flat, previously graded site. On October 1, 2001, the San Rafael City Council adopted Ordinance No. 1772 and Resolution No. 10933, enacting a new archaeological resource protection chapter within the City's Municipal Code, which established measures and procedures to identify, protect and preserve archaeological resources within the City of San Rafael. An Archaeological Sensitivity Map was prepared by a qualified archaeologist and was included as an attachment to the ordinance. This map identified three geographic areas of archaeological sensitivity (high, medium, and low) based on proximity to: a) known and/or recorded sites containing archaeological resources; and b) sites and/or geographic areas where studies and individual archaeological site assessments have been completed.

The Archaeological Sensitivity Map was subsequently used to create an archaeological database known as "Pastfinder" for use by City staff in generating an archaeological sensitivity report for development proposals that involve excavation or grading. The procedures for parcels with medium and high levels of archaeological sensitivity vary dependent upon the required environmental review and whether the proposal is discretionary or non-discretionary. Parcels with a low archaeological sensitivity level require no further evaluation.

The project site has a high sensitivity rating and thus further review and study was required. Therefore, the site was evaluated for cultural resources by the Archaeological Resource Service and a report was prepared documenting the findings. This survey found that there are no known archeological or paleontological resources on the subject site and that additional field survey is not warranted at this time. However, the site is located in an area near lands known to be previously occupied by Native Americans, it is possible that prehistoric and historic materials may be encountered during grading. Therefore, the following mitigation measure is recommended to reduce potential impacts to archeological resources to less than significant:

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Recommended Mitigation Measure:

V.b.1 In the event that archaeological features, such as concentrations of artifacts or culturally modified soil deposits including trash pits older than fifty years of age, are discovered at any time during grading, scraping, or excavation within the property, all work shall be halted in the vicinity of the find, the Planning Division shall be notified, and a qualified archaeologist shall be contacted immediately to make an evaluation. If warranted by the concentration of artifacts or soils deposits, further work in the discovery area shall be monitored by an archaeologist.

(Sources: 1, 3, 4, 5, 7, 9, 21 and 22)

d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion:

There are no formal cemeteries on the site, nor are human remains likely to exist on the property. However, a possibility remains of a cultural significance may be encountered. The City of San Rafael has adopted an Archeological Resources Ordinance that includes a standard condition of approval relating to procedures for the discovery of human remains. With the inclusion of the standard condition of approval, a less-than-significant impact would result.

(Sources: 1, 3, 4, 5, 7, 9, 21 and 22)

VI. GEOLOGY AND SOILS

Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

Discussion:

The discussion under Items VI.a through VI.e is based the geotechnical reports prepared for the proposed project and reviewed by an independent peer reviewer. A geotechnical report was prepared for this project by John Hom (*Report Geotechnical Investigation Proposed Recreation Building San Rafael Airport, dated May 9, 2005*). Consistent with the City of San Rafael's Geotechnical Review Matrix contained in the General Plan 2020, this report was peer reviewed by a third party geotechnical engineering firm, Kleinfelder. Following their review, Kleinfelder responded with a letter (*Geotechnical Peer Review New Recreational Facilities at San Rafael Airport, dated September 9, 2005*) addressing items that needed further analysis or clarification. John Hom responded to the Kleinfelder comments in a letter (*Smith Ranch Airport Recreation Building, dated November 23, 2005*). In

conclusion, Kleinfelder found the geotechnical evaluation for the site and the proposed project to be sound and consistent with City policy and engineering practices and recommended hat the recommendation made by John Hom be incorporated into the design of the structure and that inspections during construction be conducted by John Hom to ensure implementation of the recommendations (*Letter from Kleinfelder Re: Geotechnical Peer Review New Recreational Facilities at San Rafael Airport, dated December 15, 2005).* This report presented recommendation All reports and correspondence pertaining to this geotechnical review are on file at the Community Development Department.

The project site is not located within the Alquis-Priolo Special Studies Zone and no known active faults traverse the property. The nearest faults considered seismically active (experiencing rupture within the last 11,000 years) are the San Andreas Fault (16 miles southwest) Hayward Fault (11 miles northeast), the Seal Cove-San Gregorio fault (16.5 miles southwest) and the Healdsburg-Rogers Creek fault (9.5 miles northwest). Based on the geotechnical report, there are no geomorphic features suggesting the presence of an active fault extending through the site. Therefore, the risk of ground rupture at the site along a fault trace is low and no impact would result.

(Sources: 1, 4, 7, 9, 23, 24, and 25)

ii) Strong seismic ground shaking? ☐ ☐ ☒ ☐

Discussion:

The Bay Area is considered to be one of the most seismically active regions in the United States. The majority of earthquakes that occur in the Bay Area are associated with crustal movement generally along well-defined, active fault zones. The California Division of Mines and Geology (CDMG) has issued maps that identify "Active Fault Near-Source Zones" to be used with the 1997 Uniform Building Code (UBC) (Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, CDMG/IBCO, February 1998). The only faults in the project vicinity that are capable of producing a large magnitude event (i.e., Maximum Moment Magnitude 7.0 or greater) that have a high rate of seismic activity are the Hayward Fault and the San Andreas (North Coast) Fault.

The Hayward Fault is located approximately 11 miles northeast of the project site; the San Andreas (North Coast) Fault is located approximately 16 miles west of the project site. A study by the U.S. Geologic Survey (Working Group on Earthquake Probabilities, 1990) indicates that there is a 67 percent chance of an earthquake of Maximum Moment Magnitude 6.7 or higher occurring in the San Francisco Bay Area during the next 30 years. During such an earthquake, the likelihood of very strong ground shaking is highly probable. The Geotechnical report assumes that in the event of a major earthquake on either the San Andreas or Hayward Faults, horizontal ground accelerations of 0.5g or greater are to be expected to could occur on the project site.

A geotechnical investigation was conducted for this proposed project and the findings were documented in a report and letter prepared by John Hom (*Report Geotechnical Investigation Proposed Recreational Building San Rafael Airport, dated May 9, 2005 and Letter dated November 23, 2005)*. The geotechnical investigation and report identifies conditions and geologic hazards for this site and based on these, concludes that the proposed recreational facility project is feasible from a geotechnical engineering standpoint provided that the seismic safety standards of the California Building Code are implemented. In accordance with the City of San Rafael's Geotechnical Review Matrix contained in the General Plan 2020, the geotechnical report prepared for this project was also reviewed by an independent third party engineering firm. The third party reviewer, Kleinfelder, found that the assumptions, conclusions and recommendations identified in the Geotechnical Investigation were acceptable.

In regard to seismic ground shaking, the report states that seismic shaking is highly probable during the life of the project and recommends that the proposed structure should be designed in accordance with current standards for earthquake resistant construction of which the minimum requirement is that of the California Building Code. Compliance with the California Building Code and the seismic safety standards specified in the Code is mandatory and would be required prior to issuance of a building permit. Since this is a standard requirement of the City, no mitigation measures are necessary. Therefore, less-than-significant impacts would occur to seismic shaking.

(Sources: 1, 4, 7, 9, 24, and 25)

iii) Seismic related ground failure, including liquefaction?	☐	☐	☒	☐

Discussion:
Soil liquefaction is a phenomenon in which a saturated cohesionless soil located near the ground surface loses strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, fine-grained sands located below the water table. Clays are not considered to be susceptible to liquefaction. In addition, the presence of clay and silt particles in loose sandy soil will increase its resistance to liquefaction.

According to the *Report Geotechnical Investigation Proposed Recreational Building San Rafael Airport, San Rafael, California (John Hom, May 9, 2005)*, the soils encountered on the site were a thin layer of fill (identified as Bay mud that was disced), Bay Mud, stiff clays and bedrock. The bay mud extended to a depth of approximately 28 feet and below the Bay Mud was stiff clays. According to the *Geotechnical Investigation* prepared for this project and reviewed by a third party, the subsurface geologic formations at the project site do not contain any appreciable deposits that would be susceptible to liquefaction. Furthermore, seismically induced lateral spreading is considered only a slight risk because of the limited risk of liquefaction. Therefore, project impacts related to seismic related ground failure, including liquefaction, would be less-than-significant.

(Sources: 1, 4, 7, 9, 10, 24, and 25)

iv) Landslides?	☐	☐	☐	☒

Discussion:
According to General Plan 2020 Exhibit 26 (Geology Stability), the project site is designated as "more stable" and thus the geologic conditions on site are such that the potential for landslides are considered negligible. The site is flat with insignificant variation in elevation. Therefore, no impact would result.

(Sources: 1, 4, 7, 9, 10, 24, and 25)

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Discussion:
The project site is flat. The proposed project would require grading for the construction of recreational facility. This grading would be limited, but could result in short-term erosion or loss of topsoil. A Stormwater Pollution Prevention Permit (SWPPP) must be prepared and approved pursuant to the requirements of the California Regional Water Quality Control Board. An erosion control plan utilizing "best management practices" (BMP's) would also be required for review and approval by the City of San Rafael Department of Public Works,

Stormwater Pollution Prevention Program Manager and the Building Division prior to issuance of a grading permit for the project. The City also requires sites to be winterized from October 1st through April 30th. These requirements are standard for all projects and no special conditions or circumstances have been identified for the project. The City's SWPPP Program Manager has submitted his requirements for inclusion in the project conditions of approval. Based on this discussion, the standard requirements addressing erosion control and water quality impacts would ensure that impacts would be less-than-significant.

(Sources: 1, 4, 7, 9, 13, 24, and 25)

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐

Setting and Impacts:
As previously discussed, the type of geologic unit or soil that would be susceptible to liquefaction generally occurs when loose, saturated soils experience large vibratory load. The site investigation by the geotechnical engineer did not identify any soil that is susceptible to liquefaction. Furthermore, the investigation and borings conducted on the site revealed a small amount of fill over compressible Bay Mud that extended to approximately 28 feet in depth. Below the Bay Mud, stiff clays and bedrock were encountered. This geologic site conditions are such that it is not likely to become unstable and geologic hazards related to liquefaction, ground rupture, lateral spreading, and landslide are considered to be remote or non-existent.

Bay Mud, the primary type of soil on this site, is not suitable for at grade foundation support. The geotechnical report considered two alternative methods to support the proposed new structure, an at-grade foundation over additional compacted fill or driven concrete piles. The geotechnical report concludes additional fill is not appropriate for the site given the likelihood of the additional fill inducing settlement. Therefore, the report recommends the use of driven concrete piles.

The proposed grading plan and geotechnical report identify that some fill will be utilized for the new parking lot and outdoor sports fields. In reviewing the use of additional fill on the site, Kleinfelder's review of the geotechnical reports found that if significant fill is used on the site, the resulting ground surface settlements could be extremely large and thereby have an effect on surface drainage, utility lines (storm drains and sanitary sewer), and entrances and exists to the building.

The geotechnical report concludes that the proposed development is feasible from a geotechnical engineering standpoint provided that the recommendations contained the report are implemented. Therefore, implementation of the following migration measures (recommendations contained in Geotechnical Report prepared by John Hom (dated May 9 and November 23, 2005) and Kleinfelder Peer Review Letter (dated December 15, 2005), would reduce related impacts to less-than-significant

Recommended Mitigation Measures:
VI.c.1 Prior to the issuance of the building permit or grading permit, the following recommendations contained in the Geotechnical Report prepared by John Hom, dated May 9, 2005 and November 23, 2005, shall be incorporated into the project design. Prior to issuance of a grading or building permit, written verification of conformance with these recommendations shall be submitted by the project geotechnical engineer to the City of San Rafael.

a) A soil profile Type S_e in accordance with the 1997 Uniform Building Code shall be used in the design of the proposed project.

b) All areas to be graded should be stripped of any debris and organic materials. The organic material should be removed off-site and disposed of. Excavation should then be performed to achieve any finished grades.

c) Where fill is required, the exposed surface should be scarified to at least 6 inches, moisture-conditioned and compacted to at least 90-percent relative compaction per ASTM D-1557 test procedure. Where soft soils are encountered, treatment of the soft soils with lime maybe required. The fill should be placed in lifts of 8 inches or less in loose thickness, moisture conditions and compacted to at least 9 percent compaction. The fills materials should be should have a plastic index of 15, or less, and be no larger than 6 inches.

d) Finished slopes are to be no steeper than 2-horizontal to 1-vertical (2:1). If steeper slopes are necessary, they should be retained. The finished slops should be planted with deep-rooted ground cover.

e) The proposed structure should be supported by 10-12 inch square driven piles which are pre-cut and pre-stressed concrete or steel piles. These piles should be driven continuously through the Bay Mud, the stiff soils and to refusal in bedrock (penetrate into bedrock no more than 10 feet). Ten and 12-inch piles should be driven with a hammer and maintained in good operating condition with a minimum rated energy of 20,000 and 30,000-foot pounds per blow, respectively. The piles should not deviate from vertical by more than ¼ inch per foot. Indicator piles should be driven near the corners of the building and interior of the building to determine pile depths and production piles should be ordered based on the indictor piles. The refusal blow count would depend on the hammer that is utilized and the structural capacity of the pile. The piles should be driven at least 5 feet into bedrock. The pile driving subcontractor should submit to the Soils Engineer specification of the pile hammer and equipment to be used.

f) Pile driving may cause vibration that could result in cosmetic damage to adjacent properties. The owner or contractor should visit the adjacent property owners to map out the existing conditions and that vibration monitors be installed to monitor pile driving vibrations.

g) Down draft would occur on the piles due to consolidation of Bay Mud. The down drag forces should be deducted from the structural capacity of the piles. For 10 and 12-inch concrete piles, drag loads should be 22 and 28 tons respectively. For different sized piles, the down draft should be proportionate with the cross sectional perimeter of the pile.

h) To resist lateral loads, a passive pressure of 250 pcf should be used.

i) Slab on grade should not be used for the mezzanine structure. Instead, supported slabs should be used. The slab subgrade should be firm and non-yielding. The slab on grade should be tied to foundations and reinforced to span at least 8 feet in both directions. The upper 6 inches of slab subgrade should be compacted to at least 90 percent relative compaction. Slabs should be underlain by at least 4 inches of clean, free-draining crushed rock or gravel. If migration of moisture through the slabs would be objectionable, a vapor barrier should be installed between the slab and the rock. Two inches of sand may be provided above the vapor barrier.

j) Surface water drainage should be diverted away from slopes and foundations. Gutters should be provided on the roofs and downspout should be connected to closed conduits discharging on to the pavement, where possible.

k) Roof downspouts and surface drains must be maintained entirely separate from sub-drains and foundation drains. The outlets should discharge onto erosion resistant areas such as the roadway pavement, where possible.

l) The project geotechnical engineer shall conduct inspections during construction of the project to confirm that the recommendations are properly incorporated. Prior to final occupancy of the building, the project geotechnical engineer shall submit written verification that the project was constructed in accordance with the recommendations identified in the geotechnical reports.

(Sources: 1, 4, 7, 9, 13, 24, 25 and 43)

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐

Discussion:
Two test borings were conducted on this site and documented in the geotechnical report prepared for the project. The test borings encountered a sliver of fill over compressible Bay Mud over stiff clays and ultimately bedrock. The sliver of fill was found to be Bay Mud that has been disced. The Bay Mud extended to a depth of 18 feet. Below that point, stiff clays were present until approximately 40 feet at which point bedrock was discovered. Clays are considered expansive spoils by the Uniform Building Code. However, given the depth of the clays, the expansive nature of the clays would not pose a significant impact. These results of the geotechnical investigation conducted by John Hom were reviewed by Kleindelfer, a third party peer reviewer, and found to be acceptable and accurate. Therefore, a less-than-significant impact would occur.

(Sources: 1, 4, 7, 9, 13, 24, 25 and 43)

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion:
The City of San Rafael does not allow the use of septic tanks for sanitation services. The project would be served by the Las Gallinas Valley Sanitary District, which has indicated that their facilities have sufficient capacity to serve the project site and that this site has a valid sewer agreement to accommodate the proposed project. Therefore, no impact would occur.

(Sources: 1, 3, 4 and 39)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

VII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Discussion:
This proposed recreational facility would not include the transport, use, or disposal of hazardous materials. The recreational facility does include two outdoor sports fields to the east of the new structure and site landscaping around the proposed new building and within the parking lot. As proposed, the two outdoor fields would utilize synthetic all weather turf and given their synthetic nature, no fertilizers or herbicides would be used. It is assumed that the site landscaping would use some fertilizers and herbicides, but the landscape areas are minimal and herbicides or fertilizers would not typically be used in significant amounts. Lastly, the proposed drainage plan would convey all runoff from this site through vegetated bio-swales located to the north and south of the proposed building. These swales are designed to be consistent with the City's Storm Water Pollution Prevention standards and would filter any contaminants before they leave the site and enter the creek to the north. Therefore, less-than-significant impacts would result.

(Sources: 1, 2, 3, and 4)

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒

Discussion:
The proposed project would not create significant hazards to the public or the environment based on the recreational nature of the proposed use. No hazardous materials are proposed to be used or stored at the site. Therefore, no impacts would result.

(Sources: 1, 2, 3, 4 and 13)

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Discussion:
The subject site is not within one-quarter mile of either an existing or proposed school. In addition no handling of hazardous materials would not occur as part of proposed recreational use. Therefore, no impacts would result.

(Sources: 1, 2, 3, 4, 5, 10 and 13)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

Discussion:
The project location of the project is not included on a list of hazardous materials site maintained by the San Rafael Fire Department. Therefore, no impacts would result.

(Sources: 1, 4 and 13)

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Discussion:
The proposed recreational facility would be located on a portion of the 119-5 acres airport site. The San Rafael Airport is a private airport and not considered a public or public use airport and therefore is not located within an airport land use plan. Marin County Airport (Gnoss Field) is the nearest public airport to the site, located north of the City of Novato, approximately 10 miles from the project site. No existing or proposed public use airports are located within two miles of the site. Therefore, the project would not result in safety hazards associated with public or public use airports.

(Sources: 1, 2, 4, 5 and 7)

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☒	☐	☐

Setting and Impacts:
The proposed project has been referred to the California Department of Transportation, Division of Aeronautics (CalTrans-DOA). This agency is the permitting agency with respect to airport related noise and safety impacts and regional aviation and use planning issues pursuant to the California Environmental Quality Act. This agency has the technical expertise in the area of airport operation safety and airport land use compatibility. The San Rafael Airport is considered a Special-Use Airport, meaning that it is an airport that is not open to the general public and access to which is controlled by the property owner. The San Rafael Airport currently operates with a Special Use Airport Permit issued by this agency.

Given that the proposed structure would be located to one side of the runway, CalTrans-DOA has requirements for clear zones along runways. In this particular case, there is a requirement that the first 125 feet from the center of the runway be a clear zone with no obstructions or structures located within this area. From that point, there is a clear ascending zone which establishes a height limit of 1-foot for every 7 feet of linear distance. Structures,

landscaping, lighting or other site improvements are allowed in the clear ascending zone so long as they do not exceed the height limit established by the 1:7 clear ascending zone.

The proposed project has been reviewed by the CalTrans-DOA and found to be consistent with their requirements. As illustrated on Sheets A-1 and A-5 of the project plans, the proposed project has been designed so that all new structures, fencing, landscaping, and lighting standards would be within the established clear ascending zone height limits. As a part of their review of the proposed project, the Department of Transportation, Division of Aeronautics has included recommendations that should be incorporated into the project design in order to identify any permanent or temporary construction-related impacts to the airport imaginary surfaces. Therefore, these recommendations have been included as a mitigation measure. With the inclusion of these mitigation measures, a less-than-significant impact would occur.

Recommended Mitigation Measures:

VII.f.1 The applicant shall implement the guidelines in the Federal Aviation Administration's Advisory Circular 150/5370-2E, Operational Safety on Airports, during construction of the proposed project.

(Sources: 1, 4, 5, 7, 26 and 27)

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Discussion:

The proposed project would be developed on a undeveloped portion of San Rafael Airport property. The property is surrounded to the north by residential and recreational uses, to the south by residential uses and to the west by industrial, commercial and residential uses. The sole public roadway providing access to this property is Smith Ranch Road, a major arterial roadway in the City of San Rafael.

The City of San Rafael's Disaster Plan designates large area evacuation routes, including Highway 101 and Interstate 580, and other major arterials in the City. The City of San Rafael Police Department and Fire Department have reviewed the proposed project and found that development of this project would not interfere with access to any of the referenced roadway, therefore no impact would result.

(Sources: 1, 2, 3, 4, 5 and 9)

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Discussion:

The proposed project would result in the development of a recreational facility at an existing airport development. The developed portion of the property has structures and gravel and paved driveways servicing the existing non-aviation and aviation-related facilities. The remainder of the site is predominately grass that is maintained on an annual basis for weed abatement and fire suppression. The proposed project would not increase the potential for wildland fires. The majority of the existing non-aviation and aviation-related facilities on this property have recently been rebuilt and as part of this upgrade, new fire hydrants and fire sprinkler systems were installed on the

site and within the new structures. A standard condition of approval of the Fire Department would require that an additional fire hydrant be installed in the area of the proposed new structure. Furthermore, the proposed new structure would be required to include commercial fire sprinkler system and this has been indicated on the project plans. Lastly, the project site is not considered to be a wildland area by the Fire Department. Based on this analysis, a less-than-significant impact would occur.

(Sources: 1, 2, 3, 4, 5 and 9)

VIII. HYDROLOGY AND WATER QUALITY

Would the project:

a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

Discussion:
Under applicable provisions of the Clean Water Act, and subject to review by the Regional Water Quality Control board, the project is required to maintain consistency with local and state water quality and waste discharge requirements. The project does not propose any on-site wells or septic systems. Water service would be provided by Marin Municipal Water District and the sewage service would be provided by the Las Gallinas Valley Sanitary District. Development of the proposed project would create addition impervious surfaces on the site and provide parking areas for vehicles. This water will contain urban type pollutants such as fertilizers for the site landscaping areas and automobile fluid residues in the parking lot and driveway.

However, under the State Water Pollution Prevention Program and its authorization to the Storm Water Pollution Prevention Program administered through the City of San Rafael's Public Works Department, the project sponsor is required to prevent impacts to surface water quality. The project proposes to utilize bio-swales and grass lined drainage trenches to naturally filter contaminants as storm water flows across the property. This is considered to be the optimal filtering mechanism by the California Regional Water Quality Board. In addition, all roof leaders will be directed through the landscaped areas and any overage would be directed to the previously mentioned bio-filtered swales. The primary parking lot would utilize asphalt paving, an impervious surface. Interceptors would be used in the asphalt parking lot to capture and filter contaminants that may be discharged by vehicles. Furthermore, the project would be required to employ best management practices (BMPs) in accordance with City of San Rafael Municipal Code Section 9.30 (Urban Runoff Pollution Prevention). In addition, a standard condition of approval would require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the City of San Rafael Public Works Department prior to the issuance of building permits. Given that the proposed project already includes provisions to treat run-off through vegetated swales and the incorporation of the City's standard preventative measures and Best Management Practices into the project development would result in less-than-significant impact to water quality.

(Sources: 1, 2, 3, 4, 5, 9 and 13)

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells	☐	☐	☒	☐

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Discussion:
During exploratory borings, ground water was encountered at a depth of approximately 10 feet. Fluctuation in the ground water level typically occurs with seasonal rainfall and possible tidal action. The proposed recreational project does not rely on groundwater resources for the supply of water; but rather the Marin Municipal Water District would provide water service to the site under an extension to the existing water service agreement. Except for the standard use of pilings to mitigate the expansive soils conditions, excavation will not impact groundwater in perched or aquifer conditions. The project site's ability to recharge any underlying aquifer may be slightly impacted, because a portion of the site will be covered with structures and asphalt. However, given the minimal amount of impervious surface in relation of the overall size of the site, there would be adequate opportunity for recharging of the aquifer. Based on the discussion above, a less-than-significant impact would occur.

(Sources: 1, 2, 3, 4, 5, 9, 13, 24 and 25)

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Discussion:
The project site as well as the overall airport site are relatively flat and surrounded by nine-foot tall levees on all sides. Storm water presently drains primarily through sheet flows across the project site, into existing drainage swales to the north and south of the project site and then is naturally conveyed to the existing pump house at the eastern end of the property. From the pump house, the overflow drainage is pumped into the North Fork of the Gallinas Creek. The project includes an expansion of the stormwater drainage system that includes new catch basins in the paved areas. All drainage would then be directed to the existing vegetated drainage swales to the north and south of the proposed building. Therefore, increased runoff would not alter the existing drainage pattern in a manner that would result in substantial erosion or siltation on or off-site. Therefore, a less-than-significant impact would result.

Erosion may occur during project construction; however, the City's standard conditions of approval are consistent with the applicable provision of the Clean Water Act and San Francisco Regional Water Quality Board. Implementation of the City's standard conditions regarding erosion control, requiring a erosion control plan and Stormwater Pollution Prevention Program (SWPPP) for the site, would ensure that the temporary construction impacts would be less-than-significant.

(Sources: 1, 2, 3, 4, 5, 9, 13 and 31)

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which	☐	☐	☒	☐

would result in flooding on- or off- site?

Discussion:
The existing amount of hardscape on the site totals 14.9 acres, or 650,500 square feet. Construction of the proposed project would increase the amount of impervious surfaces on the site by approximately 4.4 acres, or 191,800 square feet. Since impervious areas preclude the percolation of rainwater into the ground, the amount of surface water run-off will increase over the existing un-built condition. The airport site is virtually flat and is surrounded by natural creeks to the north, south and east of the site. Currently, manmade drainage swales located to the south and north of the proposed building convey existing runoff from the site to a pump station at the northeastern edge of the site. From here, stormwater runoff is pumped into the creek.

As previously mentioned above, the proposed project would not alter the existing drainage pattern of the site or the area. A hydrologic analysis was prepared for the proposed project (***Hydrologic Analysis San Rafael Airport Sports Complex)*** by Lee Oberkamper and Associates. The creation of additional impervious surfaces is directly related to the amount of drainage that would be generated by a project. The Department of Public Works has reviewed the proposed project and determined that there would not be a substantial increase the rate or amount of surface run-off given that: a) the 191,000 square feet of additional impervious surface is negligible amount (0.04) of new impervious surfaces in relation to the overall 5,205,420-square-foot (119.5 acres) site; b) the increase in maximum depth of water during a 100-year storm amount to approximately 1/8 of an inch and is insignificant in relation to the 3,500,000 square feet of water storage capacity that would remain on the site under the proposed project conditions; and c) the remaining pervious portion of the site will provide opportunity to absorb much of the new run off. Furthermore, based on the calculations contained in the hydrologic analysis, the existing pump house is capable of handling all additional drainage flows from this site to convey them into the creek.

Based on the significant amount of land area that would be permeable and allow for filtration, plus the ability of the existing drainage system to accommodate any overflow drainage, development of this project would neither substantially alter the existing drainage pattern of the site or area nor substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off- site. Therefore, less-than-significant impacts would occur.

(Sources: 1, 2, 4, 5, 9, 13 and 31)

e. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Discussion:
As discussed above in VIII.d, the project engineer has evaluated the existing storm drain system, including the existing pump house at the eastern end of the property, and found that it has adequate capacity for the proposed development. This analysis was reviewed by the City's Public Works Department and found to be appropriate. Furthermore, no new sources of pollution are expected from this site and the project would be required to maintain consistency with state and local and water quality and waste discharge requirement. Impacts would be less-than-significant.

(Sources: 1, 2, 4, 5, 9, 13 and 31)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐

Discussion:
Site clearing, grading and compaction of soil necessary for project construction have the potential to result in discharge of sediment and temporary water quality impacts. However, given the amount of earthwork involved, impacts on water quality would be less-than-significant. As a standard condition of approval, the project would be required to employ Best Management Practices (BMPs) in accordance with City of San Rafael Municipal Code Section 9.30 (Urban Runoff Pollution Prevention). In addition, a standard condition of approval would require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the City of San Rafael Public Works Department prior to the issuance of building permits. With the standard conditions of approval, the project would not result in substantial additional sources of polluted runoff, and impacts would be less-than-significant

(Sources: 1, 2, 3, 4, 5, 9, 13 and 31)

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

Discussion:
This proposed project does not involve the construction of housing, therefore, no impacts would result.

(Sources: 4 and 28)

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐

Discussion:
The proposed new structure and other site improvements would not result in a significant impediment or redirection of flood flows. Relative to the size of the site (approximately 119.5 acres of predominantly flat land), the new proposed new structure would encompass 1.63 acres. With the addition of the proposed new project, less than 1% of the site would be developed with structures. As documented in the hydrology report prepared for the project, the site would maintain over 3,500,000 square feet of water storage capacity in the event of a 100-year storm. Given the overall size of the site, the flat topography and the limited amount of development, the proposed new structure would not impede or redirect any flood flows. Therefore, a less-than-significant impact would occur.

(Sources: 1, 4, 28 and 31)

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☒	☐	☐

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Setting and Impacts:
The entire airport site is surrounded by an existing levee system. The levee system requires periodic maintenance due to settlement and erosion. In the late 1990's, the applicant topped a portion of the levee system on the eastern portion of the site in an area under the jurisdiction of Marin County. The applicant currently maintains the entire levee system consistent with all local, state and federal standards and requirements.

As previously mentioned, this subject site is located in the 100-year flood zone (identified as A-1 on FEMA maps). Chapter 18 of the City's Municipal Code contains the regulations for protection of flood hazard areas and requires that "all new structures be constructed, located, extended, converted, or altered in full compliance with the terms of this title and other applicable regulations." The City's regulations, which are derived from the Federal Emergency Management Agency (FEMA), require that all new structures be constructed at a base floor elevation (BFE) of +6 feet NGVD 1929. The City of San Rafael further recommends an additional 1-foot of BFE elevation to allow for freeboard space, resulting in the minimum BFE of at least +7 feet NGVD 1929. For non-residential projects such as this proposal, the regulations allow structures to be built below the +7 feet elevation if the structure is dry flood-proofed or in certain instances, wet flood-proofed

This proposed project would be built with a BFE elevation of +1.5 feet above mean sea level, below the +7 feet requirement. The new structure is proposed to contain indoor recreational fields on the ground floor of the building. All offices, public viewing areas, restrooms, locker rooms and other conditioned space would be located above the ground floor. The FEMA regulations prescribe certain types of uses (i.e. parking, storage and other types of improvements not subject to significant damage) within newly constructed non-residential structures for which a community may allow wet floodproofing as a flood protection technique without a variance. Wet flood proofing is defined by FEMA as "permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing flood waters to enter the structure." The Public Works Department, in consultation with FEMA, has determined that this proposed recreational use would be similar to the types of uses that are allowed to built under the +7 feet standard as long as the portion of the building below +7 feet is wet flood-proofed. In order to ensure compliance with the wet flood-proofing standards established by FEMA, mitigation measures VIII.i.1 and 2 are recommended. With the inclusion of these measures, a less-than-significant impact would occur:

Recommended Mitigation Measures:

VIII.i.1 All portions of the building that are below the +7' NGVD 1929 as indicated on the proposed plan shall be wet flood-proofed. Where wet flood-proofing is required, the building materials must be of the type resistant to floodwater.

VIII.i.2 The construction plans must be signed and stamped by either a registered engineer or architect certifying that the building(s) and materials are designed to comply with the requirements and guidelines of the flood-proofing methods established by FEMA

(Sources: 1, 3, 4, 5, 7, 9, 13, 24, 25, 28, 29 and 30)

j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Discussion:
A seiche is a rise or fall of the surface of a water body that typically is induced by strong winds blowing across a long axis in a lake or embayment. Since the portion of the Bay adjacent to the site lies along a short east-west axis of the San Francisco Bay estuary, seiche effects would be less-than-significant. Likewise, mudflows would be insignificant due to the location of the site relative to hillslopes. A tsunami generated by a high magnitude earthquake along the San Andreas, Calaveras, or Rogers Creek faults could generate wave run-up along the

western shoreline of the Bay. Significant tsunami waves would more likely be generated by a large earthquake in the nearshore waters of the Pacific Ocean, outside the Golden Gate. However, given the distance of the project site from the western shoreline of the Bay and presence of wetlands and shallow mud flat east on the site, tsunami waves do not present a significant threat to the site. Therefore, less-than-significant impacts would result.

(Sources: 1, 4, 5, 24, and 25)

IX. LAND USE AND PLANNING

Would the project:

a. Physically divide an established community?	☐	☐	☐	☒

Discussion:
The project would not divide an established community. The proposed project would involve the construction of a new indoor recreational structure, outdoor fields, and associated site improvements and landscaping. The project site is located on 4.4 undeveloped acres of a 119.5-acre site that currently contains a private airport and light industrial uses. The entire airport site is bordered by a County regional park to the north and residential uses to the northwest and south. The proposed recreational use is consistent with the General Plan land use designation for the site which allows airport and recreational uses. No established communities exist within this site and this would not divide any of the communities in the surrounding area. Therefore, the project would not physically divide an established community, and no impacts would result.

(Sources: 1, 2, 3, 4, 5, 6, 7, 9 and 13)

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion:

Covenant of Restriction
In 1983, a covenant restricting future land uses on this property was signed by City of San Rafael, County of Marin, and the property owner, and this covenant was recorded on this property. This covenant specifies six uses that are allowable on the airport site and one of these six is "private and public recreational uses." This proposed project was found to be consistent with the covenant given that this project includes both indoor and outdoor recreational uses in a project that is privately funded and developed, but open to the general public. Therefore, it would be consistent with the private or public recreational uses" use allowed on the airport site

San Rafael General Plan
The Land Use Element of the City of San Rafael General Plan 2020 designates this site as Airport/ Recreation. The Airport/Recreation land use designation is defined as "Uses on this site are governed by a land use covenant agreed to by the City, the County, and the property owner. Recognize the unique and valuable recreational and environmental characteristics of the airport site." The General Plan 2020 further defines the allowable uses for the Airport/Recreation land use designation as: a) Uses consistent with the 2002 Master Use Permit, including the

airport and ancillary airport services and light industrial uses; b) Private and public recreational uses; and c) Public utility uses." The General Plan land use designation acknowledged the covenant on this property and identified recreation as an allowable use on this site. The proposed recreational facility is considered a "private recreational use" and is therefore allowed by the Airport/Recreation General Plan land use designation.

The proposed recreational facility would be an addition to the existing airport and ancillary light industrial uses. Aside from the land use designation, there are other applicable policies contained in the Safety, Conservation, and Air and Water Quality elements of the General Plan 2020 that are adopted for the purpose of avoiding or mitigating an environmental effect. Many of these are discussed in more detail throughout this document in the applicable sections as well as the Staff Report to the Planning Commission Furthermore, the project would further the policies contained in the Parks and Recreation Element of the General Plan, including Policies P-4 (City Recreation Needs), PR-13 (Commercial Recreation) and PR-14 (Amateur Multi-Sport Athletic Fields) that encourage the development of privately-funded recreational facilities to serve the community recreational needs and creation of all-weather outdoor fields to optimize year round use of outdoor fields.

Zoning Ordinance
The zoning designation for this site is Planned Development – Wetland Overlay (PD1764-WO) District. The current Planned Development designation, PD 1764, for this site allows a private airport use; non-aviation uses consistent with those described in the approved Use Permit; 40 new airplane hangars; two residential units (for a caretaker and security guard); a new 2,450 square foot non-aviation building, a new entry/parking lot; and new landscaping. The proposal for the addition of an indoor and outdoor recreational facility requires an amendment to the Planned Development District as well as an amendment to the Master Use Permit for the site.

The proposed recreational facility is consistent with the land use designation established by the City of San Rafael General Plan 2020, but not the current Planned Development District and Master Use Permit established for airport site. The project sponsor has submitted an application for development of the indoor and outdoor recreational facility, including applications for amendments to the PD District and Master Use Permit to establish appropriate standards and regulations for the indoor and outdoor recreational facility. The revisions to Planned Development District and Master Use Permit will be evaluated through the City's planning process and the merits of the proposed revisions will be reviewed and acted upon by the San Rafael City Council, following the review and recommendation of the Planning Commission and Design Review Board.

The proposed project would result in a community benefit because the proposed recreational facility would provide needed recreational facilities for residents of the City of San Rafael as well as residents throughout the County. The proposed recreational facility is located next to a regional county park and would entail compatible uses to those currently occurring at the park. As discussed previously, the development of the proposed project would not be located with the required 100-foot creek setbacks, would avoid filling of the three potential jurisdictional wetland areas located to the north of the building identified by a wetland delineation, would provide a minimum 50-foot setback from the three potential jurisdictional wetland areas to the north of the building, would be partially screened by existing and proposed trees and landscaping and topographical features. Furthermore, the proposed project would utilize colors and materials that are harmonious with the existing development on the site as well as the surrounding hills in the background. Lastly, given the location of the building and the setbacks from the creeks bordering the site, the proposed development would not significantly impact any threatened, endangered or special status species found in the surrounding area. Therefore, impacts to this category would be less-than-significant.

(Sources: 1, 2, 3, 4, 5, 6, 7, 9, 12, 13, 14 and 37)

c. Conflict with any applicable habitat	☐	☐	☐	☒

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

conservation plan or natural community conservation plan?

Discussion:
There are no habitat or natural community conservation plans adopted for the site. Therefore, no impacts would result.

(Sources: 1, 2, 3 and 4)

X. MINERAL RESOURCES

Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

Discussion:
According to the City of San Rafael General Plan 2020, mineral resources in the San Rafael Planning Area are limited to non-metallic construction materials (such as gravel and stone). Only one rock quarry, the San Rafael Rock Quarry, located near Point San Pedro, remains active in San Rafael, although other quarries were formerly operated elsewhere in the City. The project site is currently designated for Airport/Recreation uses and is not identified as a mineral resource area. No impacts would result.

(Sources: 1, 2, 3, 4, and 5)

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion:
Refer to Checklist Item X.a., above. The project site is designated for airport/recreation development and is not identified as a mineral resource area. No impacts would result.

(Sources: 1, 2, 3, 4, and 5)

XI. NOISE

Would the project:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Discussion:
The City of San Rafael's General Plan 2020 and Noise Ordinance contain standards for noise. For the purposes of this discussion, "L_{dn}" is defined as the day/night noise level quantifying the average weighted noise level during a 24 day, obtained after addition of 5 decibels in the evening from 7 pm to 10 pm and after the addition of 10 decibels in the night between 10 pm and 7 am. "dBA" is defined as the sound pressure level in decibels as measures on a sound meter using a filter to de-emphasize the very low and very high frequency components of the sound. These are standard methods of sound measurement. Baseline noise levels were monitored on the project site and the surrounding areas to quantify the ambient and operational airport noise levels. Ambient noise levels at the site of the proposed new recreational facility and outdoor fields ranged between 53 to 58 dBA L_{dn} and this noise level includes aircraft operations which generate between 70 and 100 dBA.

San Rafael General Plan
The General Plan 2020 contains four policies in the Noise Element that are applicable to this project, including N-1 (*Noise Impact on New Development*), N-3 (*Planning and Design of New Development*), N-4 (*Noise from New Non-Residential Development*) and *N-5 (Traffic Noise from New Development*). Analysis on these standards is provided below:

N-1 (Noise Impacts on New Development)
Exhibit 31 of the General Plan 2020 illustrates the land use compatibility standards for locating new development in existing environments. The most appropriate land use category for the proposed use would be "sports arena, outdoor spectator sports." New uses in this category are conditionally permitted in areas with existing noise levels up to 75 L_{dn} and require that a noise study be prepared to evaluate its impacts. According to the noise study prepared for this project (***San Rafael Airport Recreation Facility Environmental Noise Assessment, dated May 31, 2005 and Revised December 15, 2005***), the L_{dn}, including airport operations and the existing ambient noise levels, does not reach the 75 L_{dn} maximum standard for outdoor spectator sports events. The proposed land use would therefore be appropriate for location in the existing environment at the proposed location. This report is attached as Exhibit 3.

N-3 (Planning and Design of New Development)
This policy encourages new development to be planned and designed to minimize noise impacts from outside noise sources. This proposed recreational facility would be built approximately 350 feet north of the San Rafael Airport runway. There are no City of San Rafael or State or California standards that establish maximum noise levels for outdoor sporting areas. The U.S. Environmental Protection Agency (EPA) has done research that has found that hearing loss would occur with exposure to noise levels of 100 dBA for about 15 minutes a day, every day for 10 to 20 years. The Noise Study prepared for this project concluded that aircraft operations would generate noise levels between 70 dBA to 100 dBA. The duration of these events are short (5 to 18 seconds) and infrequent (between 2 to 11 times a day). The analysis shows that even under the worse case scenarios (11 events lasting 18 second each and generating 100 dBA), the impact from the airport operations on the recreational facility would be well below the threshold established by the EPA for hearing damage. Furthermore, the analysis assumes the worst-case scenario relating to the amount of aircraft activity at the San Rafael Airport and this is unlikely.

N-4. Noise from New Nonresidential Development
This policy states "design nonresidential development to minimize noise impacts on neighboring uses. New nonresidential development shall not increase noise levels in a residential district by more than 3 dBA L_{dn}, or create noise impacts that would increase noise levels to more than 60 dBA L_{dn} at the property line of the noise receiving use, whichever is the more restrictive standard." The noise study prepared for the project studied other outdoor soccer and baseball fields to establish the noise levels that

would be generated by this project and found that the average hourly noise levels during games at a distance of 180 feet from the field would be as high as 60 dBA. This proposed facility is located a minimum of 1,200 feet from the nearest homes in Santa Venetia to the south and 1,800 feet from homes in Contempo Marin and Captains Cove to the west. At this distance, the maximum noise levels would be below 45 dBA and below the existing noise levels in the area. Therefore, the project would neither increase noise levels in the nearby residential areas more than a 3 dBA, nor increase to a level more than 60 dBA.

N-5. Traffic Noise from New Development

This policy states "minimize noise impacts of increased off-site traffic caused by new development. Where the exterior L_{dn} is 65 dB or greater at a residential building or outdoor use area and a plan, program, or project increases traffic noise levels by more than L_{dn} 3 dB, reasonable noise mitigation measures shall be included in the plan, program or project." Access to and from the project site is through the existing roadway, which parallels the eastern border of the Contempo Marin and Captain's Cove residential developments. Traffic along this roadway exhibits low speeds ranging between 5 to 15 miles per hour and decreases significantly as vehicles approach the bridge. Measurements of the existing traffic along this roadway found that the primary vehicles using this roadway are trucks accessing the non-aviation uses at the airport. These trucks generate maximum noise levels between 60 and 70 dBA and primarily operate between 7:00 and 8:00 am and 3:00 and 6:00 p.m. It is assumed that passenger vehicles would be the primary vehicles accessing the recreational facility and these types of vehicles generate noise levels lower than trucks (between 55 and 65 dBA). Given the hours of operation proposed for the recreational facility, project traffic would generate traffic noise during evening and night hours, but would not increase noise levels by more than 1 dBA L_{dn}.

With respect to noise at Contempo Marin residential area, there are three homes that border the airport roadway and numerous other homes located to the west. These three homes are setback approximately 15 feet from the roadway and are separated by a 7-foot tall noise barrier. Previous noise analysis at these homes documented that with this noise barrier, maximum noise levels generated by passenger vehicles would range from 50 to 60 dBA. With the addition of the project traffic, the noise levels along this roadway would be audible during arrival or departures from the recreational facility, but the increase would not be significant and would be less than 1 dBA L_{dn}. Furthermore, there has been concern about vehicles leaving the site late at night and playing music that would be audible to the adjacent residences. The California Motor Vehicle Code contains regulations that prohibit amplified sound which can be heard 50 feet of more from a vehicle and this is enforceable by the San Rafael Police Department.

With respect to noise at Captain's Cove residential community, the nearest residences at the Captain's Cove residential development are approximately 70 feet from the edge of Smith Ranch Road and 80 feet from the airport roadway. The traffic levels along Smith Ranch Road are substantially higher than the volumes along the airport roadway and thereby generate higher noise levels. The traffic generated by this project would increase traffic noise in this area by less than 1 dBA L_{dn}.

Noise Ordinance

Chapter 8 of the City of San Rafael Municipal Code contains a Noise Ordinance. The City's Noise Ordinance contains general noise limits that restrict the generation of nuisance noise from various types of properties/land uses. Table 8.13-1 of the Noise Ordinance requires that the most restrictive noise limit applicable to adjoining private property be applied. In this case, the residential category is the most restrictive and therefore, the daytime limits (between 7:00 a.m. and 9:00 p.m. Sunday through Thursday and between 7:00 a.m. and 10:00 p.m., Friday and Saturday) are 60 dBA (intermittent)/50dBA (constant) and nighttime limits (between 9:00 p.m. and 7:00 a.m.,

Sunday through Thursday and 10:00 p.m. 7:00 a.m., Friday and Saturday) are 50 dBA (intermittent)/40 dBA (constant).

The project site is located a minimum of 1,300 feet from nearest homes in Santa Venetia to the south and 1,800 feet from homes in Contempo Marin and Captains Cove to the west. In terms of the outdoor sports fields, these facilities are not proposed to be lighted and would therefore only operate during the daytime. The noise study prepared for this project concludes that the maximum noise levels generated by the outdoor activities would not exceed the maximum level of 60 dBA established for the daytime. In the nighttime, the outdoor fields would not be operational and the noise generation would be limited to the indoor facility and vehicles coming to and from the site. Noise levels anticipated for the nighttime would be 45 dBA, 15 dBA lower than the noise generated by the outdoor uses. The overall L_{dn} generated by this proposed recreational facility would be 40 dBA L_{dn} which is below the standard in the City's Noise Ordinance as well as below the existing 54-56 dBA L_{dn} measured at Contempo Marin.

In addition to noise generated by the recreational uses, operational noise generated by mechanical equipment was also studied. This analysis found that the noise levels at the nearest residences would be at 33 dBA, a level within the standards of the Noise Ordinance.

In conclusion, the proposed project would be located in a noise environment that is compatible with its use. Additionally, the proposed outdoor recreational activities would not: a) raise ambient noise levels more than 3 dBA L_{dn},; b) create noise impacts that would increase noise levels to more than 60 dBA L_{dn} at the nearby residences; or c) exceed the noise limits established by the Noise Ordinance. Lastly, noise generated by project traffic would be similar or lower to that generated by existing activities at the airport. Based on this analysis, the project would be consistent with the standards established in the General Plan or Noise Ordinance and a less-than-significant impact would result.

(Sources: 1, 2, 3, 4, 5, 7, 13 and 32)

b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☒	☐	☐

Setting and Impacts:
The noise study prepared for this project studied measured the ground vibration around portions of the site that would require pile driving for the construction of the project. The ground borne measurements indicate that the levels of vibration would be below the 0.5 inches per second peak particle velocity thresholds established to prevent any structural damage and a less-than-significant impact would occur.

With respect to ground borne noise levels, the geotechnical report indicates that construction of the foundation for the proposed structure would necessitate the driving of up to 100 piles. A diesel-powered pile driver would be utilized and these typically would generate up to 80 dBA per blow at the nearest residences in Captain's Cove, Contempo Marin or Santa Venetia or 94 dBA at McInnis Park. The City's Noise Ordinance established 90 dBA as the maximum limit for construction during 7:00 a.m. and 6:00 p.m., Monday through Friday and 9:00 a.m. and 6:00 p.m. on Saturdays. The noise levels that would be created at McInnis Park would exceed this threshold. Noise impacts associated with pile driving are mitigated by pre-drilling the holes to reduce the number of blows required to sink the pile. The noise study recommends that the holes for piles be pre-drilled and notification be given to neighbors of when pile driving will take place, construction hours be limited to the hours established by the City's Noise Ordinance, noise suppression devises be used on all construction equipment, all construction equipment be properly maintained and muffled, and a noise disturbance coordinator be designated. Therefore, the

mitigation measures recommended by the noise study (included as part of Exhibit 3) are included below, with the exception of the hours of construction, which are being further limited than that recommended by the noise study. With the incorporation of these mitigation measures, exposure to persons of excessive ground borne noise levels will be less than significant.

Recommended Mitigation Measures:

XI.b.1 Construction, alteration, demolition, maintenance of construction equipment, deliveries of materials or equipment, shall be limited to between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. All such activities shall be precluded outside of the allowable hours on Monday to Friday and anytime on Saturdays, Sundays or holidays.

XI.b.2 Prior to driving any piles, each hole shall be pre-drilled.

XI.b.3 Prior to any pile driving, the project applicant shall notify all neighbors within 450 feet of the site (as determined by the City of San Rafael) of the upcoming pile driving. Notification shall be mailed at least 7 days prior to the start of pile driving providing notification of when pile driving will occur.

XI.b.4 All construction equipment shall utilize all available noise suppression devices and all equipment shall maintain and muffle loud construction equipment. Prior to the issuance of the building permit, the applicant shall provide the City with written verification from the acoustical engineer that this measure has been incorporated.

XI.b.5 Prior to the issuance of a building permit, the applicant shall designate a noise disturbance coordinator. This coordinator will be responsible for responding to any local complaints about construction noise. The disturbance coordination shall determine the case of the noise complaint and require that reasonable measure be implemented to correct the problem. The construction schedule and name and telephone number of the disturbance coordinator and telephone number shall be posted and maintained at the entrance to the site (southwest corner of Smith Ranch Road and entrance to airport driveway).

(Sources: 1, 2, 3, 4, 5, 7, 13, 24, 25 and 32)

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Discussion:
See discussion in XI.a above. Less-than-significant impact would occur.

(Sources: 1, 2, 3, 4, 5, 7, 13 and 32)

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Discussion:
Construction of the project would entail grading, pile driving, paving, installation of infrastructure and landscaping and construction of the building. For discussion of pile driving, see Section XI.b above. Site grading would generate the highest noise levels during construction whereas the construction of the building would generate the least. Large earth moving equipment would generate a maximum noise level between 69 and 74 dBA

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

at the County Park to the north. These levels would not exceed the noise levels produced by aircraft operations and would be below the 90 dBA construction noise threshold established by the Noise Ordinance. With respect to noise levels at the nearest residences, they would range between 55 and 60 dBA and would neither exceed the City standard nor interfere with normal residential activities. As discussed above, pile driving could result in temporary impacts and mitigation measures have been identified above as Measures XI.b.1 to XI.b 5.

(Sources: 1, 2, 3, 4, 5, 7, 13, 24, 25 and 32)

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:
The project site is not located within an airport land use plan nor is it within two miles of a public airport. Therefore, no impacts would result.

(Sources: 1, 2, 4 and 5)

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Discussion:
This proposed recreational facility would be built approximately 350 feet north of the San Rafael Airport runway. There are no City of San Rafael of State of California standards that establish maximum noise levels for outdoor sporting areas. The US Environmental Protection Agency has done research that has found that hearing loss would occur with exposure to noise levels of 100 dBA for about 15 minutes a day, every day for 10 to 20 years. The Noise Study prepared for this project concluded that aircraft operations would generate a noise levels between 70 dBA to 100 dBA. The duration of these events are short (5 to 18 seconds) and infrequent (between 2 to 11 times a day). The analysis shows that even under the worse case scenarios (11 events last 18 second each and generating 100 dBA), the impact from the airport operations on the recreational facility would be well below the threshold established by the United States Environmental Protection Agency for hearing damage. Furthermore, the analysis assumed the worst-case scenario relating to the amount of aircraft activity at the San Rafael Airport and this is unlikely.

(Sources: 1, 2, 3, 4, 5, 7, 13, 26 and 32)

XII. POPULATION AND HOUSING

Would the project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of	☐	☐	☐	☒

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

roads or other infrastructure)?

Discussion:
The proposed project would entail the development of an indoor and outdoor recreational facility. A recreational facility by nature would not induce population growth, but rather serve the recreational needs of the existing population. Therefore, no impacts would result.

(Sources: 1, 2, 3, 4 and 5)

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:
There are no housing units on the portion of the site proposed for development. No housing would be displaced by this proposed project, therefore no impact would result.

(Sources: 4)

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:
See discussion for item XIIb above. Therefore, no impact would result.

(Sources: 4)

XIII. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐

Discussion:
The project site is presently served by the San Rafael Fire Department and is within the Department's response zone. The nearest fire station is the Civic Center Station (Station #7) which is approximately 2.5 miles south of this site. The San Rafael Fire Department also participates in mutual aid agreements between neighboring Cities. The proposed recreational facility would be accessed through an extension to the existing private roadway serving the airport. The existing private driveway includes a bridge over the North Fork of the Gallinas Creek. Currently,

this bridge only provides one lane of travel. As part of the project, the applicant has proposed to widen the bridge over the creek to allow for one lane of travel each way and pedestrian/bicycle travel over the bridge.

The San Rafael Fire Department has reviewed the project and determined that project can be serviced with the existing Fire Department facilities and staffing and there would be no need for new or altered facilities nor reduced minimum response times. In regards to the bridge widening, the Fire Department has determined that the widening of the bridge would be a beneficial upgrade, but is not a necessary improvement associated with the proposed project since the existing bridge is adequate for their emergency vehicles to access the site and maintain response times. Therefore, less-than-significant impact would occur to fire services.

(Sources: 1, 2, 3, 4, 5, 9 and 13)

b. Police protection? ☐ ☐ ☒ ☐

Discussion:
The project site is presently served by the San Rafael Police Department. As part of their review of this project, the Police Department has reviewed the existing traffic conditions along Smith Ranch Road, calls for service to the existing County Park and areas along Smith Ranch Road and crime statistics for two other similar recreational facilities in other nearby communities.

In terms of existing traffic conditions, the Police Department reviewed the existing traffic conditions along Smith Ranch Road and the expected impact of the proposed sports facility on Smith Ranch Road. It was found that Smith Ranch Road is a low volume traffic roadway and does not experience significant peak hour effect into or out of any existing streets. A traffic speed trailer was placed on Smith Ranch Road earlier this year, and found that this location does not have a significant amount of speeding and exhibits far less incidents of speeding than other areas of the City. Since 2003, traffic related calls for service calls have resulted in 15 traffic collision reports and 23 citations (for speeding, seatbelt violation and failure to yield).

With regard to calls for service at the existing McInnis Park, the Police Department has consulted with the Marin County Sheriff's Office. A review of their data found that the average response time to this area from the Sheriff's Department averages 7.46 minutes. The Sheriff's Department responded to 58 calls in 2003, 82 calls in 2004 and 82 calls as of October 31st of this year. These calls were primarily to assist other agencies including the CHP and probation, provide extra patrol at the park and juvenile disturbance at the park. The San Rafael Police Department's average response time to this area has been 8 minutes and over the past three years has responded to 155 calls in 2003, 146 calls in 2004 and 30 calls as of October 31 of this year. These calls were primarily for audible alarms, noise disturbances and assistance to other law enforcement agencies.

In order to better understand the proposed use and its potential impacts to police protection, the San Rafael Police Department consulted with the City of Santa Rosa Police Department and the Sonoma County Sheriff's Department, law enforcement agencies which currently provide police services to two other indoor soccer facilities operated by the same group proposing this facility. This consultation found that the Cotati location generated 8 calls for service in the past 12 months. Only two of these were directly related to the soccer facility and neither were considered a true problem by the Sonoma County Sheriff's Department. In regards to the Santa Rosa facility, this facility is a portion of a larger complex that has relatively low calls for service.

The proposed recreational facility would include a café on the mezzanine level, providing food services to users of the facility. The café is proposed to include the sale of alcohol (beer and wine only). In their review of the project, the Police Department has also evaluated the potential impacts from the alcohol sales. As proposed, the sale of alcohol is not the primary component of the café and would be an ancillary service provided to patrons.

The operator of the proposed soccer facility would also operate the café component. This operator currently has an alcohol license for beer and wine sales at their Santa Rosa facility and is applying for one at their Cotati site. A consultation with the California Department of Alcohol and Beverage Control (ABC) has found that that the Santa Rosa facility has no disciplinary action in regards to their license. McInnis Park, the County Park bordering this site, has a restaurant and bar that includes an ABC license for beer, wine and distilled spirits. ABC has indicated that there has been no disciplinary action recorded against this license. In conclusion, the Police Department has found that as proposed, alcohol sales would be ancillary to the café (food service) use and with standard conditions of approval, would not pose an impact to police services. If this project is approved, the standard conditions of approval would be included as part of the Master Use Permit and require that applicant maintain kitchen facility for the cooking of an assortment foods, alcoholic beverages would only be sold for consumption on promises only and only when served at stable or counters at the café, and alcohol sales shall constitute less than 51% of the food and beverage sales.

Based on this review, the City of San Rafael Police Department has indicated the proposed project would not impact police services. They have recommended standard conditions of approval that are to be incorporated into the project and would serve to prevent crime. Furthermore, the proposed recreational project would be compatible with the existing recreational facility that is located to the north of this site. The Police Department does not anticipate that the construction and operation of this project would generate significant level of new calls for service and that the existing facilities and personnel would be adequate to service the new use.

(Sources: 1, 2, 3, 4, 5, 9, 13, 40, 41 and 42)

c. Schools? ☐ ☐ ☒ ☐

Discussion:
As discussed above, the proposed project would entail the development of a recreational facility. Recreational facilities by nature do not induce population growth, but rather serve the existing recreational needs of the existing population and community. Therefore, the proposed project would not create the need for new or altered school facilities. Furthermore, development of the proposed recreational facility would provide new state of the art recreational fields and opportunities for use by the school districts and school age children in the area. This would create a significant benefit to the schools and school age children in the County. Therefore, less-than-significant impact would result.

(Sources: 1, 2, 3, 4, 5, 9 and 13)

d. Parks? ☐ ☐ ☐ ☒

Discussion:
The proposed new recreational facility would create additional private recreational opportunities in San Rafael and Marin County in which they are greatly lacking. These facilities would be privately built and managed, but would be open to the general public. As documented in the Parks and Recreational Element of the General Plan, there is an existing deficiency in amount of parks and recreational opportunities within the City of San Rafael. The Parks and Recreation Element of the City of San Rafael's General Plan 2020 includes the following policies a) PR-4 (City Recreational Needs) provide opportunities for recreational activities for boys and girls, teens, and adults through the creation of additional facilities such as fields for active sports; PR-13 (Commercial Recreation) which encourages private sector development of commercial facilities to serve community needs by encouraging commercial recreational facilities open to the general public; and c) PR-14 (Amateur Multi-Sport Athletic Fields) which strives for the development of publicly or privately funded, large multi-sport athletic field clusters to address the needs of the community. In the development of the General Plan 2020 and the background reports

prepared for this process, the existing deficiency of adequate recreational opportunities was documented. This proposed project would address the deficiency of recreational facilities of residents of both the City of San Rafael as well as residents county-wide by providing indoor recreational space for various recreational uses as well as additional outdoor fields with all weather surface.

The proposed project was reviewed by the City of San Rafael's Parks and Recreation Commission at their July 21, 2005 meeting. The Commission found that: a) this proposed facility is consistent with the General Plan 2020 and meets the goals of the Recreation Element; b) the addition of this facility would provide a community benefit; c) the location of this facility is central and accessible to the public and the intensity, hours of operation and types of uses are similar to that at McInnis Park that is located adjacent to this proposed facility; and d) even if these recreational uses are not commercially viable, other recreational uses can be accommodated in the proposed building. The addition of this facility would have a positive impact on recreational offering in the City and therefore no impact would result.

(Sources: 1, 2, 4, 5, 9 and 37)

e. Other public facilities?	☐	☐	☐	☒

Discussion:
The City has not identified any issues related to the provision for other public facilities. Therefore, no impact would result.

(Sources: 1, 2, 4, 5, 9 and 13)

XIV. RECREATION

Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

Discussion:
See XIII.d above. Parks and recreational facilities are limited in Marin County and especially the City of San Rafael. As documented in the background report for the General Plan 2020, the surfaces of many playing fields throughout San Rafael have been overused for years without proper maintenance. This proposed project would actually provide additional recreational opportunities where it is lacking and relieve the overuse of the existing facilities. Therefore, no impact would occur.

(Sources: 1, 2, 4, 5, 9 and 37)

b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Discussion:
This proposed project is a recreational facility in its entirety. The recreational use is the primary purpose of the proposed development. The potential impacts and physical effect on the environment as a result of the construction of this project have been discussed and analyzed throughout this Initial Study. Therefore, less-than-significant impacts would result.

(Sources: 1, 2, 4, 5, 9 and 37)

XV. TRANSPORTATION/TRAFFIC

Would the project:

a. Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐

Setting and Impacts:
The proposed recreational facility would include the following uses: a) indoor soccer facility with two indoor fields and one outdoor field; b) baseball training facility with an indoor training area and one outdoor field; and c) two alternate recreational uses. Given the uncertainty of the third user of the recreational facility (gymnastics), the traffic study prepared for the proposed project studied two different alternatives with "Alternative A" analyzing a gymnastics school and "Alternative B" analyzing a climbing gym. This was done in order to study a range of traffic generating uses, with a high generating use (gymnastics) in "Alternative A" and a lower traffic generating use (climbing gym) in "Alternative B." For the purposes of the City's review and analysis, "Alternative A", was used since this would be the higher traffic-generating alternative.

In order to ensure an effective roadway network, the City of San Rafael has established traffic levels of service (LOS) standards for the A.M. peak hour (7:00 a.m. to 9:00 a.m.) and P.M. peak hour (4:00 p.m. to 6:00 pm.) for all signalized intersections. Circulation Policy C-5.A (Intersection LOS) is the threshold that the City utilizes to evaluate traffic impacts. LOS is a means to measure operation conditions and congestion levels and is therefore an indication of delay. This policy identifies that the LOS standard for intersections in this area is LOS D. The General Plan also includes Circulation Policy C-5.B (Arterial LOS) which allows the analysis of LOS for an arterial segment as the primary method of analysis based on certain characteristics of intersections and roadways and establishes LOS D as the acceptable LOS threshold for arterial segments in this area. Therefore, based on the City of San Rafael's policies, the threshold of significant used for this analyzing impacts to this category is whether a project would degrade LOS for an intersection or arterial segment to an unacceptable level (< LOS D).

To evaluate the potential impacts to the City's roadway system, the City's Traffic Engineer conducted an impact analysis on the following five intersections, those that would handle the traffic generated by this project: a) Smith Ranch Road/Silvera Parkway; b) Smith Ranch Road/Redwood Highway; c) Smith Ranch Road/Northbound Highway 101 ramps; d) Smith Ranch Road/Southbound Highway101 ramps; and e) Lucas Valley Road/Las Gallinas Ave. Additionally, the City Traffic Engineer has also studied the two arterial segments in the area, east and west bound Lucas Valley Road and east and west bound Smith Ranch Road.

The traffic report prepared for this project, *Traffic Assignment for San Rafael Airport Facility Study* (Fehr & Peers Associates, Inc, May 31, 2005), provided trip generation and trip distribution for the proposed project and these numbers were reviewed and confirmed by the City's Traffic Engineer. A copy of the Fehr & Peers Traffic Study is included as part of Exhibit 4. As proposed, the entire project would generate 0 new A.M peak hour trips and 104 new P.M. peak hour trips and 948 total daily trips. As previously mentioned, the City does not analyze or evaluate total daily trips, but rather analyzes LOS standards at intersection or arterials. Of the 104 P.M. peak hour trips, the highest generating use of the three recreational uses would be the gymnastics use, which would generate 86 P.M. peak hour trips. The soccer facility would generate 2 P.M. peak hour trips and the baseball school would generate 16 P.M. peak hour trips.

The 104 P.M. peak hour trips were distributed according to the City of San Rafael's traffic model. Of these new 104 trips, 13% of the trips would be to and from the north, 81% to and from the south, and 6% to and from the west. The City's Traffic Engineer performed a traffic impact analysis using the City's extensive traffic model for the Baseline Conditions (A.M. peak hour plus P.M. peak hour) for the five Lucas Valley Road/Smith Ranch Road intersections between Silvera Parkway to the east and Las Gallinas Avenue to the west. The baseline includes trips from previously approved, but not yet built or occupied project, such as the 56 residential condominium project at the end of North Avenue (Capri Condominiums). The following table is a summary of the seconds of delay and LOS for the five impacted intersections during the A.M. and P.M peak hour periods. The data shows the seconds of delay and LOS for the existing baseline conditions at the intersections as well as the delay and LOS with the inclusion of the proposed project. A copy of the traffic analysis from the City's Traffic Engineer is included as part of Exhibit 4.

As indicated below in Table 1, there would be no change to LOS or delay in the A.M peak hour for any intersection since the project would not generate any additional trips. In terms of the P.M. peak hour, all affected intersections would continue to operate at the same LOS as they do currently and this operation is well within the acceptable LOS standards of LOS D. The proposed project would add delay to four out of the five intersections, ranging from .6 seconds to 6.1seconds. The project would not cause the LOS at any intersection to degrade to an unacceptable level. The impact is therefore, less-than-significant

TABLE 1
INTERSECTION LEVEL OF SERVICE (LOS)

		Delay (Sec)		LOS	
Peak Period	**Intersection**	**Baseline 2005**	**Baseline + Project**	**Baseline 2005**	**Baseline + Project**
AM	Smith Ranch & Redwood Hwy	12.3	0	B	0
AM	Smith Ranch & 101 NB Ramps	56.9	0	E	0
AM	Lucas Valley & 101 SB On	14.5	0	B	0
AM	Lucas Valley & Los Gamos*	15.3	0	C*	0
AM	Lucas Valley & Las Gallinas	39.7	0	D	0
PM	Smith Ranch & Redwood Hwy	25.7	27.1	C	C
PM	Smith Ranch & 101 NB Ramps	12.2	13.7	B	B
PM	Lucas Valley & 101 SB On	23.8	29.9	C	C
PM	Lucas Valley & Los Gamos*	4.9	4.9	A*	A*
PM	Lucas Valley & Las Gallinas	25.5	26.1	C	C

0 Note: Project did not have any a.m. peak hour trips for this scenario
* Denotes unsignalized intersection

In terms of the arterial LOS, Table 2 below illustrates that the impact analysis has found that there would be no change to arterial LOS in the A.M. period since the project would not generate any new trips in this period. In terms of the P.M. peak hour, the development of the proposed project would add 9 seconds of travel time on westbound Smith Ranch Road, from 143 to 152 seconds, and would decrease speed on this segment from 12 to 11 miles an hour for the same segment. There would be no change to LOS on either arterial segment, with the Lucas Valley Road arterial continuing to operate at LOS C and Smith Ranch Road arterial continuing to operate at LOS D. Both these LOS's are within the established thresholds of the City of San Rafael General Plan 2020.

TABLE 2
ARTERIAL LEVEL OF SERVICE (LOS)

			Travel Time (Sec)		Speed (mph)		LOS	
Arterial Segment	**Direction**	**Peak Period**	**Baseline 2005**	**Baseline + Project**	**Baseline 2005**	**Baseline + Project**	**Baseline 2005**	**Baseline + Project**
Lucas Valley	Eastbound	AM	244	0	10	0	D	0
Lucas Valley	Westbound	AM	99	0	19	0	C	0
Smith Ranch	Eastbound	AM	106	0	10	0	D	0
Smith Ranch	Westbound	AM	116	0	14	0	C	0
Lucas Valley	Eastbound	PM	155	155	16	16	C	C
Lucas Valley	Westbound	PM	114	114	16	16	C	C
Smith Ranch	Eastbound	PM	93	93	12	12	D	D
Smith Ranch	Westbound	PM	143	152	12	11	D	D

0 Note: Project did not have any a.m. peak hour trip for this scenario

Given that the LOS standards for the five affected intersections and two arterial segments would be within the established threshold of LOS D, a less-than-significant impact would occur.

With respect to cumulative traffic impacts, the City of San Rafael adopted its General Plan 2020 in November 2004. As part of the General Plan update, cumulative traffic impacts were analyzed. Various land use scenarios were analyzed as part of the Environmental Impact Report prepared for the General Plan. The scenarios included additional commercial, recreational and residential development in the area around Smith Ranch Road. As part of the General Plan, certain standards were established for acceptable LOS and these have been discussed above. Based on the additional development that was modeled and incorporated into the General Plan 2020 build-out, certain roadway improvements were identified as necessary to maintain the acceptable LOS. The development of this project is within the build-out scenarios analyzed by the General Plan EIR and therefore would not result in significant cumulative impacts.

The project would still be required to pay its fair share of traffic mitigation fees. As part of the General Plan 2020, circulation improvements necessary to maintain LOS standards, improve safety and relieve congestion in San Rafael were identified. To help fund these improvements, all development projects that generate new A.M. or P.M peak hour trips are subject to traffic mitigation fees. The current traffic mitigation fee is $4,246 for every new A.M. and P.M. peak hour trip. Given that this project would generate 0 A.M. peak hour trips and 104 P.M. peak hour trips, it would be required to pay $441,574. Therefore, the following mitigation measure is recommended:

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Recommended Mitigation Measure:

XVa.1 Prior to the issuance of a building permit, a traffic mitigation fee shall be paid for each new A.M. and P.M. peak hour trip generated by the project. Total fees paid for this project shall be $441,574.00, adjusted according to the Lee Saylor Construction Index to take into account changes in construction costs. This fee amount is based on a fee of $4,246.00 times 104 total A.M. and P.M. peak hour trips in November 2004 dollars.

(Sources: 1, 2, 4, 5, 7, 9, 13, 33 and 34)

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐

Discussion:

Refer to the response to Checklist Item XV.a, above. Transportation Authority of Marin (TAM) is designated as Marin County's Congestion Management Agency. This is a joint powers agency established between the County and cities of Marin to address regional traffic impacts. The proposed project was referred to TAM for their review of consistency with the CMA's Congestion Management Plan (CMP). The CMP has established thresholds for development project review and special requirements for traffic analysis preparation (Congestion Management Plan, Marin County Congestion Management Agency).

As part of the recently updated City of San Rafael General Plan 2020, the land use assumptions for projected build-out of the General Plan by the year 2020 are no longer parcel or site specific, but are rather assumptions in traffic area zones (TAZ). The TAZ's east of Highway 101, including the subject site, contains a certain amount of additional commercial, office, recreational, and residential development that was assumed for build out of the General Plan 2020. This proposed project, including the 104 new P.M. peak hour trips, is within the amount of additional development modeled and analyzed for this TAZ, therefore, this new development has been accounted for County's model and assumptions for General Plan 2020 build out.

TAM has indicated that this project would have to pay its fair share of mitigation fees for interchange improvements at the Lucas Valley Road/Smith Ranch Road/Highway 101 improvements interchange. As discussed above in Section XV.a, circulation improvements necessary to maintain LOS standards, improve safety and relieve congestion in San Rafael were identified to mitigate the traffic impacts that would occur as result the build out of General Plan 2020. To help fund these improvements, all development projects that generate new A.M. or P.M peak hour trips are subject to traffic mitigation fees. Therefore, as required by mitigation measure XV.a.1 above, the project would have to pay its fair share of mitigation fees and those fees would be used to fund improvement in the areas, including the Lucas Valley Road/Smith Ranch Road/Highway 101 interchange improvements.

The proposed project would be consistent with the current General Plan land use designation for the site and therefore the cumulative impacts of all new traffic generation have been evaluated as part of the General Plan 2020 and Environmental Impact report prepared for this plan. TAM does still review projects that generate more than 100 new trips in order to update their traffic model. Given that this project is within the allowable land use designation and intensity modeled as part of the General Plan 2020, less-than-significant impacts related to level of service standards established by the CMA.

(Sources: 1, 2, 4, 5, 7, 9, 13, 33, 34, 35 and 45)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

Discussion

The proposed project would not result in any changes in air traffic patterns. The proposed recreational facility would be built on 4.4-acre portion of 119.5-acre site that includes the San Rafael Airport. This airport is a Special Use Airport that is permitted through the California Department of Transportation, Division of Aeronautics (CalTrans - DOA). This agency has the technical expertise in the areas of airport operations safety and airport land use compatibility. This agency has reviewed the proposed project for the recreational facility and determined that no impacts would result to the existing operations of the San Rafael Airport through implementation of this recreational project. Certain design features, setbacks and clear ascending zone setbacks have been incorporated into the project design to comply with the standards. Furthermore, CalTrans-DOA has determined that there would be no need for amendment to the Special Use Airport Permit that is currently issued for the San Rafael Airport.

Given that the proposed structure would be located to one side of the runway, the CalTrans-DOA standards for clear zones and clear ascending zone along runways would be applicable. As previously discussed in Section VII.f, the project has been reviewed by CalTrans-DOA and found to be consistent with their requirements. As part of their review of the proposed project, the Department of Transportation, Division of Aeronautics has included recommendations that should be incorporated into the project design in order to identify any permanent or temporary construction related impacts to the airport imaginary surfaces. These mitigation measures were previously identified as Mitigation Measure VII.f.1 and with the inclusion of this mitigation measures, a less-than-significant impact would occur.

(Sources 1, 2, 4, 5, 26 and 27)

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐

Discussion:

Access to the project site would come through an extension to the existing private driveway that currently leads to the airport facility off of Smith Ranch Road. The existing private roadway is a two-lane roadway that leads from Smith Ranch Road, curves to the west paralleling Smith Ranch Road, and then turns south and crosses the existing bridge across the North Fork of the Gallinas Creek. The roadway, as it crosses the existing bridge, narrows from two lanes to one lane with two raised asphalt berms over the bridge and then increases back to two lanes once it crosses the bridge. Once past the bridge, the roadway become two lanes again as it crosses over the railroad tracks and enters the exiting airport portion of the site. The project proposes to extend the existing roadway from its terminus within the airport portion of the site to the east, leading to the new recreational facility and parking areas.

The City Traffic Engineer and Fire Department have both reviewed the existing and proposed access to the new recreational facility and found the access to be safe and not pose any hazardous design features. The new roadway extension would provide two travel lanes, one in each direction, with a pedestrian/bicycle lane. The entire stretch of the new roadway was checked for turning movements of single vehicles and single unit trucks and found to be adequate.

Since access to the proposed recreational development would utilize the existing roadway and one lane bridge, the adequacy of the one lane bridge was also evaluated. Based on the amount of traffic associated with the existing and proposed developments, widening of the bridge was determined to not be necessary. Both the City Traffic Engineer and Fire Department found the existing bridge to be acceptable to accommodate the anticipated new traffic. Additionally, there is over 500 feet of roadway between Smith Ranch Road and the beginning of the bridge approach. This amount of roadway would accommodate over 20 cars to queue before resulting in vehicles backing up onto Smith Ranch Road. Furthermore, there is ample maneuvering area on the approaches to both sides of the bridge to allow vehicles to maneuver and pass in case of emergency. Based on this analysis, the condition of the existing bridge does not create or exhibit a design feature that would substantially increase hazards.

Although not required by the City, the applicant has proposed to install a new clear span bridge over the existing bridge that would increase the width of the roadway from one lane to two lanes with a separated pedestrian/ bicycle pathway. Although not required, the applicant has proposed to undergo the bridge widening to two lanes as part of this project and has included the plan in this application.

The potential safety hazards created by additional vehicles exiting the site and turning westbound onto Smith Ranch Road were also evaluated by the City's Traffic Engineer. It was found there is adequate site distance based on standard traffic engineering practices to allow vehicles ample time to survey on-coming traffic and exit the site.

Lastly, the proposed recreational use would not introduce any uses that would be incompatible with those in the surrounding area. The regional county park located to the north west of the site exhibits similar intensity and types of uses. Additionally, the proposed recreational use is consistent with Airport/Recreation General Plan land use designation for the site.

Based on the above analysis, the proposed project would not significantly increase hazards due to a design feature or incompatible use. Therefore a less-than-significant impact would occur

(Sources: 1, 2, 3, 4, 5, 10 and 13)

e. Result in inadequate emergency access? ☐ ☐ ☒ ☐

Discussion:
Refer to the response to Checklist Item XV.d, above. The City of San Rafael Fire Department and Police Department have reviewed the proposed project and determined that there is adequate emergency access to the site. Therefore, less-than-significant impacts would result.

(Sources: 1, 2, 3, 4, 5, 10 and 13)

f. Result in inadequate parking capacity? ☐ ☐ ☒ ☐

Discussion:
The parking requirements contained in the City of San Rafael Zoning Ordinance do not include a specific category or requirement for a recreational facility as proposed. Where a specific use in question is not listed in the Zoning Ordinance, the parking study of other similar facilities must be prepared and evaluated by the City Engineer. The parking study prepared for this project identifies that 180 parking spaces would be sufficient for the type and mixture of recreational uses. The proposed project would provide 184 spaces in the main parking lot plus

an overflow parking lot that could accommodate up to 80 additional vehicles. The parking analysis was evaluated by the City Traffic Engineer and found to be reasonable and adequate for the proposed type and mixture of recreational uses.

Additionally, the sole access to the location of the proposed new building is through an extension to the existing private roadway. With the new roadway extension, the proposed recreational facility would be over one-half mile from the nearest public street (Smith Ranch Road). Given this distance and the availability of land and parking opportunities on the site, it is extremely unlikely that any parking would spill onto adjacent properties, into nearby residential neighborhoods or the County Park, nor onto any public streets. Therefore, a less-than-significant impact would result.

(Sources: 1, 2, 3, 4, 5, 10 and 13)

g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Discussion:
Access to the site is through a private roadway beginning at the intersection of Smith Ranch Road and Silveria Parkway. The nearest public street to the subject site is Smith Ranch Road, located approximately one-quarter mile to the northwest from the proposed new building. There are no adopted alternative transportation policies, plans or programs that apply to this site and the development of this project would not impact policies that may apply to Smith Ranch Road. The project would also provide a new pedestrian/bicycle access from Smith Ranch road all the way to the new recreational facility. Furthermore, the project proponent has also proposed bicycle racks consistent with the requirement adopted as part of the San Rafael Zoning Ordinance. These racks would be placed at the front of the new building. No impacts to alternative transportation policies or programs would occur.

(Sources: 1, 2, 3, 4, 5, 10 and 13)

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

Discussion:
The proposed project involves the construction of a new recreational facility that would be consistent with the General Plan land use designation adopted for this site. The project would be subject to all wastewater requirements of the Regional Water Quality Board (RWQB). As standard condition of approval, the project would provide adequate on-site drainage improvements and would require a Stormwater Pollution Prevention Plan to be prepared prior to construction. The recreational facility would be connected to the Las Gallinas Valley Sanitary District sewer facilities and this system has been identified to have sufficient capacity to serve the new recreational facility. Less-than-significant impacts would result.

(Sources: 1, 2, 3, 4, and 13)

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

Discussion:
The Marin Municipal Water District (MMWD) and Las Gallinas Valley Sanitary District provide water service and wastewater treatment, respectively, to this area. Water supplies and wastewater treatment capacity are adequate to serve the proposed recreational facility, therefore the project would not require construction of new water or wastewater treatment facilities. No impacts would result.

(Sources: 1, 2, 3, 4, 36 and 39)

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

Discussion:
As discussed above in Item VIII.b, the existing storm drain system would have adequate capacity for the proposed development. Therefore, the project would not require the construction of new or expanded storm water drainage facilities and no impact would result.

(Sources: 1, 2, 3, 4, 13 and 31)

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Discussion:
The subject site is currently not being served and no water has been allocated to this property. There is water service and entitlements for the portion of the 119.5-acre site that is the San Rafael Airport. According to the Marin Municipal Water District (MMWD), a pipeline extension from the end of the District's existing facilities would be required prior to MMWD providing water service. MMWD has indicated that there is sufficient capacity in their system to serve this site. Upon completion and acceptance of the pipeline extension, the property would be eligible for water service. Therefore, a less-than-significant impact would occur

(Sources: 1, 4 and 36)

e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

Discussion:
The project site is not within the Las Gallinas Valley Sanitary District's boundaries, but is located within the district's Sphere of Influence. The existing airport use has an agreement with the Sanitary District for sanitary service for the site and the agreement allows a certain amount of allocation for sewer capacity. According to the Las Gallinas Sanitary District, the proposed addition of the recreational facility would be covered under the existing agreement for sanitary sewer services and would be within the capacity allocated under this agreement. The District has indicated that there is adequate sewer capacity to service the proposed project. Therefore, a less-than-significant impact would result.

(Sources: 1 and 39)

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Discussion:
Redwood Sanitary Landfill would serve the project. The landfill is currently approved for operations until 2039 and is currently well below maximum capacity. The projected solid waste from build-out of the project site as Airport/Recreation (addressed in the City of San Rafael General Plan 2020 EIR) has been accounted for in the landfill maximum capacity. Furthermore, the waste generated by the proposed recreational use would represent a small percentage of the remaining capacity at the Redwood Landfill, and would not result in any violations of national, state or local standards. Solid waste impacts generated by on-site project development (under worst-case conditions) would be less-than-significant.

(Sources: 1 and 4)

g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion:
The recreational use is consistent with the General Plan designation for the site. Furthermore, as proposed, the project would not create the need for any special solid waste disposal handling and would, therefore, comply with all solid waste statues and regulations. No impacts would occur.

(Sources: 1 and 4)

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important	☐	☒	☐	☐

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

examples of the major periods of California history or prehistory?

Discussion:
The project site is located in the Smith Ranch neighborhood, in an area surrounded by a regional park, residential development, commercial, industrial and office development and parks and open space. A portion of the site is developed with the San Rafael Airport and ancillary light-industrial commercial uses. As described in response to Checklist Item IV.a, the biological assessment and the independent peer review concluded that due to the highly disturbed nature of the site, there are no special-status plant species on the project site. Two special-status wildlife species were identified as having high potential to occur on the site, the Cooper Hawk and White Tailed Kite. These species could nest and migrate through the site. These species could, therefore, be affected by the proposed project. Implementation of Mitigation measure IV.a.1 would reduce the potential impacts on special status species to a less-than-significant level. Additional analysis was prepared regarding the project impacts on the California Clapper Rail and Salt Marsh Harvest Mouse. This analysis concluded that the proposed project would not have an adverse affect on these species given the project's distance from prime habitat for these species, the siting of the structure is such that it provides 150 to 208 feet setback from North Fork Gallinas Creek (top of bank) and the outdoor fields provide 118 to 173 feet setback from the North Fork Gallinas Creek (top of bank), all development would be in upland areas of the site, and is separated from the creek by a 9-foot tall levee and row of Eucalyptus trees. As described in Checklist Items V.a-c, there would be no undue disturbance to features or deposits associated with historic building. The site does not contain any historic buildings or other historic resources and no archeological resources that are listed in the City of San Rafael historical survey. An archival review indicated that there are no prehistoric sites within the immediate project limits, but there are unconfirmed site locations as well as recorded site in the general proximity of this site. Field inspections found no evidence indicative of prehistoric activity, although such items could be buried beneath fill soil and may not have been noticed during field inspections. The City's archeological ordinance includes standard conditions of approval that would be implemented as part of this project that would address any archeological resources that may be encountered during excavation. The evaluation of the site did not reveal any paleontological resources, however, there may be unique paleontological resources present in the area underlain by soil. Implementation of Mitigation Measure V.c.1a would reduce impacts related to paleontological resources to a les than significant level.

(Sources: 1-45)

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒

Discussion:
The project would involved the construction of a new 85,700 square foot indoor recreational building and two outdoor fields an associate site improvements. The project would be consistent with the San Rafael General Plan 2020 land use designation of Airport/Recreation, which allows for private recreational facilities. Furthermore, the proposed project would be built within the 36-foot height limit established by the General Plan area and the 0.30 Floor Area Ratio allowed for this land use designation. A complete analysis conducted by the City of San Rafael staff concludes that the proposed project is consistent with policies and objectives of the San Rafael General Plan 2020. No physical improvements or construction are proposed that would result in cumulative impacts that have

	Potentially Significant Impact	*Less-Than-Significant With Mitigation Incorporation*	*Less-Than-Significant Impact*	*No Impact*

not been previously considered or assessed under the San Rafael General Plan 2020 Final Environmental Impact Report (FEIR). The General Plan and EIR prepared for the general Plan considered a range of commercial, residential and recreational development in this area of Smith Ranch Road, east of Highway101, and this project and recently approved projects are within the projections assumed for General Plan 2020 build out. Furthermore, the proposed project would not result in a significant land use intensity that would require a reassessment of cumulative impacts. Future development of this site is extremely limited given the covenant of restrictions that exists for this site.

(Sources: 1-45)

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Discussion:
As described through this environmental checklist, the proposed project would not result in substantial environmental effects on human beings. Mitigation measurers are identified in this Initial Study to reduce potentially significant impacts related to Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology/Water Quality, and Noise. With implementation of these mitigation measures, these impacts would be less than significant.

(Sources: 1-45)

SOURCE REFERENCES

The following is a list of references used in the preparation of this document. Unless attached herein, copies of all reference reports, memorandums and letters are on file with the City of San Rafael Department of Community Development. References to publications prepared by Federal or State agencies may be found with the agency responsible for providing such information.

1. City of San Rafael General Plan 2020, *City of San Rafael*, adopted November 2004, and Final EIR, certified November 2004.
2. City of San Rafael Zoning Ordinance and Maps, City of San Rafael.
3. City of San Rafael Municipal Code, *City of San Rafael*, Codified 1960, last updated through December 2005.
4. Application packet for the Recreational Facility at the San Rafael Airport Recreational, submitted by Robert Herbst of the San Rafael Airport, including architectural plans, landscape plans, site plan and civil engineering drawings, contextual map, and additional materials and exhibits.
5. Site inspections of subject site and various surrounding properties, conducted between March 2005 and December 2005.
6. Photo simulations of existing and proposed views from six areas, prepared by eStudioDat. (Attached as Exhibit 1)
7. City of San Rafael files regarding San Rafael Airport property, including site photos, previous permits, and project history.
8. City of San Rafael General Plan 2000, *City of San Rafael*, adopted July 1988, and Final EIR, certified July 1988.
9. Analysis of General Plan 2020 consistency prepared by Raffi Boloyan, City of San Rafael.
10. City of San Rafael MapGuide Database and aerial photos.
11. Neighborhood Meeting Minutes, June 22 and June 23, 2005.
12. Declaration of Restriction for San Rafael Airport property between City of San Rafael, County of Marin and property owner, recorded at Marin County recorder's Office December 15, 1983.
13. Comments, Conversations and Conditions from City Departments (Police, Fire, Public Works, Traffic, Storm Water Management, and Building) contained in project file.
14. Design Review Board Meeting Minutes, July 19, 2005 and November 8, 2005.
15. BAAQMD CEQA Guidelines, *Bay Area Air Quality Management District*, December 1999.
16. Biological Site Assessment - San Rafael Airport Recreational Facility, *WRA Environmental Consultants*, February, 2005 (Attached as Exhibit 2)
17. Letter from Douglas Spicher, *WRA Environmental Consultants* Re: Potential Affect on California Clapper Rail and Salt Marsh Harvest Mouse, and Bridge Replacement, October 10, 2005. (Attached as Exhibit 2)
18. Jurisdictional Area Delineation - San Rafael Airport Recreational Facility, *WRA Environmental Consultants*, September 2005. (Attached as Exhibit 2)
19. Letter from Cay C. Goude, Assistant Field Director, *United States Department of the Interior*, Re Smith Ranch Road Residential Development, March 1, 1999. (Attached as Exhibit 2)
20. Biological Peer Review Comments, *Zander Associates*, December 1, 2005. (Attached as Exhibit 2)
21. Archaeological Sensitivity Report, *Pastfinder Archaeological Database*, generated April 5, 2005.

22. A Cultural Resources Evaluation of the San Rafael Airport Property, *Richard Greene - Archeological Resource Service*, February 8, 2005.

23. Alquist-Priolo Earthquake Fault Zoning Maps, State Division of Mines and Geology.

24. Geotechnical Investigation, *John C. Hom & Associates*, February 22, 2005, May 9, 2005 and November 23, 2005.

25. Geotechnical Peer Review Comments, *Kleinfelder*, dated September 9, 2005 and December 15, 2005.

26. Letter from Sandy Hesnard, *California Department of Transportation, Division of Aeronautics*, June 20, 2005.

27. Federal Aviation Administration's Advisory Circular 150/5370-2E, Operational Safety on Airports.

28. Flood Insurance Rate Map (FIRM) Community Panel No. 065058 0015B, *Federal Emergency Management Agency (FEMA)*, May 1984.

29. Letter from Andrew Preston, *City of San Rafael Director of Public Works*, Re Summary of Meeting with Mike Hornick of FEMA Re Flood Zone Issues, September 15, 2005.

30. Federal Emergency Management Agency Technical Bulletin 7-93 Re Wet Floodproofing.

31. Hydrologic Analysis, San Rafael Airport Sports Complex, *Lee Oberkamper & Associates*, November 26, 2005.

32. San Rafael Airport Recreational Facility Noise Assessment, *Illingworth & Rodkin*, Inc, May 31, 2005 (Revised December 15, 2005). (Attached as Exhibit 3)

33. Traffic Assignment for San Rafael Airport, *Fehr and Peers*, May 21, 2005. (Attached as Exhibit 4)

34. Memo from Nader Mansourian, *City of San Rafael Traffic Engineer*, Re: Detailed Level of Service Calculation results, November 30 2005. (Attached as Exhibit 4)

35. Marin County Congestion Management Plan.

36. Letter from Una Conkling, *Marin Municipal Water District*, Re: Water Availability, April 1, 2005.

37. Memo from Carlene McCart, *City of San Rafael community Service Director*, Re: Summary of City of San Rafael Parks and Recreation Commission Meeting, July 25, 2005.

38. Phone call with Steve Rosa, *Marin Sanitary Service*, dated March 21, 2005.

39. Letters from Al Petrie, *Las Gallinas Valley Sanitary District*, Re: Sewer Capacity, March 8 and October 13, 2005.

40. Phone conversation with Kraig Tambornini, *City of Santa Rosa Associate Planner*, October 21, 2005.

41. Phone conversation with *California Department of Alcohol and Beverage Control*, November 2005.

42. World Wide Web research on similar recreational facilities, June 2005 to October 2005.

43. California Building Code, 2001.

44. City of San Rafael Historical/Architectural Survey, September 1986.

45. Letter from Art Brook, *Transportation Authority of Marin*, Re Consistency with Contentment Management Plan, December 23, 2005.

PROJECT SPONSOR'S INCORPORATION OF MITIGATION MEASURES

As the project sponsor or the authorized agent of the project sponsor, I, Robert Herbst, undersigned, have reviewed the Initial Study/Mitigated Negative Declaration for the San Rafael Airport Recreational Facility, and have particularly reviewed all mitigation measures and monitoring programs identified herein. I accept the findings of the Initial Study and mitigation measures and hereby agree to modify the proposed project applications now on file with the City of San Rafael to include and incorporate all mitigation measures and monitoring programs set out in this Initial Study.

Property Owner (authorized agent) Date

DETERMINATION FOR PROJECT

On the basis of this Initial Study and Environmental Checklist, I find that the proposed project could have a Potentially Significant Effect on the environment; however, the aforementioned mitigation measures to be performed by the property owner (authorized agent) will reduce the potential environmental impacts to a point where no significant effects on the environment will occur. A Mitigated Negative Declaration will be prepared.

Raffi Boloyan Date
CITY OF SAN RAFAEL
Senior Planner

Exhibit 1 – Photo Simulations

Key to Location of Photo Simulations

Photo simulations of 6 views illustrating existing conditions and proposed conditions from the following areas.

- Public View #1 - Existing and Proposed Views From McInnis Park Trailhead
- Public View #2 - Existing and Proposed Views from Parking Lot at McInnis Park
- Public View #3 - Existing and Proposed Views From Levee Trail at Pump House
- Public View #4 - Existing and Proposed Views From Levee Trail at Creek Bend
- Private View #1 - Existing and Proposed Views From 501 Vendola Drive
- Private View #2 - Existing and Proposed Views From 825 Vendola Drive, 2nd Floor

Note:
Color copies of the Initial Study have been distributed to San Rafael City Council and San Rafael Planning Commission.

Non-color copies of the Initial Study plus Compact disks (CD), with the electronic version of the Initial Study, including color photos, have been distributed to all commenting agencies.

Color copies of the Initial Study are available for review at:

City of San Rafael
Community Development Department
1400 Fifth Avenue, 3rd Floor
San Rafael, CA 94901

San Rafael Public Library
1100 E Street
San Rafael, CA 94901

Marin County Library
Civic Center,
3501 Civic Center Drive
San Rafael, CA 94903

Additionally, an electronic version of the Initial Study, including the color photos, is available on the City of San Rafael web site at http://www.cityofsanrafael.org/commdev/pc.htm#staffreport

Exhibit 1
Key to Location of Photo Simulations

Exhibit 1
Public View #1 - Existing View From McInnis Park Trailhead

Exhibit 1
Public View #1 - Proposed View From McInnis Park Trailhead

Exhibit 1
Public View #2 - Existing View from Parking Lot at McInnis Park

Exhibit 1
Public View #2 - Proposed View from Parking Lot at McInnis Park

Exhibit 1
Public View #3 - Existing View From Levee Trail at Pump House

Exhibit 1
Public View #3 - Proposed View From Levee Trail at Pump House

Exhibit 1
Public View #4 - Existing View from Levee Trail at Creek Bend

Exhibit 1
Public View #4 - Proposed View from Levee Trail at Creek Bend

Exhibit 1
Private View #1 - Existing View From 501 Vendola Drive

Exhibit 1
Private View #1 - Proposed View From 501 Vendola Drive

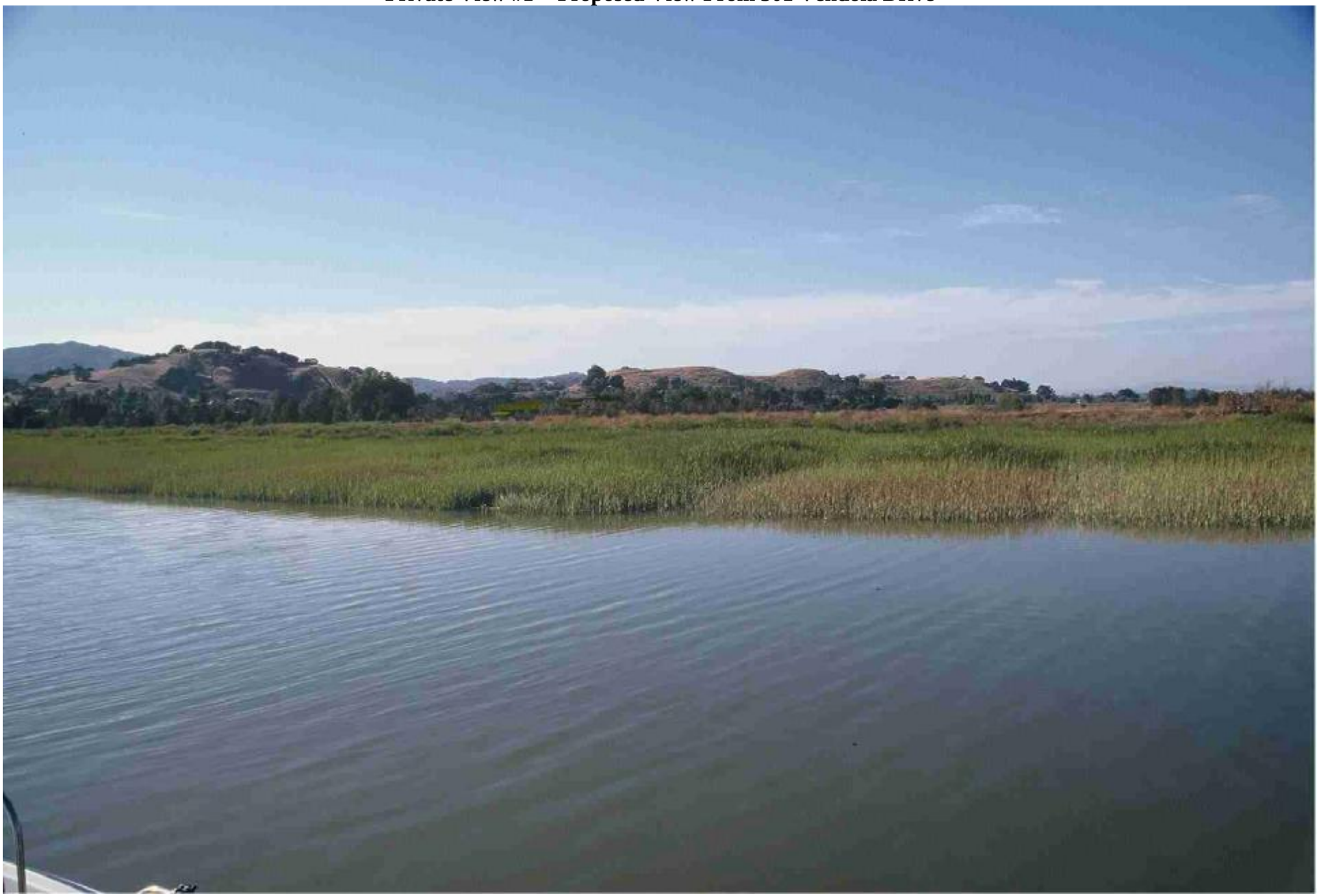


Exhibit 1
Private View #2 - Existing View From 825 Vendola Drive, 2nd Floor

Exhibit 1
Private View #2 - Proposed View From 825 Vendola Drive, 2nd Floor

Exhibit 2 - Biological Reports

- Biological Site Assessment Report, Prepared by WRA Environmental Consultants, February 2005.
- Jurisdictional Area Delineation, Prepared by WRA Environmental Consultants, September 2005.
- Letter Re: Potential Affect on California Clapper Rail and/or Salt Marsh Harvest Mouse, Prepared by WRA Environmental Consultants, October 10, 2005.
- Letter from United States Department of the Interior, Re Smith Ranch Road Residential Development, March 1, 1999
- Letter Re: Results of Peer Review, Prepared by Zander Associates, December 1, 2005.

Draft Biological Assessment

Study Area Name
SAN RAFAEL, MARIN COUNTY
CALIFORNIA

Prepared For:
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Exhibit 2
Biological Reports

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1.0 INTRODUCTION

On February 8, 2005, WRA Environmental Consultants performed a biological site assessment of the approximately 20-acre San Rafael Airport (Study Area) in the city of San Rafael (Figure 1) to determine the presence or absence of potential habitat for special status species and their sensitive habitats. The purpose of this assessment report is to identify biological issues that may require further studies in order to fully evaluate potential biological impacts from the proposed project. The assessment also identifies biological issues where no impacts are anticipated, potentially eliminating the need for further analyses. This report presents the results of the biological site assessment of the Airport Recreational Facility Study Area (Figure 2).

A biological site assessment provides general information on the potential presence of sensitive species or habitats. The biological site assessment is not an official protocol level survey for listed species that may be required for project approval by local, state, or federal agencies. However, specific findings on the occurrence of any species or the presence of sensitive habitats may require that protocol surveys be conducted. This assessment is based on information available at the time of the study and on site conditions that were observed on the date of the site visit.

1.1 General Study Area Description

The Study Area is located in San Rafael, Marin County California east of U.S. Highway 101 and south of Smith Ranch Road. The Study Area is located within the easternmost portion of the USGS Novato 7.5 minute Quadrangle. The Study Area is characterized by non-native annual grassland with a row of planted eucalyptus trees bisecting the Study Area in an east to west orientation. The grassland field is disced annually and is bordered to the north by a maintained levee associated with the north fork of Gallinas Creek and to the south by the San Rafael Airport runway. A storm water drainage ditch system and associated pump house are also present. The topography of the Study Area is generally level except for the raised levee along the northern boundary of the Study Area.

1.2 Background

1.2.1 Special Status Species

Special status species include those plants and wildlife species that have been formally listed as endangered or threatened, are proposed for listing as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These Acts afford protection to both listed and proposed species. In addition, California Department of Fish and Game (CDFG) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, and U.S. Fish and Wildlife Service (USFWS) Species of Concern are considered special status species. Although California and USFWS Species of Concern generally have no special legal status, they are given special consideration under the California Environmental Quality Act (CEQA). In addition to regulations for special status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Under this legislation, destroying active nests, eggs, and young is illegal. Plant species on California Native Plant Society (CNPS) Lists 1 and 2 are also

considered special status plant species. Impacts to these plants are considered significant according to the California Environmental Quality Act (CEQA). The CNPS List 3 and 4 plants are generally not considered under CEQA, but are included in this analysis for completeness. (The assessment may also include species of local concern as indicated by the USFWS list for the quad/county, or as designated by a City or County).

Some sensitive habitats may be regulated and protected under federal and state regulations or local ordinances or policies (City or County Tree Ordinances, Special Habitat Management Areas or General Plan Special Land Use areas). CDFG also identifies sensitive plant communities in the *List of California Natural Communities Recognized by the CNDDB*, and ranks sensitive plant communities as 'threatened' or 'very threatened' and keeps records of their occurrences in the Natural Diversity Database. Impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFG or USFWS must be considered and evaluated under the California Environmental Quality Act (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G).

2.0 METHODS

On February 8, 2005, the Study Area was traversed on foot to determine if existing conditions provided suitable habitat for any special status plant or wildlife species and if sensitive habitats were present. Prior to the site visit, the Soil Survey of Marin County, California [U.S. Department of Agriculture (USDA) 1985] was examined to determine if any unique soil types that could support sensitive plant communities were present in the Study Area.

2.1 Plant Communities

Plant communities are typically classified based on existing descriptions developed by the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) or *The Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), and these descriptive sources were used in this study. However, in some cases it is also necessary to identify variants of plant community types or to describe non-vegetated areas that are not described in existing literature.

2.2 Sensitive Plant Communities

Prior to the site visit, the NDDB list was reviewed for potential presence of sensitive plant communities and other sensitive biotic resources. During the site visit, the plant communities present were identified and evaluated to determine if any met the descriptions of those on the NDDB list or could be potentially regulated through other jurisdictions or policies.

2.3 Special Status Species

2.3.1 Literature Review

Potential occurrence of special status species in the Study Area was evaluated by first determining which special status species occur in the vicinity of the Study Area through a literature and database

search. Database searches for known occurrences of special status species included the Novato 7.5 minute USGS quadrangle and the surrounding USGS quadrangles of San Rafael, San Quentin, and Petaluma Point. The following sources were reviewed to determine which special status plant and wildlife species have been documented to occur in the vicinity of the Study Area:

- California Natural Diversity Database records (CNDDB) (CDFG 2004)
- USFWS Quadrangle Species Lists (USFWS 2004)
- CNPS Electronic Inventory records (CNPS 2004)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication "Amphibians and Reptile Species of Special Concern in California" (Jennings 2004)
- Previous WRA project files for the Study Area

2.3.2 Site Assessment

A site visit was conducted to search for suitable habitats within the Study Area and for those species identified in the literature as occurring within the vicinity. Potential for special status species to occur in the Study Area was then evaluated according to the following criteria:

(1) Not Present. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

(2) Low Potential. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

(3) Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

(4) High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

(5) Present. Species is observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

Appendix A presents the special status plant and wildlife species with a potential to occur within the Study Area, their habitat requirements, and a rating of potential for occurrence. Appendix B lists the animal species observed during the February 8, 2005 site visit.

An assessment site visit is intended to identify suitable habitat for special status species known to occur in the vicinity in order to determine the potential that they could occur within the Study Area.

The site visit does not constitute a protocol-level survey and is not intended to determine the actual presence or absence of a species; however, if a special status species is observed during the site visit, its presence is recorded and discussed.

2.4 Study Area Photographs

Representative photographs of the Study Area were taken during the February 8, 2005 site visit to show the existing site conditions. These photograph are provided in Appendix C.

3.0 RESULTS AND DISCUSSION

The following sections present the results and discussion of the assessment for special status species and their sensitive habitats within the Study Area.

3.1 Existing Plant Communities

The dominant plant community present in the Study Area most closely matches Holland's "Non-native Grassland" type. This community is described by Holland (1986) as consisting of "a dense to sparse cover of annual grasses" (including wild oats (*Avena* spp), brome grasses (*Bromus* spp.), Italian ryegrass *(Lolium multiflorum*), and fescues (*Vulpia* spp.) that is "often associated with numerous species of showy-flowered, native annual forbs." The non-native grassland within the study area has been managed for livestock grazing for many years, and management practices have included planting seed of forage grass plants (such as oats and Italian ryegrass) as well as periodic (annual) discing. The plant community on the levee adjacent to the project site has a higher density of broad leafed non-native "weeds", including wild radish (*Raphanus sativus*).

An existing row of Eucalyptus trees (Appendix C) in the Study Area was planted by the landowner only a few years ago as a windbreak and screening for the San Rafael Airport runway. This single row of non-native, immature trees is not considered to be functioning as a plant community of any importance.

3.2 Sensitive Plant Communities

No sensitive plant communities were identified in the Study Area, and based on site conditions, none would be expected. The Study Area is part of the greater San Rafael Airport property, and has been subjected to grazing and/or discing on an annual basis; levees are regularly maintained by topping and weed control. These conditions are not conducive to establishment or long-term presence of sensitive plant communities.

The Marin County Soil Survey indicates that the primary soil type within the Study Area is Xerorthents, fill, described as soil that has been mechanically mixed and containing varying amounts of rock, concrete, asphalt, and other materials. This soil type is also generally not conducive to supporting sensitive plants or sensitive plant communities.

3.3 Special Status Species

3.3.1 *Plants*

Based upon a review of the resources and databases given in Section 2.3.1, 36 special status plant species have been documented in the general vicinity of the Study Area which include undeveloped natural areas outside of the Study Area. No special status plant species were considered to have a moderate or high potential for occurrence in the Study Area, primarily because the Study Area contains no suitable habitat. Two of the special status plant species were considered to have a low potential for occurrence within the Study Area, but are also not expected to be present. The remaining species are considered to be not present. Appendix A summarizes the potential for occurrence for plant species in the Study Area.

The species listed in Appendix A generally occur in habitat types, geographic elevations, or soil types that are not present in the Study Area. For example, numerous special status species documented in the vicinity of the Study Area require forest or scrub habitat, special native soils like serpentine, or tidal salt marsh conditions, none of which are present in the Study Area.

The site assessment occurred during the blooming period of four of the 36 plant species with a potential to occur in the Study Area; however, none of the potentially blooming species were observed to be present.

3.3.2 *Wildlife*

Thirty-nine special status species of wildlife have been recorded in the vicinity of the Study Area. Appendix A summarizes the potential for occurrence for these species in the Study Area. Of these species, seven wildlife species have a low potential for occurrence in the Study Area, seven species have a moderate potential for occurrence, and 23 species are not likely to ever be present. Only two species have a high potential for occurrence or are documented present: white-tailed kite and Cooper's hawk (observed over the Study Area during the site visit).

A number of species were determined to be "Not Present" in the Study Area. This means that they are extremely unlikely to be found in the Study Area because none of their specific requirements (for breeding, foraging, etc.) are found on the site. If an individual in this category was observed on the site, it would most likely be a rare individual migrating across the area. Many special status species reviewed are listed as "Low Potential" occupants of the Study Area. This indicates that some portion of the site or some of the habitat requirements of the species could be met by resources within the Study Area, but that it is unlikely this species would occupy the Study Area because many of the species' specific requirements are not present.

Though the Study Area lies immediately adjacent to Gallinas Creek and associated marshes, it offers limited value as upland habitat for special-status wildlife species that may occur in the area. The disturbed nature (regular discing) of the Study Area and lack of vegetative cover results in poor habitat conditions for marsh dependent species that may occasionally seek refuge on higher

ground. In addition, the lack of other habitat features such as freshwater creeks and ponds limits the suitability of the site for special status amphibian species of the region.

Eighteen species of wildlife were observed in or adjacent to the Study Area during the site assessment (Appendix B). The majority of the wildlife observed in the Study Area are commonly found species, and many are adapted to occupying disturbed or urban areas. Two special status wildlife species were observed.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Plants

There were no plant communities identified within the Study Area that are considered to be sensitive plant communities, and there is no suitable habitat for the 36 plants identified in the literature as being in the vicinity of the Study Area. Two special status plant species on the list have only a low potential to be present, however, site conditions suggest that it is highly unlikely that they would be present. Past agricultural land uses, regular maintenance/farming activities, general isolation from sensitive habitats, and poor soil type makes the Study Area an unlikely location where sensitive plants could become established or supported. Therefore, focused surveys for special status plants are not recommended.

4.2. Wildlife

The grassland community and planted Eucalyptus trees on site provide nesting and foraging habitat for many common wildlife species, and may occasionally provide habitat for an individual or migrant special status wildlife species. Most of the 39 identified special status wildlife species that have been recorded in the literature as being in the vicinity of the Study Area are not likely to occur in the Study Area itself because suitable habitat is not present. Nine special status wildlife species were identified in this study as having a moderate potential to occur within the Study Area. Since special status wildlife species and their potential habitat within the Study Area may be impacted by future changes in land use as a result of constructing the proposed project (Figure 2)., project alteration of the Study Area, including the removal of the Eucalyptus trees, should be planned to occur outside of the nesting period for bird species. If tree removal or ground disturbing operations are planned during the nesting season (approximately March-August), pre-construction surveys should take place to avoid impacting any nesting birds protected under the Migratory Bird Treaty Act. This survey should include potential raptor nesting habitat within 250 feet of the Study Area. Otherwise, no focused wildlife surveys are recommended at this time.

Although this assessment determined that most special status wildlife species are unlikely to occur on the site, it is not unusual for governmental agencies (responsible or lead agencies) to require pre-construction surveys or other mitigation measures to reduce potential project-related impacts to a less-than-significant level, even when available habitat is described as unsuitable for these species.

5.0 REFERENCES

California Department of Fish and Game. 2004. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.

California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

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Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife, Volume III: Amphibians and Reptiles, Birds, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento.

Exhibit 2
Biological Reports

APPENDIX A

LIST OF POTENTIAL SPECIAL STATUS PLANT AND ANIMAL SPECIES

Appendix A. Special status plant and animal species that may occur, or are known to occur in habitats similar to those found on the Study Area. List compiled from USFWS Marin County Species lists (USFWS 2004), and CNDDB and CNPS lists for the USGS 7.5 Minute Quadrangles: San Rafael, San Quentin, Petaluma Point and Novato (2004).

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Mammals			
salt-marsh vagrant shrew *Sorex vagrans halicoetes*	FSC, CSC	Found in salt marshes of the South Arm of San Francisco Bay. Prefer medium to high marsh 6-8ft above sea level.	Not present. Study Area is outside of typical range for this species. Medium to high marsh habitat not available within Study Area.
pallid bat *Antrozous pallidus*	CSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not present. Roosting habitat not available at Study Area.
Townsend's western big-eared bat *Euderma maculatum*	FSC, CSC	Primarily found in rural settings in a wide variety of habitats including oak woodlands and mixed coniferous-deciduous forest. Day roosts highly associated with caves and mines. Very sensitive to human disturbance.	Not present. Roosting habitat not available at Study Area.
salt-marsh harvest mouse *Reithrodontomys raviventris*	FE, SE	Primary habitat in pickleweed-dominated saline emergent marshes of San Francisco Bay. Require adjacent upland areas for escape from high tides.	Not present. Salt marsh habitat not available within Study Area. Tidal marsh in adjacent Gallinas Creek is of low suitability to support the species.
San Pablo vole *Microtus californicus sanpabloensis*	CSC	Found in the salt marshes of San Pablo Creek on the south shore of San Pablo Bay. Constructs burrow in soft soil and feeds on grasses, sedges and herbs.	Not present. Salt marsh habitat not available within Study Area. May occur in salt marsh habitat on outboard side of levee.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Birds			
common loon *Gavia immer*	FSC, CSC	Winter in estuarine and subtidal marine habitats along coast, San Francisco Bay.	Not present. Marine habitat not available within or adjacent to Study Area.
double-crested cormorant (rookery) *Phalacrocorax auritus*	CSC	Nests along coast on sequestered islets, usually on ground with sloping surface or in tall trees along lake margins.	Not present. Suitable habitat not available for this species, may occur as transient along nearby Gallinas Creek.
American bittern *Botaurus lentiginosus*	FSC, draft CSC	Occurs in fresh emergent wetlands, often hiding, resting, and roosting solitarily amidst tall, dense, emergent vegetation, on ground, or near ground on log, stump, or on emergent plants.	Not present. Suitable emergent wetland habitat not available within Study Area.
great egret (rookery) *Ardea alba*	none	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Moderate Potential. May occur to forage in grassland fields of Study Area during wet winter months; observed foraging in nearby Gallinas Creek during WRA site visit. Rookery habitat not available.
snowy egret (rookery) *Egretta thula*	none	Widespread along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. Feeds primarily on small fish, crustaceans and large insects.	Moderate Potential. May occur to forage in grassland fields of Study Area during wet winter months; common species in region. Rookery habitat not available.
black-crowned night heron (rookery) *Nycticorax nyticorax*	none	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Moderate Potential. May occur to forage in grassland fields of Study Area during wet winter months; common species in region. Rookery habitat not available.

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
great blue heron (rookery) *Ardea herodias*	none	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Found in close proximity to foraging areas (rivers and streams, tide-flats, wet meadows.)	Moderate Potential. May occur to forage in grassland fields of Study Area during wet winter months; common species in region. Rookery habitat not available.
white tailed kite *Elenus leucurus*	FSC, CFP	Year long resident of coastal and valley lowlands; rarely found away from agricultural areas. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians.	Present. Observed foraging over adjacent field during WRA site visit. May forage in grasslands of Study Area and roost and nest in Study Area trees.
osprey *Pandion haliaetus*	CSC	Nests along ocean shores, bays, freshwater lakes and larger streams in treetops.	Low potential. May pass through Study Area or forage in nearby Gallinas Creek. Species is known to nest in nearby China Camp SP (T. Schneider pers. Observation). Foraging and breeding habitat not available at Study Area.
northern harrier (nesting) *Circus cyaneus*	CSC	Frequents meadows, grasslands, rangelands, fresh and saltwater emergent wetlands throughout California. Nests in shrubby vegetation on ground.	Low potential. May pass through Study Area to forage in grasslands and marshes of nearby Gallinas Creek. Species is known to nest in nearby China Camp SP (T. Schneider pers. Observation). Breeding habitat not available at Study Area.
Cooper's hawk *Accipiter cooperii*	CSC	Inhabits areas with dense tree stands or patchy woodlands. Usually nests in deciduous riparian areas or second-growth conifer stands near streams.	Present. Individual observed flushing from eucalyptus trees during WRA site visit. May breed in nearby woodlands and utilize Study Area as foraging habitat.

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
American peregrine falcon *Falco peregrinus anatum*	FD, SE, CFP	Winters throughout Central Valley. Requires protected cliffs and ledges for cover. Feeds on a variety of birds, and some mammals, insects, and fish.	Low potential. May pass through Study Area to forage in marshes of nearby Gallinas Creek. Breeding habitat not available at Study Area.
black rail *Laterallus jamaicensis coturniculus*	FSC, ST, CFP	Rarely seen resident of saline, brackish, and fresh emergent wetlands in the San Francisco Bay area. Nest in dense stands of pickleweed	Not present. Though species is known to occur in the vicinity, suitable pickleweed salt marsh habitat not available for this species on or adjacent to Study Area.
California clapper rail *Rallus longirostris obsoletus*	FE, SE	Found in tidal salt marshes of the San Francisco Bay. Require mudflats for foraging and dense vegetation on higher ground for nesting.	Not present. Though species is known to occur in vicinity, marsh habitat adjacent to the Study Area is only marginally suitable due frequent inundation. May pass through the Creek on occasion but would avoid the open grassland habitat of the Study Area.
western snowy plover *Charadrius alexandrinus nivosus*	FT, CSC	Found on sandy beaches, salt pond levees and shores of large alkali lakes. Need sandy gravelly or friable soils for nesting.	Not present. Suitable sandy or gravelly substrates not available for this species on or adjacent to Study Area.
California least tern *Sterna antillarum browni*	FE, SE	Nests along the coast from San Francisco Bay South to Northern Baja California. Colonial breeder on bare or sparsely vegetated flat substrates: sand beaches, alkali flats, land fills, or paved areas.	Not present. Suitable bare flat substrates not available on or adjacent to Study Area.
western burrowing owl *Athene cunicularia hypugea*	FSC, CSC	Frequents open grasslands and shrublands with perches and burrows. Preys upon insects, small mammals, reptiles, birds, and carrion. Nests and roosts in old burrows of small mammals.	Low potential. Suitable habitat available for this species in open grassland habitat but species is currently very uncommon in Marin County and is considered extirpated as a breeder.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
short eared owl *Asio flammeus*	CSC	Found in open, treeless areas with elevated sites for perches and dense vegetation for roosting and nesting.	Not present. Dense vegetation for roosting and nesting not available. Species is uncommon in the region.
rufous hummingbird *Selasphorus rufus*	FSC	Found in a wide variety of habitats that provide nectar-producing flowers. A common migrant and uncommon summer resident of California.	Moderate potential. Species may occur to forage during migration. Unlikely to breed in region.
Allen's hummingbird *Selasphorus sasin*	FSC	Breeds in sparse and open woodlands, coastal redwoods, and sparse to dense scrub habitats. Distribution highly dependent on abundance of nectar sources.	Moderate potential. Species may occur to forage. Woodland and scrub habitat not available.
olive-sided flycatcher *Contopus cooperi*	FSC	Most often found in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain	Not present. Suitable habitat not available for this species at the Study Area.
saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	FSC, CSC	Frequents low, dense vegetation near water including fresh to saline emergent wetlands. Brushy habitats used in migration. Forages among wetland herbs and shrubs for insects primarily.	Low potential. May occur to forage along the margins of the levee during the spring breeding season. Unlikely to utilize habitats within the Study Area.
San Pablo song sparrow *Melospiza melodia samuelis*	FSC	Found in saline emergent wetlands of San Pablo Bay. Require low, dense vegetation for cover and nesting.	Low potential. Species is present in the adjacent marshes of Gallinas Creek and is a yearlong resident. May occur to forage along the margins of the levee and along the drainage channel located within the Study Area.
tricolored blackbird *Agelaius tricolor*	FSC, CSC	Usually nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs.	Low potential. May occur to forage over Study Area, suitable nesting habitat available in adjacent Gallinas Creek.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Reptiles and Amphibians			
western pond turtle *Clemmys marmorata*	FSC, CSC	Occurs in perennial ponds, lakes, rivers and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter.	Not present. Suitable freshwater aquatic habitat not available on or adjacent to Study Area.
western spadefoot toad *Scaphiopus (Spea) hammondii*	FSC, CSC	Occurs primarily in grasslands but occasionally populates valley-foothill hardwood woodlands. Feed on insects, worms, and other invertebrates. Requires shallow temporary pools for breeding.	Not present. Species is uncommon in region and suitable habitat is not available at the Study Area due to the lack of breeding season pools.
California red-legged frog *Rana aurora draytonii*	FT, CSC	Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Documented to disperse through upland habitats after rains.	Not present. Suitable freshwater aquatic habitat not available on or adjacent to Study Area.
foothill yellow-legged frog *Rana boylii*	FSC, CSC	Found in or near rocky streams in a variety of habitats. Feed on both aquatic and terrestrial invertebrates.	Not present. Suitable freshwater aquatic habitat not available on or adjacent to Study Area.
Fishes			
coho salmon-central CA coast *Oncorhynchus kisutch*	FT, SE, NMFS	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficent oxygen.	Not present. Suitable aquatic habitat not available on or adjacent to Study Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Sacramento splittail *Pogonichthys macrolepidotus*	FT, CSC	Endemic to the lakes and rivers of the central valley, now confined to the delta, Suisun Bay and associated marshes. Found in slow moving river sections and dead end sloughs. Require flooded vegetation for spawning and foraging of young.	Not present. Suitable aquatic habitat not available within Study Area. Low potential to occur in adjacent Gallinas Creek, species observed in Petaluma River mouth in 1991 (CNDDB 2004)
tidewater goby *Eucyclogovius newberryi*	FE, CSC	Found in the brackish waters of coastal lagoons, marshes, creeks, and estuaries. Unique among fishes of the Pacific coast, gobies are restricted to waters of low salinity in coastal wetlands. They feed along the bottom, preferring clean, shallow, slow-moving waters.	Not present. Aquatic habitat not available within Study Area; species is extirpated from the region (CNDDB 2004)
Invertebrates			
mimic tryonia (California brackish-water snail) *Tryonia imitator*	none	Inhabits coastal lagoons, estuaries and salt marshes from Sonoma Co. south to San Diego Co. Able to withstand a wide range of salinities.	Not present. Study Area is outside of known range for this species.
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	FSC	Aquatic, known from the San Francisco Bay area.	Not present. Species is known from one locale in western Marin County.
monarch butterfly *Danaus plexippus*	none	Winter roost sites located in wind-protected tree groves with nectar and water sources nearby.	Moderate potential. May roost in eucalyptus trees on and adjacent to Study Area. Documented to occur in nearby China Camp SP (CNDDB 2004). Not observed on Feb. 8, 2005 site visit (appropriate season to occur).

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Plants			
Napa false indigo *Amorpha californica car. napensis*	FSC, 1B (April-July)	Openings in broad-leafed upland forest, chaparral, cismontane woodland. 150-2,000 m.	Not present. Suitable habitat not available for this species within Study Area.
bent-flowered fiddleneck *Amsinckia lunaris*	FSC, 1B (March - June)	Coastal bluff scrub, cismontane-woodlands, valley and foothill grassland. 50-500m.	Not present. Suitable habitat not available for this species within Study Area.
Mt. Tamalpais Manzanita *Arctostaphylos hookeri ssp. Montana*	FSC, 1B (February - April)	Serpentine slopes in chaparral, valley and foothill grasslands. 160-760 M.	Not present. Suitable habitat not available for this species within Study Area.
Marin manzanita *Arctostphylos virgata*	FSC, 1B (January - March)	Sandstone or granitic soil in broad-leafed upland forest, closed cone coniferous forest, chaparral, north coast coniferous forest. 60-700 M.	Not present. Suitable habitat not available for this species within Study Area.
small groundcone *Boschniakia hookeri*	2 (April - August)	North coast coniferous forest. 90-885 M.	Not present. Suitable habitat not available for this species within Study Area.
Tiburon mariposa lily *Calochortus tiburonensis*	FT, ST, 1B (March - June)	Open, rocky slopes in serpentine grassland. 50-150 M.	Not present. Suitable habitat not available for this species within Study Area.
Tiburon Indian paintbrush *Castilleja affinis spp. neglecta*	FE, ST, 1B (April - June)	Rocky serpentine sites in valley and foothill grassland. 75-400 M.	Not present. Suitable habitat not available for this species within Study Area.
San Francisco Bay spineflower *Chorizanthe cuspidata var. cuspidata*	FSC, 1B (April - August)	Sandy soil on terraces and slopes in coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. 5-550 M.	Not present. Suitable habitat not available for this species within Study Area.
Mt. Tamalpais thistle *Cirsium hydrophilum var. vaseyi*	FSC, 1B (May - August)	Serpentine seeps and streams in broad-leafed upland forest, chaparral. 265-620 M.	Not present. Suitable habitat not available for this species within Study Area.
Point Reyes bird's-beak *Cordylanthus maritimus ssp. palustris*	FSC, 1B (June-October)	Coastal tidal salt marsh. 0-15 M.	Not present. Suitable habitat not available for this species within Study Area.
minute pocket-moss *Fissidens pauperculus*	1B (N/A)	North coast coniferous forest on damp soil. 10-100 M.	Not present. Suitable habitat not available for this species within Study Area.

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Marin checker lily *Fritillaria lanceolata car. tristulis*	FSC, 1B (February - April)	Coastal bluff scrub, coastal scrub, coastal prairie. 30-300 M.	Not present. Suitable habitat not available for this species within Study Area.
fragrant fritillary *Fritillaria liliacea*	FSC, 1B (February - April)	Coastal scrub, valley and foothill grassland, coastal prairie. Often on serpentine or clay soil. 3-410 M.	Not present. Suitable habitat not available for this species within Study Area.
Diablo helianthella *Hellanthella castanea*	FSC, 1B (April-June)	Rocky, azonal soil in broad leafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. 25-1150 M.	Not present. Suitable habitat not available for this species within Study Area.
hayfield tarplant *Hemizonia congesta ssp. leucocephala*	3 (April-October)	Coastal scrub, valley and foothill grassland. 25-365 M.	Low potential. Grassland in Study Area is disturbed and of poor quality.
Marin western flax *Hesperolinon congestum*	FT, ST, 1B (April-July)	Serpentinite in chaparral, valley and foothill grassland. 30-365 M.	Not present. Suitable habitat not available for this species within Study Area.
Santa Cruz tarplant *Holocarpha macradenia*	FT, SE, 1B (June-October)	Light sandy soil or sandy clay in coastal prairie, valley and foothill grassland. 10-260 M.	Not present. Suitable habitat not available for this species within Study Area.
thin-lobed horkelia *Horkelia tenuiloba*	FSC, 1B (May - July)	Mesic, sandy openings in coastal scrub, chaparral. 45-500 M.	Not present. Suitable habitat not available for this species within Study Area.
woolly-headed lessingia *Lessingia hololeuca*	3 (June-October)	Clay, serpentinite in broad-leafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. 15-305 M.	Not present. Suitable substrate does not exist in the Study Area.
Tamalpais lessingia *Lessingia micradenia var. micradenia*	FSC, 1B (June-October)	Serpentine soil in chaparral, valley and foothill grassland, often on roadsides. 100-305 M.	Not present. Suitable habitat not available for this species within Study Area.
Mt. Diablo cottonweed *Micropus amphibolus*	3 (March-May)	Rocky soils in broad-leafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. 45-825 M.	Low potential. Grassland in Study Area is disturbed and of poor quality.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
marsh microseris *Microseris paludosa*	1B (April-June)	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-300 M.	Not present. Suitable habitat not available for this species within Study Area.
Baker's navarretia *Navarretia leucocephala ssp. bakeri*	FSC, 1B (May - July)	Mesic sites in cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forests; adobe or alkaline soils. 5-950 M.	Not present. Suitable habitat not available for this species within Study Area.
Marin County navarretia *Navarretia rosulata*	FSC, 1B (May- July)	Rocky, sometimes serpentine soil in closed cone coniferous forest, chaparral. 200- 635 M.	Not present. Suitable habitat not available for this species within Study Area.
white-rayed pentachaeta *Pentachaeta bellidiflora*	1B, SE, FE (March-May)	Open dry rocky slopes and grassy areas on soil from serpentine bedrock in valley and foothill grassland. 35-620 M.	Not present. Suitable habitat not available for this species within Study Area.
hairless popcorn-flower *Plagiobothrys glaber*	FSC, 1A (March-May)	Alkaline meadows and seeps, coastal salt marshes and swamps. 5 180 M.	Low potential. May occur in adjacent tidal marsh habitat. Poor quality brackish habitat available in drainage ditch.
North Coast semaphore grass *Pleuropogon hooverianus*	FSC, ST,1B (May-August)	Mesic sites in broad-leafed upland forest, meadows and seeps, freshwater marshes and swamps, North Coast coniferous forest, vernal pools. 10-1150 M.	Not present. Suitable habitat not available for this species within Study Area.
Marin knotweed *Polygonum marinense*	FSC, 3 (April-October)	Coastal salt or brackish marshes and swamps. 0-10 M.	Low potential. May occur in adjacent tidal marsh habitat. Poor quality brackish habitat available in drainage ditch.
Tamalpais oak *Quercus parvula var. tamalpaisensis*	1B (March-April)	Lower montane coniferous forest. 100-750 M.	Not present. Suitable habitat not available for this species within Study Area.

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Point Reyes checkerbloom *Sidalcea calycosa ssp. rhizomata*	FSC, 1B (April - September)	Freshwater marshes and swamps near the coast. 5-75 (240) M.	Not present. Freshwater marsh habitat not available within Study Area.
Marin checkerbloom *Sidalcea hickmanii ssp. viridis*	FSC, 1B (May-June)	Chaparral on serpentine or volcanic soils, sometimes after burns. 0-430 M.	Not present. Suitable habitat not available for this species within Study Area.
Santa Cruz microseris *Stebbinsoseris decipiens*	FSC, 1B (April - May)	On seaward slopes, soil derived from sandstone shale or serpentine in broad-leafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub. 10-500 M.	Not present. Suitable habitat not available for this species within Study Area.
Tamalpais jewelflower *Streptanthus batrachopus*	FSC, 1B (April - June)	Closed-cone coniferous forest, talus serpentine outcrops in chaparral. 305-650 M.	Not present. Suitable habitat not available for this species within Study Area.
Mt. Tamalpais jewelflower *Streptanthus glandulosus ssp.pulchellus*	FSC, 1B (May - July)	Serpentine slopes in chaparral, valley and foothill grassland. 150 800 M.	Not present. Suitable habitat not available for this species within Study Area.
Tiburon jewelflower *Streptanthus niger*	FE, SE, 1B (May June)	Shallow rocky serpentine slopes in valley and foothill grassland. 30-150 M.	Not present. Suitable habitat not available for this species within Study Area.
showy Indian clover *Trifolium amoenum*	FE, 1B (April - June)	Valley and foothill grassland, coastal bluff scrub; sometimes serpentine soils. 5-360 M.	Not present. Suitable habitat not available for this species within Study Area.

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SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE

* Key to status codes:
Status codes used above are:
FE - Federal Endangered
FT - Federal Threatened
FC - Federal Candidate
FPD - Federal Proposed Delisted
FSC - United States Fish and Wildlife Service Federal Species of Concern
NMFS - Species under the Jurisdiction of the National Marine Fisheries Service
SE - State Endangered
CSC - CDFG Species of Special Concern, CSC (Draft) - 4 April 2001 Draft
CDFC Species of Special Concern
CFP - California Fully Protected Species
SLC - Species of Local Concern
None - No status given but rookery/nesting sites are monitored and protected by CDFG
List 1B - CNPS 1B List, Endangered, Threatened, or Rare in California
List 2- CNPS List 2 Plants are rare, threatened, or endangered in California, but more common elsewhere
List 3-CNPS List 3 Plants about which we need more information (a review list)

APPENDIX B

LIST OF OBSERVED SPECIES

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Appendix B-1. Wildlife species observed during the February 8, 2005 site assessment.

Species	Comments
Great egret, *Ardea alba*	Foraging in Gallinas Creek
Mallard, *Anas platyrhynchos*	Present in Gallinas Creek
Turkey vulture, *Cathartes aura*	Soaring over Study Area
White-tailed kite, *Elanus leucurus*	Foraging in adjacent field
Cooper's hawk, *Accipiter cooperii*	Flushed from eucalyptus trees
American kestrel, *Falco sparverius*	Flushed from utility pole
California quail, *Callipepla californica*	Flushed from rubble pile in Study Area
mourning dove, *Zenaida macroura*	Many present throughout Study Area
Anna's hummingbird, *Calypte anna*	Foraging near eucalyptus trees
Black phoebe, *Sayornis nigricans*	Present in Study Area
San Pablo song sparrow, *Melospiza melodia samuelis*	Singing and calling in Gallinas Creek marsh
Golden-crowned sparrow, *Zonotrichia atricapilla*	Perched on rubble pile vegetation
Western meadowlark, *Sturnella neglecta*	Flushed from grassland field
House finch, *Carpodacus mexicanus*	Flocks perched in trees
American goldfinch, *Carduelis tristis*	Fly-over
Red-winged blackbird, *Agelaius phoeniceus*	Many present throughout Study Area
Raccoon, *Procyon lotor*	tracks observed throughout Study Area
Black-tailed hare, *Lepus californicus*	Flushed several throughout Study Area

Plant species identifiable during the February 8, 2005 site assessment.

Species	Common Name
Avena barbata	Wild oat
Baccharis pilularis	Coyote brush
Brassica sp.	Wild mustard

Bromus diandrus	Ripgut brome
Centaurea solstitialis	Star thistle
Distichlis spicata	Salt grass
Eucalyptus sp.	Eucalyptus (planted wind break)
Grindelia stricta	Gum plant
Lolium multiflorum	Italian ryegrass
Picris echioides	Ox tongue
Polypogon monspeliensis	Rabbit-foot grass
Raphanus sativus	Wild radish
Salicornia virginica	Pickleweed

APPENDIX C

STUDY AREA PHOTOGRAPHS

Appendix C. Representative photographs from February 8, 2005 Marin Ranch Airport Biological Assessment. Southern portion of Study Area (top). Northern portion of Study Area (bottom).

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Appendix C. Representative photographs from February 8, 2005 Marin Ranch Airport Biological Assessment. Vegetated levee bordering Gallinas Creek (top). Surface water drainage ditch and pumphouse (bottom).

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Jurisdictional Area Delineation

San Rafael Airport Recreational Facility
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1.0 INTRODUCTION

WRA, Inc. (WRA) conducted a delineation study at the proposed San Rafael Airport Recreational Facility Project (Study Area) to describe the location and extent of waters, including wetlands, which may be considered jurisdictional by the U.S. Army Corps of Engineers ("Corps") under Section 404 of the Clean Water Act. The approximately 20-acre Study Area is located on a portion of the San Rafael Airport property between the airport runway and the North Fork of Gallinas Creek (Figure 1).

The Clean Water Act gives the Corps jurisdiction over "Waters of the United States" which include in part: lakes, rivers, streams (including intermittent streams) and wetlands. The Corps has defined the term "wetlands" as follows:

> *Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*
> (33 CFR 328.3 (b))

In addition to wetlands, this study evaluated the presence of any "waters of the United States" potentially subject to Corps jurisdiction under Section 404 of the Clean Water Act. These features hold or convey water, but unlike wetlands, typically are not vegetated with wetland classified plants and/or may not have hydric soils. Other waters of the U.S. generally include lakes, ponds, rivers, streams, creeks, and drainages.

The Corps of Engineers has issued a manual for the delineation of wetlands (Environmental Laboratory 1987) along with standard methods and data reporting forms to determine the presence or absence of wetlands. These procedures and the results of the delineation study are presented in this report.

2.0 METHODS

This study evaluated the presence or absence of indicators of three wetland parameters described in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual) (Environmental Laboratory 1987). The three parameters used to determine the presence of wetlands are: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the Corps Manual:

> *"...[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland delineation."*

Prior to conducting field studies, available reference materials were consulted, including the Soil Survey of Sonoma County (USDA 1972) and topographic maps of the site.

On September 7, 2005, a routine level study of vegetation, soils, and hydrology indicators was conducted. The results were recorded on standard 1987 *Corps Manual* data sheets (Appendix A). The hydrophytic vegetation, hydric soils, and wetland hydrology indicators used to make wetland determinations are summarized below.

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Biological Reports

Vegetation

Dominant plant species observed were assigned a wetland indicator status according to the U.S. Fish and Wildlife Service, List of Plant Species that Occur in Wetlands (Reed 1988). This wetland plant classification system is based on the expected frequency of occurrence of plants in wetlands.

Indicator Status	Description	Frequency of Occurrence
OBL	Obligate, always found in wetlands	> 99%
FACW	Facultative wetland, usually found in wetlands	67-99%
FAC	Facultative, equal occurrence in wetland or non-wetlands	34-66%
FACU	Facultative upland, usually found in non-wetlands	1-33%
UPL / NL	Upland / Not Listed, not found in wetlands	<1%

When greater than 50 percent of the dominant plant species have an indicator status of OBL, FACW, and/or FAC, the vegetation is considered to be hydrophytic. Dominant herbaceous plant species were determined by the 50/20 rule. Sub-dominant plant species were also recorded at each sample point.

Soils

The Natural Resource Conservation Service defines a hydric soil as:

> *"A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part."*
>
> (Federal Register July 13, 1994, US Department of Agriculture, Natural Resource Conservation Service)

Soils formed over long periods of time under wetland (anaerobic) conditions sometimes possess characteristics that indicate they meet the definition of hydric soils. Wetland soils often develop a characteristic low chroma matrix color, designated 0, 1, or 2, which can be used to identify them as hydric soils. Soils with a chroma of 0 or 1 may be considered hydric; soils with a chroma of 2 must also have mottles to be considered hydric. In wetlands, low chroma color and other characteristics are developed as a result of long-term saturation or inundation.

However, low chroma soils can also develop in upland conditions as a result of other processes. For example, long-term accumulation of organic matter under upland grassland vegetation can result in a low chroma soil color, but this soil would not be considered hydric.

Chroma designations were determined in the field by comparing a soil sample with a standard Munsell soil color chart (Gretag Macbeth 2000). Soil profiles were described to include horizon depths, color, redoximorphic features, and texture.

Hydrology

Wetland hydrology is a term which encompasses hydrologic characteristics of areas that are periodically inundated or saturated to the surface at some time during the growing season. Recorded data can be used when available to determine wetland hydrology. In California, recorded data which shows inundation or saturation to the surface for a minimum of five percent of the growing season (18 days in areas with a 365 day growing season) is considered evidence of wetland hydrology.

When studies are conducted at a time of year when surface water, ground water, or saturated soils can not be observed, evidence of wetland hydrology is based on observation of the hydrologic indicators described in the 1987 *Corps Manual*. Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, and drift lines, or indirect indicators (secondary indicators), such as oxidized root channels and algal mats. If indirect or secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology. Depressions and topographic low areas were examined for these hydrological indicators.

In addition to wetlands, this study evaluated the presence of any "waters of the United States" potentially subject to Corps jurisdiction under Section 404 of the Clean Water Act. Other areas, besides wetlands, subject to Corps jurisdiction include lakes, rivers, and streams (including intermittent streams). Jurisdiction in non-tidal areas extends to the ordinary high water mark (OHW), which is defined as:

> *The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*
>
> (33 CFR 328.3 (e))

3.0 STUDY AREA DESCRIPTION

The Study Area is located in San Rafael, Marin County California east of U.S. Highway 101 and south of Smith Ranch Road. The Study Area is located within the easternmost portion of the USGS Novato 7.5 minute Quadrangle. The Study Area is characterized by non-native annual grassland with a row of planted eucalyptus trees bisecting the Study Area in an east to west orientation. The grassland field is disced annually and is bordered to the north by a maintained levee associated with the north fork of Gallinas Creek and to the south by the San Rafael Airport runway. A storm water drainage ditch system and associated pump house are also present. The topography of the Study Area is generally level except for the raised levee along the northern boundary of the Study Area.

Vegetation

The dominant plant community present in the Study Area most closely matches Holland's "Non-native Grassland" type. This community is described by Holland (1986) as consisting of "a dense to sparse cover of annual grasses" (including wild oats (*Avena* spp), brome grasses (*Bromus* spp.), Italian ryegrass *(Lolium multiflorum*), and fescues (*Vulpia* spp.) that is "often associated with numerous species of showy-flowered, native annual forbs." The non-native grassland within the study area has been managed for livestock grazing for many years, and management practices have included planting seed of forage grass plants (such as oats and Italian ryegrass) as well as periodic (annual) discing. The plant community on the levee adjacent to the project site has a higher density of broad leafed non-native "weeds", including wild radish (*Raphanus sativus*).

An existing row of Eucalyptus trees in the Study Area was planted by the landowner only a few years ago as a windbreak and screening for the San Rafael Airport runway. This single row of non-native, immature trees is not considered to be functioning as a plant community of any importance.

Soils

The Marin County Soil Survey (185), indicates that the Study Area is underlain by one soil mapping unit, Xerorthents, fill. This soil type is described as soil material that has been moved mechanically and mixed, and can contain varying amounts of rock, concrete, asphalt, and other materials. Typically they are loamy and are well drained, but are subject to subsidence.

Hydrology

The principal hydrological sources for the Study Area are direct precipitation and surface runoff. The drainage, which has a clearly defined bed and bank, bisects the Study Area appears to be ephemeral or intermittent, and is not likely to hold or convey water for significant periods.

4.0 RESULTS

A routine level jurisdictional wetlands delineation was conducted within the Study Area on September 7, 2005. The site was field reviewed for potential jurisdictional waters and wetland areas. The results were recorded on standard 1987 *Corps Manual* data sheets (Appendix A). Potential jurisdictional areas are described in the following sections and shown on the map in Figure 2.

Potential Jurisdictional Areas

Potential jurisdictional wetland areas were identified within the Study Area as shown in Figure 2. Two are seasonally wet areas located in vegetated swales and one is a wet area caused by seepage through the levee from Gallinas Creek, and consequently is wet during periods of high tidal series. Due to the relatively small size, seasonal nature, and level of disturbance caused by annual discing of the general area for fire control, all of the wetlands are of low quality.

One wetland swale area (sample point 1) was dominated by hydrophytic vegetation primarily composed of FAC classified plants including Italian ryegrass (*Lolium multiflorum*), and deer weed (*Lotus scoparius*), in addition to some curly dock (FACW). A second swale area (sample point 2) contained these plants in addition to rabbit-foot grass (*Polypogon monspeliensis*), a FACW classified plant Dominant vegetation in the seepage wetland area was salt grass *(Distichlis spicata*), a FACW classified plant (and also a halophyte or salt tolerant plant).

Adjacent upland areas (sample point 1u) were vegetated primarily by upland species including cultivated oats (*Avena sativa*) and bull thistle (*Cirsium vulgare*).

Soils observed in the wetland swale (sample 1w) and adjacent uplands (sample point 1u) were typical of the mapped soil type with low chromas. The soils in potential wetland area, however, had chroma of 1 (10YR 4/1 and 10YR 5/1) while the soils in upland areas had chroma of 2 without mottles. A soil with a chroma of 2 must also have mottles in order to be classified as a hydric soil.

Hydrology indicators observed in potential wetland areas included sediment and debris deposits, algal mats, welded vegetation, and oxidized root channels. There was no soil saturation or standing water in soil pits in potential wetlands at the time of the site visit.

Potential Jurisdictional Waters

No areas of potential waters of the U.S. were observed to be present within the Study Area.

Potential Impacts to Jurisdictional Areas

As shown in Figure 2, the project will avoid filling the potential jurisdictional areas and no permit will be required from the Army Corps of Engineers. These potential jurisdictional areas, which are considered to be of low quality, will be adequately protected from indirect impacts by a minimum 50-foot buffer zone. This buffer zone includes an established row of trees which will provide vegetation screening from the development. Additional features of the development, including the back of the building facing the jurisdictional areas and no lighting on the play fields, also add to the overall protection of the jurisdictional areas. No additional mitigation is recommended.

5.0 REFERENCES

Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.

Federal Register July 13, 1994, US Department of Agriculture, Natural Resource Conservation Service.

Federal Register Vol. 51, No. 219, Part 328.3 (b & d). November 13, 1986.

Gretag Macbeth. 2000. Munsell Soil Color Charts. New Windsor, NY.

Reed, P. B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 0). U.S. Fish and Wildlife Service Biological Report 88 (26.10).

United States Department of Agriculture Soil Conservation Service. 1985. Soil Survey of Marin County, California. In cooperation with the University of California Agricultural Experiment Station.

Figure 1. Location map of the Study Area.

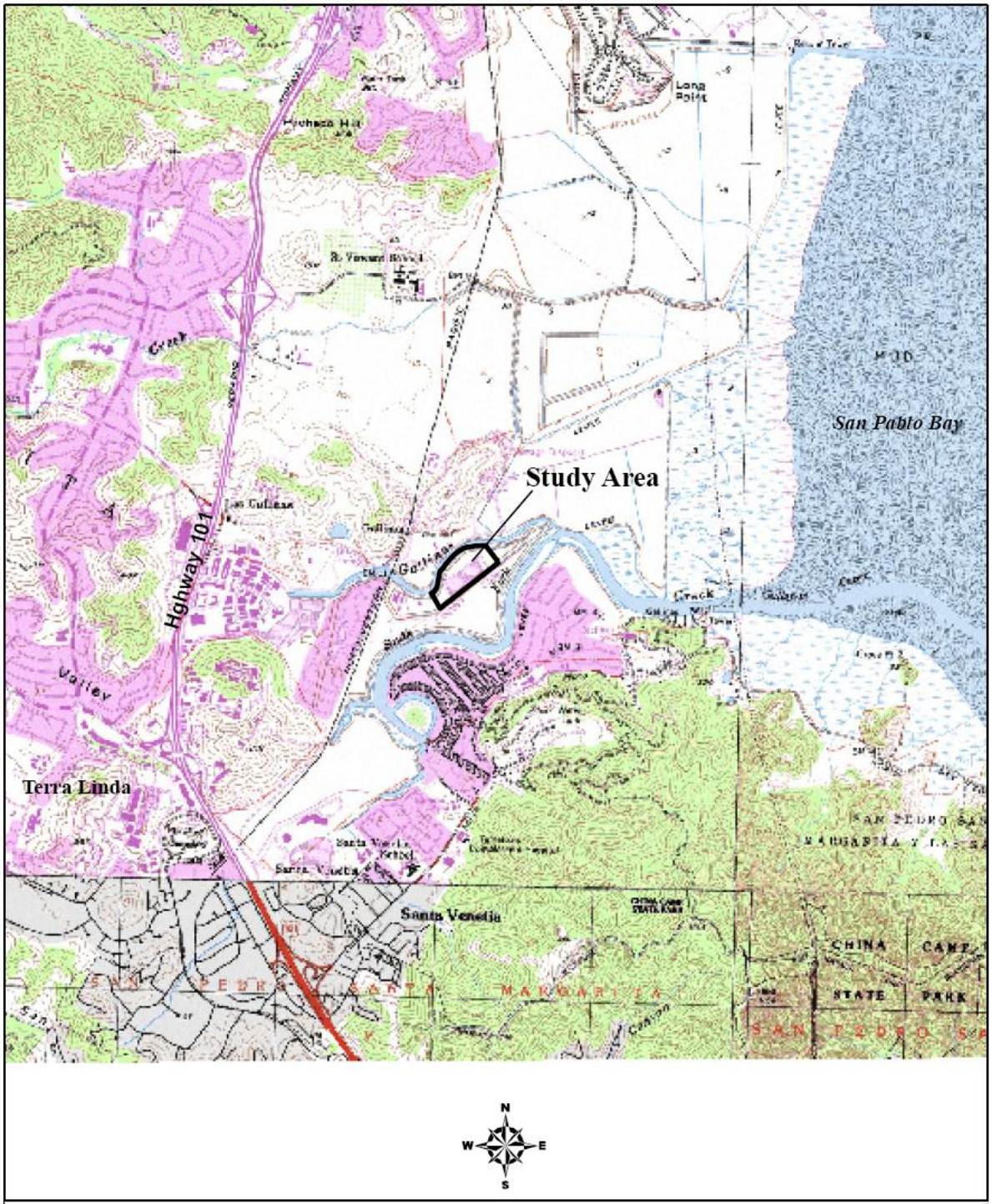


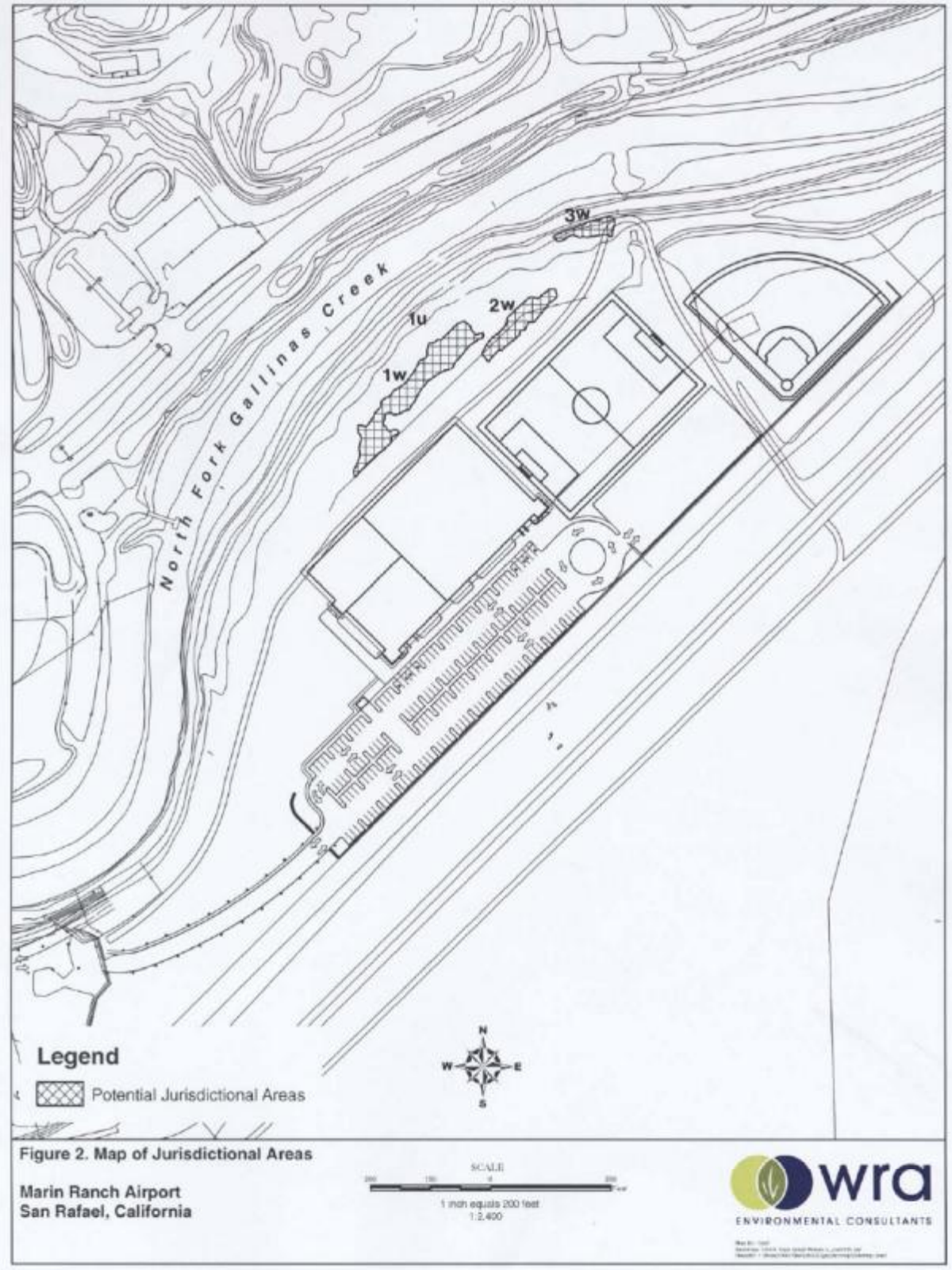
Figure 1. Study Area Location Map

Marin Ranch Airport
San Rafael, California

SCALE
0.5 0.25 0 0.5 Miles
1 inch equals 0.499535 miles
1:31,650.528328

wra
ENVIRONMENTAL CONSULTANTS

Figure 2. Delineated areas of Study Area.



Appendix A - Corps Delineation Data Forms

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	San Rafael Airport Recreational Facility	Date:	8/7/2005
Applicant/Owner:	JHS Properties	County:	Marin
Investigator:	W R A, Inc.	State:	CA
Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	wetland
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area? (if needed explain on reverse.) *Seasonal Wetland*	☒ Yes ☐ No	Plot ID:	1w

VEGETATION

Dominant Plant Species	Stratum	Indicator	Sub-dominant Plant Species	Stratum	Indicator
1. Lolium multiflorum	GRASS	FAC	1.		
2. Lotus scoparius	HERB	FAC	2.		
3. Rumex crispus	HERB	FAC	3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		
8.			8.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 100

Remarks : Area dominated by wetland classified plants, meets wetland plant criteria

HYDROLOGY

Recorded Data
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs
☐ Other

X No Recorded Data Available

Field Observations :

Depth of Surface Water : none (in.)

Depth to Free Water in Pit : none (in.)

Depth To Saturated Soil : none (in.)

Wetland Hydrology Indicators :
Primary Indicators :
☐ Inundated
☐ Saturated in Upper 12 Inches
☐ Water Marks
☐ Drift Lines
☒ Sediment Deposits
☐ Drainage patterns In Wetlands

Secondary Indicators (2 or more required) :
☒ Oxidized Root Channels In Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☐ FAC-Neutral test
☐ Other (Explain In Remarks)

Hydrology Remarks : Presence of sediment deposits and oxidized channels indicates inundation and saturation.

Plot ID: 1w

SOILS

Map Unit Name (Series and Phase): Xerorthents, fill

Drainage Class:

Taxonomy (Subgroup):

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-16+		10YR 4/1			loamy clay

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks:

Low chroma and indication of wetland hydrology.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Hydric Soil Present ? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks: Three parameters of wetland condition met, but low quality habitat conditions due to small size, disturbance of annual fire control discing, and low plant diversity and presence of native plants.

Approved By HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Rafael Airport Recreational Facility	Date: 8/7/2005
Applicant/Owner: JHS Properties	County: Marin
Investigator: W R A, Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: wetland
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? *Seasonal Wetland* ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 2w

VEGETATION

Dominant Plant Species	Stratum	Indicator	Sub-dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	GRASS	FACW	1.		
2. Lolium multiflorum	GRASS	FAC	2.		
3.			3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		
8.			8.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 100%

Remarks : Presence of two dominant wetland classified plants meets wetland plant parameter

HYDROLOGY

_____ Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

X No Recorded Data Available

Field Observations :

Depth of Surface Water : none (in.)

Depth to Free Water in Pit : none (in.)

Depth To Saturated Soil : none (in.)

Wetland Hydrology Indicators :

Primary Indicators :
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☒ Sediment Deposits
- ☐ Drainage patterns in Wetlands

Secondary Indicators (2 or more required) :
- ☒ Oxidized Root Channels in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral test
- ☐ Other (Explain in Remarks)

Hydrology Remarks : Oxidized channels very abundant and sediment deposits meet wetland hydrology criteria.

Plot ID: 2w

SOILS

Map Unit Name
(Series and Phase) : Xerorthents, fill

Drainage Class: _____

Taxonomy (Subgroup) : _____

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-16+		10YR 4/1			loamy clay

Hydric Soil Indicators :

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks:

Low chroma soils and indication of wetland hydrology meets hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Hydric Soil Present ? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks : Three wetland parameters met. Wetland area is low quality due to annual fire control discing disturbance, small size, and lack of native plants.

Approved By HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Rafael Airport Recreational Facility	Date: 8/7/2005
Applicant/Owner: JHS Properties	County: Marin
Investigator: W R A , Inc.	State: CA
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: wetland
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☒ No	Transect ID:
Is the area a potential Problem Area? *Seasonal Wetland* ☒ Yes ☐ No (if needed explain on reverse.)	Plot ID: 3w

VEGETATION

	Dominant Plant Species	Stratum	Indicator	Sub-dominant Plant Species	Stratum	Indicator
1.	Distchlis spicata	GRASS	FACW			
2.						
3.						
4.						
5.						
6.						
7.						
8.						

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 100%

Remarks : Area dominated by Distichlis, a wetland classified plant. This plant also a halophyte, but presence of hydrology indicators indicates it is present as a wetland plant.

HYDROLOGY

Recorded Data
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

X No Recorded Data Available

Field Observations :
- Depth of Surface Water : none (in.)
- Depth to Free Water in Pit : none (in.)
- Depth To Saturated Soil : none (in.)

Wetland Hydrology Indicators :
Primary Indicators :
- ☐ Inundated
- ☐ Saturated in Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage patterns In Wetlands

Secondary Indicators (2 or more required) :
- ☒ Oxidized Root Channels In Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral test
- ☐ Other (Explain In Remarks)

Hydrology Remarks : Saturated at high tidal series by seepage through levee from Gallinas Creek.

Plot ID: 3w

SOILS

Map Unit Name (Series and Phase): Xerorthents, fill

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-16+		10YR 4/1			loamy clay

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks:

Low chroma soils and hydrology indicators meet hydric criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Hydric Soil Present ? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks : Three wetland parameters met.

Approved By HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Rafael Airport Recreational Facility	Date: 8/7/2005
Applicant/Owner: JHS Properties	County: Marin
Investigator: W R A, Inc.	State: CA
Do Normal Circumstances exist on the site? ☐ Yes ☐ No	Community ID: upland
Is the site significantly disturbed (Atypical Situation)? ☐ Yes ☐ No	Transect ID:
Is the area a potential Problem Area? (if needed explain on reverse.) ☐ Yes ☐ No	Plot ID: 1u

VEGETATION

Dominant Plant Species	Stratum	Indicator	Sub-dominant Plant Species	Stratum	Indicator
1. Avena sativa		NI	1.		
2. Cirsium vulgare		FACU	2.		
3.			3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		
8.			8.		

Percent of Dominant Species that are OBL, FACW and/or FAC: (excluding FAC-) 0%

Remarks : No wetland classified plants

HYDROLOGY

_____ Recorded Data ☐ Stream, Lake or Tide Gauge ☐ Aerial Photographs ☐ Other X No Recorded Data Available	Wetland Hydrology Indicators : Primary Indicators : ☐ Inundated ☐ Saturated in Upper 12 Inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage patterns in Wetlands Secondary Indicators (2 or more required) : ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral test ☐ Other (Explain in Remarks)
Field Observations : Depth of Surface Water : none (in.) Depth to Free Water in Pit : none (in.) Depth To Saturated Soil : none (in.)	

Hydrology Remarks : No wetland hydrology indicators were observed.

Exhibit 2
Biological Reports

Plot ID: 1u

SOILS

Map Unit Name
(Series and Phase): Xerorthents, fill

Drainage Class:

Taxonomy (Subgroup):

Field Observations
Confirm Mapped Type? ☒ Yes ☐ No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance / Contrast	Texture, Concretions, Structure, etc.
0-16+		10YR 3/2		none	

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content In Surface Layer In Sandy Soils
- ☐ Organic Streaking In Sandy Soils
- ☐ Listed On Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain In Remarks)

Profile Remarks:

Soil does not meet hydric criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Hydric Soil Present ? ☐ Yes ☒ No

Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks: No wetland parameters present.

Approved By HQUSACE 3/92

wra
ENVIRONMENTAL CONSULTANTS

October 10, 2005

Robert Herbst
JHS Properties
2173-D East Francisco Blvd.
San Rafael, CA 94901

Dear Robert,

This letter provides clarification of two concerns raised by the City of San Rafael about the proposed San Rafael Airport Recreational Facility which include, whether the development would have an adverse affect on sensitive species, such as the California clapper rail and salt marsh harvest mouse, and would replacing the bridge deck crossing the north fork of Gallinas Creek from Smith Ranch Road have any impacts requiring permitting from regulatory agencies.

Potential Affect on California Clapper Rail and/or Salt Marsh Harvest Mouse

Gallinas Creek is quite narrow at the location of the proposed project. Dominant vegetation in the fringe wetlands along both sides of the channel is alkali bulrush with some small patches of salt grass and pickleweed. Pacific cordgrass grows in a narrow, broken fringe along a deeply incised tidal channel. Across Gallinas Creek from the proposed project site is the McInnis Park complex consisting of a golf area, play fields, hiking trail, and lighted parking lots and roadways all within proximity to Gallinas Creek. The 2005 version of the California Department of Fish and Game Natural Diversity Data Base (CNDDB) indicates that the nearest recorded occurrence for the California clapper rail to the proposed site is east of the confluence of the North Fork of Gallinas Creek and the South Fork of Gallinas Creek, approximately 1/2 mile from the proposed development site in the prime habitat of the open tidal wetlands at the mouth of Gallinas Creek on San Pablo Bay. The wetlands in the channel adjacent to the proposed development site are not suitable habitat for the clapper rail or salt marsh harvest mouse because of the limited habitat size, lack of preferred vegetation, existing disturbance, and distance from prime habitat areas. Given these circumstances, it is unlikely that the California clapper rail and the salt marsh harvest mouse would be established in the fringe wetlands lining Gallinas Creek and adjacent to the proposed development site. The California clapper rail may pass through this area within the confines of the tidal wetland habitat, foraging, on an occasional basis.

In 1999 the U.S. Fish and Wildlife Service issued a letter of "no effect" for a housing project consisting of two homes located just upstream of the proposed project (see attached). This determination was based on the same information described above which has not changed since 1999. At that time the California Department of Fish and Game (Biologist Fred Botti, personal communication by telephone) also concurred that there would be no effect. The mitigation for the two houses (completed in 2000) was to provide a buffer zone of 50 feet between the back of the houses and Gallinas Creek.

It is our opinion that the proposed project will have no significant adverse affect on either the California clapper rail or salt marsh harvest mouse because: (1) is it unlikely that either animal would have an established presence at this location in Gallinas Creek due to lack of appropriate

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habitat (habitat size and plant type) and distance from prime habitat; (2) disturbance from existing land uses, including human presence and noise from the San Rafael Airport and McInnis Park; (3) the proposed project will have more than a 100-foot buffer between it and Gallinas Creek; (4) the development will be at a relatively low elevation behind the levee; (5) and the playfields will not be lighted.

Potential Affect of Replacing the Bridge Deck

You have indicated that replacing the deck of the existing bridge crossing Gallinas Creek from Smith Ranch Road will involve adding a new deck over the top of the existing deck without removing the old deck. All work will be conducted from the existing roadway on either side of the bridge and no work will be conducted in or from the creek. In addition, the new deck will be the same width as the existing deck, so there will be no additional shading. Based on this description, no permits would be required from the Corps of Engineers or California Department of Fish and Game (WRA contacted the California Department of Fish and Game, Warden Bill Cox, and confirmed this conclusion by telephone). The San Francisco Bay Conservation and Development Commission does not have jurisdiction upstream of the confluence of North and South Fork Gallinas Creek confluence.

WRA recommends, however, that care be taken to make sure debris or construction related materials is not allowed to fall or be placed into the creek or fringe wetlands, and that if any material accidently falls into the creek or wetlands that it be removed.

If additional information is needed or there are questions, please feel free to contact Douglas Spicher at 415-454-8868 or spicher@wra-ca.com.

Sincerely,

Douglas Spicher PWS
Principal

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

IN REPLY REFER TO:
1-1-99-TA-680

March 1, 1999

Bob Herbst
H&H Management and
Real Estate Development
2173 D Francisco Boulevard
San Rafael, California 94901

Subject: Smith Ranch Road Residential Development Project, Marin County, California

Dear Mr. Herbst:

This transmits the U.S. Fish and Wildlife Service's (Service) response to your request for technical assistance regarding the effects of your proposed Smith Ranch Road Residential Development project (Project) on the California clapper rail (*Rallus longirostris obsoletus*)(clapper rail). The Project includes the construction of 2 residential homes on a 1.28-acre parcel adjacent to Gallinas Creek, immediately upstream of the Northwestern Pacific railroad. Developement will be prohibited within a 50-foot setback from Gallinas Creek. The setback will be planted with native vegetation and separated from the development with a 6-foot metal fence.

Clapper rails have been known to occur approximately 1,200 meters downstream from the project site in a pocket marsh on Gallinas Creek and in the marshes at the creek's mouth along San Francisco Bay. Also, clapper rails may forage on Gallinas Creek upstream of these marshes in closer proximity to the proposed project. The clapper rail is protected under the Federal Endangered Species Act of 1973, as amended (Act). Section 9 of the Act and its implementing regulations prohibit the "take" of federally listed fish and wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any listed wildlife species. "Harm" in this definition includes significant habitat modification or degradation where it actually kills or injures wildlife, by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR § 17.3).

After review of the information provided, the Service has determined that, provided all measures to minimize impacts are implemented, the proposed project is not likely to result in take of the clapper rail. Therefore, unless new information reveals effects of the proposed action that may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

If you have any questions or concerns contact Dan Buford at (916) 979-2739, extension 443.

Sincerely,

Cay C. Goude

Cay C. Goude
Assistant Field Supervisor

cc: CDFG, Region III, Yountville, CA (Attn: Fred Botti)
City of San Rafael, San Rafael, Ca (Attn: Kraig Tambornini)

ZANDER ASSOCIATES

Environmental Consultants

December 1, 2005

RECEIVED
DEC 0 8 2005
BUILDING

Raffi Boloyan, Senior Planner
City of San Rafael Community Development Department
P.O. Box 151560
San Rafael, California 94915-1560

Results of Peer Review
Biological Resources Reports
Proposed Recreational Facility at San Rafael Airport

Dear Raffi:

Zander Associates has completed a review of various documents provided to us by the City of San Rafael on November 8, 2005 that pertain to the proposed recreational facility at the San Rafael Airport. We also visited the site on November 22, 2005 to evaluate existing conditions. The purpose of our review and site visit was to determine if the effects of the proposed project on biological resources were accurately identified and discussed. A list of the documents reviewed follows:

- Biological Site Assessment prepared by WRA (February 2005)
- Jurisdictional Area Delineation prepared by WRA (September 2005)
- Letter to Robert Herbst from Douglas Spicher of WRA dated October 10, 2005.
- The applicant's written project description
- Proposed Project Plans prepared by L.A. Paul & Associates dated 08/09/05
- Grading and Drainage Plans prepared by Oberkamper & Associates dated 10/17/05
- Landscape Plan prepared by Baronian Whisler dated October 3. 2005
- Preliminary Bridge Design from Steadfast Bridges dated 7/25/2005

The biological site assessment describes the existing plant communities and potential wildlife use on the site and addresses the potential for sensitive plants, plant communities, and wildlife to be present in the area. It does not specifically evaluate a project or identify impacts on biological resources. The assessment concludes that there are no sensitive plants or plant communities on the site and that most of the special status wildlife species recorded within the vicinity are not likely to occur on the site. However, it does recommend pre-construction surveys to avoid disturbance of any nesting birds.

The jurisdictional area delineation identifies three wetland areas on the site that are potentially subject to U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act. Under the discussion of potential impacts, WRA states that the project will avoid filling these areas and that they will be adequately protected from indirect impacts through

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establishment of a minimum 50-foot buffer zone. Based on our review of the delineation and the proposed project plans, we concur with this conclusion.

The delineation mentions an existing storm water drainage ditch system and associated pump house but it does not describe in detail the nature and extent of the ditch. The ditch is not identified as a potential wetland or waters of the United States, but there is no discussion as to why. During our site visit, we examined the ditch system and spoke with Robert Herbst, Airport Facilities Manager regarding the function and maintenance of the system. The ditches are used to direct surface runoff from the airfield to a pump station and ultimately out into Galinas Creek. The ditches are regularly maintained and basically devoid of vegetation. Since these are clearly man-made ditches excavated in upland areas, and they do not support wetland vegetation, we believe they would not be subject to Corps jurisdiction.

The October 10, 2005 letter to Robert Herbst evaluates potential effects of the project on the California clapper rail and salt marsh harvest mouse. It also discusses potential impacts and permitting requirements associated with replacing the bridge deck crossing the North Fork of Galinas Creek from Smith Ranch Road. WRA concludes the project will have no significant adverse affect on either the clapper rail or salt marsh harvest mouse for several reasons, which it lists. One of the reasons is that the playfields will not be lighted. We did not see a statement to that affect in the written project description provided but through discussion with you, we understand that is the case. To clarify the record, we recommend that the written project description include a statement that the playfields will not be lighted. All of the reasons that WRA lists are supportable and we therefore concur with the conclusion that the project will not adversely affect the clapper rail or salt marsh harvest mouse.

Replacement of the deck of the existing bridge crossing over Galinas Creek involves adding a new deck over the top of the existing bridge, which will remain in place. Based on the description of the work and jurisdictional boundaries provided in the WRA letter, we concur that no permits would be required from the Corps, Department of Fish and Game or the Bay Conservation and Development Commission for this activity.

The grading and drainage plans indicate that a series of earthen swales will be constructed to carry runoff from the development to the drainage ditch and ultimately out to Galinas Creek . In other areas of the site, runoff from the ballfields and parking areas will simply flow overland through landscaped areas. We recommend that the Initial Study include a discussion of how the project will address water quality issues related to habitat in Galinas Creek. It is our opinion that if runoff from the project is directed through grass-lined swales before being discharged into the creek, that will help filter out pollutants and reduce the potential to degrade habitat quality in Galinas Creek.

In summary, the documents prepared by WRA appear to accurately describe the existing biological resources on the project site and in the vicinity. The project grading plans indicate that the wetland areas identified on the site will not be filled and WRA concludes that they will be adequately protected from indirect impacts through establishment of a minimum 50-foot buffer

zone. WRA also concludes that the project will have no significant adverse affect on either the clapper rail or salt marsh harvest mouse. Based on our review of the documents and our site visit, we concur with both of these conclusions. For clarification, we recommend the Initial Study include a statement that the playfields will not be lighted. We understand that drainage from the site will be directed through a series of vegetated swales before being discharged into Galinas Creek and we believe that will help filter out pollutants and reduce the potential to degrade habitat quality in the creek. We recommend the Initial Study include a discussion of these drainage swales and how they will be constructed to filter runoff from the project.

Should you have any questions regarding our review or require further assistance with this project, please call me.

Sincerely,

Leslie Zander

Leslie Zander
Principal

Exhibit 3 - Noise Study

- San Rafael Airport Recreational Facility – Environmental Noise Assessment, Prepared by Illingworth & Rodkin Inc, May 31, 2005 and Revised December 15, 2005

Exhibit 3
Noise Study

San Rafael Airport Recreation Facility
Environmental Noise Assessment

May 31, 2005
Revised December 15, 2005

♦ ♦ ♦

Prepared for:

Bob Herbst
San Rafael Airport, LLC
2175 L Francisco Boulevard
San Rafael, CA 94901

Prepared by:

Dana M. Lodico
Richard B. Rodkin, PE
Richard R. Illingworth, PE

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Job No. 05-025

Exhibit 3
Noise Study

Introduction

This noise report assesses the potential for noise impacts resulting from the proposed recreation facility at the San Rafael Airport in San Rafael, CA. The proposed facility would include an outdoor soccer field, an outdoor baseball field, an indoor soccer field, and two additional indoor recreation facilities. The Setting Section of the report presents a discussion of the fundamentals of environmental acoustics, regulatory background information, and a discussion of the existing noise environment at the project site and at noise-sensitive receivers in the project's vicinity. The Impacts and Mitigation Measures Section evaluates the potential for noise impacts resulting from the project and presents mitigation measures for all identified significant impacts.

Setting

Fundamental Concepts of Environmental Acoustics

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. The Decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, and 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as an approximate doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2.

Because sound levels can vary over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

TABLE 1 Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA $L_{eq[h]}$.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels in the night between 10:00 pm and 7:00 am.
Day/Night Noise Level, L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level, CNEL, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 p.m. - 10:00 p.m.) and a 10 dB addition to nocturnal (10:00 p.m. - 7:00 a.m.) noise levels. The Day/Night Average Sound Level, L_{dn}, is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Regulatory Background

The State of California, and the City of San Rafael have each established regulations, plans, and policies designed to limit noise exposure at noise sensitive land uses. These include; (1) the State CEQA Guidelines, Appendix G, (2) the Noise Element of the San Rafael General Plan, and (3) the City of San Rafael Noise Ordinance.

State CEQA Guidelines

There are no state laws directly applicable in the assessment of noise associated with new projects. The California Environmental Quality Act (CEQA) includes qualitative guidelines for determining significance of adverse environmental noise impacts. A project will typically have a significant impact if it would:

a. Expose people to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or application standards of other agencies.

b. Expose people to or generate excessive groundborne vibration or groundborne noise levels.

c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

e. For projects within an area covered by an airport land use plan or within two miles of a public airport or public use airport when such an airport land use plan has not been adopted, or within the vicinity of a private airstrip, expose people residing or working in the project area to excessive aircraft noise levels.

f. For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

CEQA does not define the noise level increase that is considered substantial. Typically, an increase in the L_{dn} noise level of 3 dBA or greater at noise-sensitive receptors would be considered significant when projected noise levels would exceed those considered satisfactory for the affected land use.

San Rafael Noise Element of the General Plan

The City of San Rafael guides development of land uses to be compatible with the noise environment in the Noise Element of the General Plan. This element establishes noise and land use compatibility guidelines for proposed land uses and sets goals in order to minimize noise throughout the community.

N-1. Noise Impacts on New Development: Protect people in new development from excessive noise by applying noise standards in land use decisions. Apply the Land Use Compatibility Standards (see Exhibit 30) to the siting of new uses in existing noise environments. These standards identify the acceptability of a project based on noise exposure. If a project exceeds the standards in Exhibit 30, an acoustical analysis shall be required to identify noise impacts and potential noise mitigations. Mitigation should include the research and use of "state of the art" abating materials and technology.

N-3. Planning and Design of New Development: Encourage new development to be planned and designed to minimize noise impacts from outside noise sources.

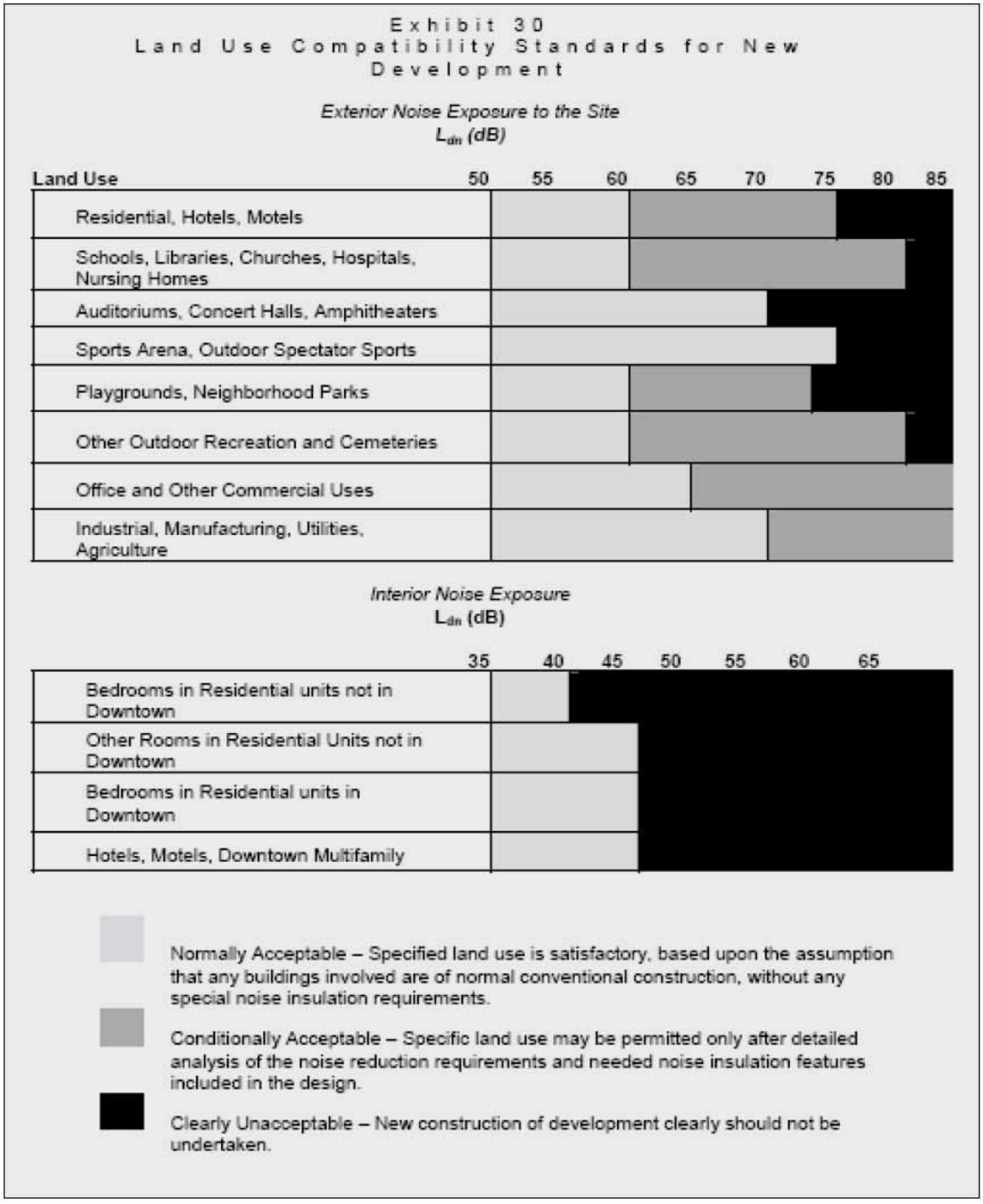
N-3a. Noise Mitigation. Require, where appropriate, the following mitigation measures to minimize noise impacts on proposed development projects:

Site planning. Proper site planning is the first mitigation measure that should be investigated to reduce noise impacts. By taking advantage of the natural shape and terrain of the site, it often is possible to arrange the buildings and other uses in a manner that will reduce and possibly eliminate noise impacts. Specific site planning techniques include (a) increasing the distance between the noise source and the receiver, (b) placing non-noise sensitive land uses such as parking lots, maintenance facilities, and utility areas between the source and the receiver, (c) using non-noise sensitive structures such as garages to shield noise-sensitive areas, and (d) orienting buildings to shield outdoor spaces from a noise source.

N-4. Noise from New Nonresidential Development: Design nonresidential development to minimize noise impacts on neighboring uses.

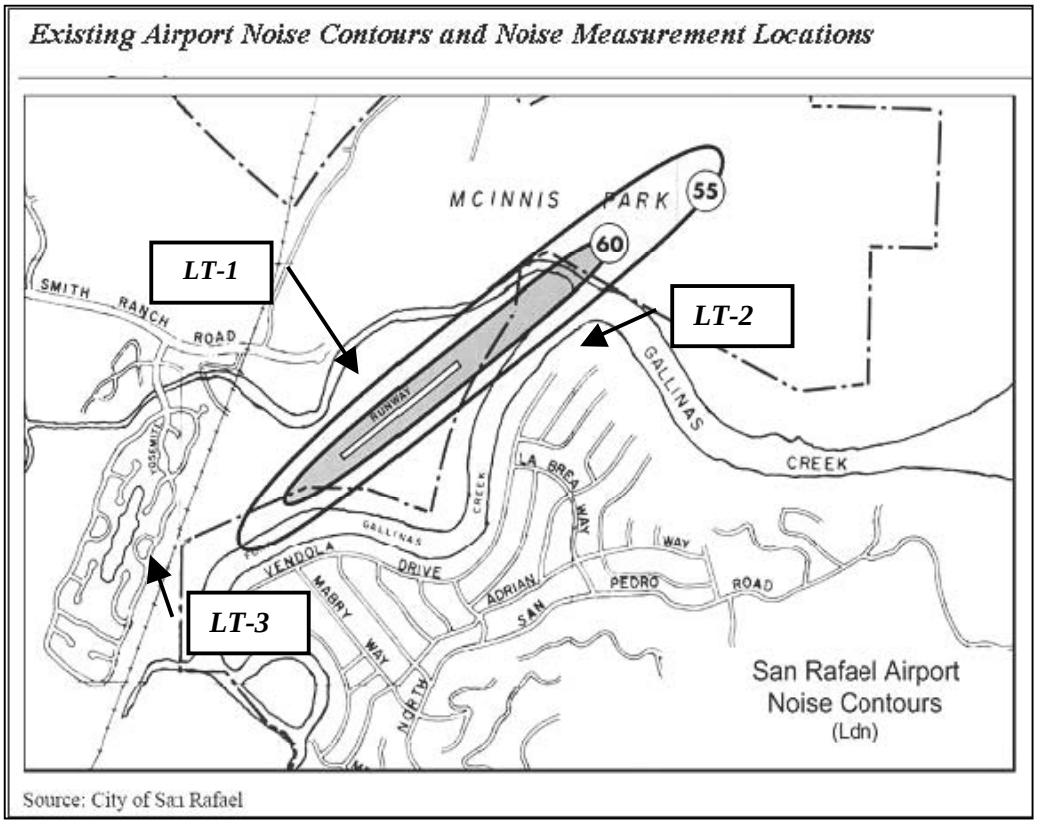
Performance Standards for Uses Affecting Residential Districts. New nonresidential development shall not increase noise levels in a residential district by more than L_{dn} 3 dB, or create noise impacts that would increase noise levels to more than L_{dn} 60 dB at the property line of the noise receiving use, whichever is the more restrictive standard.

Exhibit 3
Noise Study



N-7. Airport/Heliport: To the extent allowed by federal and state law, consider and mitigate noise impacts of any changes in facilities or operations that require use permit mitigations or other land use permits at the San Rafael Airport in north San Rafael and the heliport in East San Rafael (see Noise Contours for SR Airport in Exhibit IV.4-2).

Exhibit 3
Noise Study



City of San Rafael Noise Ordinance and California Motor Vehicle Code

The City of San Rafael has adopted a noise ordinance (Chapter 8.13 of the Municipal Code) to control excessive unnecessary unreasonable noise in the city.

The general noise limits are that no person shall produce, suffer, or allow to be produced by any machine, animal, or device, or by any other means a noise level greater than the following when measured on any residential property during the daytime (7:00 AM to 9:00 PM, Sunday through Thursday, and 7:00 AM to 10:00 PM on Friday and Saturday) a maximum noise level of 60 dBA and an average noise level of 50 dBA. During the nighttime (9:00 PM to 7:00 AM Sunday through Thursday, and 10:00 PM to 7:00 AM on Friday and Saturday), a maximum noise level of 50 dBA and an average level of 40 dBA. Exemptions to these limits include construction for which noise levels are limited to a maximum of 90 dBA at the nearest adjacent property during the allowable construction hours which are 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 6:00 PM on Saturday. No construction is allowed on Sunday or holidays. Finally, vehicle noise which is subject to regulation under the California Motor Vehicle Code, is exempted by the Ordinance.

The California Motor Vehicle Code contains two provisions potentially applicable to this project. Section 2707 of the California Motor Vehicle Code prohibits amplified sound which can be heard 50 feet or more from a vehicle and Section 27150 of the California Motor Vehicle Code controls it. The California Motor Vehicle Code provisions are enforced by the local police.

Existing Noise Environment

Noise levels at the site of the Outdoor Soccer Field were monitored for a period of one week (from February 4 to 11, 2005) to quantify ambient and operational airport noise levels. The measurement location (LT-1) was at the approximate setback of the Outdoor Soccer Field to the runway, about 225 feet from the center of the runway and 5 feet above the surrounding ground. Ambient noise levels were low (35 to 45 dBA L_{eq}) with occasional loud events produced by aircraft operations. At the measurement location, the L_{dn} ranged from 53 dBA to 58 dBA and instantaneous maximum noise levels generated by aircraft flights were typically 70 dBA to 100 dBA L_{max}. The daily trends in noise levels are shown in the Appendix.

Noise levels were previously measured at two locations on July 17-22, 2002[1] to quantify the noise environment at nearby noise sensitive areas. Measurement location LT-2, located off the end of Vendola Drive and east of the airport runway, showed 24 aircraft operations over the 5-day period. The L_{dn} at this location ranged from 49 dBA to 54 dBA, including all noise, not just aircraft. At location LT-3, located in the Contempo Marin Mobile Home Park on Glacier Way, the noise level generated by the aircraft was not distinguishable from noise generated by traffic on the local streets and other neighborhood noise. The L_{dn} (including the noise from all sources) at location LT-3 was measured to be 54 dBA to 56 dBA.

Impacts and Mitigations

Noise and Land Use Compatibility (Airport Noise): A significant noise impact may be identified if exterior noise levels at the future outdoor soccer field would exceed 75 dBA L_{dn}.

Operational Noise: The impact would be considered significant if project-generated noise were to increase the noise levels at noise-sensitive receivers by 3 dBA L_{dn} or create noise impacts that would increase noise levels to more than 60 dB L_{dn} at the property line of the noise receiving use, or violate the provisions of the San Rafael Noise Ordinance.

Construction Noise: Construction activities would be considered to have a significant impact if noise levels exceed 90 dBA at adjacent properties.

Ground-Borne Vibration: Vibration levels would be considered significant if peak particle velocities exceed 0.5 inches per second, a level above which there begins to be a possibility of some minor structural damage (U.S. Bureau of Mines, 1980).

Project Impacts

Impact 1 The proposed project is located in a noise environment that is compatible with its use. This impact is less-than-significant.

[1] San Rafael Airport Aircraft Noise Monitoring, Illingworth & Rodkin, Inc., Letter dated August 2, 2002.

Ambient noise levels at the site of the Outdoor Soccer Field were low (35 dBA to 45 dBA L_{dn}) with occasional loud events produced by aircraft operations. The L_{dn} including aircraft operations and the ambient noise environment ranges from 53 dBA to 58 dBA. The noise environment would be considered conditionally acceptable.

Aircraft arriving or departing from the San Rafael Airport typically generate maximum noise levels of 70 dBA to 100 dBA. The duration of these loud events is relatively short (typically 5 to 18 seconds) and infrequent (2 to 11 events per day). There are no City or State requirements for acceptable maximum noise levels in outdoor sporting event areas. Noise levels generated by aircraft operations would briefly disrupt speech at recreational activities, but would not cause hearing damage to soccer participants or spectators. Assuming a credible worst-case condition of eleven 18-second aircraft events with an L_{max} of 100 dBA taking place during a day of soccer activities, soccer participants would be exposed for a total of 3 minutes and 18 seconds of 100 dBA L_{max} noise over the course of one full day. The U.S Environmental Protection Agency found that hearing loss would occur with exposure to noise levels of 100 dBA for about 15 minutes per day every day for a period of about 10 to 20 years[2]. The duration of noisy events is far below the thresholds established for hearing damage at the levels experienced at the site. In addition, it is unlikely that the credible worst-case condition would be achieved. This impact is **less-than-significant**.

Mitigation Measures: NONE

Impact 2a **Outdoor recreation activities would result in an increase in noise levels surrounding the site. Activities would not raise ambient noise levels by more than 3 dBA L_{dn} or create noise impacts that would increase noise levels to more than 60 dBA L_{dn} at the nearby residences nor would the City of San Rafael Noise Ordinance limits be exceeded. This impact is less-than-significant.**

Noise surveys conducted for various soccer fields indicate that hourly average noise levels during soccer games at 180 feet from the center of the field are as high as an L_{eq} of 56 dBA. Maximum noise levels reach 60 dBA.

The project site is located approximately 1000 feet from the nearest residences along Santa Venetia and more than 1000 feet from homes in the Contempo Marin Mobile Home Park. The existing McInnis Park playing field is located significantly closer to the Contempo Marin Mobile Home Park and approximately 1350 feet from the Santa Venetia homes. At a distance of 1000 feet, hourly noise levels generated by outdoor soccer activities would be below an L_{eq} of 41 dBA. Maximum noise levels would be below 45 dBA. These noise levels are below the existing noise levels in the area.

Baseball activities would generate similar noise levels. The noise levels generated by outdoor soccer activities would also not exceed the city noise ordinance limits of a maximum level of 60 dBA during the daytime or an average level of 55 dBA during the daytime. Later in the evening, activities would be confined to the indoor facility. Noise generated inside the facility would be significantly reduced by the walls and windows of

[2] Information on the Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, Figure C-6 Equal TTS Curves for 4000 Hz, U.S. Environmental Protection Agency, March 1974.

the facility. Noise levels would be about 15 dBA lower than the noise generated by outdoor activities with windows open and about 20 to 25 dBA lower than the noise generated by outdoor activities with windows and doors closed. Noise levels generated by indoor activities would be far below the levels allowed by the City of San Rafael Noise Ordinance. Finally, the 24-hour average L_{dn} generated by the facility would be less than 40 dBA, far below the existing L_{dn} of 54-56 dBA measured in the Contempo Marin Mobile Home Park.

In addition to the noise generated by the recreational activities themselves, noise could also be generated by rooftop mounted mechanical equipment associated with the building. This equipment typically generates noise levels of up to 65 dBA measured at a distance of 25 feet. At the nearest residence, this translates to a noise level of less than 33 dBA, typical of the lowest noise levels measured in the area during the nighttime hours and well within the allowable limits of the City of San Rafael's Noise Ordinance.

Mitigation Measures: NONE

Impact 2b Recreation activities would increase traffic volumes along the airport driveway road. However, noise generated by project traffic would be similar or lower in level to that generated by existing activities. This impact is less-than-significant.

The traffic study estimates that the project would add a maximum of 104 peak hour trips during busy activity days, nearly all of which would be passenger cars. The cars would access the facility from Smith Ranch Road, along the airport driveway road. Traffic speeds along the driveway are very low (5 to 15 mph) and traffic slows to a near stop as it approaches the bridge, due to a sharp 90-degree turn in the roadway.

Approximately 35% of the existing airport peak trips are by large trucks, often towing trailers. Commercial tenants, including Bartlett Tree Service, Linscott Engineering, and Superior Roofing, currently send about 20 trucks out daily (Monday through Friday) between 7:00 am and 8:00 am and they return between 3:00 pm and 6:00 pm. Each truck is filled with 2 to 3 workers who arrive/depart in passenger cars shortly before the departure/arrival of the trucks. At low speeds, trucks typically generate maximum noise levels of about 60 to 70 dBA at a distance of 50 feet. Passenger cars generate lower maximum noise levels of about 55 to 65 dBA at a distance of 50 feet. It is estimated that the peak traffic hour L_{eq} generated by soccer traffic would be 4 to 5 dBA lower than the existing peak hour (7:00 am to 8:00 am) traffic noise along the airport driveway road. Recreational project traffic would introduce some traffic noise during evening hours, but would not substantially increase the L_{dn} at the nearby residences (increase would be less than 1 dBA L_{dn}).

The nearest home at Captain's Cove is approximately 80 feet from the airport driveway road and about 70 feet from the edge of Smith Ranch Road. Traffic volumes and speeds along Smith Ranch Road are substantially higher than those along the airport driveway road and generate higher noise levels at the residence. During the arrival and departure from soccer activities, traffic along the driveway would be audible in the absence of other noise sources. However, the primary noise sources at this residence would continue to be existing traffic along Smith Ranch Road and aircraft operations.

Based on existing traffic volumes along Smith Ranch Road[3] and the estimated project trips, soccer traffic would not measurably increase the traffic noise generated along Smith Ranch Road (increase would be less than 1 dBA L_{dn}).

The Contempo Marin Mobile Home Park includes several homes that are located along the airport driveway and behind a solid 7-foot high noise barrier. The 2002 noise measurement survey found that noise levels in the Contempo Marin Mobile Home Park were approximately 54 to 56 dBA L_{dn} including aircraft noise, unshielded traffic noise (the 7-foot barrier was not yet built at the time of this measurement), and neighborhood noise. Behind the 7-foot barrier, maximum noise levels generated by passenger cars along the driveway would be 50 to 60 dBA, which would be 20 to 30 dBA lower than maximum levels generated during aircraft overflights. Again, while traffic along the driveway would be audible during the arrival and departure from soccer activities, project traffic would not substantially increase the L_{dn} at these residences.

The residents in the area have expressed concern that vehicles passing by late at night may have their windows down and their stereos blasting. In our experience, this is not typical for vehicle passbys and, in any case, this activity is controlled by the Motor Vehicle Code which states that it is illegal to operate a car application system which is audible at a distance of 50 feet from the car. This impact is **less-than-significant**.

Mitigation Measures: NONE

Impact 3: Noise generating activities associated with the construction of the project would temporarily elevate noise levels at nearby noise sensitive receptors. With the application of standard construction controls, the impact would be less-than-significant, except during pile driving.

Project construction activities would include grading of the site, pile driving, paving of roadways, construction of project infrastructure, and construction of buildings. With the exception of pile driving (discussed below), the highest noise levels would be generated during grading of the site, with lower noise levels occurring during building construction. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 80 to 85 dBA at a distance of 100 feet. Typical hourly average construction-generated noise levels are about 75 to 80 dBA measured at a distance of 100 feet from the site during busy construction periods. These noise levels drop off at a rate of about 6 dBA per doubling of distance between the noise source and receptor.

The nearest residences are located in the Santa Venetia development and in the Contempo Marin Mobile Home Park; both located more than 1000 feet from the project site. Typical hourly average construction-generated noise levels would be approximately 55 to 60 dBA at these residences during busy construction periods. Noise levels at adjacent residences may intermittently be audible above the existing noise environment. However, noise levels produced by heavy equipment would not interfere with normal residential activities. At McInnis Park, located approximately 200 feet from the project site, construction activities would produce typical hourly average noise levels of 69 to 74

[3] San Rafael Traffic Counts, available online at http://www.sanrafaelpublicworks.org/dept3.htm, City of San Rafael, Department of Public Works.

dBA during busy construction periods and could disrupt park activities, but would not exceed noise levels produced by aircraft in the area. Noise levels would be below 90 dBA in accordance with the City's Noise Ordinance.

It is anticipated that the project would require the driving of up to 100 piles to provide a foundation for the proposed building. A diesel-powered pile driving hammer would be used to seat the piles. Diesel hammers generate maximum noise levels of 100 dBA at 100 feet during each blow. This translates to a level of approximately 80 dBA at the nearest homes in Santa Venetia or Contempo Marin Mobile Home Park and maximum noise levels of 94 dBA at McGinnis Park. Noise levels would exceed the City of San Rafael's Noise Ordinance limit at the McGinnis Park property but would not exceed the ordinance limits at the nearest residential development. Noise impacts associated with pile driving are typically mitigated by pre-drilling the holes to reduce the number of blows required to seat the pile and by completing the pile driving phase as quickly as possible. In some cases, multiple pile drivers are used to reduce the duration of exposure to pile driving noise. In addition to the construction mitigation measures recommended below, it is further recommended that **to mitigate pile driving noise, each hole be pre-drilled and that notification be given to neighbors of when pile driving will take place.**

With appropriate construction time limits and noise suppression techniques, the noise generated by the other construction activity would not generate significant adverse impacts. During construction, the following standard measures to reduce construction noise should be implemented:

- **Limit construction to the hours allowed in the City's Noise Ordinance.**
- **Use available noise suppression devices and properly maintain and muffle loud construction equipment.**
- **Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post the construction schedule and telephone number for the disturbance coordinator at the construction site.**

Application of these measures will reduce the short-term construction noise impact to a level that would be less-than-significant.

Mitigation Measures: NONE

Impact 4: Ground vibration generated during pile driving would not be significant at off-site receptors. This impact is less-than-significant.

Ground vibrations measured around pile driving sites indicate that vibration levels at a distance of 200 feet (the distance to McGinnis Park) are far below the 0.5 inches per second peak particle velocity threshold established to protect against

any structural damage. In fact, vibration levels at the McGinnis Park facility and at the nearest adjacent residents would generally not be detectable.

Exhibit 3
Noise Study

Appendix: Noise Measurement Results

Figure A-1: Measured Noise Levels on February 4-11, 2005

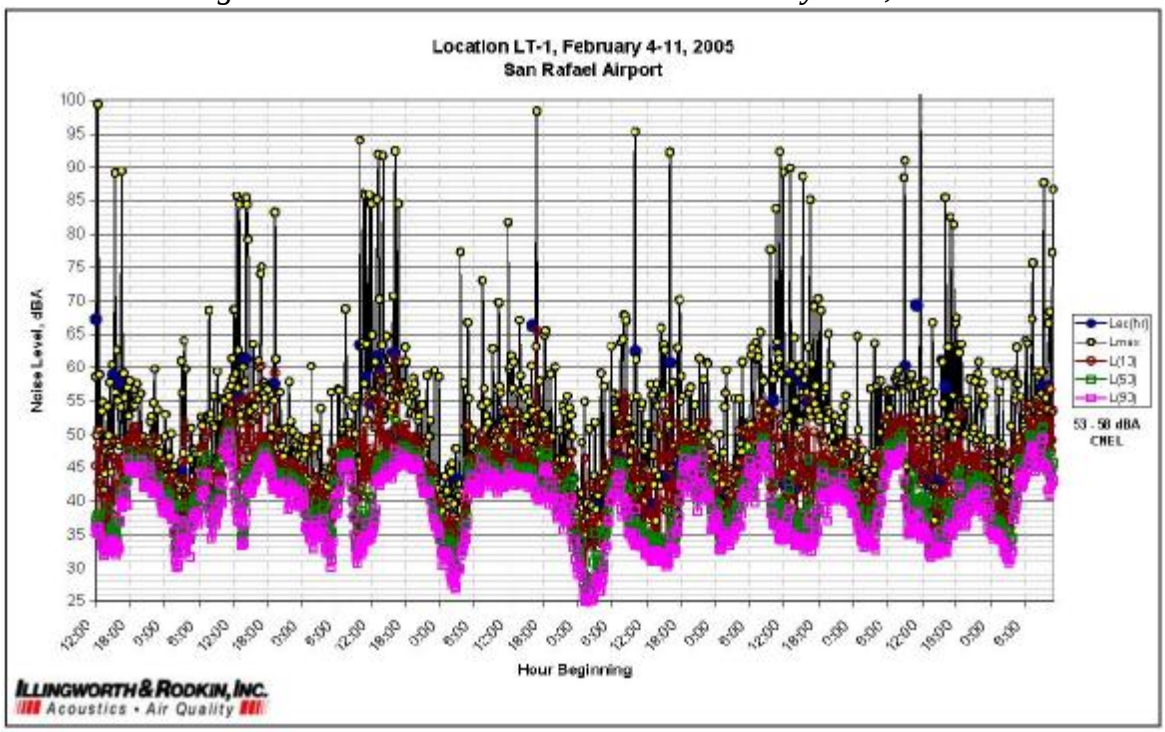


Figure A-2: Measured Noise Levels on February 5, 2005

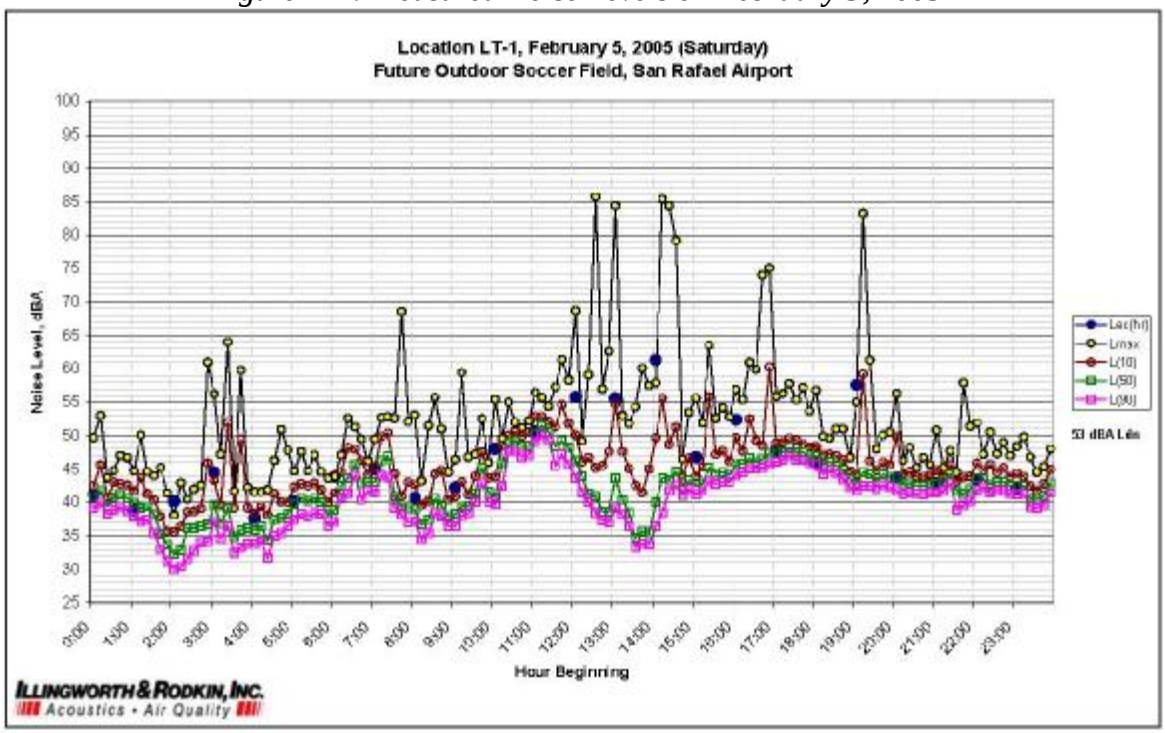


Figure A-3: Measured Noise Levels on February 6, 2005

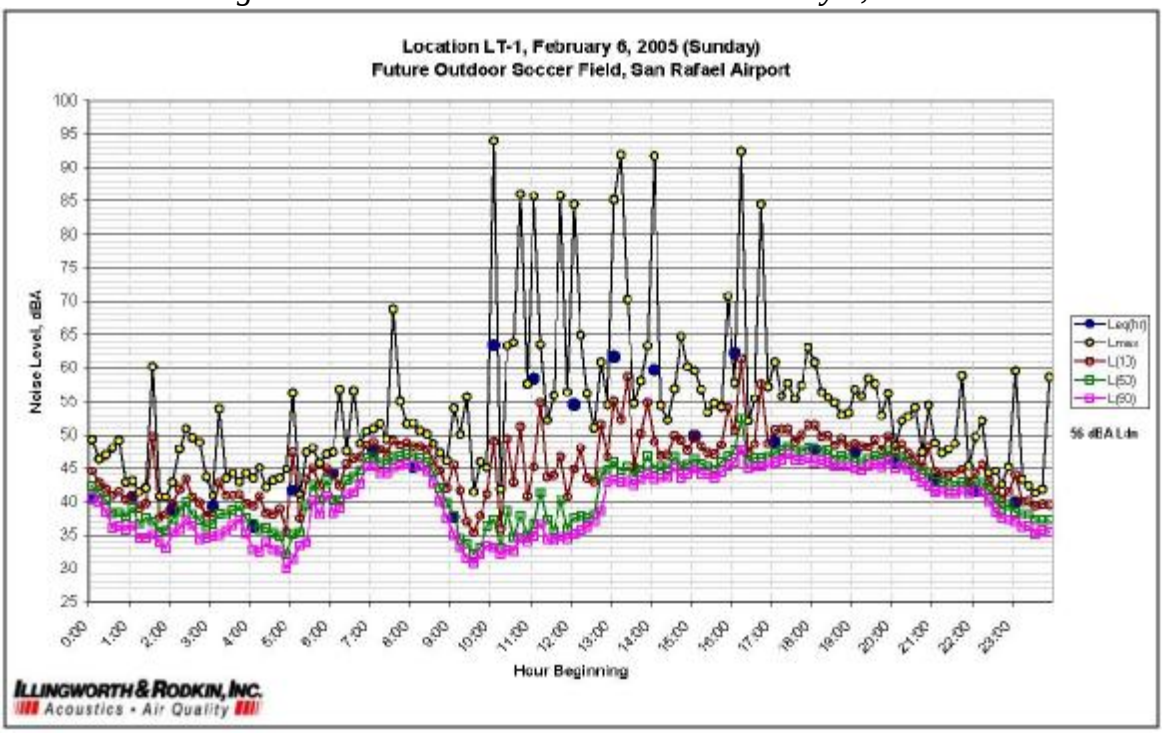


Figure A-4: Measured Noise Levels on February 7, 2005

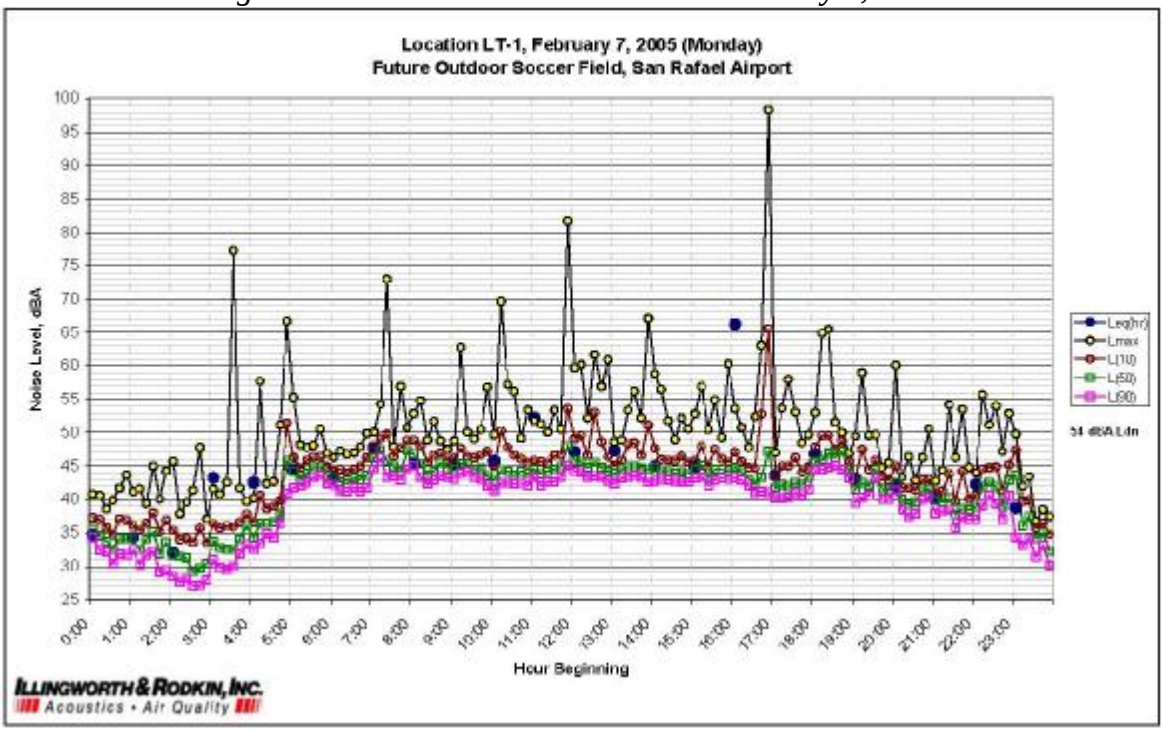


Figure A-5: Measured Noise Levels on February 8, 2005

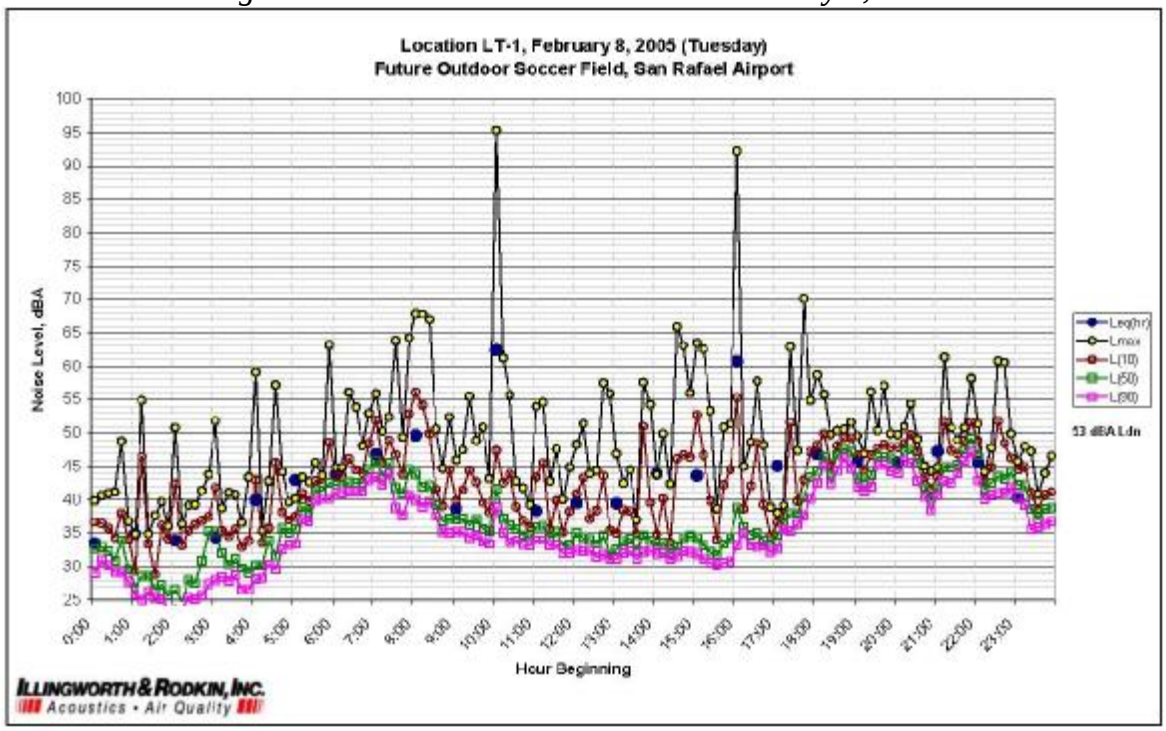


Figure A-6: Measured Noise Levels on February 9, 2005

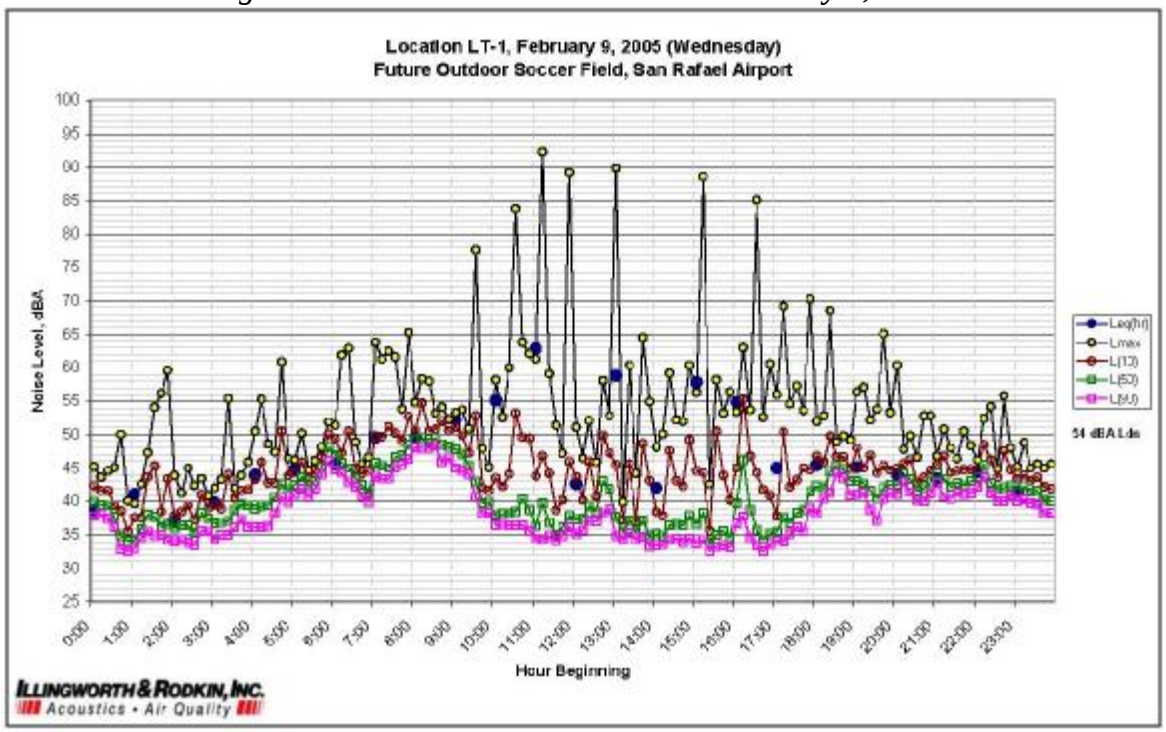


Figure A-7: Measured Noise Levels on February 10, 2005

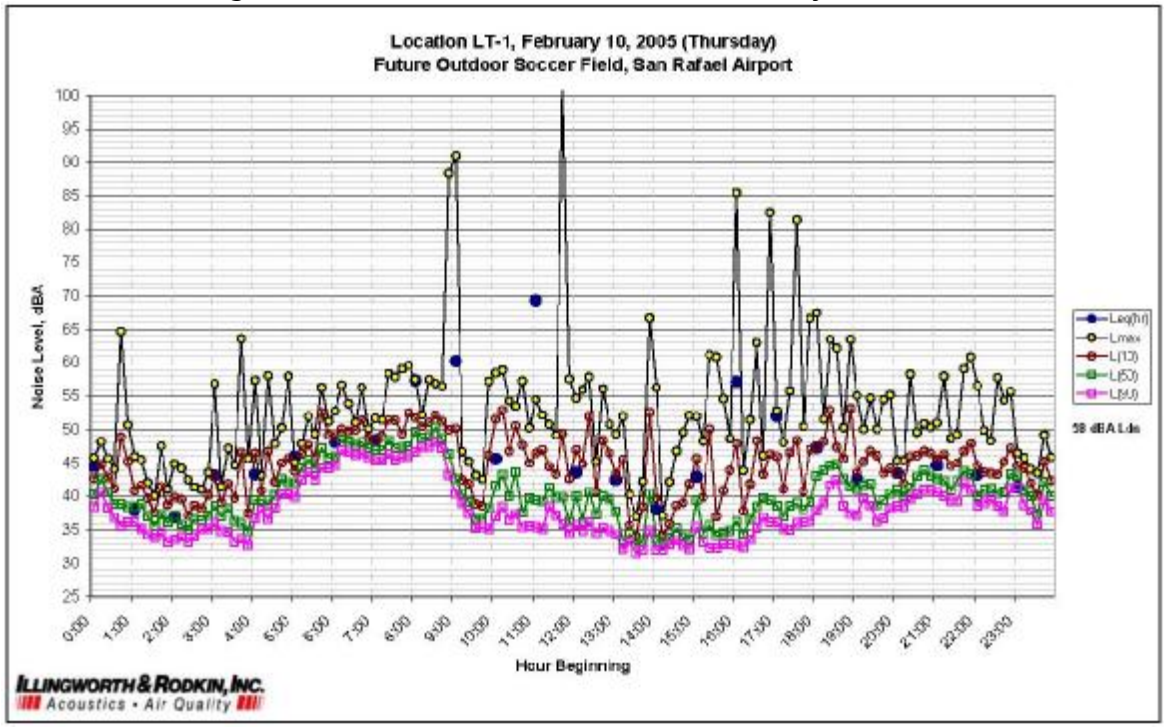


Figure A-8: Measured Noise Levels on February 4/11, 2005

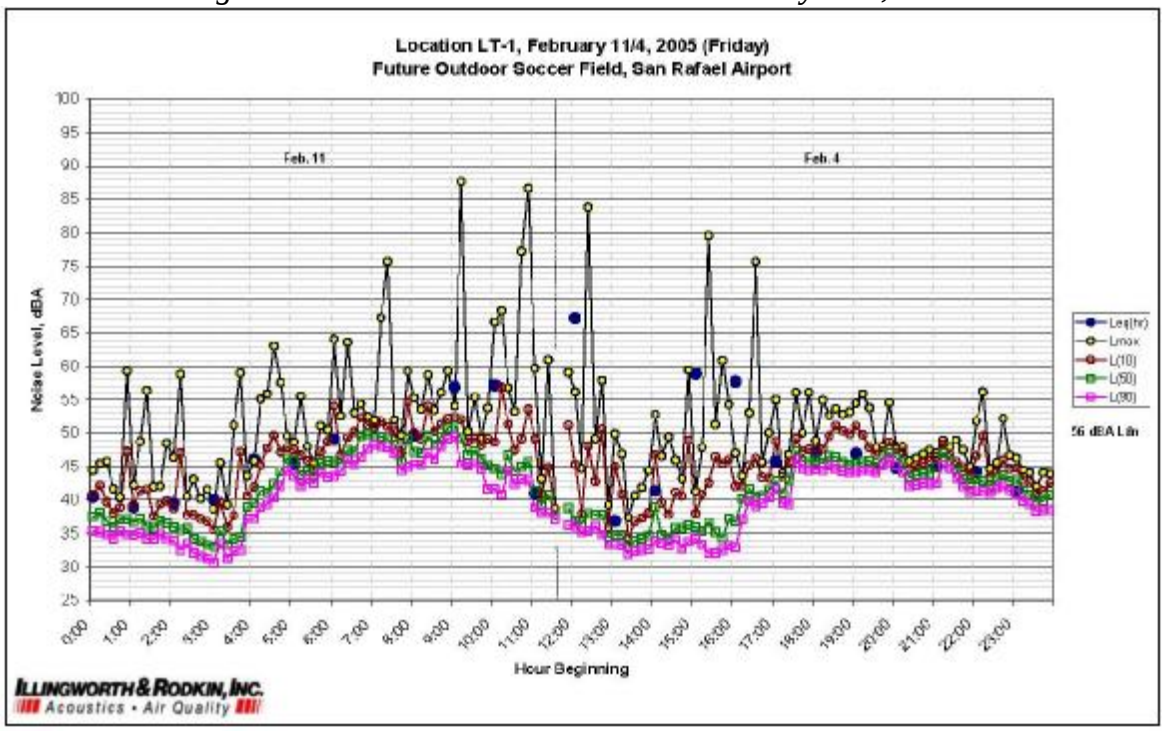


Exhibit 4 - Traffic Studies

- Traffic Assignment for San Rafael Airport Recreational Facility, Prepared by Fehr & Peers, May 31, 2005.
- Level of Service Analysis, Prepared by City of San Rafael Traffic Engineer, November 30, 2005

Exhibit 4
Traffic Studies

FEHR & PEERS
TRANSPORTATION CONSULTANTS

May 31, 2005

Robert Herbst
San Rafael Airport, LLC
2175 L Francisco Blvd.
San Rafael, CA 94901

Re: Traffic Assignment for San Rafael Airport Recreational Facility

Dear Bob:

This letter presents the estimated trip generation and traffic assignment for two alternative development schemes for the proposed San Rafael Airport recreational facility. In Alternative A, the proposed 70,000 square-foot recreation facility would hold a baseball training facility, a soccer complex, and a gymnastics facility. Alternative A is projected to generate 104 weekday PM peak hour trips and no AM peak hour trips.

Alternative B includes a baseball training facility, a soccer complex, and a climbing gym rather than a gymnastics facility. Alternative B is projected to generate 45 weekday PM peak hour trips and 10 AM peak hour trips.

We have identified five study intersections for analysis near the proposed project site. It should be noted that the City may require additional intersections be added to our study area. Project trips for each alternative were assigned to these intersections according to the residential population distribution within a 25 mile radius of the site.

PROJECT DESCRIPTION

The proposed project is a 70,000 square foot sports facility at the San Rafael Airport near Smith Ranch Road in San Rafael, California. Located just south of the North Fork of Gallinas Creek, the proposed project is situated between the McInnes Park Golf Center and the San Rafael Airport. Access to the sports complex will be via the existing San Rafael Airport roadway, off of Smith Ranch Road at the intersection with Silveira Parkway (Figure 1).

It is our understanding that the two proposed development alternatives are:

Alternative A
- 44,000 square-foot soccer complex with two indoor fields and one outdoor field
  12,000 square-foot baseball training facility an outdoor field
- 14,000 square foot gymnastics facility

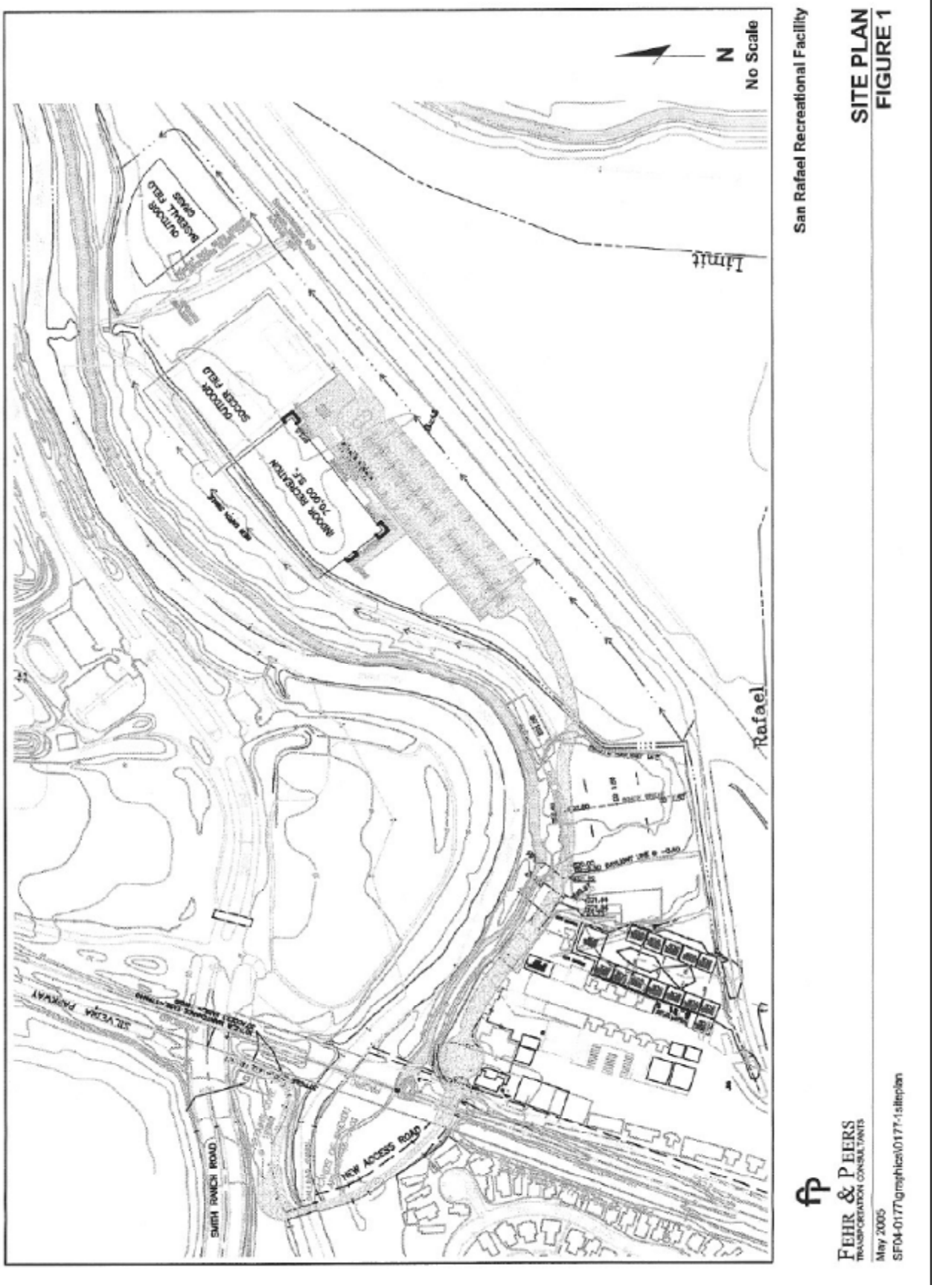
Total: 70,000 square-foot

Alternative B
- 44,000 square foot soccer complex with two indoor fields and one outdoor field
  12,000 square-foot baseball training facility plus an outdoor field
- 14,000 square-foot climbing gym

Total. 70,000 square-feet

604 Mission Street, 4th Floor, San Francisco, CA 94105 (415) 348-0425 Fax (415) 348-0428
www.fehrandpeers.com

Exhibit 4
Traffic Studies



Both the baseball training and soccer facilities are new businesses in San Rafael. The gymnastics facility would be relocating from an existing facility on Woodland Road in San Rafael and the climbing gym would be relocating from Dodie Street in San Rafael.

STUDY AREA

The study area includes the roadways and project intersections located near the proposed project site.

Roadway Network

US Highway 101 – Highway 101 is a north-south eight-lane freeway providing regional access to the recreational facility. South of the project site, Highway 101 connects with Interstate 580 and the Richmond Bridge. Northbound and southbound on- and off-ramps are located on Smith Ranch Road / Lucas Valley Road, within three quarters of a mile of the proposed project site.

Smith Ranch Road – This east-west arterial extends from Highway 101 to the McInnis Park Golf Center. Access to the project site will be from the existing San Rafael Airport roadway, connecting to the south side of Smith Ranch Road at the junction with Sliver Parkway. To the west of Highway 101, Smith Ranch Road becomes Lucas Valley Road and extends to Nicasio Valley Road.

Study Intersections

The following intersections are located near the project site and have been identified as the most likely to handle the majority of project-generated traffic (Figure 2):

1. Smith Ranch Road /Silveira Parkway
2. Smith Ranch Road / Redwood Highway
3. Smith Ranch Road / Northbound US-101 Ramps
4. Smith Ranch Road / Southbound US-101 Ramps
5. Lucas Valley Road / Las Gallinas Avenue

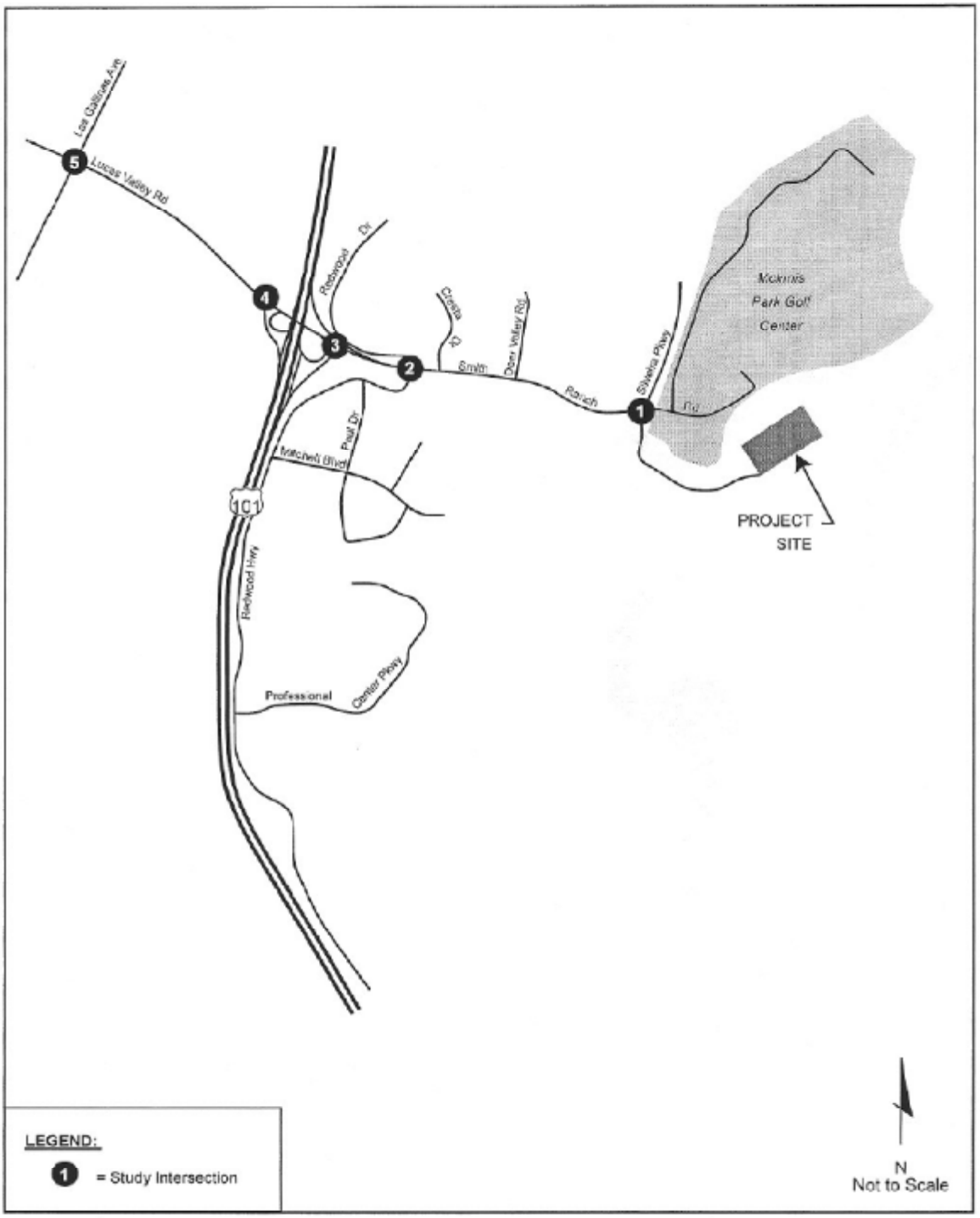
TRIP GENERATION

Fehr & Peers developed estimates of the number of trips the proposed recreational facility would create under each alternative development scheme.

Alternative A

The weekday PM peak period (4:00 to 6:00 PM) typically has the highest traffic volumes on the roadway network in San Rafael. Table 1 summarizes the expected PM peak hour trip generation for Alternative A, which includes the baseball training facility, the soccer complex, and the relocated gymnastics facility. We do not expect this alternative to generate new trips in the AM peak hour, but do expect that it will generate 104 trips in the PM peak hour. A discussion of individual land uses associated with this alternative follows.

Exhibit 4
Traffic Studies



San Rafael Recreational Facility

FEHR & PEERS
TRANSPORTATION CONSULTANTS

PROJECT LOCATION AND STUDY INTERSECTIONS

December 2004
SF04-0177/0177-2 location

FIGURE 2

FEHR & PEERS
TRANSPORTATION CONSULTANTS

TABLE 1
ALTERNATIVE A: WEEKDAY TRIP GENERATION

Land Use	Size (ksf)	Daily		PM Peak Hour		
		Rate	Total Trips	Total Trips	In	Out
Baseball Training Facility	12	N/A	36[1]	16[1]	6	10
Soccer Complex *2 Indoor Fields* *1 Outdoor Field*	44	32 per indoor game 56 per outdoor game	552	2[2]	2	0
Gymnastics Facility	14	40 per class	360	86[3]	40	46
New Traffic			**948**	**104**	**48**	**56**

Notes:
1. Daily and PM peak trips as reported by facility operator, 6/21/2004
2. All weekday games are to be scheduled after the PM peak hour
3. Based on counts taken at the Mega Gymnastics center

Source: ITE and Fehr & Peers, 2005

The baseball training facility will give private and small group baseball lessons. This facility is not an indoor batting cage facility. Instead, students would enroll in classes or private lessons by appointment. The operator would facilitate weekend games or practices on the outdoor baseball field, with most other training and lessons occurring at either the indoor facility or the outdoor facility, depending on the weather or the type of lesson or training. The facility would generate a negligible number of AM peak hour trips since the hours of operation on weekdays would be 10:00 AM to 9:00 PM. In a letter to the City, dated June 21, 2004, the facility operator estimated that there would be approximately 12 people, including students and instructors, at the facility between 6:00 and 8:00 PM on weekdays. The operator estimates that the facility would generate between 12 and 16 PM peak hour trips. We have assumed 16 PM peak hour trips for the baseball facility.

The soccer complex will have two indoor fields and one outdoor field. The complex will facilitate up to 15 league soccer games on weekday evenings with start times between 6:20 and 11:10 PM, according to representatives from Sports City, the soccer complex operator. This includes up to 12 games on the indoor fields and up to 3 games on the outdoor field in on a peak weeknight. The operator has selected the earliest start time of 6:20 PM to ensure that weekday trips to the soccer complex occur after the PM peak period. We estimate that two employees of the soccer facility arrive before the games, generating two PM peak hour trips.

The third component of Alternative A is a proposed gymnastics facility. With this project, Mega Gymnastics of San Rafael would relocate to the proposed San Rafael Airport recreational facility. Fehr & Peers collected trip generation counts at the existing gym on Tuesday, December 14, and Wednesday, December 15, 2004, from 4:00 to 6:00 PM. These counts showed that the Mega Gymnastics facility generated an average of 86 trips in the PM peak hour (4:00-5:00 PM). Since we expect the class schedule and size of the programs to be similar to those of the existing gym, we also expect the relocated gym to generate 86 trips in the PM peak hour. The traffic using the

relocated gymnastics facility would not be new traffic to the overall transportation network, but would be shifted traffic from the current facility to the new site.

Therefore, we expect the trip generation for all three components of Alternative A to be 104 PM peak hour trips and no AM peak hour trips.

We have also provided an estimate of daily traffic for individual components of the proposed project. We based the estimate of daily trips to the indoor soccer fields on parking and traffic studies W Trans completed for Sports City's Santa Rosa indoor soccer facility. The parking study showed, on average, that 16 vehicles parked in the soccer facility's parking lot per game. Based on this information we assumed 16 vehicles will travel to each indoor game and generate 32 vehicle trips per game (one inbound and one outbound). At this rate, if the indoor soccer fields are fully utilized with 12 games per weekday evening, there will be 384 daily trips to the indoor soccer complex. Outdoor soccer games tend to have larger teams and longer games than indoor soccer games. For each outdoor soccer game we estimate that there would be 28 vehicles and 56 vehicle trips. At this rate, if the outdoor soccer field has three games per night it will generate 168 trips. The operator of the baseball training facility estimates that they will generate 36 daily vehicle-trips.

Daily trip generation for the gymnastics facility is based on a comparison of observed weekday evening traffic generation at the existing facility and a typical summer class schedule. This comparison suggests that the gymnastics facility would generate an estimated 360 daily vehicle trips assuming nine classes per day with an average trip generation of 40 vehicle trips each.

Alternative B

Alternative B would have the same trip generation for the soccer complex and the baseball training facility as Alternative A. However, rather than a gymnastics complex, a climbing gym would relocate to the project site.

In Alternative B, the Class 5 climbing gym in San Rafael would relocate to a 14,000 square-foot space and would generate trips in both the AM and PM peak periods. We have based our trip generation forecasts for the climbing gym on counts we collected at the Class 5 climbing gym on January 12, 2005 from 7:00 to 9:00 AM and 4:00 to 6:00 PM. These counts showed the existing climbing gym generated 10 trips in the AM peak hour (7:15-8:15 AM) and 27 trips in the PM peak hour (5:00-6:00 PM). Since the size and membership at the new facility are expected to be similar to the existing gym, the relocated climbing gym is estimated generate the same number of peak hour trips (Table 2). The ratio of daily trips to peak hour trips for the climbing gym is similar to a health/fitness club (ITE Land Use #492). Based on this relationship, the climbing gym would generate 366 daily trips. These daily and peak hour trips are existing trips within San Rafael that would shift from their existing routes to the new site.

The climbing gym is projected to generate fewer trips than the gymnastics facility. In total Alternative B would generate 10 AM peak hour trips and 45 PM peak hour trips.

FEHR & PEERS

TABLE 2
ALTERNATIVE B: WEEKDAY TRIP GENERATION

Land Use	Size (ksf)	Daily		AM Peak Hour			PM Peak Hour		
		Rate	Total Trips	Total Trips	In	Out	Total Trips	In	Out
Baseball Training Facility[1]	12	N/A	36	0	0	0	16	6	10
Soccer Complex *2 Indoor Fields* *1 Outdoor Field*	44	32 per indoor game 50 per outdoor game	552	0	0	0	2[2]	2	0
Climbing Gym[3,4]	14	N/A	366	10	7	3	27	16	11
New Traffic			**954**	**10**	**7**	**3**	**45**	**24**	**21**

Notes:
[1] Daily and PM peak trips as reported by facility operator, 6/21/2004
[2] All weekday games are to be scheduled after the PM peak hour
[3] Peak hour trips based on counts taken at the Class 6 Climbing Gym
[4] Daily trips based on ratio of peak hour to daily trips of Health/Fitness Club (ITE Land Use #492)

Source: ITE and Fehr & Peers, 2005

TRIP DISTRIBUTION AND ASSIGNMENT

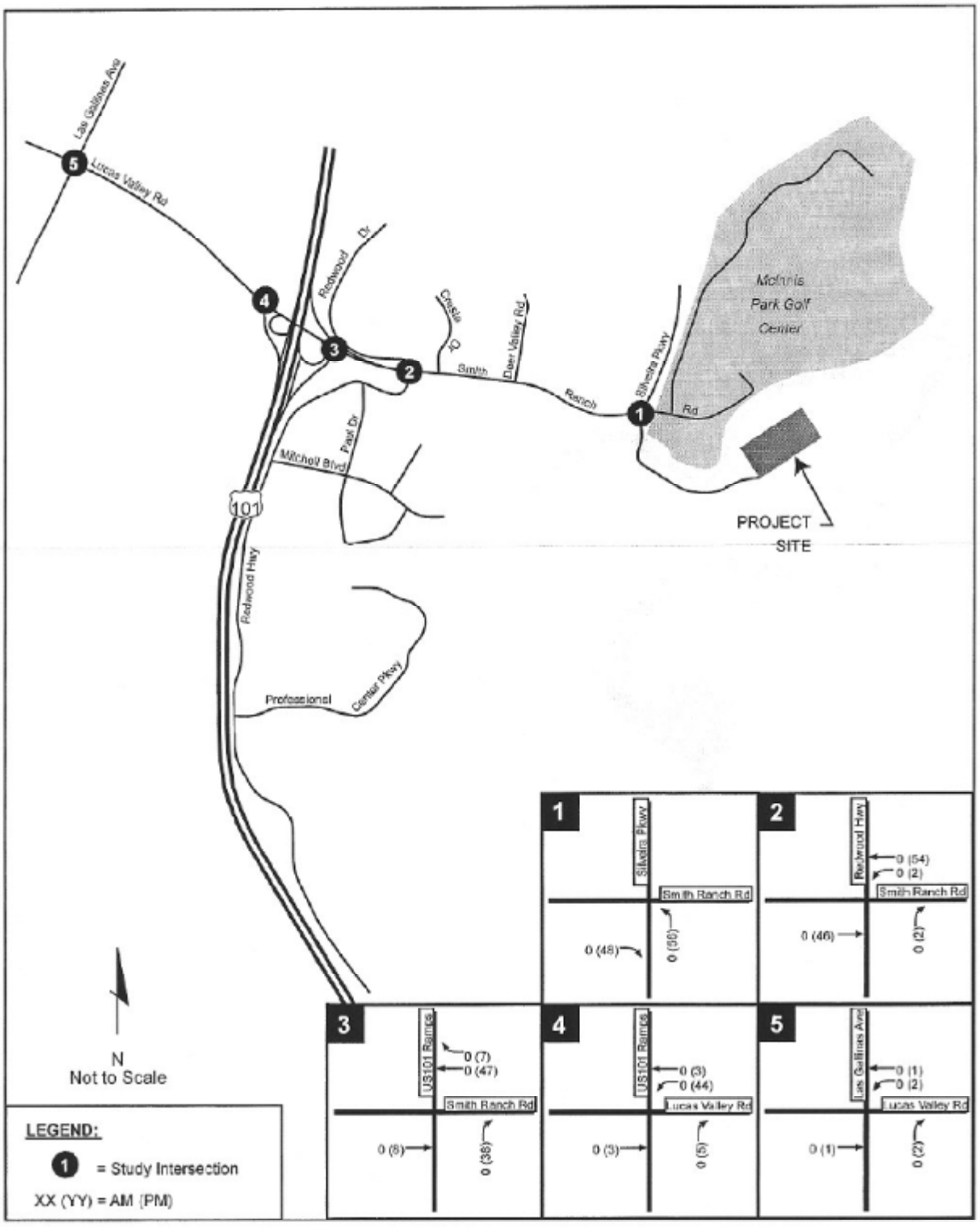
The same trip distribution patterns were used to assign trips to the study intersections for both alternatives. Access to the proposed recreational facility will be via Smith Ranch Road from northbound Highway 101, southbound Highway 101, Lucas Valley Road, or Redwood Highway. The geographic distribution of trips between those routes was projected according to the residential population distribution of the surrounding area. Based on the locations of comparable facilities and typical driving times, we assumed patrons would live in Marin County or within 15 miles of the facility. Table 3 shows the resulting trip distribution using population data reported in the 2000 Census.

TABLE 3
DIRECTIONAL DISTRIBUTION OF PROJECT TRIPS

Direction	Percent of Trips
North	13%
South	81%
West	6%

Source: Census 2000 & Fehr & Peers, 2004

Exhibit 4
Traffic Studies



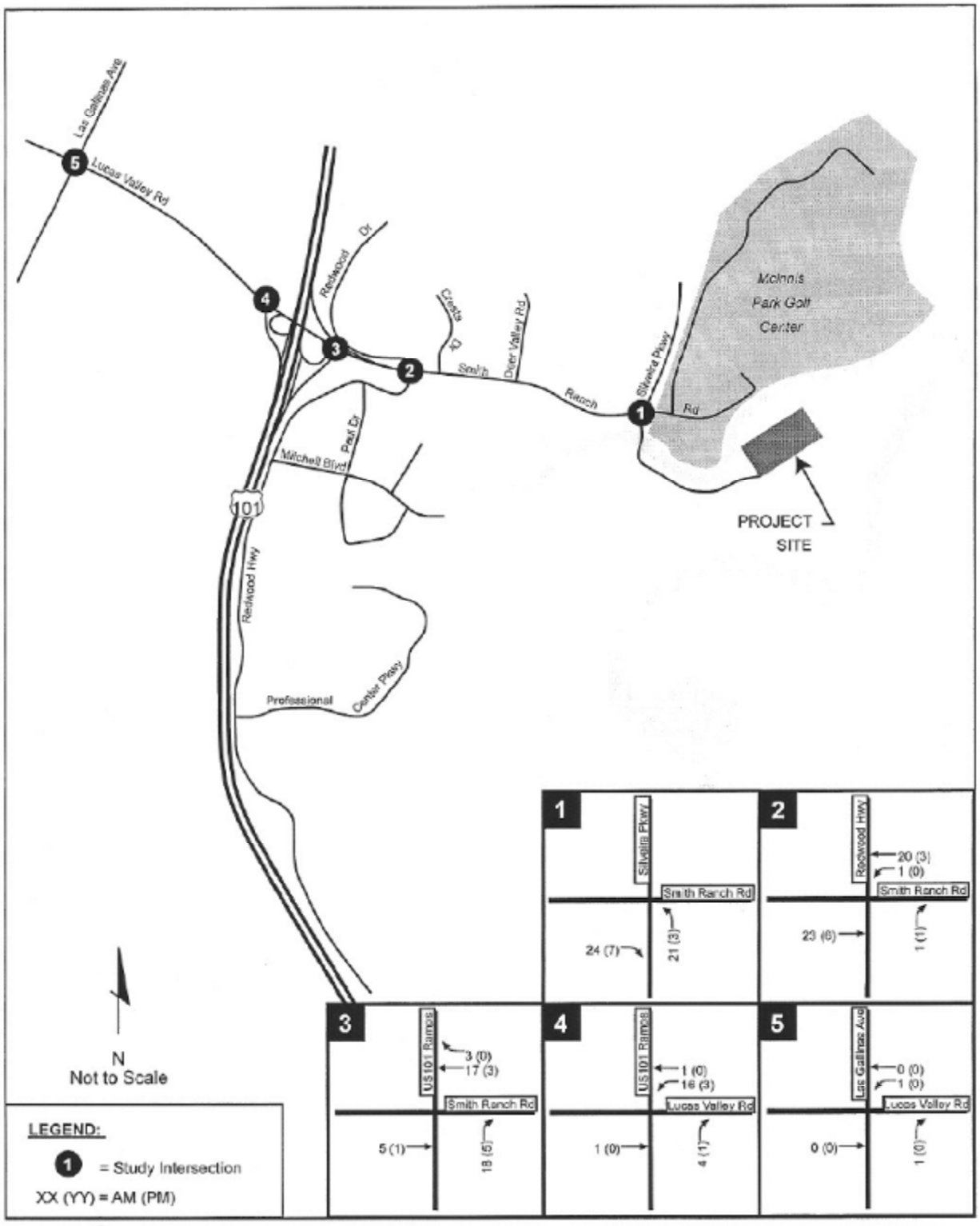
FEHR & PEERS
TRANSPORTATION CONSULTANTS

January 2005
SF04-0177\0177-3 pta

San Rafael Recreational Facility

ALTERNATIVE A
AM & PM PEAK HOUR PROJECT TRIP ASSIGNMENT
FIGURE 3

Exhibit 4
Traffic Studies



FEHR & PEERS
TRANSPORTATION CONSULTANTS

January 2005
SF04-0177\0177-4 pta B

San Rafael Recreational Facility

ALTERNATIVE B
AM & PM PEAK HOUR PROJECT TRIP ASSIGNMENT

FIGURE 4

FEHR & PEERS
TRANSPORTATION CONSULTANTS

We estimate that patrons traveling from or to Novato and other locations to the north of the project site will account for 13 percent of the project-generated trips. We expect eighty-one percent of trips to travel from or to locations south of the project site. These locations include the City of San Rafael, Corte Madera, and Larkspur. Trips from the north and south of the project site would likely travel via Highway 101 and use the Lucas Valley Road / Smith Ranch Road off ramps. We expect the remaining six percent of trips to be from areas west of Highway 101 and will take Lucas Valley Road to Smith Ranch Road. Figures 3 and 4 show the trip assignment through the proposed study intersections for Alternatives A and B, respectively, according to this directional distribution.

We hope you have found this analysis useful. Please feel free to call me with any questions.

Sincerely

FEHR & PEERS

Chris Mitchell, PE
Senior Engineer

Cc: Mr. Nader Mansourian, PE, City of San Rafael

/lb

SF04 0177

Exhibit 4
Traffic Studies

CITY OF SAN RAFAEL, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

INTERDEPARTMENTAL MEMORANDUM

TO: **RAFFI BOLOYAN**
ASSOCIATE PLANNER

DATE: November 30, 2005

FROM: **NADER MANSOURIAN**
CITY TRAFFIC ENGINEER

FILE NO: 13.02.13

SUBJECT: **SAN RAFAEL AIRPORT RECREATION FACILITY PROJECT**
DETAILED LEVEL OF SERVICE CALCULATION RESULTS

As requested we are providing the City's traffic model intersection and Arterial Level of Service analysis results for the Baseline and Baseline plus project scenarios A and B for a.m. and p.m. peak hours. The analysis was performed for major intersections on Smith Ranch Road and Lucas Valley Road between Redwood Highway and Las Gallinas Avenue.

Intersection LOS

		Delay (Sec)			LOS		
Peak	Intersection	Base05	Airport - A	Airport B	Base05	Airport A	Airport B
AM	Smith Ranch & Redwood Hwy	12.3	⊕	12.3	B	⊕	B
AM	Smith Ranch & 101 NB Ramps	56.9	⊕	56.9	E	⊕	E
AM	Lucas Valley & 101 SB On	14.5	⊕	14.5	B	⊕	B
AM	Lucas Valley & Los Gamos*	15.3	⊕	15.3	C*	⊕	C*
AM	Lucas Valley & Las Gallinas	39.7	⊕	39.7	D	⊕	D
PM	Smith Ranch & Redwood Hwy	25.7	27.1	26.2	C	C	C
PM	Smith Ranch & 101 NB Ramps	12.2	13.7	12.6	B	B	B
PM	Lucas Valley & 101 SB On	23.8	29.9	25.8	C	C	C
PM	Lucas Valley & Los Gamos*	4.9	4.9	4.9	A*	A*	A*
PM	Lucas Valley & Las Gallinas	25.5	26.1	25.6	C	C	C

⊕ Note: Project did not have any a.m. peak hour trip for this scenario
* Denotes unsignalized intersection

SAN RAFAEL AIRPORT RECREATION FACILITY PROJECT DETAILED LEVEL OF SERVICE CALCULATION RESULTS CONTINUED

Arterial LOS

			Travel Time (Sec)			Speed (mph)			LOS		
Arterial	Dir	Peak	Base05	Airport A	Airport B	Base05	Airport A	Airport B	Base05	Airport A	Airport B
Lucas Valley	EB	AM	244	⊕	245	10	⊕	10	D	⊕	D
Lucas Valley	WB	AM	99	⊕	99	19	⊕	19	C	⊕	C
Smith Ranch	EB	AM	106	⊕	109	10	⊕	10	D	⊕	D
Smith Ranch	WB	AM	116	⊕	116	14	⊕	14	C	⊕	C
Lucas Valley	EB	PM	155	155	155	16	16	16	C	C	C
Lucas Valley	WB	PM	114	114	114	16	16	16	C	C	C
Smith Ranch	EB	PM	93	93	93	12	12	12	D	D	D
Smith Ranch	WB	PM	143	152	146	12	11	12	D	D	D

⊕ Note: Project did not have any a.m. peak hour trip for this scenario