CEQA ADDENDUM

Attachment 1

Aradon Project EIR (94-EIR-9)
Summary Impact Tables

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 1 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
Class I Impacts			
AESTHETICS	Clustered, two-story Site II development would significantly change open space, urban fringe character at the western gateway to Goleta, as stated in Board of Supervisors findings for this site in adopting the Goleta Community Plan. Site I development would alter views of recreational area and Pacific Ocean from Hollister Avenue.	Provide screening vegetation along Site I and II units fronting Hollister Avenue, avoiding 350-foot view corridor on Site I.	Significant.
PUBLIC FACILITIES	Residential buildout would generate 95 elementary school age students, impacting the currently over-enrolled Ellwood School.	Pay statutory school fees to the Goleta Union School District, to be used for capital improvements, but not for additional teachers; notify the Goleta Union School District expected buildout date of the project to allow the District to plan in advance for new students.	Significant.
	Buildout generates 675 tons/yr. of trash, exceeding significance threshold of 196 tons/yr.	Establish Solid Waste Management Plan for residential, commercial, and recreational uses with local recycling organization; emphasize drought-tolerant and other species minimizing need for clipping and leaf collection; provide on-site composting plan for yard clippings generated within public and common open space areas.	Significant (approximately 3371 tons/yr).

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
TRANSPORTATION AND CIRCULATION (SHORT TERM)	During the construction phase of Highway 101/Hollister Avenue interchange improvements project (6-12 months), traffic contribution would significantly impact operation of local intersections.	None.	Significant.
Class II Impacts			
AIR QUALITY	Residents living adjacent to Mobil Oil Processing Facility could potentially be exposed to odors during facility malfunctions, exceeding APCD significance threshold of 12 persons.	Provide potential buyers with a "buyer beware statement," notifying inhabitants of odor potential.	Less than significant.
BIOLOGICAL RESOURCES	Grading would occur behind the reconfigured 1st green up to Devereux Creek ESH dripline. Potential for errant heavy equipment activity in the ESH and sedimentation into creek during grading or caused by erosion until landscaping is established.	Avoid grading adjacent to Devereux Creek ESH during rainy season (November 1 to May 1). Use sediment control structures to direct runoff and remove silt, and use until disturbed soils stabilized by new landscaping.	Less than significant.
	Site II development adjacent to Devereux Creek ESH creating disturbance during grading.	Implement Riparian Plan, providing 1.71 acres of riparian habitat on site. Obtain any required Streambed Alteration Agreements from California Department of Fish and Game, U.S. Army Corps of Engineers.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 3 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
BIOLOGICAL RESOURCES (CONTINUED)	Potential for encroachment and disturbance by Site I and II residents and domesticated pets adjacent to Devereux Creek, golfers looking for errant golf shots in Devereux Creek ESH behind 1st green and coastal sage scrub habitat north of 3rd tee.	Include native riparian shrub species on existing margin of the ESH adjacent to Site I and II residences, behind 1st green, and coastal sage scrub north of 3rd tee that would reduce human and domestic animal pet encroachment.	Less than significant.
	Provision of vertical access along Bell Canyon lagoon could increase erosion, impacting tidewater goby, Category 1 Candidate for listing as federally endangered species, prairie bulrush, species of special concern.	Locate the proposed vertical access along existing pathway adjacent to Mobil Oil Treatment Facility presently covered primarily with invasive, insignificant vegetation; improve trail to encourage use, discourage off-trail use. Review and approval of trail plan.	Less than significant.
	Potential for increased sedimentation, point pollutants for paved surfaces in Devereux Creek during construction, project buildout.	Install sedimentation, silt, grease traps in paved areas to minimize pollution reaching downstream habitats. Maintain filters in working order.	Less than significant.
CULTURAL RESOURCES	Due to archaeological sites in project vicinity, the project site is considered sensitive. Project development could encroach within unknown, previously undisturbed prehistoric resources.	Perform Phase I survey of proposed development areas on Site I and III. If potentially significant resources identified, evaluate and mitigate consistent with County Cultural Resource Guidelines. In event unexpected remains encountered during construction, temporarily redirect construction until the finds can be evaluated pursuant to County Cultural Resource Guidelines.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 4 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
CULTURAL RESOURCES (CONTINUED)	Relocation of County historic landmark Barnsdall-Rio Grande Gas Station as project entrance gatehouse could irreparably damage structural integrity, precluding appropriate restoration. Potential for incompatible surrounding architecture style and vegetation in new location could affect historical gas station character and setting.	Relocation and restoration plan for the gas station prepared by qualified architectural historian including specifications on relocation procedures, including treatment of surface and structural features, restoration details, and landscaping plan, approval of County Historic Landmarks Committee.	Less than significant.
Class II Impacts			
ENVIRONMENTAL HAZARDS	Removal of leaky gas tank/soil beneath Barnsdall gas station during relocation could require additional soil remediation. Excavation of fuel tank below existing maintenance building could expose residual contamination and/or create soil instability. Proposed maintenance building could be subject to hazardous substance releases including pesticides and herbicides stored inside.	Proper remediation of contaminated soils resulting from leaking fuel tank, removal of maintenance building fuel tank, and proposed hazardous material storage plans reviewed and approved by EHS and Fire Department, respectively.	Less than significant.
GEOLOGICAL PROCESSES	Grading of site soils characterized by medium to rapid runoff rates, moderate to high erosion hazards could cause erosion, sedimentation into Devereux Creek.	Submit grading and drainage plans including components such as temporary berms, sedimentation traps, revegetation, drain pipe energy dissipators, prohibition on creek-bank grading and on grading during the rainy season.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 5 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
GEOLOGICAL PROCESSES (CONTINUED)	Site I and II development would reduce ground surface area capable of absorbing rainfall, potentially increasing storm water runoff into the creek. Increased runoff could result in greater risks of flooding if Devereux Creek is not capable of handling the flow.	Implement County Flood Control requirements to ensure adequate drainage facilities to convey stormwater runoff within the proposed development; landscape plan restoration plantings for Devereux Creek shall not preclude adequate conveyance of storm water runoff within creek.	Less than significant.
NOISE (LONG-TERM)	During later construction phases, residents of completed and occupied earlier phase units could be exposed to subsequent construction activity.	Limit hours of construction involving heavy equipment, power tools to 7:00 A.M. to 4:00 P.M., weekdays only.	Less than significant.
	Southernmost part of Site II potentially subject to noise exposures are very close to significance thresholds for indoor interior living areas of 45 dBA CNEL; with peak hour traffic and anticipated traffic levels identified in Goleta Community Plan, potential for exceeding 45 dBA CNEL interior living area threshold, particularly at second story.	Construct continuous wall of concrete, block, stucco, slumpstone, etc. at least 5 feet high along development property line on north side of Hollister Avenue, proceeding west from Las Armas Road to Unit 57F and from Unit 61F to Unit 76F; use double-glazed or other suitable noise-attenuating design on second story windows facing Hollister Avenue.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 6 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
RECREATION	Additional estimated 635 project residents would increase demand on vicinity trails with open space, coastal views, including County Park property to east; Site I development would partially obstruct open space and ocean views experienced by walkers, bikers, joggers, etc. on Hollister Avenue.	Develop segment of Coastal Trail south of Site I to provide open space and coastal views similar to other recreational corridors in vicinity.	Less than significant.
	Restructuring of golf course membership to provide member preferential tee times could reduce public access during weekend peak period use.	Provide tee-time reservation plan that does not substantially reduce public access during peak period use.	Less than significant.
TRANSPORTATION AND CIRCULATION	The Storke Road Interchange Improvement project required for mitigating project impacts at Storke Road/Hollister Avenue intersection is not completed.	Condition construction of Sites I and II until after completion of improvements.	Less than significant.
	Simultaneous full operation of banquet and peak golf and restaurant use could result in overcapacity of parking lot areas.	Develop parking management plan used during banquet and golf period overlap (i.e., weekend mid-mornings through mid-afternoons), including strategies such as valet parking, on-site overflow areas, short-term off-site employee parking areas, etc.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
TRANSPORTATION AND CIRCULATION (CONTINUED)	Parking areas would be unable to accommodate demand during professional golf tournaments.	Develop professional tournament parking management plan for each event including list of off-site secured parking lots in project vicinity, how spectators would be directed to the lots, and be transported to the golf course.	Less than significant.
	Safety impacts associated with Ellwood Elementary School from increased project traffic and increased young students going to and from school. Increased pedestrian traffic on north side of Hollister Avenue from project site to Ellwood Elementary School.	Construct pedestrian path along north side of Hollister Avenue from project site to Ellwood Elementary School; contribute to construction of traffic signal at Hollister Avenue and school crossing.	Less than significant.
	Geometrics of the Hyatt Access Road/Hollister Avenue intersection require adequate width to accommodate project ingress/ egress, and spacing with U.S. 101 southbound ramps.	Provide plans for review and approval of County Public Works Department and Caltrans.	Less than significant.
	Project-added contribution to regional cumulative impacts would impact Storke Road/ Hollister Avenue intersection, other area intersections and road segments.	Construct dual left-turn lanes on both northbound and southbound approaches at intersection.	Less than significant.
		Pay traffic mitigation fees in accordance with County policies.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
Class III Impacts			
AIR QUALITY	Project development would generate 6.6 lbs/day of ROC and 16.0 lbs/day of NO_x, below the APCD significance threshold of 25 lbs/day.	None required.	Less than significant.
ENVIRONMENTAL HAZARDS	Footprint of hydrogen sulfide release from Mobil oil treatment facility of 300 ppm (serious injury level) limited to 325 feet, 675 feet short of proposed clubhouse, and 775 feet short of Site I.	Install H_2S sensors along western project site boundary to detect potentially harmful concentrations.	Less than significant.
	Mobil oil treatment facility NGL/LPG bullet rupture fireball, vapor cloud fire, or explosion injury hazard footprints extend to proposed clubhouse and residential development, but potential frequency is less than once in a million years, extraordinary based on County thresholds.	Develop Emergency Response Plan for proposed Sites I, II, and III. Provide buyer-beware clause to prospective residential unit purchases.	Less than significant.
	Project grading on south side of Hollister Avenue would occur in the vicinity of the Mobil Line 69 Oil Pipeline but would not encroach on the pipeline or disturb the pipeline by either grading or earthshaking.	None required.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS
(page 9 of 10)

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
ENVIRONMENTAL HAZARDS (CONTINUED)	Electromagnetic fields from SCE transmission lines and Ellwood Peaking Facility of 2 mG or greater would not extend within living areas of Site I or II boundaries.	Provide EMF disclosure statement to potential residence buyers; include note in final subdivision Public Report regarding proximity to powerlines; post notice of emergency Ellwood Peaking Facility operations.	Less than significant.
	Exterior living areas and the southern exposure of six proposed units north of the Hole 1 fairway could feasibly be hit by an errant tee shot, causing structural damage and bodily harm. The severity of injury is considered minor (bodily injury, but not death), and the frequency is considered between once a year to once in 10,000 years. This combination of severity and frequency is not considered significant according to County risk of upset thresholds.	Provide a buyer-beware clause to prospective purchasers of Units 23-28, indicating potential for accidents caused by errant golf ball shots.	Less than significant.
NOISE (SHORT-TERM)	Construction equipment activity on eastern project boundary would generate transient noise affecting some portions of the Ellwood Elementary School playground. Some play areas are screened by development to the west of the school and noise levels would only be excessive when equipment is operated at the eastern boundary of Site II.	None.	Less than significant.

Notes: Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

Table 1-1
SUMMARY OF IMPACTS AND MITIGATIONS

Resource	*Description of Impact*	*Mitigation*	*Residual Impacts*
PUBLIC FACILITIES	Buildout generates 38 junior high school students attending Goleta Valley Junior High, increasing enrollment to 847 (71 percent of campus capacity); and 25 high school students at Dos Pueblos, increasing enrollment to 1,258 (52 percent capacity).	Payment of state-mandated fees, to be used to construct temporary or permanent classroom space, but not for additional teachers.	Less than significant.
	Site II would require annexation to and extension of sewer line from Goleta West Sanitary District. Sufficient treatment capacity at Goleta Wastewater Treatment Plan exists to accommodate Site II demand.	None.	Less than significant.
RECREATION	Golf course reconfiguration would change distances on some holes, relocated putting greens, slightly reduce driving range width, but not result in substantial change to overall length or complexity.	None required.	Less than significant.
WATER RESOURCES	Project development would result in a net demand of 46.2 AFY, proposed to be delivered by the Goleta Water District (GWD). GWD service is considered not to cause or contribute to groundwater overdraft.	Revise landscape plan to minimize use of low-water demand ornamental species; use reclaimed water to irrigate landscaped common areas.	Adverse, but less than significant.

Notes:
Class I Significant, unavoidable
Class II Significant, but feasibly mitigated
Class III Adverse, but less than significant

CEQA ADDENDUM

Attachment 2

The Residences at Sandpiper SEIR
Summary Impact Tables

Table 1-1. Summary of Impacts and Mitigations
(Page 1 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class I Impacts			
Aesthetics/ Visual Resources	Impact AES-2: The proposed residential development would result in a significant change to the existing project site open space character. (Impact previously identified in 94-EIR-9).	AES-3 The design, scale and character of the project architecture shall be compatible with vicinity development.	Significant
	Impact AES-3: The proposed project has the potential to substantially obstruct public views along the Hollister Avenue corridor, including open space and the Santa Ynez Mountains and Foothills.	None identified.	Significant
Air Quality	Impact AQ-3: Operation of the project would produce significant ROC and NOx emissions from all combined residential project sources, including vehicular traffic, wood-burning fireplaces, space heating, water heating, and consumer products.	AQ-2 The applicant shall coordinate with the Metropolitan Transit District (MTD) to provide a covered bus shelter adjacent to the project site on Hollister Avenue. The applicant shall also post MTD bus route schedules and rideshare information in a central location on a covered message board. AQ-3 The applicant shall incorporate the following energy conservation measures into project building plans unless the applicant proves that incorporation of a specific measure is infeasible: a. Install heat transfer modules in furnaces and hot water heater insulation. b. Use light colored water based paint and roofing materials. c. Use solar panels for water heating systems and water heater systems that heat water only on demand. d. Use passive solar cooling/heating. e. Use concrete or other non-polluting materials for parking lots instead of asphalt.	Significant

Table 1-1. Summary of Impacts and Mitigations

(Page 2 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class I Impacts			
Air Quality (continued)		AQ-5 To reduce significant daily ROC and NOx emissions during winter days from combined project sources, residences shall be built without wood-burning fireplaces or only with natural gas burning units.	
	Impact AQ-8: Emissions of NOx and ROC from project operations, in combination with other cumulative project sources of NOx and ROC emissions in the region, would produce significant impacts.	See AQ-2, AQ-3, and AQ-4 above.	Significant for ROC
Hazards	Impact HAZ-1: Assuming continuous operation of the Reliant Peaking Facility, the proposed project would expose 12 structures to elevated ELF magnetic fields of 2 mG.	HAZ-1 The applicant shall provide an EMF Disclosure Statement and an EMF Information Package containing a balanced range of EMF educational and informational materials to potential buyers of units SF1 through SF12. HAZ-2 The applicant shall request that the California Department of Real Estate insert the following into the final Subdivision Public Report: "The subject property is located near power lines and a power substation. Purchasers should be aware that there is ongoing research on adverse health effects associated with long-term exposure to low-level magnetic fields. Although no causal link is established, there is sufficient evidence to require reasonable safety precautions. The buyer may wish to become informed on the issue before making a decision on a home purchase in this location."	Significant

Table 1-1. Summary of Impacts and Mitigations
(Page 3 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class I Impacts			
Hazards (continued)		HAZ-3 Applicant shall under ground all utility lines within the project site.	
	Impact HAZ-2: Increase in the number of residences exposed to ELF magnetic fields.	HAZ-1 The applicant shall provide an EMF Disclosure Statement containing language and a EMF Information Package containing a balanced range of EMF educational and informational materials to potential buyers of units SF1 through SF3. HAZ-2 The applicant shall request that the California Department of Real Estate insert the following into the final Subdivision Public Report: "The subject property is located near power lines and a power substation. Purchasers should be aware that there is ongoing research on adverse health effects associated with long-term exposure to low-level magnetic fields. Although no causal link is established, there is sufficient evidence to require reasonable safety precautions. The buyer may wish to become informed on the issue before making a decision on a home purchase in this location." HAZ-3 Applicant shall fund, as a part of Las Armas Road improvements the under grounding of the Goleta/Ellwood/Isla Vista, Carneros A, and Encanto power lines.	Significant
Public Facilities	Impact PF-6: The project would contribute incrementally to significant and unavoidable cumulative impacts to schools as identified in the Goleta Community Plan EIR (Impact previously discussed in 94-EIR-9).	PF-8 The applicant shall pay the statutory school fees in effect at the time of issuance of building permits to the appropriate school district.	Significant and unavoidable

Table 1-1. Summary of Impacts and Mitigations

(Page 4 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class I Impacts			
Public Facilities (continued)	Impact PF-7: The proposed project would contribute substantial amounts of solid waste under buildout of the Goleta Community Plan (Impact previously discussed in 94-EIR-9).	No additional mitigation measures.	Significant
Recreation	Impact REC-1: The proposed project residential population would result in an increase of use of adjacent coastal trails, the Santa Barbara Shores County Park, Haskells Beach, and Ellwood Shores.	REC-1 The applicant shall provide for a pedestrian controlled signalized crosswalk at the corner of Hollister Avenue and Las Armas Road to provide a safe pedestrian crossing to the adjacent Santa Barbara Shores County Park. REC-2 Recreational facilities equivalent to at least 1.68 acres, such as play structures, ball fields, etc. shall be developed within the Lot 2, Lot, 7 and/or Lot 9 common open space areas.	Significant
Traffic and Circulation	Impact TR-3: The proposed project would generate additional vehicular trips and would result in additional traffic through project area intersections to the extent that LOS would be degraded (Impact previously identified in 94-EIR-9).	TR-2 The project shall pay traffic mitigation fees in accordance with County policies. These fees shall be used by the County to provide infrastructure improvements required to accommodate future and cumulative traffic volumes.	Significant
	Impact TR-6: The proposed project would generate additional vehicular trips and would contribute to a general degradation of LOS on project area intersections (Impact previously identified in 94-EIR-9).	See TR-2 above.	Significant
Class II Impacts			
Aesthetics/ Visual Resources	Impact AES-1: The proposed project would result in short-term adverse aesthetic impacts during construction.	AES-1 To prevent construction and/or employee trash from blowing offsite, covered receptacles shall be provided onsite prior to commencement of grading or construction activities.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 5 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Aesthetics/ Visual Resources (continued)		AES-2 The applicant or designee shall retain a clean-up crew to ensure that trash and all excess construction debris is collected daily and placed in provided receptacles throughout construction.	
Air Quality	Impact AQ-3: Operation of the project would produce significant NOx emissions from all combined residential project sources, including vehicular traffic, wood-burning fireplaces, space heating, water heating, and consumer products.	See AQ-2, AQ-3, and AQ-4 above	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 6 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Biological Resources	BIO-1: Removal of native grasslands would occur during development of the site.	BIO-1 The applicant shall submit a [revised] Vegetation Enhancement Plan for Devereux Creek and adjacent wetland and native grassland habitat. The Plan shall be prepared by a P&D-approved biologist or restoration ecologist familiar with conditions at the site. The Plan shall include specific goals for habitat restoration and include performance criteria by which replanting success is measured; any necessary stream channel and creek flow modifications to ensure restoration success; a planting plan including an irrigation plan; an exotic vegetation management plan; methods to protect the plantings until established; and a contingency plan in the event performance criteria are not met. The plan shall include provisions for maintaining and enhancing the native grassland areas onsite and provisions for salvaging and propagating the yard rush (Juncus occidentalis) plants from wetland site 4 and reestablishing the species in suitable locations within the wetland buffer areas. In addition, the plan shall specifically provide for redirection of the Creek from its current course along the UPRR tracks back to the original Devereux Creek channel crossing the property. This would potentially require excavation of the channel invert to remove accumulated sediment and to restore appropriate elevations. Construction and habitat improvement activities in the channel shall be limited to dry season (May 1 to October 31) unless otherwise stipulated in permits from the Army Corps of Engineers or CDFG (see BIO-5). It may also	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 7 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		require contributing to the design and construction of a structural solution to ensure continued flow across the UPRR and onto the project property in cooperation with UPRR. The plan shall include details of planting and maintenance of barrier plantings identified in BIO-4 (below). BIO-2 An open space easement including the protected area and creek corridor of Devereux Creek shall be developed and approved by the Board of Supervisors, so that the restoration area would remain in perpetuity. Within this approximately 2.3-acre area, riparian habitat and adjacent wetland, native grassland, and related upland habitat shall be enhanced through eradication of invasive non-native plants and the planting of native species, according to a plan developed by a P&D-approved biologist and approved by P&D. BIO-10 Use of non-indigenous native plant material in the Enhancement Plan area shall be avoided. a. Where native plants are proposed in natural protected areas or in landscape plans, ensure that seed, cuttings or plants are obtained from known sources in the watershed or in the Goleta Valley. Local experts, Growing Solutions or the University of Santa Barbara Coal Oil Point Reserve, should be contacted to assist with verifying plant stock from appropriate geographic origins.	

Table 1-1. Summary of Impacts and Mitigations
(Page 8 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		b. Remove invasive non-natives from the site and do not allow potentially invasive ornamentals (such as periwinkle, fountain grass, cape ivy, English ivy, Algerian ivy, bamboo, etc.) to be included in the landscape plan. The California Exotic Plant Pest Council list of Exotic Invasive Species should also be consulted to ensure that species on this list are not introduced to the site.	Less than significant
	BIO-2: Rough site grading would create substantial ground disturbance and necessitate removal of the upper three feet of soil and associated vegetation throughout the entire project site outside of the proposed restoration area and buffer. Loss of habitat would result in reductions in populations of commons wildlife that currently use the site.	See BIO-1 above.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 9 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		BIO-3 The final grading plan shall identify measures to minimize sedimentation into the protected area adjacent to the creek channel, and protected wetlands and native grassland. Grading in this area shall avoid the rainy season (November 1 to May 1) unless P&D and a P&D-qualified biologist or restoration specialist determine that erosion and sediment control measures are sufficient to avoid impacts during the rainy season. Sediment control structures (e.g., straw bales, silt curtains/fences, sediment basins, etc.) shall be placed between graded areas and the protected area to direct runoff and remove silt. The structures shall be remain in place and regularly maintained until all disturbed soils are stabilized by structures or vegetation. BIO-6 Sedimentation, silt, and grease traps, or other storm water runoff treatment control measures shall be installed in paved areas to act as filters to minimize pollution reaching the Devereux Creek channel and downstream habitats. These measures shall address short-term construction and long-term operational impacts of runoff from the site. The measures shall be maintained in working order for the life of the project. Prior to receiving a CDP for grading, the applicant shall submit grading and building plans that shown the detail of this requirement to P&D for review and approval. Prior to construction, installation shall be photo-documented and submitted by the applicant to P&D. The County shall inspect and ensure filters are maintained and effectively mitigating impact.	

Table 1-1. Summary of Impacts and Mitigations
(Page 10 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		BIO-9 Improvements to the hydrologic and water quality of Devereux Creek channel shall be enhanced. This shall be accomplished in the following manner: a. Grade and design the site to facilitate runoff to riparian and wetland habitats, as described below. b. Include sediment and erosion control measures in the grading/drainage plan, and maintain these measures throughout the construction period. Install and maintain erosion control (such as jute netting or coir fabric/rolls) measures along the creek channel and in protected areas until native plants or landscaping is established. c. Install native wetland plants (of known local geographic origin) that will absorb pollutant materials that may enter the Devereux Creek channel. d. Include pervious surfaces in the project design in key areas (adjacent to concrete walkways and impervious roads) so that runoff percolates into the ground to the maximum extent feasible. e. Filter all runoff prior to its discharge into the Devereux Creek channel. f. Direct runoff from rooftops and large impervious areas to a filtering system and thence to the upstream end of the Devereux Creek channel so supplemental water benefits the riparian corridor and aquatic biota that colonize the channel.	

Table 1-1. Summary of Impacts and Mitigations
(Page 11 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)	BIO-3: Loss of wetland habitat (site 4, Assessment) would reduce habitat complexity and biodiversity on the site.	See BIO-1 above BIO-2 A conservation or open space easement including the protected area and creek corridor of Devereux Creek shall be developed and approved by P&D, so that the restoration area would remain in perpetuity. Within this area, at least 1 acre of riparian habitat shall be enhanced through eradication of invasive non-native plants and the planting of native riparian species, according to a plan developed by a P&D-approved biologist. BIO-5 Prior to receiving a Coastal Development Permit (CDP) for construction, the applicant shall obtain all other required federal, state or local permits or authorizations including but not limited to: a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG), a Section 404 permit from the U.S. Army Corps of Engineers (USACE), a Section 401 Water Quality Certification or Waiver from the Regional Water Quality Control Board. Copies shall be submitted to P&D.	Less than significant
	BIO-4: Development of the project would result in indirect effects associated with increased noise and human activity, activities of pets, and nighttime lighting on the remaining habitat onsite and in the project vicinity including the protected grasslands, remaining eucalyptus grove, and the proposed restoration site, which may be used by California red-legged frogs.	See BIO-2 above.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 12 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		BIO-4 The final landscape plan shall include barrier plantings native riparian shrub and understory species (e.g., blackberry, California rose, and other thorny species) on the existing margin of the protected area and the Devereux Creek channel to reduce encroachment into the area by humans and domestic pets. BIO-7 Non-invasive landscape plants to be included in the landscape plan for the site should be selected for their attractiveness to Monarch butterflies, and their capacity to provide nectar, basking and/or roosting habitat between the months of October and December. BIO-8 Night lighting in the vicinity and within the Devereux Creek channel and buffer area, including the native grassland, wetland, eucalyptus grove, and nature trail, shall be minimized. Lights on homes adjacent to the creek, and within the buffer, native grassland or wetland enhancement area shall be directed away from the protected area, be of low intensity, and shall be connected to timing devices that shut off after 10 PM.	
	BIO-5: Runoff from the residential development could degrade water quality in the creek channel on site, and in downstream reaches of Devereux Creek and Devereux Slough.	BIO-3 The final grading plan shall identify measures to minimize sedimentation into the protected area adjacent to the creek channel, and protected wetlands and native grassland. Grading in this area shall avoid the rainy season (November 1 to May 1) unless P&D and a P&D-qualified biologist or restoration specialist determine that erosion and sediment control measures are sufficient to avoid impacts during the rainy season. Sediment	

Table 1-1. Summary of Impacts and Mitigations
(Page 13 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Biological Resources (continued)		control structures (e.g., straw bales, silt curtains/fences, sediment basins, etc.) shall be placed between graded areas and the protected area to direct runoff and remove silt. The structures shall be remain in place and regularly maintained until all disturbed soils are stabilized by structures or vegetation. See BIO-6 above. See BIO-9 above.	Less than significant
	Impact BIO-8: Sewer lateral and utility installation could result in direct impact to the Devereux Creek Channel and the eucalyptus grove.	See BIO-2 and BIO-5 above. BIO-11 Sewer lateral extensions, or other utility connections that must cross the Devereux Creek channel shall avoid the creek and adjacent buffer and protected areas. This shall be accomplished by directional drilling/boring or other technology. Exceptions to this measure include electrical conduit to light the pedestrian pathway that can be buried within the pathway (and cross Devereux Creek on the pedestrian bridge) and installation of the clean water drainage system identified in the Vegetation Enhancement Plan subsequent to its review and approval by the County.	Less than significant
Geologic Processes	Impact GEO-1: Project grading during construction would potentially cause substantially increased erosion and sedimentation.	GEO-1 The applicant shall submit grading and drainage plans with the Final Development Plan/Tract Map application.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 14 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Geologic Processes (continued)		a. Temporary berms and sedimentation traps shall be installed in association with project grading to minimize erosion of soils into Devereux Creek. The sedimentation basins shall be cleaned after large rain events, and as further directed by Permit Compliance staff, and the silt shall be removed and disposed of in a location approved by P&D. b. Revegetation or restoration shall be completed, including measures to minimize erosion and to reestablish soil structure and fertility. Revegetation shall include native, fast-growing, vined plants that shall quickly cover drainage features. Local native species shall be emphasized. A landscape revegetation plan shall be included as part of the Final Redevelopment Plan. c. Graded areas shall be revegetated immediately completion of installation of utilities with deep-rooted, native, drought-tolerant species, as specified in a landscape revegetation plan to minimize slope failure and erosion potential. Geotextile binding fabrics shall be used as necessary to hold soils until vegetation is established. d. Drains shall be designed to cause exiting flow of water to enter sub-parallel downstream (60 degrees or less) to existing Devereux Creek stream flow to avoid eddy currents that would cause opposite bank erosion.	

Table 1-1. Summary of Impacts and Mitigations

(Page 15 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Geologic Processes (continued)		e. An energy dissipater or a similar device such as trash racks or baffles shall be installed at the base end of drainpipe outlets to minimize erosion during storm events. Pipes shall be covered to prevent children from entering the storm drain. f. Storm drains shall be designed to minimize environmental damage and shall be shown on drainage plans. g. With the exception of limited ground disturbance in association with construction of the proposed bridge and adjoining walkway, grading shall be prohibited within 25 feet of the Devereux Creek top-of-bank. Where possible, hand equipment shall be utilized during ground disturbances adjacent to the proposed bridge. h. The applicant shall limit excavation and grading to the dry season of the year (i.e., April 15 to November 1) unless a Building & Safety approved erosion control plan is in place and all measures therein are in effect. i. Temporary siltation protection devices such as silt fencing, straw bales, and sand bags shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur. P&D staff shall determine these locations.	

Table 1-1. Summary of Impacts and Mitigations

(Page 16 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Geologic Processes (continued)	Impact GEO-5: Surficial soils encountered within the depths affected by proposed grading include plastic, highly expansive clays.	GEO-2 All grading and earthwork recommendations by Padre Associates (1999) shall be incorporated into the final project design, including the Final Grading Plan. A Registered Civil Engineer or Certified Engineering Geologist shall supervise all grading activities. These recommendations would include, but not be limited, to the following: a. Within the footprint of proposed buildings and foundations, and extending to a minimum distance of 5 feet beyond the foundation footprint, soils should be overexcavated to a depth of 3 feet below existing grade, or 1 foot below bottom of foundation, whichever is deeper. b. Foundations shall be constructed to compensate for consolidation settlement of 1 inch; and c. Where feasible, building areas shall be backfilled with nonplastic, low expansion soils to mitigate the potential effects of expansive soils. If highly expansive soil is placed within the upper 3 feet below buildings, measures recommended in Padre Associates (1999), such as providing positive drainage away from slabs, presoaking soils prior to pouring slabs, and using post-tensioned slabs, perimeter moisture barriers, and grade beam foundation systems, shall be completed.	Less than significant
	Impact GEO-6: The upper 2 feet of surface soils are potentially compressible, resulting in low structural strength and support for proposed development.	See Measure GEO-2 above.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 17 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Hazards	Impact HAZ-2: Due to the proximity of historic oil production, it is possible though unlikely that unknown hazardous materials could be encountered during grading.	HAZ-4 In the unlikely event that hazardous materials are encountered during grading, excavation shall be temporarily suspended or redirected. The applicant shall prepare and implement a soil remediation plan for these areas.	Less than significant
Noise	Impact NOI-1: Construction activity would impact residential and educational sensitive receptors within 1,600 of the project site (Impact previously identified in 94-EIR-9).	NOI-1 Construction activity for site preparation and for future development shall be limited to the hours between 7:00 a.m. and 4:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g., Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions. Construction schedule shall coincide with off-school (i.e., summer) months. NOI-2 Stationary construction equipment that generates noise which exceeds 65 dBA at the project boundaries shall be shielded with the most modern and effective noise control devices, i.e., mufflers, lagging, and/or motor enclosures to P&D's satisfaction and shall be located at a minimum of 200 feet from occupied residences and other noise sensitive uses as far as possible from the eastern property line of the project site. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, would be generated.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 18 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Noise (continued)		NOI-3 Temporary noise barriers shall be used and relocated as needed to block line-of-sight between the construction equipment and the Ellwood Elementary School to reduce effects of construction noise on these sensitive receptors below 65 dBA CNEL. NOI-4 The project applicants shall notify the sensitive noise receptors in advance of any and all construction activities. The construction manager's (or representative's) telephone number shall also be provided with the notification so that community concerns can be communicated. NOI-5 All permanent exterior mechanical equipment shall be acoustically engineered, incorporating attenuating designs, mufflers, enclosures, parapets, etc., so that the noise generated by these operations would not exceed the 65 dBA CNEL at the Ellwood Elementary School sensitive receptor location.	

Table 1-1. Summary of Impacts and Mitigations
(Page 19 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Noise (continued)	Impact NOI-3: Related project buildout and Cathedral Oaks Overpass traffic directed on to Hollister Avenue would cumulatively increase ambient noise levels along roadways in the vicinity of the project site, impacting project residences.	NOI-6 An acoustical study and Acoustical Attenuation Plan shall be prepared associated with the probable future Cathedral Oaks Overpass project by a County-approved acoustical engineer that determines any characteristics of attenuation (i.e., potential sound wall height and extent) required to maintain exterior noise levels experienced on the western and northern boundaries of the Residences at Sandpiper project to 65 dBA CNEL or less, and the interior noise level of proposed project structures to 45 dBA CNEL or less Any perimeter fencing along the northern boundary of the proposed project site shall provide for a 180-foot gap in the attenuation along the northern project boundary within the restoration and enhancement area of Devereux Creek.	Less than significant
Public Facilities	Impact PF-3: Generation of solid waste would occur as a result of short-term construction impacts.	PF-4 Demolition and/or excess construction materials shall be recycled where applicable (i.e., wood, cardboard, concrete, and asphalt). The applicant shall submit a Construction and Demolition Waste Management Plan. PF-5 Materials with recycled content shall be used in project construction. And the use of chippers on site during construction shall further reduce excess wood for landscaping cover.	Less than significant
	Impact PF-4: Significant amounts of solid waste would be generated by the proposed project at full buildout (Impact previously identified in 94-EIR-9).	PF-6 The permittee shall develop and implement a Solid Waste Management Program. The program shall include one or more of the following measures, but is not limited to those measures:	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 20 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Public Facilities (continued)		a. Provision of space and/or bins for storage of recyclable materials within the project site. b. Implementation of a curbside recycling and green waste program to serve the new development. c. Development of a plan accessible collection of materials on a regular basis. d. Regular composting of lawn clippings and other landscape materials. PF-7 The applicant shall implement a monitoring program (quarterly, semi-annually) to ensure a 35 percent to 50 percent participation in overall waste disposal, using source reduction, recycling, and/or composting programs. The monitoring program shall include a detailed report on the programs implemented and documentation (i.e., receipts) of the amounts diverted where applicable or, in the case of source reduction programs, an estimate of the amounts diverted.	
Recreation	Impact REC-2: Residential development would result in increased demands on recreational facilities.	See Measure REC-2 above.	Less than significant
	Impact REC-3. The proposed project does not contribute active recreational facilities, which would reduce the project's contribution to recreational cumulative impacts.	See Measure REC-2 above.	Less than significant
Traffic and Circulation	Impact TR-1: Short-term construction traffic including heavy equipment would potentially impact local roadways and intersections.	TR-1 The applicant shall prepare a Construction Transportation Plan that designates heavy equipment routes, schedules, and the need for any special flagpersons to direct traffic during peak volume periods, with special attention to Ellwood School drop-off and pick-up activity.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 21 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Traffic and Circulation (continued)	Impact TR-4: Inadequate street width within the internal circulation system could pose safety problems.	TR-3 The street system shall be reviewed and approved by the Fire Department and designed to provide adequate access and circulation for emergency vehicles. No on-street parking shall be allowed in accordance with Fire Department condition. TR-4 The project shall be responsible for widening Hollister Avenue adjacent to the site frontage. This widening shall be completed according to the County's arterial standards and include curb, gutter and sidewalk. The improvements should provide the required sight distance for vehicles entering or exiting the site.	Less than significant
		TR-5 The project shall construct half-street improvements on Las Armas Road from Hollister Avenue to Campasino Drive along the project frontage. The improvements shall provide the required sight distance for vehicles entering or exiting from the site.	
Water Resources/ Flooding	Impact WR-2: Proposed development would create additional impervious ground coverage, substantially reducing the ability of the site to absorb surface water runoff.	WR-4 Surface water detention basins, velocity reduction structures (e.g., rip-rap), and bioswales shall be constructed to reduce off-site runoff velocities and to prevent off-site flooding and long-term erosion-induced sedimentation in Devereux Creek. These features shall be included on the drainage plan. WR-5 Finish floor elevations shall be designed at a minimum of 2 feet above the 100-year flood level, as determined by the County Flood Control Department.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 22 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Water Resources/ Flooding (continued)	Impact WR-3: Proposed structures on the west side of Devereux Creek are located within the County Flood Control District 50-foot setback.	WR-6 Structures shall be prohibited within 50 feet of the Devereux Creek top-of-bank. A cross section shall be included on the drainage plan, which traverses the creek and adjacent residences to the west, demonstrating the setback and slope configuration.	Less than significant
	Impact WR-4: Increased runoff could potentially result in increased long-term erosion and sedimentation, and therefore decreased water quality in Devereux Creek.	See WR–6 above and; WR-8 The drainage plan shall include bioswales to minimize concentrated drainage, minimize erosion, and allow suspended solids to settle before entering Devereux Creek. The plan shall include specifications for the bioswales to be maintained in working order.	Less than significant
	Impact WR-5: Pollution from vehicles, roadways, and parking areas, as well as from landscape and household chemicals, could be carried in surface runoff into Devereux Creek, thereby degrading the quality of waters contributing to Devereux Slough from this portion of its watershed.	See WR-9 above and; WR-7 The drainage plan shall include filters installed in paved areas to reduce oil and grease pollution from entering Devereux Creek. The plan shall include specifications for the filters to be maintained in working order.	Less than significant
	Impact WR-5: Pollution from vehicles, roadways, and parking areas, as well as from landscape and household chemicals, could be carried in surface runoff into Devereux Creek, thereby degrading the quality of waters contributing to Devereux Slough from this portion of its watershed.	WR-8 The drainage plan shall include bioswales to minimize concentrated drainage, minimize erosion, and allow suspended solids to settle before entering Devereux Creek. The plan shall include specifications for the bioswales to be maintained in working order. WR-9 The drainage plan shall include separation of clean runoff (e.g., from roofs) from polluted runoff (i.e., from streets and driveways). The plan shall include specifications for the drains to be maintained in working order.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 23 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Water Resources/ Flooding (continued)		WR-10 The drainage plan shall include detention basins designed to capture runoff associated with a 2-year storm event. The detention basins shall be placed immediately upstream of stormwater pollution source reduction and biological treatment systems, such as oil-water separators and bioswales, on both the west and east side of the creek. The plan shall include specifications for the basins to be maintained in working order. The CC&Rs shall assign responsibility for long-term maintenance to the Homeowner's Association. WR-11 The applicant shall prepare a Pesticide, Herbicide, and Fertilizer Maintenance Plan that minimizes their use in common areas, particularly during the rainy season. Biodegradable pesticides and herbicides shall be maximized. Grasses not generally susceptible to pest disease, such as Bermuda grass, shall be planted in common area turf areas.	
	Impact WR-5: Pollution from vehicles, roadways, and parking areas, as well as from landscape and household chemicals, could be carried in surface runoff into Devereux Creek, thereby degrading the quality of waters contributing to Devereux Slough from this portion of its watershed.	WR-12 Dog waste pollution minimization shall be implemented in the vicinity of Devereux Creek. Mutt-mitt dispensers shall be installed on both sides of the creek. An educational display/sign shall be installed which provides information about Santa Barbara County Project Clean Water. The display shall include information pertaining to dog waste and surface water pollution prevention.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 24 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class II Impacts			
Water Resources/ Flooding (continued)		WR-13 The drainage plan shall include use of permeable surfaces, such as pavers in driveways, parking areas, and gravels or decomposed granite on common area pathways, to increase infiltration of surface water at the site. The plan shall include specifications for these permeable surfaces to be maintained. The CC&Rs shall assign responsibility for long-term maintenance to the Homeowner's Association.	
	Impact WR-6: Siltation of the UPRR culvert, located immediately north of the project site along Devereux Creek, would continue to result in divergence of normal creek flow away from the project site.	See Biological mitigation measures.	Less than significant
	Impact WR-7: The project's potential erosion-induced siltation of surface waters and runoff of pollutants as a result of increased impervious surfaces, pesticide and herbicide use, and oil and grease residues from the proposed project, could result in contributions to cumulative water quality impacts on Devereux Slough.	See Measures WR-7 though WR-11 above and Biological mitigation measures.	Less than significant
Class III Impacts			
Aesthetic/ Visual Resources	Impact AES-4: The proposed project would add night lighting to this area, including street lights and outdoor security lighting. Hooded fixtures are proposed.	AES-4 Exterior night lighting installed on the project site shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels.	Less than significant
	Impact AES-5: Proposed residential development and architectural style would be consistent with the character of the project vicinity.	AES-3 The design, scale and character of the project architecture shall be compatible with vicinity development.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 25 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Air Quality	Impact AQ-1: Ground disturbances and equipment operation during construction activities would produce adverse but less than significant short-term PM10 emissions.	AQ-1a Dust generated by project construction activities shall be kept to a minimum and prevented from dispersing offsite by following the dust control measures.	Less than significant
	Impact AQ-2: Heavy equipment used during proposed construction activities would produce adverse but less than significant combustive NOx and ROC emissions.	AQ-1b ROC and NOx emissions generated by construction equipment shall be reduced by application of the following equipment control measures: a. Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) shall be utilized whenever feasible. b. The engine size of construction equipment shall be the minimum practical size. c. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. d. Construction equipment shall be maintained in tune per the manufacturer's specifications. e. Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines. f. Catalytic converters shall be installed on gasoline-powered equipment, if feasible. g. Diesel catalytic converters shall be installed, if available. h. Diesel-powered equipment shall be replaced by electric equipment whenever feasible. i. Construction employee trips shall be minimized by requiring carpooling and by providing for lunch onsite.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 26 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Biology	BIO-6: Loss of monarch butterfly habitat.	BIO-7 Non-invasive landscape plants to be included in the landscape plan for the site should be selected for their attractiveness to Monarch butterflies, and their capacity to provide nectar, basking and/or roosting habitat between the months of October and December.	Less than significant
	BIO-7: The loss and alteration of upland habitat including non-native grasslands and eucalyptus trees, as well as coyote brush shrubs, would not substantially affect sensitive species or habitats.	BIO-2 A conservation or open space easement including the protected area and creek corridor of Devereux Creek shall be developed and approved by P&D, so that the restoration area would remain in perpetuity. Within this area, at least 1 acre of riparian habitat shall be enhanced through eradication of invasive non-native plants and the planting of native riparian species, according to a plan developed by a P&D-approved biologist. BIO-8 Night lighting in the vicinity of the Devereux Creek channel and buffer area, including the native grassland, wetland and eucalyptus grove shall be minimized. Lights on homes adjacent to the creek, buffer , native grassland or wetland, shall be directed away from the protected area, be of low intensity and shall be connected to timing devices that shut off after dark.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 27 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Biology (continued)		BIO-9 Improvements to the hydrologic and water quality of Devereux Creek channel shall be enhanced. This shall be accomplished in the following manner: a. Grade and design the site to facilitate runoff to riparian and wetland habitats, as described below. b. Include sediment and erosion control measures in the grading/drainage plan, and maintain these measures throughout the construction period. Install and maintain erosion control (such as jute netting or coir fabric/rolls) measures along the creek channel and in protected areas until native plants or landscaping is established. c. Install native wetland plants (of known local geographic origin) that will absorb pollutant materials that may enter the Devereux Creek channel. d. Include pervious surfaces in the project design in key areas (adjacent to concrete walkways and impervious roads) so that runoff percolates into the ground to the maximum extent feasible. e. Filter all runoff prior to its discharge into the Devereux Creek channel. f. Direct runoff from rooftops and large impervious areas to a filtering system and thence to the upstream end of the Devereux Creek channel so supplemental water benefits the riparian corridor and aquatic biota that colonize the channel.	

Table 1-1. Summary of Impacts and Mitigations

(Page 28 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Energy	Impact EG-1: Proposed development would increase demands on electrical and natural gas supplies.	EG-1 The following energy-conserving techniques shall be incorporated into project design unless the applicant demonstrates their feasibility to the satisfaction of P&D staff: a. installation of energy efficient appliances; and b. installation of energy efficient lighting. EG-2 The applicant shall install exterior motion sensitive light switches. EG-5 Landscaping in common areas shall be designed in a manner to shade buildings and vehicle parking areas to lessen demand for air conditioning.	Less than significant
Geologic Resources	Impact GEO-2: Project grading would result in less than significant changes in topography.	See Measure GEO-2 above.	Less than significant
	Impact GEO-3: Project grading would result in creation of cut and fill slopes that are not anticipated to be prone to failure.	See Measure GEO-2 above.	Less than significant
	Impact GEO-4: A strong earthquake on a nearby or distant fault could cause substantial ground shaking at the project site..	See Measure GEO-2 above.	Less than significant
	Impact LU-3: The proposed project would increase the concentration of people residing in western Goleta and therefore would potentially result in adverse transportation/circulation impacts and conflict with the Circulation Element.	None identified.	Less than significant
	Impact LU-4: The proposed project would result in the loss of 14.46 gross acres of open space.	None identified.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 29 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Hazards	Though impacts on sensitive receptors at the project site would be less than significant, the County of Santa Barbara Protection Services Division, Hazardous Materials Unit is concerned regarding the impacts a risk of upset could have on their staffing levels	HAZ-5 The Venoco Facility should provide specific notification and alarm to project site residents in the event of a hazardous material release.	Less than significant
		HAZ-6 The applicant should request that the California Department of Real Estate insert the following into the final Subdivision Public Report: "The subject property is located within the vicinity of the Venoco Oil Processing Facility. Potential risk of upset impacts on project residents have been determined by the County to be insignificant. The buyer however, may wish to become informed on the issue before making a decision on a home purchase in this location."	Less than significant
Noise	Impact NOI-2: Project buildout would generate additional traffic on U.S. 101 and Hollister Avenue that along with existing volumes would affect exterior and interior residential noise levels (Impact previously identified in 94-EIR-9).	None identified.	Less than significant
Public Facilities	Impact PF-1: The proposed project would present an increase of growth requiring police protection services.	PF-1 The applicant shall pay Goleta Development Impact Fees, including Schools and Sheriffs fees, prior to issuance of building permits.	Less than significant
	Impact PF-2: The proposed project would result in student generation (Impact previously identified in 94-EIR-9).	PF-2 The applicant shall notify GUSD and SBHSD of the expected buildout date of the project to allow the District to plan in advance for new students. PF-3 The applicant shall obtain a letter from the affected school district, which states their ability to accommodate the expected number of new students.	Less than significant

Table 1-1. Summary of Impacts and Mitigations

(Page 30 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class III Impacts			
Public Facilities (continued)	Impact PF-5: The proposed project would require an extension of sewer facilities to serve future residents (Impact previously identified in 94-EIR-9).	None required.	Less than significant
Transportation/ Circulation	Impact TR-2: The proposed project would generate additional vehicular trips and would result in additional traffic on the adjacent roadways.	None identified.	Less than significant
Water Resources/ Flooding	Impact WR-1: The proposed 119-unit project would involve an estimated increase in water demand of 38 AFY. The GWD does not have the potential to cause overdraft of the Goleta Groundwater Basin due to the GWD's required compliance with the Wright judgment.	WR-1 The project landscape plan shall be revised to maximize the use of low-water demand ornamental species. Project CCRs shall include information and photographs about drought-tolerant plantings for individual private spaces (i.e. front and back yards) and encouraging and facilitating owner use of these water-saving species. WR-2 The applicant shall where feasible contract with an agency that sells reclaimed water to provide water for all common area exterior landscaping. Non-reclaimed water shall not be used to water exterior landscape. The applicant shall renew the contract annually and send copies of the contract and all receipts for reclaimed water received to P&D staff. These documents shall be due on the first of June of every year commencing with occupancy clearance. If not feasible, the applicant shall provide documentation as to the efforts made to procure reclaimed water from local water purveyors and the negative outcome. WR-3 Indoor water use in all proposed structures shall be limited through the following measures: a. Recirculating, point-of-use, or on-demand water heaters shall be installed. b. Low flow toilets shall be installed.	Less than significant

Table 1-1. Summary of Impacts and Mitigations
(Page 31 of 31)

Resource	*Description of Impact*	*Mitigation Measure*	*Residual Impact*
Class IV Impacts			
Aesthetic/ Visual Resources	Impact AES-6: The proposed project would remove existing above ground utility lines.	None needed.	Beneficial
Biological Resources	Impact BIO-9: Devereux Creek modifications would remove non-native species, and implement a native riparian species restoration plan that would enhance the biological habitat quality for steelhead trout and California red-legged frog (e.g., more water in the channel, enhanced cover), although no known spawning or rearing habitat is present for either species.	None needed.	Beneficial

Table 1-2. Summary of Cumulative Environmental Impacts
(Page 1 of 3)

Class I - Significant, Unavoidable Impacts
AESTHETICS
Impact AES-7: Proposed development would cumulatively result in a loss of open space in the Goleta region.
Impact AES-8: Proposed development would cumulatively result in change in the character of visual resources along the Hollister Avenue corridor.
AIR QUALITY
Impact AQ-8: Emissions of ROC from project operations, in combination with other cumulative project sources of and ROC emissions in the region, would be significant and unavoidable.
BIOLOGICAL RESOURCES
Impact BIO-10: Loss of upland migratory corridors and open land would contribute to cumulative losses in the Devereux Slough watershed.
Impact BIO-11: Loss of Foraging Habitat in the Goleta Valley, and the Devereux Slough watershed in particular, has substantially reduced opportunities for foraging raptors.
Impact BIO-12: Fragmentation of habitat and loss of unique botanical resources would contribute to cumulative losses in the South Coast Region.
HAZARDOUS MATERIALS/RISK OF UPSET
Impact HZ-2: Increase in the number of residences exposed to ELF magnetic fields.
PUBLIC FACILITIES
Impact PF-6: The project would contribute incrementally to significant and unavoidable Class I cumulative impacts to schools as identified in the Goleta Community Plan EIR.
Impact PF-7: The proposed project would contribute substantial amounts of solid waste under buildout of the Goleta Community Plan.
TRANSPORTATION/CIRCULATION
Impact TR-6: The proposed project would generate additional vehicular trips that would significantly contribute to a general degradation of LOS on the Storke Road/Hollister Avenue intersection.
Class II - Significant But Mitigable Impacts
AIR QUALITY
Impact AQ-8: Emissions of NOx from project operations, in combination with other cumulative project sources of NOx emissions in the region, would be significant but feasibly mitigated by removal of wood burning fireplaces.

Table 1-2. Summary of Cumulative Environmental Impacts

(Page 2 of 3)

Class II - Significant But Mitigable Impacts
BIOLOGICAL RESOURCES
Impact BIO-14: Construction of impervious surfaces has the potential to substantially increase pollutant runoff into wetlands on the site and the Devereux Creek channel. Impact BIO-15: Introduction of native, but potentially not indigenous (i.e., genetically foreign) plant material, in the riparian corridor, protected area, or landscaped portions of the site, has the potential to reduce genetic diversity of indigenous populations or species that have adapted to local climatic, soil, and hydrologic conditions.
NOISE
Impact NOI-3: Related project buildout and Cathedral Oaks Overpass traffic directed on to Hollister Avenue would cumulatively increase ambient noise levels in the vicinity of the project site, potentially impacting project residence second floor interior living area levels.
RECREATION
Impact REC-2: The proposed project residential population would contribute to the regional demand on recreational facilities.
TRANSPORTATION AND CIRCULATION
Impact TR-5: Short-term construction activity, including heavy equipment, deliveries, and employee traffic associated with the Cathedral Oaks Overcrossing project and other future development (i.e., Sandpiper Golf Course Renovations, Monarch Point Residential Development) would potentially result in increased congestion on Hollister Avenue west and in the vicinity of the project site, affecting eastbound turning movements into the project site and potentially creating an unsafe situation.
WATER SUPPLY- DRAINAGE AND WATER QUALITY
Impact WR-8: The project's potential erosion-induced siltation of surface waters and runoff of pollutants as a result of increased impervious surfaces, pesticide and herbicide use, and oil and grease residues from the proposed project, could result in contributions to cumulative water quality impacts on Devereux Slough.
Class III - Adverse but Less than Significant Impacts
AESTHETICS/VISUAL RESOURCES
Impact AES-9: Related project buildout and Cathedral Oaks Overpass traffic directed on to Hollister Avenue would potentially necessitate construction of perimeter fencing along the northern and western boundary of the project site, which would contribute to the change in the character of visual resources as experienced from the Calle Real and U.S. Highway 101 corridors.

Table 1-2. Summary of Cumulative Environmental Impacts

(Page 3 of 3)

Class III - Adverse but Less than Significant Impacts
AIR QUALITY
Impact AQ-6: PM_{10} emissions from project construction, in combination with other cumulative project sources of PM_{10} emissions in the region, would produce adverse, but less than significant impacts. Impact AQ-7: NO_x and ROC emissions from project construction, in combination with other cumulative project sources of NO_x and ROC emissions in the region, would produce adverse, but less than significant impacts.
BIOLOGICAL RESOURCES
Impact BIO-13: Additional loss of eucalyptus and Monterey cypress trees from the project site would remove basking and patrolling habitat for Monarch butterflies that may be used prior to the winter aggregation in the Ellwood Main grove for overwintering and mating activities.
GEOLOGICAL RESOURCES
GEO-7: The project's contribution to cumulative impacts on geologic resources resulting from buildout of approved or current projects located within the Devereux Slough watershed including increased erosion and sedimentation, would be less than significant due to the relatively small size of the project.
HAZARDOUS MATERIALS
Impact HAZ-3: The project would contribute to the increase in the number of residences exposed to ELF magnetic fields of 2 mG.
TRANSPORTATION/CIRCULATION
Impact TR-5: The proposed project would generate additional vehicular trips that would have a less than significant contribution to a general degradation of LOS on project area roadways.
WATER RESOURCES-WATER SUPPLY
Impact WR-2: The County of Santa Barbara Board of Supervisors has determined that service through the GWD does not have the potential to cause or contribute to groundwater basin overdraft due to the GWD's compliance with the *Wright Judgment*.
Class IV - Beneficial Impacts
BIOLOGICAL RESOURCES
Impact BIO-16: The applicant proposed Vegetation Enhancement Plan would have a beneficial impact on the Devereux Creek watershed as a whole.

CEQA ADDENDUM

Attachment 3

Goleta General Plan/Coastal Land Use Plan EIR Summary Impact Table Excerpts

Impact	Class	GP/CLUP Policy and Mitigation Measure	Residual Impact
Rate of Population Growth for the Same Area			
Impact 3.3-4. Long-term Operational Contributions to Air Pollutant Emissions as a Result of GP/CLUP Buildout	III	No mitigation is required	Less Than Significant
Impact 3.3-5. Cumulative ROG and NO_X Emissions	I		Cumulatively Significant
Impact 3.3-6. Cumulative PM_{10} Emissions	II	Implementation of City Grading Ordinance and SBCAPCD dust-control measures	Cumulatively Less Than Significant
Biology			
Impact 3.4-1. Temporary Impacts to Special Status Habitats and Special Status Species	II	Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy Policy CE 2: Protection of Creeks and Riparian Areas Policy CE 3: Protection of Wetlands Policy CE 4: Protection of Monarch Butterfly Habitat Areas Policy CE 5: Protection of Other Terrestrial Habitat Areas Policy CE 6: Protection of Marine Habitat Areas Policy CE 7: Protection of Beach and Shoreline Habitats Policy CE 8: Protection of Special-Status Species Policy CE 9: Protection of Native Woodlands Policy CE 10: Watershed Management and Water Quality Policy OS 1: Lateral Shoreline Access Policy OS 2: Vertical Access to the Shoreline Policy OS 3: Coastal Access Routes, Parking, and Signage Policy OS 4: Trails and Bikeways Policy OS 5: Ellwood-Devereux Open Space Area Policy OS 6: Public Park System Plan Policy OS 7: Adoption of Open Space Plan Map Policy LU 1: Land Use Plan Map and General Policies Policy LU 6: Park and Open Space Uses Policy LU 9: Coastal-Dependent and -Related Uses (Key Pacific Shoreline Sites)	Less Than Significant
Impact 3.4-2. Loss of Special Status Habitats	II	Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy Policy CE 2: Protection of Creeks and Riparian Areas Policy CE 3: Protection of Wetlands Policy CE 4: Protection of Monarch Butterfly Habitat Areas Policy CE 5: Protection of Other Terrestrial Habitat Areas Policy CE 6: Protection of Marine Habitat Areas Policy CE 7: Protection of Beach and Shoreline Habitats	Less Than Significant

Impact	Class	GP/CLUP Policy and Mitigation Measure	Residual Impact
		Policy CE 9: Protection of Native Woodlands Policy CE 10: Watershed Management and Water Quality Policy OS 1: Lateral Shoreline Access Policy OS 2: Vertical Access to the Shoreline Policy OS 3: Coastal Access Routes, Parking, and Signage Policy OS 4: Trails and Bikeways Policy OS 5: Ellwood-Devereux Open Space Area Policy OS 6: Public Park System Plan Policy OS 7: Adoption of Open Space Plan Map Policy LU 1: Land Use Plan Map and General Policies Policy LU 6: Park and Open Space Uses Policy LU 9: Coastal-Dependent and -Related Uses (Key Pacific Shoreline Sites)	
Impact 3.4-3. Long-term Degradation of Special Status Habitats	II	Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy Policy CE 2: Protection of Creeks and Riparian Areas Policy CE 3: Protection of Wetlands Policy CE 4: Protection of Monarch Butterfly Habitat Areas Policy CE 5: Protection of Other Terrestrial Habitat Areas Policy CE 7: Protection of Beach and Shoreline Habitats Policy CE 9: Protection of Native Woodlands Policy CE 10: Watershed Management and Water Quality Policy OS 5: Ellwood-Devereux Open Space Area Policy LU 1: Land Use Plan Map and General Policies Policy LU 6: Park and Open Space Uses Policy LU 9: Coastal-Dependent and -Related Uses (Key Pacific Shoreline Sites)	Less Than Significant
Impact 3.4-4. Fragmentation of Special Status Habitats	II	see Impact 3.4-2	Less Than Significant
Impact 3.4-5. Harm to Listed Species	II	Policy CE 8: Protection of Special Status Species see also Impact 3.4-1 and 3.4-2	Less Than Significant
Impact 3.4-6. Loss, Reduction, or Isolation of Local Populations of Native Species	II	see Impacts 3.4-1, 3.4-2, and 3.4-5	Less Than Significant
Impact 3.4-7. Reduction in Amount or Quality of Habitat for Special Status Species	II	see Impacts 3.4-1, 3.4-2, and 3.4-5	Less Than Significant
Impact 3.4-8. Break or Impairment of Function of Existing Wildlife Linkages	II	see Impacts 3.4-2, 3.4-3, and 3.4-4	Less Than Significant
Impact 3.4-9. Loss or Degradation of Conserved Habitat	II	see previous Impacts	Less Than Significant

Impact	Class	GP/CLUP Policy and Mitigation Measure	Residual Impact
Impact 3.4-10. Inconsistency with Approved Conservation Program or Local Conservation Policy	II	see previous Impacts	Less Than Significant
Impact 3.4-11. Impacts to Non-Special-Status Habitats and Species	III	No mitigation is required	Less Than Significant
Impact 3.4-12. Resources Not Effected by Maintenance/Management	IV	No mitigation is required	Beneficial
Impact 3.4-13. Protection of ESHAs and Maintenance/Management of Regional and Neighborhood Open Space Area	IV	No mitigation is required	Beneficial
Impact 3.4-14. Cumulative Impacts to Biological Resources	III	No mitigation is required	Cumulatively Less Than Significant
Cultural Resources			
Impact 3.5-1. Damage to Sites of Cultural, Historical, or Paleontological Significance	II	Policy OS 8: Protection of Native American and Paleontological Resources Policy VH 5: Historic Resources Policy VH 6: Historical and Cultural Landscapes	Less Than Significant
Impact 3.5-2. Loss or Destruction of an Important Historical Building, Archaeological Site, or Paleontological Site	II	Policy OS 8: Protection of Native American and Paleontological Resources Policy VH 5: Historic Resources Policy VH 6: Historical and Cultural Landscapes	Less Than Significant
Impact 3.5-3. Loss or Destruction of Significant Cultural Resource	II	Policy OS 8: Protection of Native American and Paleontological Resources Policy VH 5: Historic Resources Policy VH 6: Historical and Cultural Landscapes	Less Than Significant
Geology, Soils, and Mineral Resources			
Impact 3.6-1. Substantial Accelerated Soil Erosion and/or Loss of a Substantial Amount of Topsoil	II	Policy SE 1: Safety in General Policy SE 2: Bluff Erosion and Retreat Policy SE 3: Beach Erosion and Shoreline Hazards Policy SE 5: Soil and Slope Stability Hazards	Less Than Significant
Impact 3.6-2. Exposure of People or Structures to Substantial Adverse Effects Resulting from the Rupture of a Known Earthquake Fault, Seismic Ground Shaking, Seismically Induced Landsliding, or Liquefaction	II	Policy SE 1: Safety in General Policy SE 4: Seismic and Seismically Induced Hazards Policy SE 11: Emergency Preparedness	Less Than Significant

Impact	Class	GP/CLUP Policy and Mitigation Measure	Residual Impact
		Policy LU 9: Coastal-Dependent and -Related Uses (Key Pacific Shoreline Sites) Policy LU 10: Energy-Related On- and Off-Shore Uses Policy LU 12: Land Use In Goleta's Environs Policy OS 2: Vertical Access to the Shoreline Policy OS 6: Public Park System Plan Policy OS 7: Adoption of Open Space Plan Map Policy OS 9: Financing Public Parks, Open Space, and Recreation Facilities Policy CE 14: Preservation and Enhancement of Urban Forest Policy VH 1: Scenic Views Policy VH 2: Local Scenic Corridors Policy VH 5: Historic Resources Policy PF 2: Other Facilities of the City of Goleta Policy PF 5: School Facilities	
Impact 3.10-8. Physical Division of an Established Community Due To Buildout of GP/CLUP Land Uses	II	Policy LU 1: Land Use Plan Map and General Policies Policy LU 2: Residential Land Uses Policy LU 8: Central Hollister Residential Development Area Policy LU 12: Land Use In Goleta's Environs Policy HE 8: Preservation of Existing Housing and Neighborhoods Policy HE 9: Excellence in New Housing Design	Less Than Significant
Noise			
Impact 3.11-1. Exposure of Noise Sensitive Land Uses to Noise from Single-Event and Nuisance Noise Sources	I	Policy NE 1: Noise and Land Use Compatibility Standards Policy NE 6: Single-Event and Nuisance Noise Policy NE 7: Design Criteria to Attenuate Noise	Significant
Impact 3.11-2. Exposure of Existing or Planned Noise Sensitive Receptors Uses to Increased Noise	I	Policy NE 2: Traffic Noise Sources Policy NE 7: Design Criteria to Attenuate Noise	Significant
Impact 3.11-3. Exposure of Proposed Noise Sensitive Land Uses to Traffic Noise	I	Policy NE 1: Noise and Land Use Compatibility Standards Policy NE 2: Traffic Noise Sources Policy NE 7: Design Criteria to Attenuate Noise	Significant
Impact 3.11-4. Exposure of Proposed Noise Sensitive Land Uses to Railway Noise	I	Policy NE 1: Noise and Land Use Compatibility Standards Policy NE 4: Railway Noise Policy NE 7: Design Criteria to Attenuate Noise	Significant
Impact 3.11.5. Exposure of Noise Sensitive Land Uses to Industrial and Other Point Sources	I	Policy NE 1: Noise and Land Use Compatibility Standards Policy NE 5: Industrial and Other Point Sources Policy NE 7: Design Criteria to Attenuate Noise	Significant
Impact 3.11-6. Exposure of Proposed Noise Sensitive Land Uses to Airport Noise	III	Policy NE 1: Noise and Land Use Compatibility Standards Policy NE 3: Airport Noise	Less Than Significant

CEQA ADDENDUM

Attachment 3

Goleta General Plan/Coastal Land Use Plan EIR Summary Impact Table Excerpts

HASKELL'S LANDING
General Plan Amendments

Chapter 4.0 CONSERVATION ELEMENT: LAND, MARINE AND AIR RESOURCES

POLICY	TOPIC	POLICY LANGUAGE	APPLICATION RECOMMENDED CHANGE	STATUS
		Protection of Creeks and Riparian Areas		
CE 2.2	Stream Protection Area	A streamside protection area (SPA) is hereby established along both sides of the creeks identified in Figure 4-1. The purpose of the designation shall be to preserve the streamside protection area in a natural state in order to protect the associated riparian habitats and ecosystems. The streamside protection area shall include the creek channel, wetlands and/or riparian vegetation related to the creek hydrology, and an adjacent upland buffer area. The width of the streamside protection area shall be as follows: a. In areas where land has already been fully subdivided and developed, the SPA shall not be less than 50 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater. Exceptions may be allowed in instances where existing permitted development on a subject parcel encroaches within the 50-foot buffer if: (1) there is no feasible alternative siting for the development that will avoid the SPA; (2) the new development will not extend into the ESHA, and the resulting buffer will not be less than 25 feet; and (3) the new development will not encroach further into the SPA than the existing development on the parcel. b. In all other instances, the SPA shall not be less than 100 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of associated wetlands and/or riparian vegetation, whichever is greater.	A streamside protection area (SPA) is hereby established along both sides of the creeks identified in Figure 4-1. The purpose of the designation shall be to preserve the streamside protection area in a natural state in order to protect the associated riparian habitats and ecosystems. The streamside protection area shall include the creek channel, wetlands and/or riparian vegetation related to the creek hydrology, and an adjacent upland buffer area. The width of the streamside protection area shall be as follows: a. In areas where land has already been fully subdivided and developed, the SPA shall not be less than 50 feet outward on both sides of the creek, measured from the top of the bank or the outer limit of wetlands and/or riparian vegetation, whichever is greater. Exceptions may be allowed in instances where existing permitted development on a subject parcel encroaches within the 50-foot buffer if: (1) there is no feasible alternative siting for the development that will avoid the SPA; (2) the new development will not extend into the ESHA, and the resulting buffer will not be less than 25 feet; and (3) the new development will not encroach further into the SPA than the existing development on the parcel. b. In all other instances, the SPA shall not be less than **50** ~~100~~ feet outward on both sides of the creek, measured from the top of the bank or the outer limit of associated wetlands and/or riparian vegetation, whichever is greater. c. If the provisions above would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed	Identical. Initiated by City 4/16/07 and as identified on 1/17/08.

		c. If the provisions above would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel, subject to approval of a conditional use permit.	by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel, subject to approval of a conditional use permit.	

Chapter 7.0 TRANSPORTATION ELEMENT

POLICY	TOPIC	LANGUAGE	APPLICATION RECOMMENDED CHANGE	STATUS
Mitigating Traffic Impacts of Development				
TE 13.4	Options if Traffic Mitigations not Fully Funded	If the transportation capital improvements needed to maintain adopted transportation LOS standards are not able to be funded, then the City shall take one of the following four actions: a. Phase or delay development until such time that adequate fiscal resources can be provided to build the necessary facilities transportation improvements (or to include them in the impact fee system). b. Require the developer to construct the necessary transportation system improvements, with a reimbursement agreement which utilizes future payments of impact fees by other projects. c. Reduce the scope of the development to reduce the traffic generation below the thresholds set in Policy TE-4. d. Require the developer to identify alternative strategies to mitigate potential traffic impact to achieve the thresholds set in Policy TE-4.	Action: Revise appropriate text as follows: a. ~~Phase or delay development until such time~~ **Ensure** that adequate fiscal resources ~~can be~~ **are available to** provided ~~to build~~ the necessary facilities transportation improvements (or to include them in the impact fee system). ~~b. Require the developer to construct the necessary transportation system improvements, with a reimbursement agreement which utilizes future payments of impact fees by other projects.~~ ~~c. Reduce the scope of the development to reduce the traffic generation below the thresholds set in Policy TE-4.~~ b. ~~d.~~ Require the developer to identify alternative strategies to mitigate potential traffic impact to achieve the thresholds set in Policy TE-4.	1/17/08 If the transportation capital improvements needed to maintain adopted transportation LOS standards are not able to be funded, then the City shall take one of the following three actions: a. Phase or delay development until such time that adequate fiscal resources can be provided to build the necessary facilities transportation improvements (or to include them in the impact fee system). b. Require the developer to construct the necessary transportation system improvements, with a reimbursement agreement which utilizes future payments of impact fees by other projects. c. Reduce the scope of the development to reduce the traffic generation below the thresholds set in Policy TE-4. d. Require the developer to identify

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				alternative strategies to ~~mitigate~~ minimize potential traffic impact to achieve the thresholds set in Policy TE-4. Initiated 1/29/08 as part of Track 2, moved to Track 3 during 3/08 staff environmental review. **TRACK 3**

Chapter 8.0 PUBLIC FACILITIES

POLICY	TOPIC	POLICY LANGUAGE	APPLICATION RECOMMENDED CHANGE	STATUS
Public Safety Services and Facilities				
PF 3.2	New Fire Station in Western Goleta	The Santa Barbara County Fire Department has determined that the most under-served area in Goleta is the extreme western portion near Winchester Canyon. In conjunction with the fire department, the City shall provide a site consisting of approximately two acres of land for a new Fire Station 10 to serve the western area of the City, as shown on the map in Figure 8-1. The Santa Barbara County Fire Department will construct Fire Station 10 as soon as funding becomes available.	The Santa Barbara County Fire Department has determined that the most under-served area in Goleta is the extreme western portion near Winchester Canyon. In conjunction with the fire department, the City shall provide a site consisting of approximately two acres of land for a new Fire Station 10 to serve the western area of the City. **Possible locations for the proposed fire stations are** ~~as~~ shown on the map in Figure 8-1. The Santa Barbara County Fire Department will construct Fire Station 10 as soon as funding becomes available.	No City proposed change. Offered to Propose for Initiation and carry for the City. Initiated by City Council on 3/4/08
Figure 8-1	Public Facilities Map		Revise Figure 8-1 to include a range of proposed sites which could be considered for possible future fire station.	No City proposed change. Offered to Propose for Initiation and Carry for the City. Initiated by City Council on 3/4/08.

Chapter 10.0 HOUSING ELEMENT

POLICY	TOPIC	POLICY LANGUAGE	APPLICATION RECOMMENDED CHANGE	CITY RECOMMENDED STATUS
Require Inclusion of Very Low-, Low- and Moderate-Income Housing in New Development:				
HE 11.5	Establishment of Unit Percentages and Income Levels.	Except for designated affordable housing sites as identified in HE 11.6 the inclusionary housing requirement shall be as follows: a. Proposed rental projects shall be required to provide 5% of the total number of units within the project at rent levels affordable to very low- and low-income households. b. Proposed for-sale projects, including subdivisions for purposes of condominium conversions, will be required to provide 5% of the units at prices affordable to very low income, 5% affordable to low income, 10% affordable to moderate income households, and 10% affordable to households earning 120-150% of median income. Requirements for provision of inclusionary units in for-sale projects for very low- and low-income households may be satisfied by providing the same number of rental units at rent levels affordable to these households.	Except for designated affordable housing sites as identified in HE 11.6 the inclusionary housing requirement shall be as follows: a. Proposed rental projects shall be required to provide 5% of the total number of units within the project at rent levels affordable to very low- and low-income households. b. Proposed for-sale projects, including subdivisions for purposes of condominium conversions, will be required to provide ~~5% of the units at prices affordable to very low income, 5%~~ **15%** affordable to low income **or** 10% affordable to moderate income households, and 10% affordable to households earning 120-150% of median income. Requirements for provision of inclusionary units in for-sale projects ~~for very low- and~~ low-income households may be satisfied by providing the same number of rental units at rent levels affordable to these households. **---OR---** b. Proposed for-sale projects, including subdivisions for purposes of condominium conversions, will be required to provide **either:** ~~5% of the units at prices affordable to very low income, 5%~~ **a.** **15%** affordable to low income, **b.** 10% affordable to moderate income households, and 10% affordable to households earning 120-150% of median income **or** **c.** **10% of the units affordable to households earning 120-150% of median income and 10% of the units affordable to households earning 150-200% of**	Initiated by City 4/16/07 without specific language proposed. Proposed to initiate in conjunction with this application or coordinate timing with City process. Initiated by City Council 3/4/08.

HASKELL'S LANDING
General Plan Amendments

			median income where at least one member of the qualifying household is employed within the Goleta City limits. Requirements for provision of inclusionary units in for-sale projects ~~for very low- and~~ low-income households may be satisfied by providing the same number of rental units at rent levels affordable to these households.	
Table 10A-16	Inventory of Land Suitable for Residential Development: Vacant Residentially Zoned Sites	Map #39 APN: 079-210-049 Site Size 13.73 acres Maximum Residential Density: DR- 8 Maximum Number of Units: 109 Land Use Designation: Planned Residential Maximum Residential Density: 8 Maximum Number of Units:109 Type of Constraints: Riparian buffer, native grasslands Net Developable Area: 12.36 Adjusted Number of Units: 98	Correct Table as follows: Map #39 APN: 079-210-049 Site Size ~~13.73 acres~~ **14.46 Acres** Maximum Residential Density: DR- 8 Maximum Number of Units: ~~109~~ **116** Land Use Designation: Planned Residential Maximum Residential Density: 8 Maximum Number of Units: ~~109~~ **116** Type of Constraints: Riparian buffer, native grasslands Net Developable Area: ~~12.36~~ **14.20 Acres** ~~Adjusted Number of Units: 98~~	No City proposed change. Proposed for Initiation in conjunction with this application or coordinate with City process. Initiated by City Council 3/4/08.

CEQA ADDENDUM

Attachment 5

Air Quality

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Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2007 TOTALS (lbs/day unmitigated)	7.44	50.25	29.02	0.00	38.42	3.16	41.58	8.03	2.90	10.93	3,937.51
2007 TOTALS (lbs/day mitigated)	7.44	50.25	29.02	0.00	10.27	3.16	13.43	2.15	2.90	5.05	3,937.51
2008 TOTALS (lbs/day unmitigated)	129.58	68.54	52.97	0.01	38.47	4.43	42.89	8.04	4.07	12.11	6,493.00
2008 TOTALS (lbs/day mitigated)	67.19	68.54	52.97	0.01	10.31	4.43	14.74	2.16	4.07	6.23	6,493.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5.88	0.81	2.10	0.00	0.01	0.01	1,007.40

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.57	8.27	74.09	0.04	8.88	1.72	4,701.62

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	12.45	9.08	76.19	0.04	8.89	1.73	5,709.02

10/23/2008 12:03:50 PM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 11/30/2007-12/27/2007 Active Days: 20	3.59	29.77	15.79	0.00	38.40	1.49	39.90	8.02	1.37	9.39	2,332.85
Fine Grading 11/30/2007-01/11/2008	3.59	29.77	15.79	0.00	38.40	1.49	39.90	8.02	1.37	9.39	2,332.85
Fine Grading Dust	0.00	0.00	0.00	0.00	38.40	0.00	38.40	8.02	0.00	8.02	0.00
Fine Grading Off Road Diesel	3.52	29.64	14.18	0.00	0.00	1.49	1.49	0.00	1.37	1.37	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.13	1.62	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.53
Time Slice 12/28/2007-12/31/2007 Active Days: 2	7.44	50.25	29.02	0.00	38.42	3.16	41.58	8.03	2.90	10.93	3,937.51
Asphalt 12/28/2007-01/11/2008	3.85	20.48	13.23	0.00	0.01	1.67	1.68	0.01	1.53	1.54	1,604.66
Paving Off-Gas	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.17	18.72	9.52	0.00	0.00	1.60	1.60	0.00	1.48	1.48	1,272.04
Paving On Road Diesel	0.09	1.51	0.47	0.00	0.01	0.06	0.06	0.00	0.05	0.05	161.56
Paving Worker Trips	0.14	0.25	3.24	0.00	0.01	0.01	0.01	0.00	0.00	0.01	171.06
Fine Grading 11/30/2007-01/11/2008	3.59	29.77	15.79	0.00	38.40	1.49	39.90	8.02	1.37	9.39	2,332.85
Fine Grading Dust	0.00	0.00	0.00	0.00	38.40	0.00	38.40	8.02	0.00	8.02	0.00
Fine Grading Off Road Diesel	3.52	29.64	14.18	0.00	0.00	1.49	1.49	0.00	1.37	1.37	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.13	1.62	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.53

Time Slice 1/1/2008-1/10/2008 Active Days: 8	7.04	47.52	27.99	0.00	38.42	3.01	41.43	8.03	2.77	10.79	3,937.31
Asphalt 12/28/2007-01/11/2008	3.66	19.40	12.90	0.00	0.01	1.59	1.61	0.01	1.46	1.47	1,604.53
Paving Off-Gas	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.99	17.76	9.40	0.00	0.00	1.54	1.54	0.00	1.41	1.41	1,272.04
Paving On Road Diesel	0.08	1.41	0.43	0.00	0.01	0.05	0.06	0.00	0.05	0.05	161.56
Paving Worker Trips	0.13	0.24	3.07	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.93
Fine Grading 11/30/2007-01/11/2008	3.38	28.12	15.09	0.00	38.40	1.41	39.82	8.02	1.30	9.32	2,332.78
Fine Grading Dust	0.00	0.00	0.00	0.00	38.40	0.00	38.40	8.02	0.00	8.02	0.00
Fine Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.12	1.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.47
Time Slice 1/11/2008-1/11/2008 Active Days: 1	11.75	**68.54**	**52.97**	**0.01**	**38.47**	**4.43**	**42.89**	**8.04**	**4.07**	**12.11**	**6,493.00**
Asphalt 12/28/2007-01/11/2008	3.66	19.40	12.90	0.00	0.01	1.59	1.61	0.01	1.46	1.47	1,604.53
Paving Off-Gas	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.99	17.76	9.40	0.00	0.00	1.54	1.54	0.00	1.41	1.41	1,272.04
Paving On Road Diesel	0.08	1.41	0.43	0.00	0.01	0.05	0.06	0.00	0.05	0.05	161.56
Paving Worker Trips	0.13	0.24	3.07	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.93
Building 01/11/2008-08/22/2008	4.72	21.02	24.98	0.01	0.05	1.42	1.47	0.02	1.30	1.32	2,555.69
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,621.20
Building Vendor Trips	0.14	1.90	1.48	0.00	0.01	0.07	0.08	0.00	0.06	0.07	282.22
Building Worker Trips	0.50	0.90	11.70	0.01	0.03	0.02	0.06	0.01	0.02	0.03	652.28
Fine Grading 11/30/2007-01/11/2008	3.38	28.12	15.09	0.00	38.40	1.41	39.82	8.02	1.30	9.32	2,332.78
Fine Grading Dust	0.00	0.00	0.00	0.00	38.40	0.00	38.40	8.02	0.00	8.02	0.00
Fine Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.12	1.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00	85.47

Time Slice 1/14/2008-8/7/2008 Active Days: 149	4.72	21.02	24.98	0.01	0.05	1.42	1.47	0.02	1.30	1.32	2,555.69
Building 01/11/2008-08/22/2008	4.72	21.02	24.98	0.01	0.05	1.42	1.47	0.02	1.30	1.32	2,555.69
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,621.20
Building Vendor Trips	0.14	1.90	1.48	0.00	0.01	0.07	0.08	0.00	0.06	0.07	282.22
Building Worker Trips	0.50	0.90	11.70	0.01	0.03	0.02	0.06	0.01	0.02	0.03	652.28
Time Slice 8/8/2008-8/22/2008 Active Days: 11	129.58	21.19	27.21	0.01	0.05	1.42	1.48	0.02	1.31	1.33	2,680.14
Building 01/11/2008-08/22/2008	4.72	21.02	24.98	0.01	0.05	1.42	1.47	0.02	1.30	1.32	2,555.69
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,621.20
Building Vendor Trips	0.14	1.90	1.48	0.00	0.01	0.07	0.08	0.00	0.06	0.07	282.22
Building Worker Trips	0.50	0.90	11.70	0.01	0.03	0.02	0.06	0.01	0.02	0.03	652.28
Coating 08/08/2008-09/05/2008	124.86	0.17	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	124.45
Architectural Coating	124.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.10	0.17	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	124.45
Time Slice 8/25/2008-9/5/2008 Active Days: 10	124.86	0.17	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	124.45
Coating 08/08/2008-09/05/2008	124.86	0.17	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	124.45
Architectural Coating	124.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.10	0.17	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	124.45

Phase Assumptions

Phase: Fine Grading 11/30/2007 - 1/11/2008 - Default Fine Site Grading Description

Total Acres Disturbed: 7.67

Maximum Daily Acreage Disturbed: 1.92

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 12/28/2007 - 1/11/2008 - Default Paving Description
Acres to be Paved: 1.92
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/11/2008 - 8/22/2008 - Default Building Construction Description
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2008 - 9/5/2008 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Area Source Unmitigated Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.79	0.33	0.00	0.00	0.00	1,004.23
Hearth - No Summer Emissions							
Landscape	0.16	0.02	1.77	0.00	0.01	0.01	3.17
Consumer Products	4.94						
Architectural Coatings	0.72						
TOTALS (lbs/day, unmitigated)	5.88	0.81	2.10	0.00	0.01	0.01	1,007.40

Area Source Changes to Defaults

10/23/2008 11:38:40 AM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	0.43	0.56	4.99	0.00	0.60	0.12	316.75
Condo/townhouse general	6.14	7.71	69.10	0.04	8.28	1.60	4,384.87
TOTALS (lbs/day, unmitigated)	6.57	8.27	74.09	0.04	8.88	1.72	4,701.62

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1.67	9.57	dwelling units	5.00	47.85	347.40
Condo/townhouse general	6.00	6.90	dwelling units	96.00	662.40	4,809.16
					710.25	5,156.56

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.2	1.5	98.1	0.4
Light Truck < 3750 lbs	16.7	2.4	94.0	3.6
Light Truck 3751-5750 lbs	20.4	1.0	98.5	0.5
Med Truck 5751-8500 lbs	7.5	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	33.3	66.7
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.7	64.9	35.1	0.0
School Bus	0.2	0.0	0.0	100.0
Motor Home	1.2	8.3	83.4	8.3

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.9	5.6	6.1	5.7	4.1	5.7
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						

Operational Changes to Defaults

10/23/2008 11:39:23 AM

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2007 TOTALS (lbs/day unmitigated)	7.44	50.25	29.02	0.00	38.42	3.16	41.58	8.03	2.90	10.93	3,937.51
2007 TOTALS (lbs/day mitigated)	7.44	50.25	29.02	0.00	10.27	3.16	13.43	2.15	2.90	5.05	3,937.51
2008 TOTALS (lbs/day unmitigated)	129.58	68.54	52.97	0.01	38.47	4.43	42.89	8.04	4.07	12.11	6,493.00
2008 TOTALS (lbs/day mitigated)	67.19	68.54	52.97	0.01	10.31	4.43	14.74	2.16	4.07	6.23	6,493.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	20.88	2.18	60.54	0.18	9.55	9.19	2,919.22

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	7.01	9.70	76.74	0.04	8.88	1.72	4,456.25

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	27.89	11.88	137.28	0.22	18.43	10.91	7,375.47

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Urbemis 2007 Version 9.2.4

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	0.46	0.65	5.17	0.00	0.60	0.12	300.22
Condo/townhouse general	6.55	9.05	71.57	0.04	8.28	1.60	4,156.03
TOTALS (lbs/day, unmitigated)	7.01	9.70	76.74	0.04	8.88	1.72	4,456.25

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1.67	9.57	dwelling units	5.00	47.85	347.40
Condo/townhouse general	6.00	6.90	dwelling units	96.00	662.40	4,809.16
					710.25	5,156.56

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.2	1.5	98.1	0.4
Light Truck < 3750 lbs	16.7	2.4	94.0	3.6
Light Truck 3751-5750 lbs	20.4	1.0	98.5	0.5
Med Truck 5751-8500 lbs	7.5	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	33.3	66.7
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.7	64.9	35.1	0.0
School Bus	0.2	0.0	0.0	100.0
Motor Home	1.2	8.3	83.4	8.3

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.9	5.6	6.1	5.7	4.1	5.7
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						

Operational Changes to Defaults

10/23/2008 11:54:34 AM

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2007 TOTALS (tons/year unmitigated)	0.04	0.35	0.19	0.00	0.42	0.02	0.44	0.09	0.02	0.10	27.27
2007 TOTALS (tons/year mitigated)	0.04	0.35	0.19	0.00	0.11	0.02	0.13	0.02	0.02	0.04	27.27
Percent Reduction	0.00	0.00	0.00	0.00	73.30	0.00	70.29	73.29	0.00	61.67	0.00
2008 TOTALS (tons/year unmitigated)	1.72	1.91	2.16	0.00	0.18	0.13	0.30	0.04	0.12	0.15	224.76
2008 TOTALS (tons/year mitigated)	1.07	1.91	2.16	0.00	0.05	0.13	0.18	0.01	0.12	0.13	224.76
Percent Reduction	38.03	0.00	0.00	0.00	71.72	0.00	41.60	70.65	0.00	17.08	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.67	0.18	2.68	0.01	0.39	0.38	245.80

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OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.23	1.60	13.68	0.01	1.62	0.31	843.12

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.90	1.78	16.36	0.02	2.01	0.69	1,088.92

10/23/2008 11:55:05 AM

Urbemis 2007 Version 9.2.4

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: P:\300.Environmental\5980 - Haskells Landing\Air Quality\HaskellsLandingProject.urb924

Project Name: Haskells Landing Project

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	0.08	0.11	0.92	0.00	0.11	0.02	56.80
Condo/townhouse general	1.15	1.49	12.76	0.01	1.51	0.29	786.32
TOTALS (tons/year, unmitigated)	1.23	1.60	13.68	0.01	1.62	0.31	843.12

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1.67	9.57	dwelling units	5.00	47.85	347.40
Condo/townhouse general	6.00	6.90	dwelling units	96.00	662.40	4,809.16
					710.25	5,156.56

10/23/2008 11:55:05 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.2	1.5	98.1	0.4
Light Truck < 3750 lbs	16.7	2.4	94.0	3.6
Light Truck 3751-5750 lbs	20.4	1.0	98.5	0.5
Med Truck 5751-8500 lbs	7.5	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	33.3	66.7
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.7	64.9	35.1	0.0
School Bus	0.2	0.0	0.0	100.0
Motor Home	1.2	8.3	83.4	8.3

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.9	5.6	6.1	5.7	4.1	5.7
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
% of Trips - Commercial (by land use)						

Operational Changes to Defaults

CEQA ADDENDUM

Attachment 6

Biological Resources

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

July 17, 2008

Chuck Lande
Chadmar Group
1933 Cliff Drive Suite 6
Santa Barbara, CA 93109

RE: Native Grassland Habitat within the Haskell's Landing Project Site – 2008 Survey Results

Dear Mr. Lande:

Denise Duffy & Associates, Inc. (DD&A) was requested to conduct a native grassland survey at the Haskell's Landing Project site in Goleta, California, and compare the results with the proposed Development Plan (dated July 15, 2008) to determine whether the plan continues to avoid and minimize impacts to the native grassland. In addition, DD&A was requested to review the Final Supplemental EIR for The Residences at Sandpiper Project (September 2001, SCH#1993121097) (SEIR) to evaluate site conditions for consistency with the environmental setting described in the Final SEIR.

DD&A conducted a field survey on February 27 and April 11, 2008, when purple needlegrass (*Nassella pulchra*) and meadow barley (*Hordeum brachyantherum*) were easily identifiable within the project site. The occurrences of the purple needlegrass and meadow barley within the project site were generally consistent with the descriptions in the Final SEIR. The 2008 survey results show a slight variation in the location, size, and density of some of the occurrences, as shown in Figure 1 (attached). However, these variations from year to year are expected in natural communities as a result of changes in weather conditions (e.g., amount and timing of precipitation, temperature). In addition, different survey methodology may contribute to the variations in the location, size, and density of occurrences. However, the largest concentrations of purple needlegrass occurrences running east-west in the center of the project site remain within the preserve areas identified in the Development Plan. The meadow barley populations running north-south along the creek also remain outside of the development area and within the 50-foot setback of the creek. The occurrences of native grassland have not significantly changed since 2001, and the proposed Development Plan continues to avoid and minimize impacts to native grassland, as required by the Final EIR.

In addition to the site visits in 2008, DD&A visited the site on May 10 and June 21, 2007, to evaluate site conditions for consistency with the Final SEIR. The field surveys conducted by DD&A found that the upland, creek, and wetland habitats within the project site were consistent with the habitat descriptions in the Final SEIR. The following discussion summarized from the Final SEIR describes the habitats and wildlife that occur or have the potential to occur within the project site.

Habitat Descriptions

Upland Habitats
The upland habitats of the project site are dominated by non-native annual grasses and forbs (broad-leaved species). The project site also supports several shrub and tree species that add biodiversity and

physical structure to the upland plant community. Common non-native grass species include slender wild oats (*Avena barbata*), annual ryegrass (*Lolium multiflorum*), brome grasses (*Bromus diandrus, B. rubens, B. hordeaceus*), and harding grasses (*Phalaris aquatica*). Common weedy forbs include fennel (*Foeniculum vulgare*), sow thistle (*Sonchus oleraceus*), dock (*Rumex crispus, R. acetosella*), vetch (*Vicia sativa*), black mustard (*Brassica nigra*), Australian saltbush (*Atriplex semibaccata*), oxalis (*Oxalis corniculatus*), filaree (*Erodium botrys, E. moschatum*), wild radish (*Raphanus sativa*), common plantain (*Plantago lanceolata*), and pimpernel (*Anagalis arvensis*). The most common tree species are non-native eucalyptus (*Eucalyptus globules* and *E. cladocalyx*); these are mostly mature trees with some recruitment occurring. There are also several scattered Monterey cypress (*Cupressus macrocarpa*) on the project site. Monterey cypress are native to California but not indigenous to Santa Barbara County. Other non-native species on the project site include ornamentals that may have been dumped on the project site or escaped from a garden setting.

Native species observed in the upland community include peppergrass (*Lepidium nitidum*), blue-eyed grass (*Sisyrinchium bellum*), California morning glory (*Calystegia macrostegia*), western ragweed (*Ambrosia psilostachya*), spurrey (*Spergularia sp.*), green everlasting (*Gnaphalium californicum*), coyote brush (*Baccharis pilularis*), and tarplant (*Hemizonia fasciculata*). Coyote brush and ragweed are the two most widespread species on the project site. Several patches of native grasses are prominent on the project site. These patches are dominated by two native grass species; purple needlegrass and meadow barley. Most patches are dominated by purple needlegrass, but there is a relatively extensive patch of meadow barley along the west bank of the Devereux Creek outside the development area.

Devereux Creek Habitats

As described in the Final SEIR, the creek running north-south in the central portion of the project site is a mapped blue line creek (USGS 7.5 minute Dos Pueblos Quadrangle) and is identified as environmentally sensitive habitat in the adopted City of Goleta General Plan. The creek flows intermittently with its mapped source located in the area now known as Winchester Commons. Flow south of the railroad tracks appears to ephemeral due to sediment deposition in the culvert under the tracks as described below and the redirection of flow westward along the north side of the railroad tracks.

Drainage from the Winchester Commons flows into an existing 36-inch culvert underlying U.S. Highway 101, through an open channel between that culvert and the railroad tracks, and then through a concrete box culvert under the UPRR tracks. The latter culvert is nearly filled with sediment. The creek channel downstream from the railroad tracks has several inches of accumulated sediment in its bottom, raising the invert of the channel for some distance downstream. Part of the deposition in the creek channel downstream from the railroad track is due to bank slumping.

The riparian corridor on the project site lacks the typical scrub-shrub vegetation, such as willow (*Salix spp.*) and mulefat (*Baccharis salicifolia*) found along creeks in coastal Santa Barbara County. The stream banks are dominated by coyote brush in the northern half, and weedy annual grasses and eucalyptus in the southern half, although coyote brush is spreading into the southern half. Scattered umbrella sedge (*Cyperus eragrostis*) and rabbitsfoot grass (*Polypogon monspeliensis*) occur in the northern half of the drainage. Patches of mugwort (*Artemisia douglasiana*) are present along the banks.

Wetland Habitats

An earlier wetland delineation identified four isolated and adjacent wetlands on the project site. One of the wetlands identified is associated with Devereux Creek and supports creeping spike rush (*Eleocharis macrostachya*), an obligate wetland plant, and exhibits wetland hydrology, including abundant oxidized root channels in the upper 12 inches of soil. The three other wetland areas on-site are all dominated by hydrophytic vegetation. Several native species are associated with these wetland areas including; yard rush (*Juncus occidentalis*), creeping spike rush, meadow barley, mugwort, western ragweed, poverty weed (*Iva axillaries var. robustior*), and blue-eyed grass.

Wildlife Species

The open grassland habitat supports common wildlife including; California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), gopher snake (*Pituophis catenifer*), western fence lizard (*Sceloporus occidentalis*) and alligator lizard (*Elgaria coerulea)*. Several bird species utilize the upland habitat for foraging and possible nesting habitat including; several finch species, red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*B. lineatus*), European starling (*Sturnus vulgaris*), Bewick's wren (*Thryomanes bewickii*) and Brewer's blackbird (*Euphagus cyanocephalus*).

During the wet season, the drainage associated with Devereux Creek could support several species usually observed in riparian habitat including common yellowthroat (*Geothlypis trichas*), Hutton's vireo (*Vireo huttoni*), black phoebe (*Sayornis nigricans*), and pacific chorus frog (*Hyla regilla*).

The dense stands of blue gum eucalyptus trees are likely to be used by several raptor/bird species including white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), red-shouldered hawk, red-tailed hawk, American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and barn owl (*Tyto alba*). The dense stand that occupies the southern extent of the stream on-site is suitable for autumnal aggregations and patrolling individuals of Monarch butterflies (*Danaus plexippus*).

Special Status Species

Three special-status species may utilize aquatic habitat in Devereux Creek, Devereux Slough, or adjacent aquatic habitats such as Bell Canyon Creek or Tecolote Creek; steelhead (*Oncorhynchus mykiss irideus*), California red-legged frog (*Rana aurora draytonii*) and tidewater goby (*Eucyclogobius newberryi*) are all known to occur within the vicinity of the project site. Devereux Creek may provide marginal habitat for these species; however, the very short duration of water on the project site does not provide desirable or optimal habitat for any of these species.

Conclusions

The Development Plan creates open space areas that include stands of the native grasslands, creek, and wetland habitats. The open space area forms a continuous corridor from the northern boundary of the project site to its southern boundary along both sides of Devereux Creek. The open space area contains a mosaic of interconnected habitats that includes the riparian corridor along Devereux Creek, the small wetlands in the grassland depressions, and the patches of native grassland. The Development Plan also

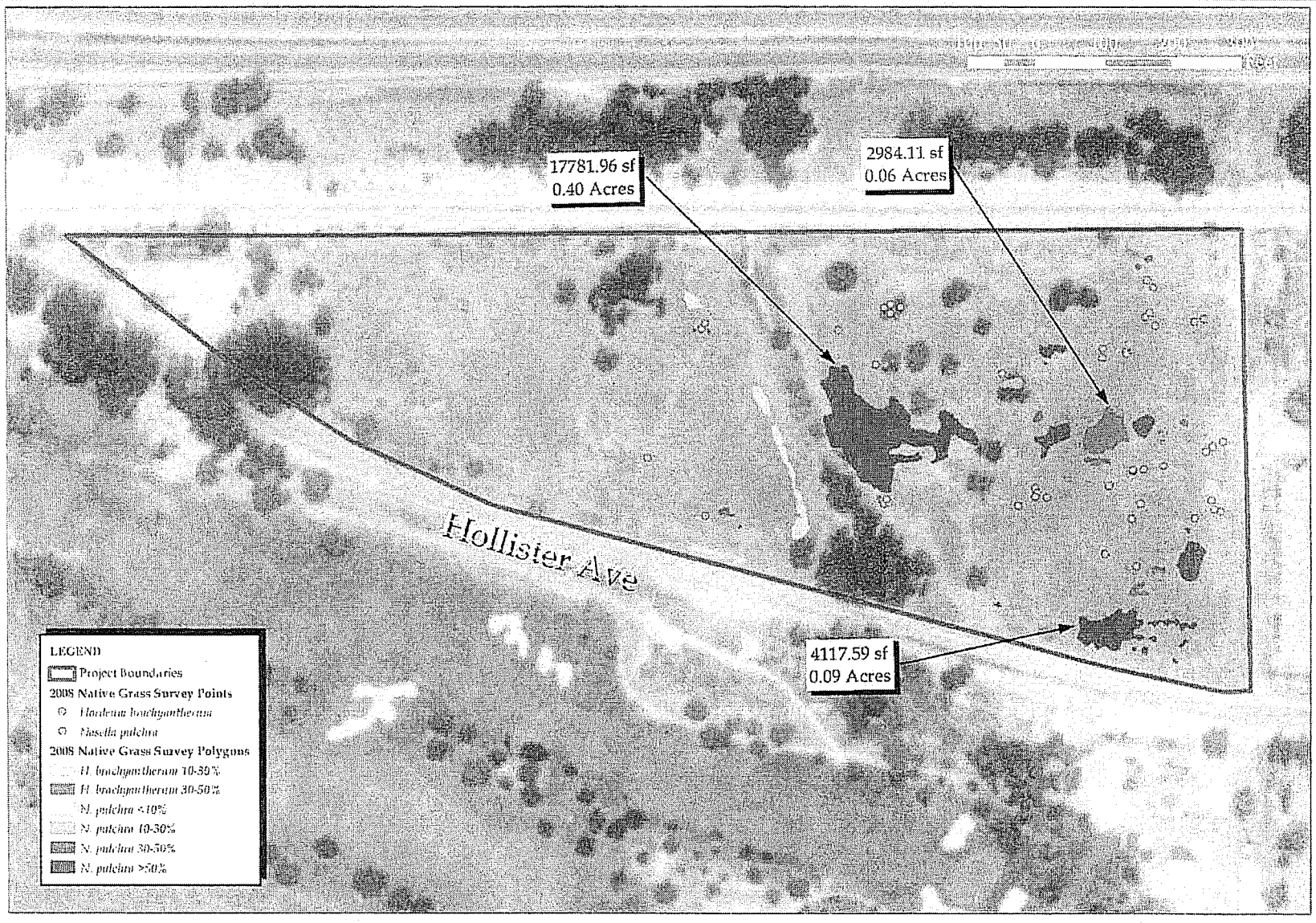
creates an open space area around the small wetland near Hollister Road and an open area in the center of the lots in the western portion of the project site.

There have not been any significant changes in the environmental setting related to habitat types and descriptions, general locations of the habitats, and the wildlife species known or expected to occur within the project site since the publishing of the Final EIR in 2001. The occurrences of native grassland within the project site have not significantly changed since 2001, and the proposed Development Plan continues to avoid and minimize impacts to native grassland and other sensitive habtiats, as required by the Final EIR.

As always, please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

Erin Harwayne
Senior Project Manager/Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.



N	2008 Native Grass Survey Results	Figure 1

DENISE DUFFY & ASSOCIATES, INC.

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

November 4, 2008

Chuck Lande
Chadmar Group
1933 Cliff Drive Suite 6
Santa Barbara, CA 93109

Subject: Methodology Techniques Utilized to Review Wetland/Upland Interface for "Native Grassland Habitat within the Haskell's Landing Project Site – 2008 Survey Result, July 2008"

Dear Mr. Lande,

This letter outlines the methods and techniques employed by Denise Duffy and Associates, Inc. (DD&A) Senior Environmental Scientist, Erin Harwayne, and Associate Biologist, Matt Johnson, to confirm the wetland boundaries for the Haskell's Landing project located in the City of Goleta.

DD&A visited the site on May 10 and June 21, 2007, to evaluate site conditions for consistency with the *Final Supplemental EIR for The Residences at Sandpiper Project* (September 2001, SCH#1993121097) (SEIR). The field surveys conducted by DD&A found that the upland, creek, and wetland habitats within the project site were consistent with the habitat descriptions in the Final SEIR.

Wetland boundaries were confirmed by comparing the existing maps from the Final SEIR with the hydrophytic vegetation and soil indicators observed during project site visits. The existing maps from the Final SEIR were used in the field to identify the original wetland boundaries on the project site. The vegetation along these borders was then evaluated to create the unique suite of flora that represented the interface between wetland and upland. There are two unique vegetation suites used to estimate the wetland/upland interface on the Haskell's Landing project site. These vegetation suites are described in further detail below.

As described in the Final SEIR the Devereux Creek wetland/upland interface was estimated using spike rush (*Eleocharis macrostachya*). The Deveruex Creek wetland/upland interface was also estimated by the observation of oxidized root channels in the upper 12 inches of soil. Devereux Creek is also a well defined channel that runs through the Haskell's Landing property which aided in the identification of the wetland/upland interface.

The boundaries for the three other wetland sites located within the Haskell's Landing project were estimated using a suite of hydrophytic vegetation including: yard rush (*Juncus tenuis*), spike rush, meadow barley (*Hordeum brachyantherum*), mugwort (*Artemisia douglasiana*), western ragweed (*Ambrosia psilostachya*), poverty weed (*Iva axillaries var. robustior*), and blue-eyed grass (*Sisyrinchium bellum*). Plant species were identified using The Jepson Manual: Higher

Plants of California (Hickman, 1993)[1], and were assigned a wetland status according to the *National List of Plant Species That Occur in Wetlands: 1988 National Summary* (Reed, 1988).[2]

Using these techniques DD&A biologists were able to estimate the size and location of the wetland features found on the Haskell's Landing property and compare them to the original wetland features mapped in the SEIR. DD&A did not perform a wetland delineation at the project site. One of the plant species (meadow barley) that was used to estimate the wetland/upland interface was also mapped to update the native grass populations occurrences as a result there are some instances were the two classifications overlap. DD&A confirmed that the size and location of the wetland features on the project site were consistent with the Final SEIR.

Sincerely,

Matt Johnson
Associate Biologist
DENISE DUFFY & ASSOCIATES, Inc.

1. Hickman, J.C. (ed.). 1993. The Jepson manual: higher plants of California. University of California Press, Berkeley, CA. 1400 pp.
2. Reed, Porter B.; for U.S. Fish and Wildlife Service in cooperation with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Soil Conservation Service. 1988. National List of Plant Species That Occur in Wetlands: 1988 National Summary: California Region (R0). Available online at: http://www.fws.gov/nwi/bha/download/1988/region0.txt

Erin Harwayne

Senior Environmental Scientist/Planner/Project Manager

Education

Bachelor of Science, Earth Systems Science & Policy (Marine and Coastal Ecology), California State University Monterey Bay, 2000

Continuing Education, Land Use/Natural Resources, through University of California Extension Program

Professional Affiliations

Board, Monterey Dunes Natural History Association
Member, Friends of Moss Landing Marine Labs
Member, Association for Environmental Professionals
Member, California Native Plant Society
Member, California Native Grass Association

Registrations/ Certifications

CEQA and NEPA Intensive Workshop Certifications
Fairy and Tadpole Shrimp Identification Class and USFWS Test Certification
PADI Certified SCUBA Diver
U. S. Fish and Wildlife Service Endangered Species Permit No. TE-091857-0, California tiger salamander
California Department of Fish and Game Research Permit for Listed Plant Species No. 04-08-RP – Sand gilia
California Department of Fish and Game Scientific Collection Permit No. CS-007722 – Aquatic invertebrates

Work Experience

Environmental Scientist/Planner/ Project Manager - Denise Duffy & Associates, Inc.

Research Assistant - Monterey Bay National Marine Sanctuary

With over 8 years at DD&A, Ms. Harwayne has managed and prepared numerous environmental documents in compliance with CEQA and NEPA for a wide variety of projects involving water resources, education, natural resources, public works, and transportation. She has experience preparing all types and levels of environmental documents, including:

- Initial Studies/Mitigated Negative Declarations (IS/MND)
- Environmental Assessments/Finding of No Significant Impact (EA/FONSI)
- Environmental Impact Reports (EIR)
- Environmental Impact Statements (EIS)
- Biological Assessments (BA)
- Natural Environment Studies (NES)
- Wetland Delineation Reports
- Mitigation Monitoring and Reporting Programs

Integrating her extensive background in ecology with land use planning, Ms. Harwayne utilizes an innovative approach toward solving complex environmental issues. Her technical capabilities include:

- Adeptness in regulatory permitting processes, including Clean Water Act Section 401 and 404, CDFG 1602, federal Endangered Species Act Section 7 and 10 consultation and permit processes, state Endangered Species Act Section 2081 Incidental Take Permits
- Management and preparation of environmental documents in accordance with CEQA and NEPA requirements and local, state, and federal policies and regulations, including the Clean Water Act and the federal and State Endangered Species Act
- Proficiency in conducting biological surveys, including protocol-level surveys for special-status wildlife and plant species such as the San Joaquin kit fox, California tiger salamander, black legless lizard, California red-legged frog, vernal pool crustaceans (fairy and tadpole shrimp), sand gilia, Monterey spineflower, and seaside bird's beak
- Experience in conducting wetland delineations per U.S. Army Corps of Engineers and Coastal Act criteria
- Service as the environmental consultant for California State University, Monterey Bay, managing the 2007 Master Plan EIR process and ongoing specific campus projects
- Excellent communication and presentation skills
- Skill in technical writing and editing
- Expertise in preparing scopes, managing subconsultants, and keeping projects within established budgets and timeframes

Section 10 and Section 7 Projects:

- *Santa Lucia Preserve Habitat Conservation Plan EA, Rancho San Carlos Partnerships and the U.S. Fish and Wildlife Service*
- *Fort Ord Habitat Conservation Plan EIR and EIS, Fort Ord Reuse Authority and the U.S. Fish and Wildlife Service*

Educational Facility Projects:

- *North Quad Student Housing IS/MND, CSUMB*
- *Outdoor Pool IS/MND, CSUMB*
- *Master Plan EIR, CSUMB*
- *North Campus Housing EIR, CSUMB*
- *Land Exchange Addendum to Master Plan EIR, CSUMB*

- *Environmental Analysis for CSUMB's Master Plan Near-Term Projects: Building Demolition Pilot Project, Library Project, Visitor's Center Project, Sports Complex Project, Co-Generation Plant, and Telecommunications Infrastructure Upgrade Project*

Biological and Wetland Assessment Projects:

- *Regional Water Augmentation EIR, MCWD*
- *Marina Station EIR, City of Marina*
- *Seaside Main Gate EIR, City of Seaside*
- *LaTourette Subdivision EIR, County of Monterey*
- *The First Tee EIR, City of Seaside*
- *Urban Service Area Amendment EIR, City of Gilroy*
- *General Plan Update EIR, City of Gilroy*
- *Regency Center EIR, City of Gilroy*
- *KPIG Generator Project, Mapleton Communications*
- *Chili's Restaurant IS/MND – Biological Report and Wetland Delineation, City of Seaside*
- *Biological Assessment for General Plan Update, City of Monterey*
- *Snowcreek Biological Assessment Town of Mammoth Lakes, Chadmar, Inc.*
- *Bay Avenue Outfall IS/MND, City of Seaside*
- *Laguna Seca Raceway Ticket Booth EA/IS, U.S. Army Corps of Engineers and Monterey County Parks*
- *Arroyo Seco Road Guardrail NES, Monterey County Department of Public Works*
- *Thorne Road Bridge NES, Monterey County Department of Public Works*
- *Highway 25 Safety Improvement NES, Caltrans District 4*

Water Resources Projects:

- *Storm Drain Improvements Project IS/MND, City of Carmel-by-the-Sea*
- *Tank Design and Improvements Project EA/IS, MCWD*
- *Water Master Plan EIR, MCWD*
- *Castroville Storm Drain Master Plan Improvements Project, Monterey County Department of Public Works*
- *Pond A-4 Sediment Storage Environmental Analysis, Santa Clara* Valley *Water District*

Permitting and Condition Compliance Monitoring Projects:

- *Marina Heights CDFG Incidental Take Permit, Chadmar, Inc.*
- *Bridge Improvement Projects, San Benito County Department of Public Works*
- *Highway 25 Safety Improvement Project, San Benito COG*
- *Bayer Tank Demolition and Intertie Project, MCWD*
- *Endangered Species Act Educational Workshop, MCWD*

Linear Projects:

- *Uvas Creek Park Preserve Trail Improvements IS/MND, City of Gilroy*
- *Carmel Valley Class I Bicycle Trail IS/MND, Monterey County Department of Public Works*
- *Carmel Valley Road Improvements IS/MND, Monterey County Department of Public Works*

CEQA ADDENDUM

Attachment 7

Noise

GEORGE E. LEIGHTON

CONSULTANT, NOISE CONTROL

ACOUSTICAL ANALYSIS REPORT #1136

for

THE SANDPIPER RESIDENTIAL PROJECT

at

HOLLISTER AV., GOLETA, CA

Prepared for

DAN MCGREGOR, EXEC. V.P.

THE CHADMAR GROUP

COSTA MESA, CA

Prepared by

George E. Leighton

George E. Leighton

Certified Acoustical Consultant

11-20-01

1307-A SOUTH EUCLID STREET · ANAHEIM, CA 92802 · (714) 535-8648 FAX (714) 535-8649 (800) 570-3666

CONTENTS

FOREWORD

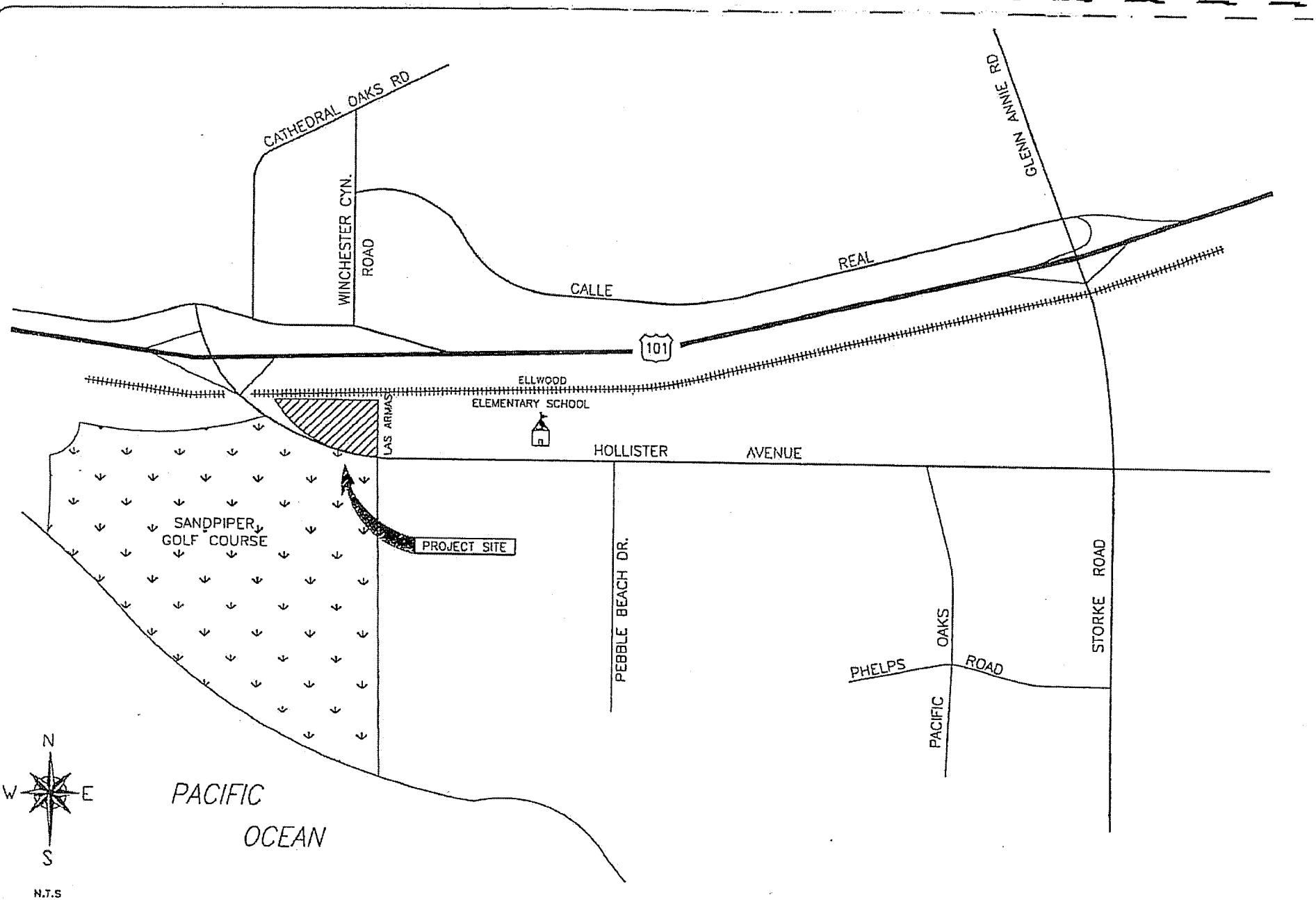
This report was prepared for Dan McGregor, Exec. V.P. The Chadmar Group, Costa Mesa, California.

Its purpose is to cover the acoustical analysis of The Sandpiper Residential Project at Hollister Ave., Goleta, CA.

On-site noise surveys were made to determine the exterior noise environment and mitigation measures (sound walls) required to reduce noise levels where required to meet the levels specified for outside recreational areas (65 CNEL).

Interior noise levels were computer calculated to assure that construction was adequate to exclude exterior noise and meet interior noise levels (45 CNEL).

In addition, multi-unit building plans were examined to ensure that party walls and floor/ceiling assemblies separating adjacent units meet Title 24 STC-50 and IIC-50 requirements.



N.T.S

ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING STREET NETWORK/SITE LOCATION

FIGURE

SANDPIPER PROJECT - NOISE SURVEY ANALYSIS
EXTERIOR NOISE ENVIRONMENT

Summary

On 11-15-01, two noise surveys were made on the site of the Sandpiper Residential project:

1. 24 Hour Continuous Survey This included:
   a. Train noise
   b. Highway 101 traffic noise
   c. Aircraft noise (negligible).

2. Short Term Average Highway 101 Noise Levels (Leq) at various locations on the site along the northern property line adjacent to the railway. In addition, locations along Hollister Ave. and the east and west boundaries were included.

Conclusions

Six-foot high noise barrier walls are needed along portions of the northerly property line parallel to the railway. These will reduce the noise levels below 65 CNEL in the outdoor areas. These wall locations are shown on the following map. The most critical project locations are along the northern boundary which will be reduced below 65 CNEL.

NORTHERLY BOUNDARY CNEL

	No Wall		6'Wall 1st Fl		6' Wall 2nd Fl	
24 Hr Survey	Existing	Future	Existing	Future	Existing	Future
Hwy 101 CNEL	66.6	67.6	61.2	62.2	66.6	67.6
Train CNEL	68.4	68.4	59.4	59.4	63.4	63.4
Total	70.6	71.0	63.4	64.0	68.3	69.0

SOUTHERLY BOUNDARY CNEL

Location	Face of Home		Recreation Area	
Hollister Ave.	63.5	65.5	58.8	60.8

NOTES

- 24-hr Survey

  This enables us to isolate the train passbys. The data also correlates with an earlier Wylie report (data att) of locomotive passby noise.

  The Leq also correlates with Leq measured at the site below (60.1 vs 59).

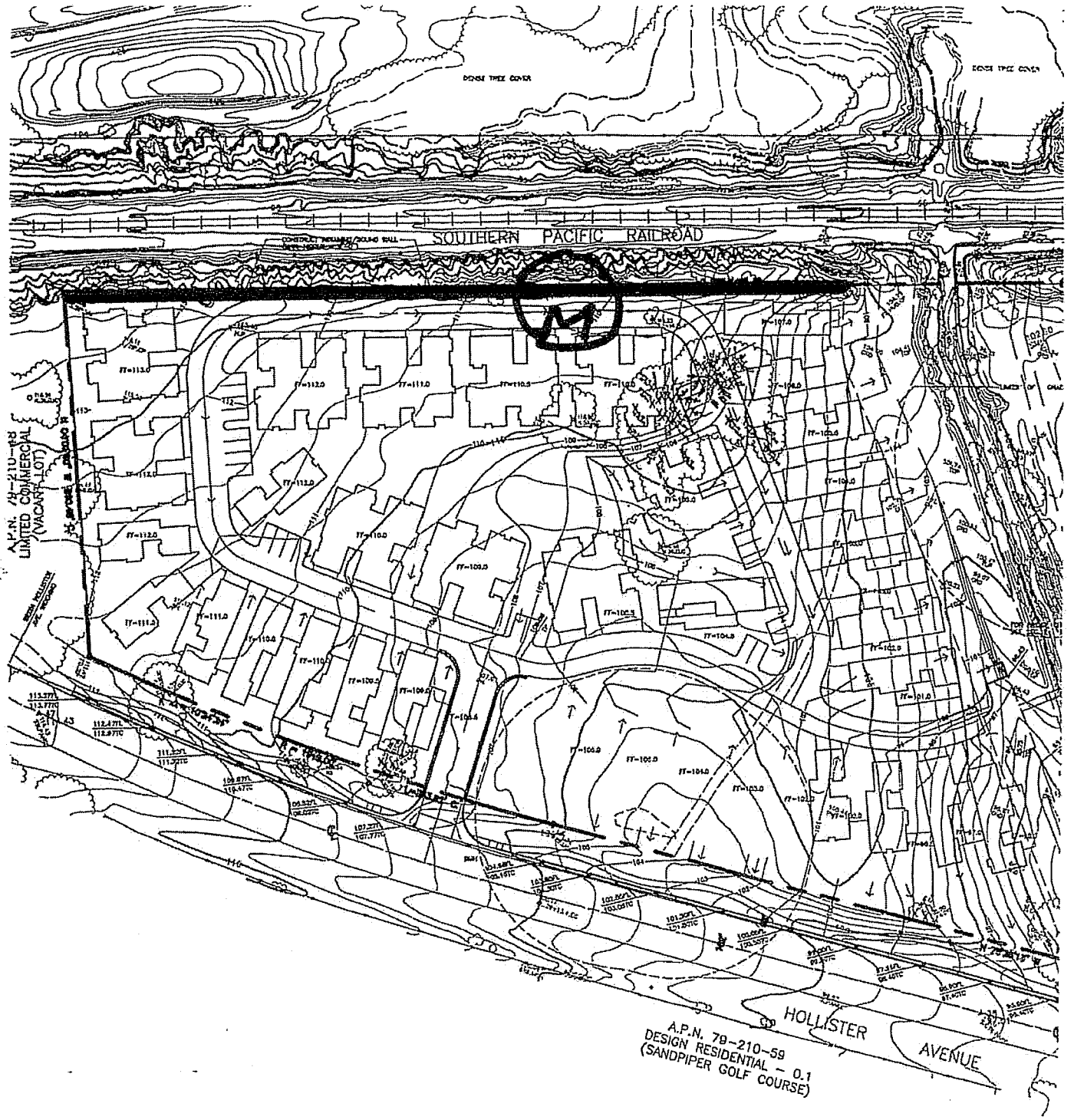
  In summary, the data measured, correlates with other on-site & historical data, giving us confidence that we have valid data.

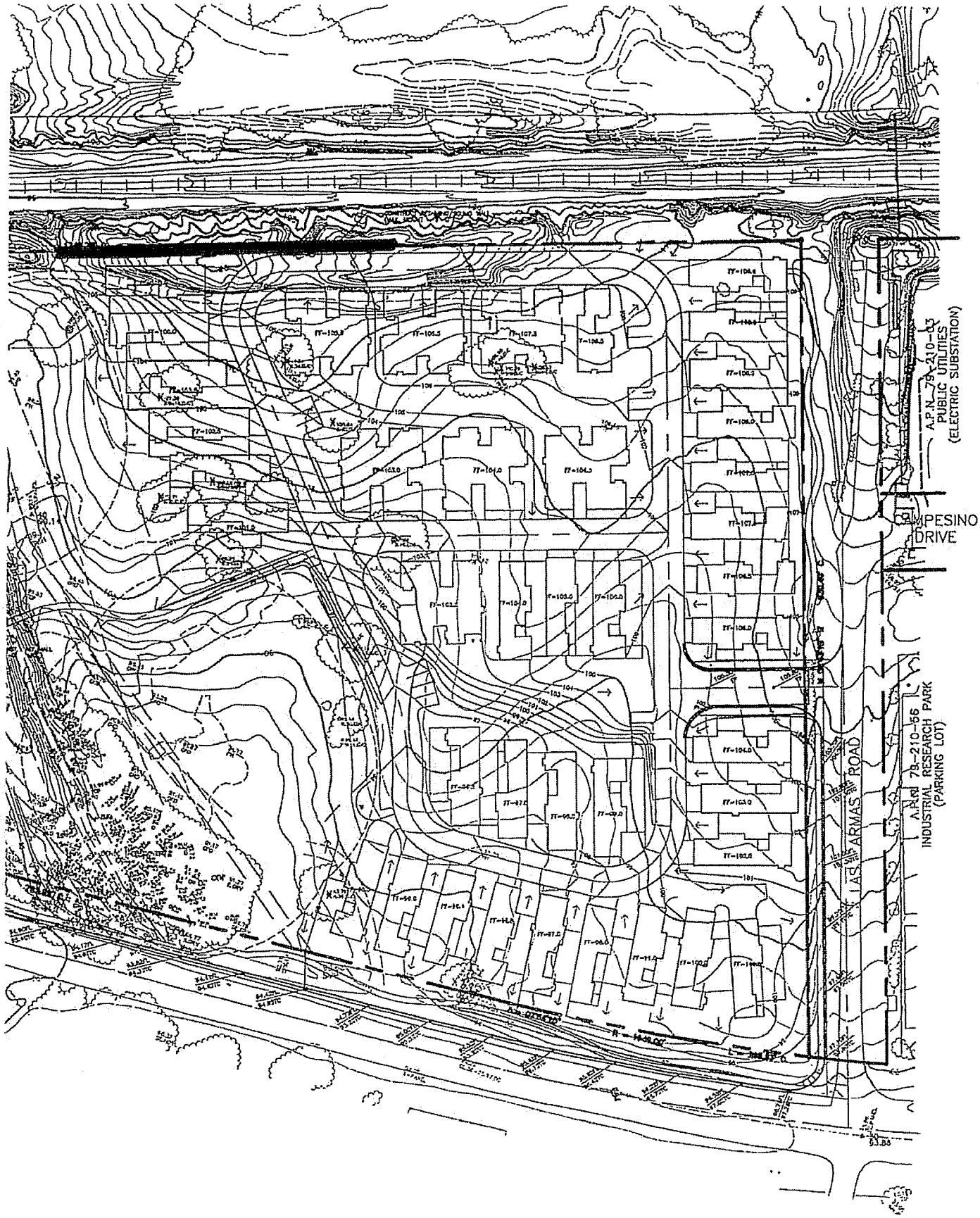
- Short Term Leq data

  As noted above, the readings in this portion of the study are accurate and are used to locate the noise barrier walls and are used to calculate the CNEL's both exterior and interior.

- Santa Barbara Airport

  The Sandpiper project is outside the 60 CNEL contour of the airport. It is 3 miles from the threshold of ILS Runway 7. At a 3° glideslope, on the ILS approach, aircraft are at 830' above the project at low power levels - hence the low noise levels.


DENSE TREE COVER
SOUTHERN PACIFIC RAILROAD
A.P.N. 79-210-58
LIMITED COMMERCIAL
(VACANT LOT)
A.P.N. 79-210-59
DESIGN RESIDENTIAL - 0.1
(SANDPIPER GOLF COURSE)
HOLLISTER
AVENUE



6' NOISE BARRIER WALLS

3b

SANDPIPER PROJECT
TITLE 24 & UBC ACOUSTICAL REQUIREMENTS

Four requirements have to be met.

1. 65 CNEL Outside Living Areas

   Use of 6' noise barrier walls assure that this requirement is met.

2. 45 CNEL Interior Noise Limits

   Interior noise was computer modeled. (Appendix 2). Using the data for exterior CNEL and noise spectrum coupled with published and empirically derived transmission loss (noise barrier properties) for exterior wall assemblies, interior noise spectra for the 2nd floor bedroom was determined. This was modified by the room constant (computer calculated) to determine the interior noise levels in dBA.

   The worst case analysis is made. The 2nd floor rooms along the northern property line (railroad side) have the highest exterior noise levels, hence the worst exterior noise environment. Good quality dual pane, doors and windows with DS glass will meet this requirement.

3. Party Walls - STC 50 Min

   The double-stud walls with double R-11 insulation and 5/8" Type X gyp board on each side provides STC-57 performance.

4. Floor/Ceiling Assemblies - STC-50, IIC-50

   The TJI web beam with 3/4" subfloor, 1 1/2" light weight concrete, R-11 insulation, and 2 layers of 5/8" gyp board on RC-1 channels will meet the above requirements, providing STC-58 and IIC-50 performance.

NOTE

Vinyl tile, cushioned vinyl or a resilient underlayment used with a hard tile (ceramic or equivalent) is required to meet the IIC-50.

Summary

With the special items listed above, the building plans dated 08 October 01 meet the required acoustical performance.

OTHER CONSIDERATIONS

- Project Machinery, Fixed

  This would be air conditioning heat exchangers. Typically at 60-65 dBA at 10' would result in 20 dBA at the school site, 1/3 miles to the east. This would be inaudible to anyone, against an expected 45 dBA ambient noise level.

- New Freeway 101 (Cathedral Oaks) Overpass

  Although there is no definitive design data, assuming the following data:

  1. Distance 350' from project
  2. 6,000 ADT
  3. 30 MPH
  4. No barriers

  Expect a 48 CNEL at the Sandpiper project. This would not be a significant impact.

- Construction Noise

  Once the construction schedule and equipment list is released we can proceed with noise calculations and mitigation measures to meet the noise standards at the school 1/3 mile to the east.

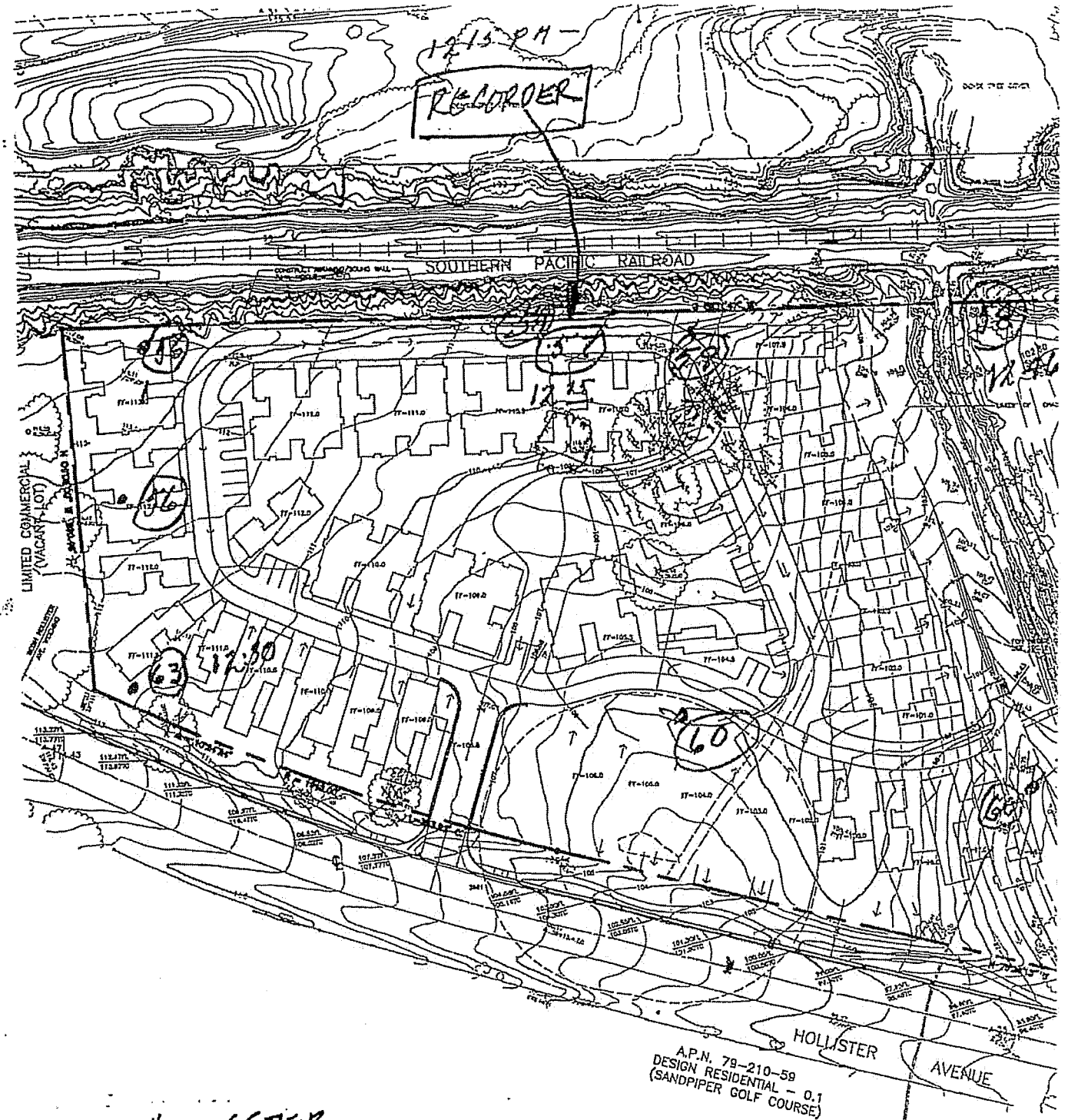
  In the interim we can expect that at the minimum special "Hospital-type mufflers and intake filter-silencers will be specified for all diesel engines, and temporary noise barrier walls will be specified as appropriate. In addition, construction can be scheduled to avoid noise-sensitive hours.

  Where required, additional measures can be undertaken such as temporary engine enclosures, and acoustic materials can be applied where necessary.

  With the application of acoustic materials and products as indicated, coupled with special scheduling of noisy activities, construction noise can be controlled to meet the local noise ordinance limits.

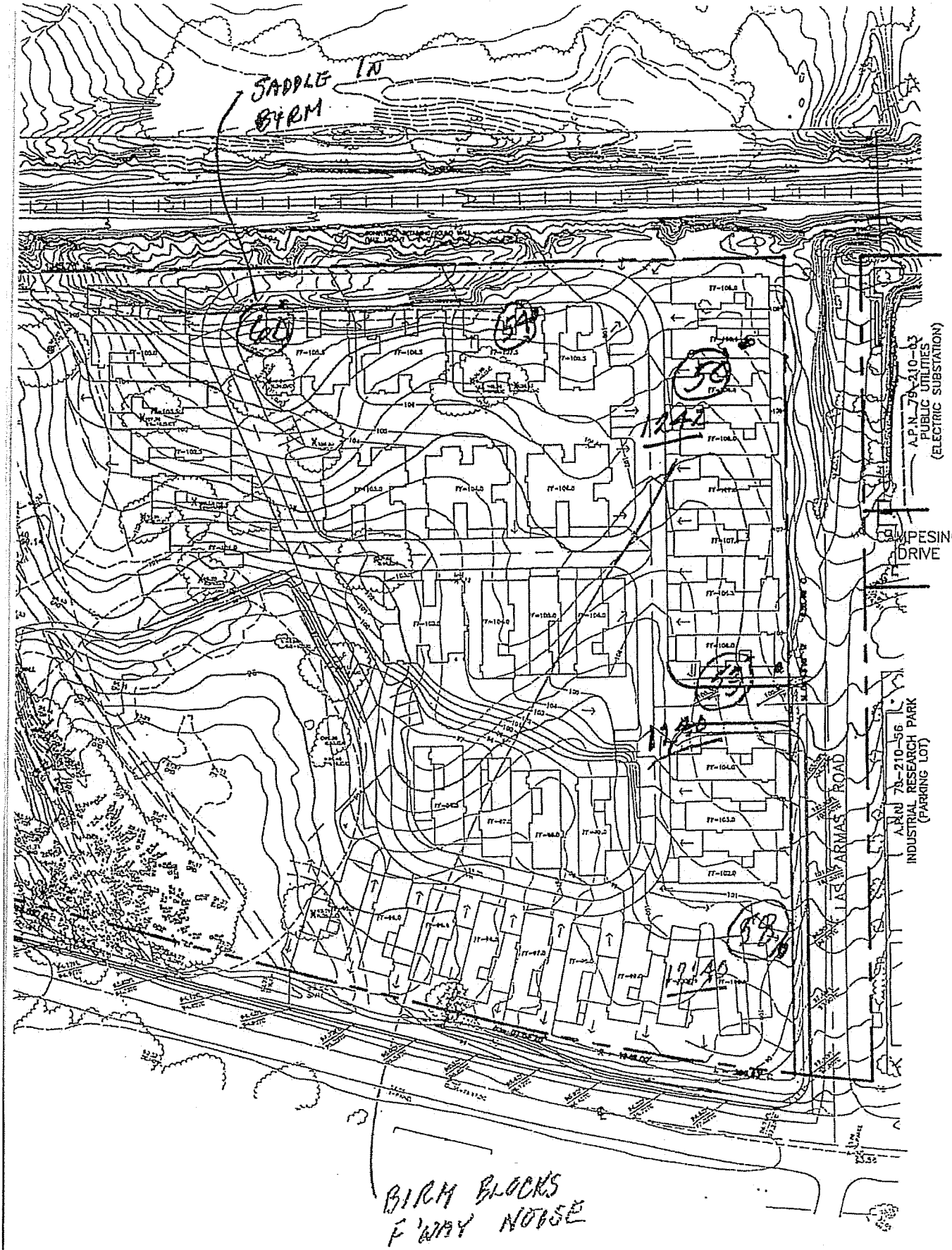
APPENDIX

1. George E. Leighton, Consulting Services
2. Noise Survey Data
3. Calculations - Computer Modeling
4. Brochure: National Council of Acoustical Consultants



HOLLISTER
SPEED LIMIT 45

NOTE: NORTHBOUND FREIGHT
30-40 CARS EXPECTED
PASSING 2:00



11-15-01 Leg SITE SURVEY

HOURLY DATA
CHDMAR PROJECT
SANTA BARBARA

Date	Day	Hour	Leq	Lmin	Lmax	L(1)	L(10)	L(25)	L(50)	L(90)	L(99)
1-15-01	Thursday	1	--	--	--	--	--	--	--	--	--
		2	--	--	--	--	--	--	--	--	--
		3	--	--	--	--	--	--	--	--	--
		4	--	--	--	--	--	--	--	--	--
		5	--	--	--	--	--	--	--	--	--
		6	--	--	--	--	--	--	--	--	--
		7	--	--	--	--	--	--	--	--	--
		8	--	--	--	--	--	--	--	--	--
		9	--	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--	--
		11	--	--	--	--	--	--	--	--	--
		12	--	--	--	--	--	--	--	--	--
		13	60.1	46.7	84.7	66.6	63.0	60.9	58.8	54.1	49.2
		14	63.0	47.5	89.0	67.8	63.0	61.2	59.1	54.2	50.0
		15	68.7	48.6	94.4	81.6	63.7	61.9	59.8	55.4	51.8
		16	60.9	49.9	71.6	66.5	63.5	61.9	60.2	56.6	53.2
		17	62.0	50.0	73.3	67.7	64.6	62.9	61.2	58.1	55.0
		18	62.2	53.9	72.1	66.9	64.4	63.1	61.6	58.7	56.1
		19	63.5	52.7	91.7	67.3	64.2	62.7	61.0	58.0	55.5
		20	60.6	50.5	69.4	66.4	63.4	61.6	59.7	56.1	53.1
		21	62.2	49.0	85.9	68.0	63.4	61.3	59.0	55.2	52.1
		22	60.4	49.7	74.1	67.5	63.3	61.2	58.8	54.3	51.5
		23	59.1	43.4	77.1	65.8	62.2	59.9	57.3	52.5	46.7
		24	57.2	40.1	68.8	65.0	61.0	58.2	54.8	48.3	43.6
1-16-01	Friday	1	55.7	35.8	71.2	64.6	59.4	56.3	52.6	43.9	39.0
		2	70.4	34.8	97.2	84.0	59.3	55.3	50.9	42.5	36.7
		3	54.6	32.8	69.8	64.3	58.7	54.7	50.3	37.8	34.8
		4	55.3	35.0	73.0	64.4	59.3	55.6	51.1	41.4	36.5
		5	56.0	37.3	69.8	64.5	59.8	57.2	53.1	45.2	39.1
		6	67.9	44.6	89.6	82.8	62.0	59.8	57.1	51.4	47.7
		7	61.8	49.9	74.8	66.5	64.5	63.1	61.2	56.8	52.6
		8	63.7	51.3	72.2	68.5	66.0	64.8	63.2	59.6	56.1
		9	63.6	51.8	89.2	67.3	64.9	63.4	61.5	57.7	54.2
		10	60.9	47.1	75.0	66.9	63.8	61.9	59.8	54.9	50.3
		11	60.4	45.8	82.0	66.7	63.1	61.2	58.9	53.8	49.2
CNEL 70.2	LDN 70.1	12	60.8	46.2	76.4	67.8	63.4	61.6	59.6	54.9	50.4
		13	61.2	46.0	72.5	67.4	64.0	62.2	60.2	56.0	51.2
		14	--	--	--	--	--	--	--	--	--
		15	--	--	--	--	--	--	--	--	--
		16	--	--	--	--	--	--	--	--	--
		17	--	--	--	--	--	--	--	--	--
		18	--	--	--	--	--	--	--	--	--
		19	--	--	--	--	--	--	--	--	--
		20	--	--	--	--	--	--	--	--	--
		21	--	--	--	--	--	--	--	--	--
		22	--	--	--	--	--	--	--	--	--
		23	--	--	--	--	--	--	--	--	--
CNEL 70.2	LDN 70.1	24	--	--	--	--	--	--	--	--	--

USING CALIFORNIA NOISE EMISSION LEVELS

Distributions: Interstate 15 - Lake Elsinore - 1987 (JPC)

	Automobiles	Medium Trucks	Heavy Trucks
Day	72.631	8.353	14.015
Evening	2.294	0.264	0.443
Night	1.529	0.176	0.295

Average Daily Traffic: 35,453

Speeds:	Automobiles:	65.0 MPH	104.6 KPH
	Medium Trucks:	65.0 MPH	104.6 KPH
	Heavy Trucks:	65.0 MPH	104.6 KPH
Lanes:	Number of Lanes:	4	
	Lane Width:	12.0 ft.	3.66 meters
	Median Width:	20.0 ft.	6.10 meters
Site:	Soft		
Barrier:	None		
Distance from Center of Near Lane to Receiver:		300.0 ft.	91.44 meters
Angle:	Left Limit:	-90.0 degrees	-1.57 radians
	Right Limit:	90.0 degrees	1.57 radians

	Cars	Medium Trucks	Heavy Trucks	TOTAL
Day	61.9	53.0	54.7	63.1
Evening	58.5	49.6	51.3	59.7
Night	56.0	47.1	48.8	57.2
CNEL	64.0	55.2	56.9	65.2
LDN	63.7	54.8	56.5	64.9

NOISE CALCS @ MONITORING LOCATION

FHWA MODEL ~ CALIBRATION FOR ON-SITE SURVEY, 65.2 VS 65.5

P 1 OF 3

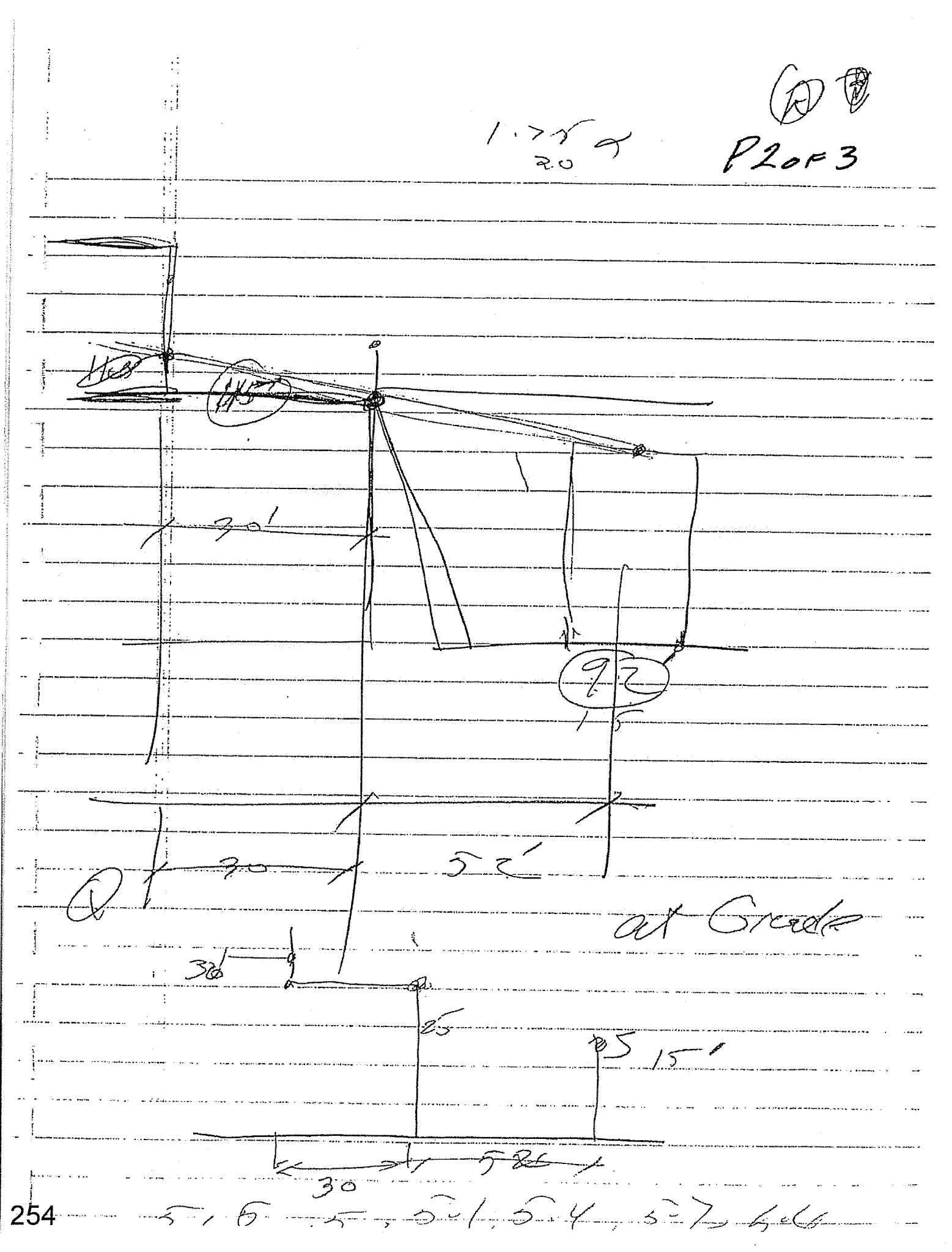
Source Height (in ft.): 15.0
Barrier Height (in ft.): 31.0
Receiver Height (in ft.): 30.0
Distance from Source to Barrier (in ft.): 52.0
Distance from Receiver to Barrier (in ft.): 30.0

Octave Band Center Frequency							
60	120	240	360	480	2000	4000	8000
6.8	8.1	10.1	11.6	12.7	18.7	21.8	24.0

Source Height (in ft.): 15.0
Barrier Height (in ft.): 31.0
Receiver Height (in ft.): 40.0
Distance from Source to Barrier (in ft.): 52.0
Distance from Receiver to Barrier (in ft.): 30.0

Octave Band Center Frequency							
60	120	240	360	480	2000	4000	8000
5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.1

RAILROAD NOISE REDUCTION ~ 6' WALL
- 1ST FLOOR
- 2ND FLOOR


30'
52'
at Grade
36'
25'
15'
30

Date: 11-18-2001

FHWA Traffic Noise Prediction Model

USING CALIFORNIA NOISE EMISSION LEVELS

Distributions: Orange County Arterials - 1985 (GEM)

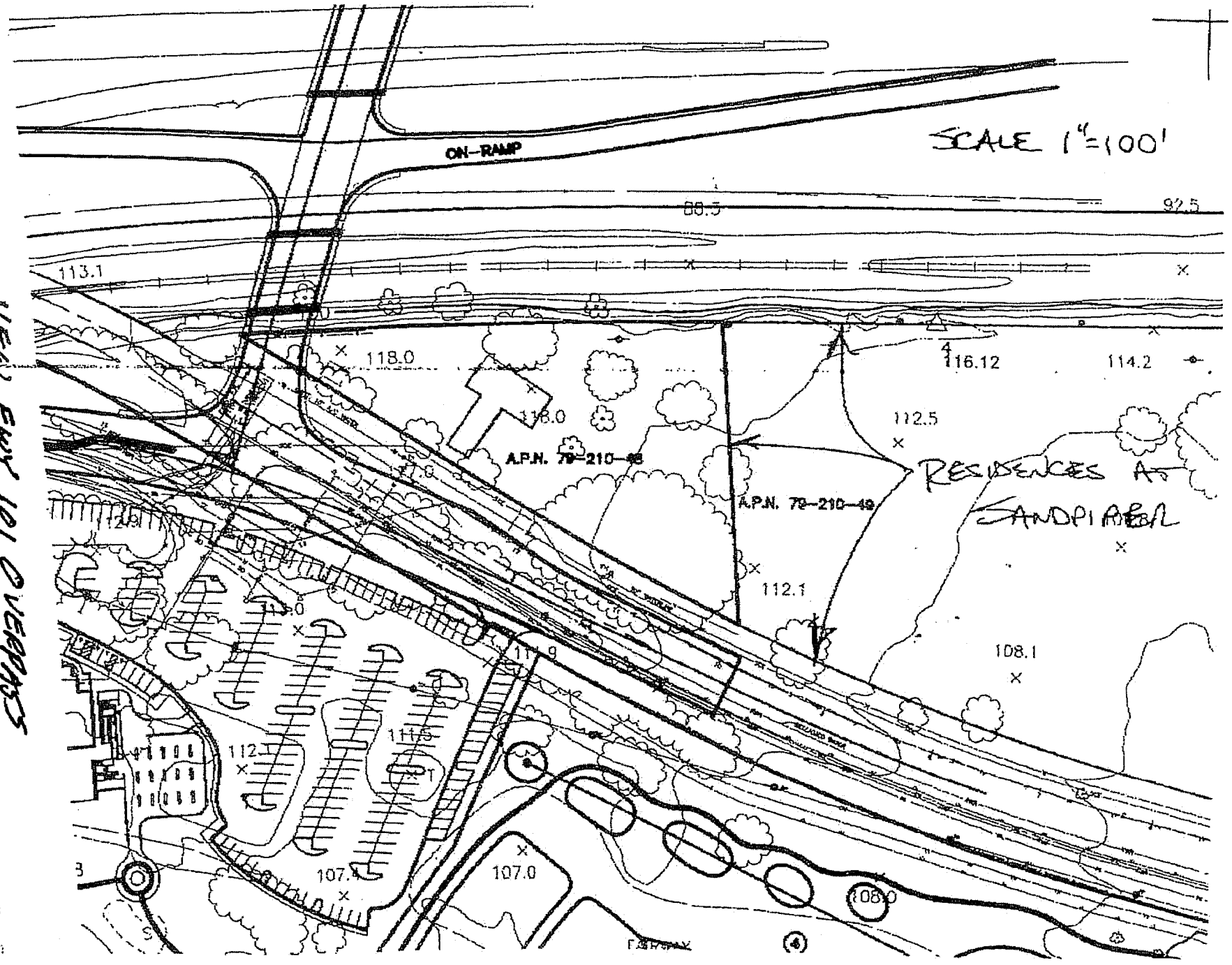
	Automobiles	Medium Trucks	Heavy Trucks
Day	72.965	13.125	11.342
Evening	1.509	0.094	0.231
Night	0.616	0.021	0.097

Average Daily Traffic: 6,117

Speeds:	Automobiles:	30.0 MPH	48.3 KPH
	Medium Trucks:	30.0 MPH	48.3 KPH
	Heavy Trucks:	30.0 MPH	48.3 KPH
Lanes:	Number of Lanes:	2	
	Lane Width:	12.0 ft.	3.66 meters
	Median Width:	0.0 ft.	0.00 meters
Site:	Soft		
Barrier:	None		
Distance from Center of Near Lane to Receiver:		350.0 ft.	106.68 meters
Angle:	Left Limit:	-90.0 degrees	-1.57 radians
	Right Limit:	90.0 degrees	1.57 radians

	Cars	Medium Trucks	Heavy Trucks	TOTAL
Day	44.0	37.7	41.0	46.4
Evening	42.6	31.7	32.3	43.3
Night	37.2	30.8	34.2	39.6
CNEL	45.9	39.1	42.3	48.1
LDN	45.4	38.9	42.1	47.7

NEW OVERPASS ~ WEST OF PROJECT


SCALE 1"=100'
ON-RAMP
88.5
92.5
113.1
118.0
116.12
114.2
118.0
112.5
A.P.N. 79-210-48
A.P.N. 79-210-49
RESIDENCES AT
SANDPIPER
112.1
108.1
111.0
111.9
112
111.5
107.4
107.0
108.0
NEW FWY 101 OVERPASS

P 1 of 3

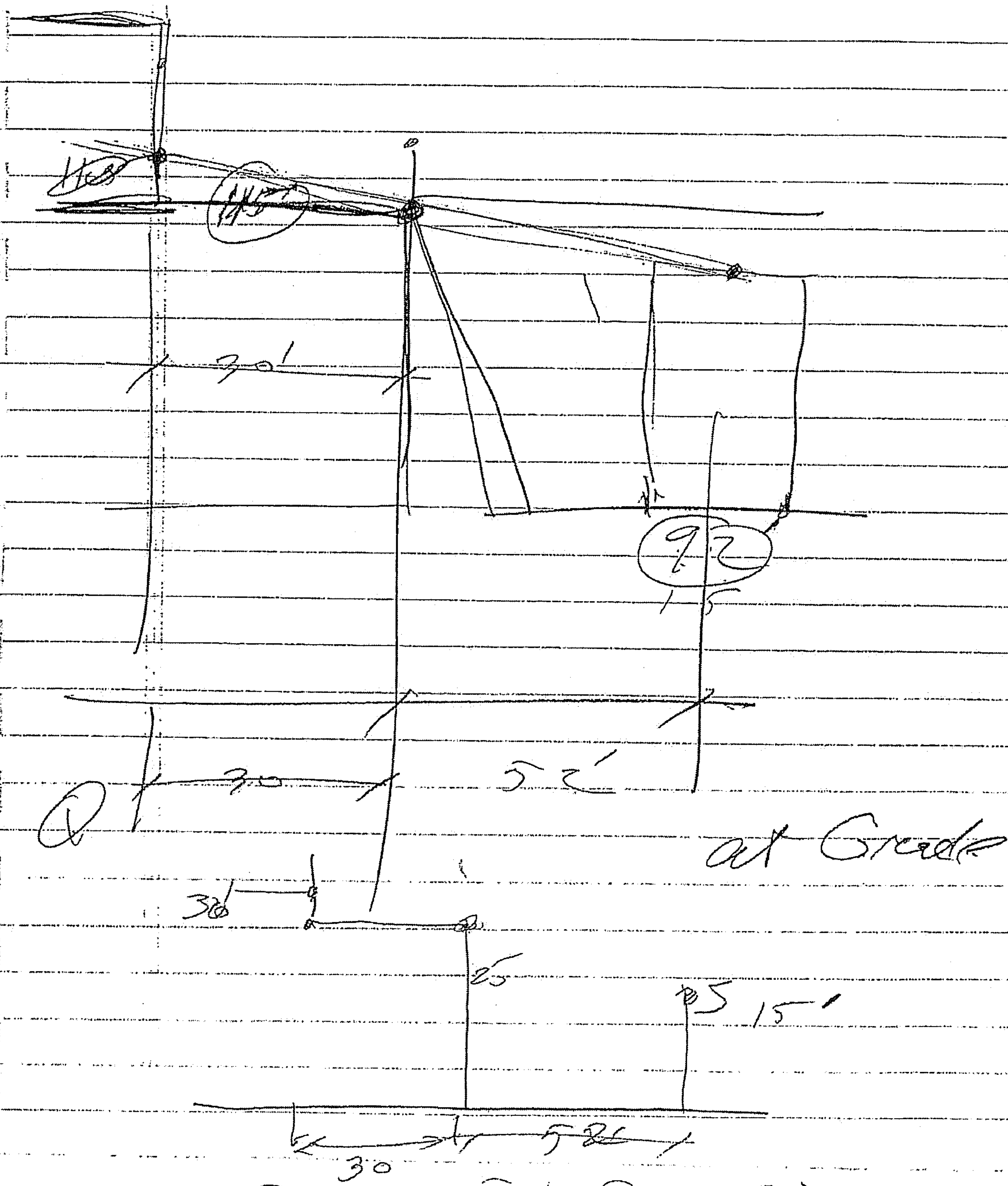
Source Height (in ft.): 15.0
Barrier Height (in ft.): 31.0
Receiver Height (in ft.): 30.0
Distance from Source to Barrier (in ft.): 52.0
Distance from Receiver to Barrier (in ft.): 30.0

Octave Band Center Frequency							
60	120	240	360	480	2000	4000	8000
6.8	8.1	10.1	11.6	12.7	18.7	21.8	24.0

Source Height (in ft.): 15.0
Barrier Height (in ft.): 31.0
Receiver Height (in ft.): 40.0
Distance from Source to Barrier (in ft.): 52.0
Distance from Receiver to Barrier (in ft.): 30.0

Octave Band Center Frequency							
60	120	240	360	480	2000	4000	8000
5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.1

RAILROAD NOISE REDUCTION ~ 6' WALL
- 1ST FLOOR
- 2ND FLOOR


30'
52'
at Grade
30
25
15'
30

B

P 3 OF 3

(2) w/ Box Ball ...

7 8 10 12 13 19 32 24

(3) w/ Box ...

BARRIER ATTENUATION

Source Height (in ft.): 15.0
Barrier Height (in ft.): 25.0
Receiver Height (in ft.): 30.0
Distance from Source to Barrier (in ft.): 52.0
Distance from Receiver to Barrier (in ft.): 30.0

Octave Band Center Frequency							
60	120	240	360	480	2000	4000	8000
5.0	5.0	5.0	5.1	5.1	5.4	5.7	6.4

NOISE REDUCTION ~ W/ BERM
& NO WALL ~ RAILROAD

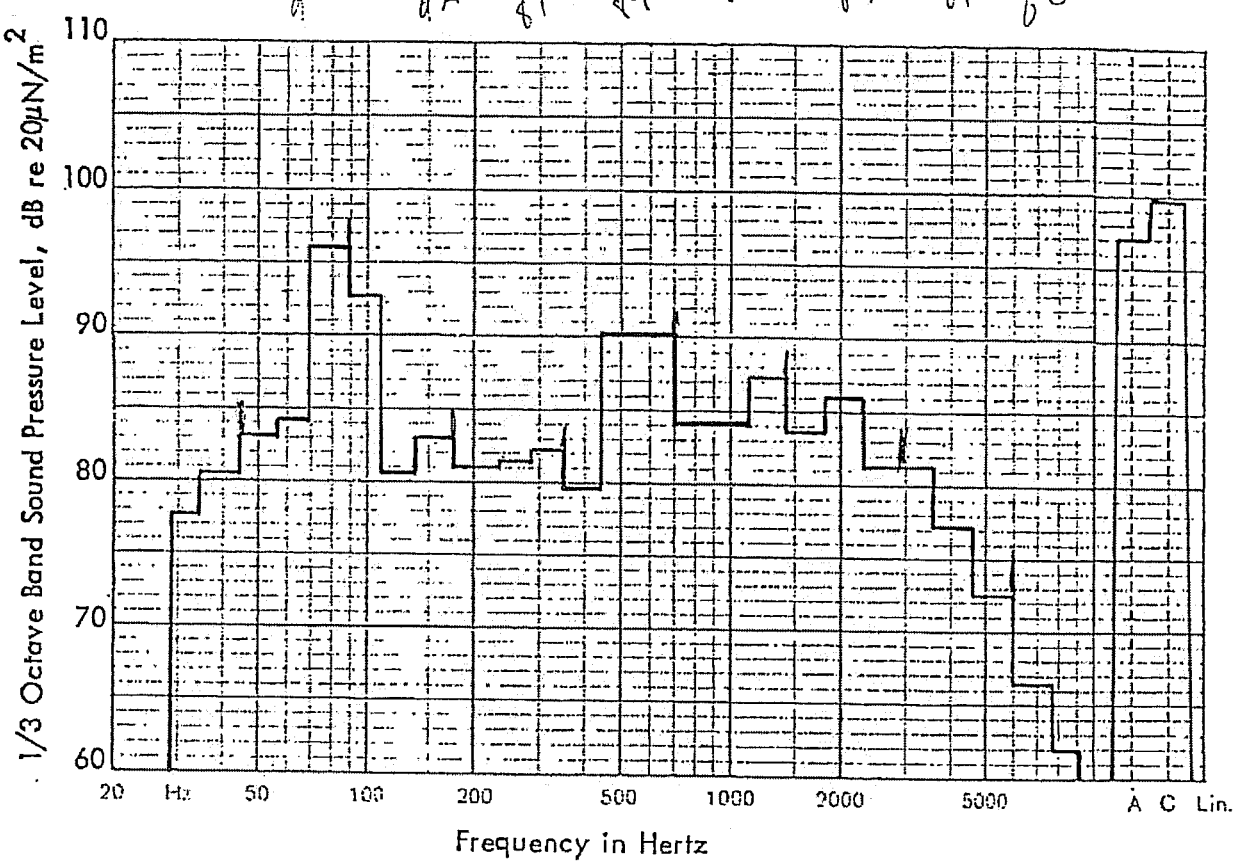


Figure 3.2-9. Spectrum of Noise Emitted by a Diesel-Electric Locomotive Operating Over Level Grade (0% Grade at 58 mph, Measurements at 50 Feet).

Date: 11-18-2001 FHWA Traffic Noise Prediction Model (1)

USING CALIFORNIA NOISE EMISSION LEVELS ~ HOLLISTER AV

Distributions: Orange County Arterials - 1985 (GEM)

	Automobiles	Medium Trucks	Heavy Trucks
Day	72.965	13.125	11.342
Evening	1.509	0.094	0.231
Night	0.616	0.021	0.097

Average Daily Traffic: 5,800 (include the H. Truck)

Speeds:	Automobiles:	45.0 MPH	72.4 KPH
	Medium Trucks:	45.0 MPH	72.4 KPH
	Heavy Trucks:	45.0 MPH	72.4 KPH
Lanes:	Number of Lanes:	2	
	Lane Width:	12.0 ft.	3.66 meters
	Median Width:	0.0 ft.	0.00 meters
Site:	Soft		
Barrier:	None		
	Distance from Center of Near Lane to Receiver:	50.0 ft.	15.24 meters
Angle:	Left Limit:	-90.0 degrees	-1.57 radians
	Right Limit:	90.0 degrees	1.57 radians

	Cars	Medium Trucks	Heavy Trucks	TOTAL
Day	60.9	52.3	53.0	62.1
Evening	59.5	46.3	44.3	59.8
Night	54.1	45.4	46.2	55.2
CNEL	62.9	53.7	54.2	63.9
LDN	62.3	53.5	54.1	63.4

Calib for Hollister
Day time (car + M. Trucks)
60.9 + 52.3 = 61.5 calcd
Ave 60+60+63 = 61 Ave. 66 - 5 = (61)
Fast 62.9 + 53.7 = 63.0 ... Future

Date: 11-18-2001

FHWA Traffic Noise Prediction Model

SING CALIFORNIA NOISE EMISSION LEVELS

Distributions: Orange County Arterials - 1985 (GEM)

	Automobiles	Medium Trucks	Heavy Trucks
Day	72.965	13.125	11.342
Evening	1.509	0.094	0.231
Night	0.616	0.021	0.097

Average Daily Traffic: 5,800

Speeds:	Automobiles:	45.0 MPH	72.4 KPH
	Medium Trucks:	45.0 MPH	72.4 KPH
	Heavy Trucks:	45.0 MPH	72.4 KPH
Lanes:	Number of Lanes:	2	
	Lane Width:	12.0 ft.	3.66 meters
	Median Width:	0.0 ft.	0.00 meters
Site:	Hard		
Barrier:	None		
Distance from Center of Near Lane to Receiver:		72.0 ft.	21.95 meters
Angle:	Left Limit:	-90.0 degrees	-1.57 radians
	Right Limit:	90.0 degrees	1.57 radians

	Cars	Medium Trucks	Heavy Trucks	TOTAL
Day	60.9	52.4	53.0	62.1
Evening	59.5	46.3	44.3	59.8
Night	54.1	45.5	46.2	55.2
CNEL	62.9	53.7	54.2	63.9
LDN	62.3	53.5	54.1	63.4

Date: 11-18-2001

FHWA Traffic Noise Prediction Model

Page: 3 of 3

3

SING CALIFORNIA NOISE EMISSION LEVELS

Distributions: Orange County Arterials - 1985 (GEM)

	Automobiles	Medium Trucks	Heavy Trucks
Day	72.965	13.125	11.342
Evening	1.509	0.094	0.231
Night	0.616	0.021	0.097

Average Daily Traffic: 5,800

Speeds:	Automobiles:	45.0 MPH	72.4 KPH
	Medium Trucks:	45.0 MPH	72.4 KPH
	Heavy Trucks:	45.0 MPH	72.4 KPH
Lanes:	Number of Lanes:	2	
	Lane Width:	12.0 ft.	3.66 meters
	Median Width:	0.0 ft.	0.00 meters
Site:	Hard		
Barrier:	Wall		
	Height of Receiver:	5.0 ft.	1.52 meters
	Height of Barrier:	6.0 ft.	1.83 meters
	Height of Pavement:	0.0 ft.	0.00 meters
	Distance from Center of Near Lane to Barrier:	60.0 ft.	18.29 meters
	Distance from Barrier to Receiver:	12.0 ft.	3.66 meters
Angle:	Left Limit:	-90.0 degrees	-1.57 radians
	Right Limit:	90.0 degrees	1.57 radians

	Cars	Medium Trucks	Heavy Trucks	TOTAL
Day	54.5	46.4	47.8	55.9
Evening	53.1	40.3	39.2	53.5
Night	47.7	39.5	41.0	49.0
CNEL	56.4	47.7	49.1	57.6
LDN	55.9	47.5	49.0	57.2

Hollister @ w/ wall

A re no wall -63 dB

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	20-Oct-08
LOCATION:	NORTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	YEAR 2020		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		510.9
DIST WALL	80		MED TRUCK SLE DIST		510.6
DIST W/OB	440		HVY TRUCK SLE DIST		510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	1	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	116.0	AUTOMOBILES =	116.00		
ROAD	116.0	MEDIUM TRUCKS	118.30		
		HEAVY TRUCKS =	124.01		
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	55.4	53.9	47.5	46.0	54.7
HEAVY TRUCKS	58.7	57.3	48.3	49.5	58.0
VEHICULAR NOISE	64.2	62.5	59.0	54.7	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	55.5	53.8	50.2	45.9	54.9

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.2		69.8
LEQ PK HR WITH TOPO OR BARRIER	55.5	*******	68.6
CNEL WITHOUT TOPO AND BARRIER	63.6		69.6
CNEL WITH TOPO AND BARRIER	54.9	*******	68.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	20-Oct-08
LOCATION:	NORTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	YEAR 2020		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		511.0
DIST WALL	80		MED TRUCK SLE DIST		510.8
DIST W/OB	440		HVY TRUCK SLE DIST		518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	1	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	61.7	60.2	53.8	52.3	61.0
HEAVY TRUCKS	64.9	63.5	54.5	55.7	64.2
VEHICULAR NOISE	67.9	66.3	60.7	58.5	67.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	61.0	59.4	53.8	51.6	60.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	67.9		71.2
LEQ PK HR WITH TOPO OR BARRIER	61.0	*******	69.1
CNEL WITHOUT TOPO AND BARRIER	67.2		70.9
CNEL WITH TOPO AND BARRIER	60.3	*******	69.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	20-Oct-08
LOCATION:	NORTH - 1st FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	YEAR 2020		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	510.9
DIST WALL	80			MED TRUCK SLE DIST	510.6
DIST W/OB	440			HVY TRUCK SLE DIST	510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	59.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	1	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	116.0	AUTOMOBILES =	116.00		
ROAD	116.0	MEDIUM TRUCKS	118.30		
		HEAVY TRUCKS =	124.01		
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	55.4	53.9	47.5	46.0	54.7
HEAVY TRUCKS	58.7	57.3	48.3	49.5	58.0
VEHICULAR NOISE	64.2	62.5	59.0	54.7	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	55.5	53.8	50.2	45.9	54.9

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.2		65.5
LEQ PK HR WITH TOPO OR BARRIER	55.5	*******	60.9
CNEL WITHOUT TOPO AND BARRIER	63.6		65.0
CNEL WITH TOPO AND BARRIER	54.9	*******	60.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	20-Oct-08
LOCATION:	NORTH - 2nd FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	YEAR 2020		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		511.0
DIST WALL	80		MED TRUCK SLE DIST		510.8
DIST W/OB	440		HVY TRUCK SLE DIST		518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	63.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	1	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	61.7	60.2	53.8	52.3	61.0
HEAVY TRUCKS	64.9	63.5	54.5	55.7	64.2
VEHICULAR NOISE	67.9	66.3	60.7	58.5	67.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	61.0	59.4	53.8	51.6	60.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	67.9		69.2
LEQ PK HR WITH TOPO OR BARRIER	61.0	*******	65.4
CNEL WITHOUT TOPO AND BARRIER	67.2		68.7
CNEL WITH TOPO AND BARRIER	60.3	*******	65.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	20-Oct-08
LOCATION:	SOUTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	5,870	YEAR 2020		PK HR VOL	587
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	57.5
DIST WALL	60			MED TRUCK SLE DIST	57.3
DIST W/OB	0			HVY TRUCK SLE DIST	57.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	109.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.0	60.1	58.3	52.3	61.5
MEDIUM TRUCKS	55.8	54.2	47.9	46.3	55.0
HEAVY TRUCKS	56.6	55.2	46.1	47.4	55.9
VEHICULAR NOISE	63.8	62.1	58.9	54.3	63.3

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	63.8	62.1	58.9	54.3	63.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	63.8		63.9
LEQ PK HR WITH TOPO OR BARRIER	63.8	*******	63.9
CNEL WITHOUT TOPO AND BARRIER	63.3		63.3
CNEL WITH TOPO AND BARRIER	63.3	*******	63.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	20-Oct-08
LOCATION:	SOUTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	5,870	YEAR 2020		PK HR VOL	587
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	60.3
DIST WALL	60			MED TRUCK SLE DIST	59.6
DIST W/OB	0			HVY TRUCK SLE DIST	58.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS:		(10=HARD SITE, 15=SOFT SITE)		
AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	123.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.7	59.8	58.0	52.0	61.2
MEDIUM TRUCKS	57.1	55.6	49.2	47.7	56.4
HEAVY TRUCKS	58.1	56.6	47.6	48.9	57.3
VEHICULAR NOISE	64.2	62.5	58.9	54.7	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	64.2	62.5	58.9	54.7	63.6

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.2		64.2
LEQ PK HR WITH TOPO OR BARRIER	64.2	*******	64.2
CNEL WITHOUT TOPO AND BARRIER	63.6		63.7
CNEL WITH TOPO AND BARRIER	63.6	*******	63.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	OVERPASS	DATE:	20-Oct-08
LOCATION:	WEST - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,000	YEAR 2020		PK HR VOL	600
SPEED	30				
PK HR %	10				
DIST CTL	300				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	300.0
DIST WALL	300			MED TRUCK SLE DIST	300.0
DIST W/OB	0			HVY TRUCK SLE DIST	300.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS:		(10=HARD SITE, 15=SOFT SITE)		
AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	119.0	AUTOMOBILES =	119.00	
ROAD	119.0	MEDIUM TRUCKS=	121.30	
		HEAVY TRUCKS =	127.01	
GRADE:	2.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	46.4	44.5	42.7	36.6	45.9
MEDIUM TRUCKS	40.9	39.4	33.0	31.4	40.1
HEAVY TRUCKS	43.3	41.9	32.9	34.1	42.6
VEHICULAR NOISE	48.9	47.2	43.5	39.3	48.3

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	48.9	47.2	43.5	39.3	48.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	48.9		50.4
LEQ PK HR WITH TOPO OR BARRIER	48.9	*******	50.4
CNEL WITHOUT TOPO AND BARRIER	48.3		50.0
CNEL WITH TOPO AND BARRIER	48.3	*******	50.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	OVERPASS	DATE:	20-Oct-08
LOCATION:	WEST - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,000	YEAR 2020		PK HR VOL	600
SPEED	30				
PK HR %	10				
DIST CTL	300				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	300.5
DIST WALL	300			MED TRUCK SLE DIST	300.4
DIST W/OB	0			HVY TRUCK SLE DIST	300.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS:		(10=HARD SITE, 15=SOFT SITE)		
AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	133.0	AUTOMOBILES =	119.00	
ROAD	119.0	MEDIUM TRUCKS=	121.30	
		HEAVY TRUCKS =	127.01	
GRADE:	2.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	46.4	44.5	42.7	36.6	45.9
MEDIUM TRUCKS	46.0	44.5	38.1	36.6	45.3
HEAVY TRUCKS	48.5	47.0	38.0	39.3	47.7
VEHICULAR NOISE	51.8	50.3	45.0	42.4	51.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	51.8	50.3	45.0	42.4	51.2

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	51.8		52.7
LEQ PK HR WITH TOPO OR BARRIER	51.8	*******	52.7
CNEL WITHOUT TOPO AND BARRIER	51.2		52.1
CNEL WITH TOPO AND BARRIER	51.2	*******	52.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	43,000	YEAR 2010		PK HR VOL	4,300
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	510.9
DIST WALL	80			MED TRUCK SLE DIST	510.6
DIST W/OB	440			HVY TRUCK SLE DIST	510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.8	58.9	57.2	51.1	60.3
MEDIUM TRUCKS	54.3	52.8	46.5	44.9	53.6
HEAVY TRUCKS	57.7	56.2	47.2	48.4	56.9
VEHICULAR NOISE	63.1	61.4	57.9	53.6	62.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	54.4	52.7	49.1	44.9	53.8

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	63.1		69.5
LEQ PK HR WITH TOPO OR BARRIER	54.4	*******	68.6
CNEL WITHOUT TOPO AND BARRIER	62.6		69.4
CNEL WITH TOPO AND BARRIER	53.8	*******	68.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	43,000	YEAR 2010		PK HR VOL	4,300
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		511.0
DIST WALL	80		MED TRUCK SLE DIST		510.8
DIST W/OB	440		HVY TRUCK SLE DIST		518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS:		(10=HARD SITE, 15=SOFT SITE)			
AUTOM	15.0				
MED TR	10.0				
HVY TR	10.0				
BARRIER	1	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	116.0		AUTOMOBILES =	116.00	
ROAD	116.0		MEDIUM TRUCKS	118.30	
			HEAVY TRUCKS =	124.01	
GRADE:	0.0 %		GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

	VEHICLE DISTRIBUTION:			
	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.8	58.9	57.2	51.1	60.3
MEDIUM TRUCKS	60.6	59.1	52.7	51.2	59.9
HEAVY TRUCKS	63.9	62.4	53.4	54.7	63.1
VEHICULAR NOISE	66.8	65.2	59.7	57.4	66.1

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	59.9	58.3	52.8	50.5	59.2

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	66.8		70.7
LEQ PK HR WITH TOPO OR BARRIER	59.9	*******	69.0
CNEL WITHOUT TOPO AND BARRIER	66.1		70.4
CNEL WITH TOPO AND BARRIER	59.2	*******	68.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 1st FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	43,000	YEAR 2010		PK HR VOL	4,300
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	510.9
DIST WALL	80			MED TRUCK SLE DIST	510.6
DIST W/OB	440			HVY TRUCK SLE DIST	510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	59.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	1	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.8	58.9	57.2	51.1	60.3
MEDIUM TRUCKS	54.3	52.8	46.5	44.9	53.6
HEAVY TRUCKS	57.7	56.2	47.2	48.4	56.9
VEHICULAR NOISE	63.1	61.4	57.9	53.6	62.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	54.4	52.7	49.1	44.9	53.8

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	63.1		64.7
LEQ PK HR WITH TOPO OR BARRIER	54.4	*******	60.6
CNEL WITHOUT TOPO AND BARRIER	62.6		64.3
CNEL WITH TOPO AND BARRIER	53.8	*******	60.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 2nd FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	43,000	YEAR 2010		PK HR VOL	4,300
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	511.0
DIST WALL	80			MED TRUCK SLE DIST	510.8
DIST W/OB	440			HVY TRUCK SLE DIST	518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	63.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.8	58.9	57.2	51.1	60.3
MEDIUM TRUCKS	60.6	59.1	52.7	51.2	59.9
HEAVY TRUCKS	63.9	62.4	53.4	54.7	63.1
VEHICULAR NOISE	66.8	65.2	59.7	57.4	66.1

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	59.9	58.3	52.8	50.5	59.2

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	66.8		68.4
LEQ PK HR WITH TOPO OR BARRIER	59.9	*******	65.0
CNEL WITHOUT TOPO AND BARRIER	66.1		68.0
CNEL WITH TOPO AND BARRIER	59.2	*******	64.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	22-Oct-08
LOCATION:	SOUTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,175	YEAR 2010		PK HR VOL	618
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	57.5
DIST WALL	60			MED TRUCK SLE DIST	57.3
DIST W/OB	0			HVY TRUCK SLE DIST	57.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	109.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.2	60.3	58.5	52.5	61.7
MEDIUM TRUCKS	56.0	54.5	48.1	46.6	55.3
HEAVY TRUCKS	56.8	55.4	46.4	47.6	56.1
VEHICULAR NOISE	64.0	62.3	59.2	54.5	63.5

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	64.0	62.3	59.2	54.5	63.5

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.0		64.1
LEQ PK HR WITH TOPO OR BARRIER	64.0	*******	64.1
CNEL WITHOUT TOPO AND BARRIER	63.5		63.5
CNEL WITH TOPO AND BARRIER	63.5	*******	63.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	22-Oct-08
LOCATION:	SOUTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,175	YEAR 2010		PK HR VOL	618
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	60.3
DIST WALL	60			MED TRUCK SLE DIST	59.6
DIST W/OB	0			HVY TRUCK SLE DIST	58.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	123.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	57.3	55.8	49.5	47.9	56.6
HEAVY TRUCKS	58.3	56.9	47.8	49.1	57.6
VEHICULAR NOISE	64.4	62.7	59.1	54.9	63.8

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	64.4	62.7	59.1	54.9	63.8

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.4		64.5
LEQ PK HR WITH TOPO OR BARRIER	64.4	*******	64.5
CNEL WITHOUT TOPO AND BARRIER	63.8		63.9
CNEL WITH TOPO AND BARRIER	63.8	*******	63.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	CUMULATIVE		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	510.9
DIST WALL	80			MED TRUCK SLE DIST	510.6
DIST W/OB	440			HVY TRUCK SLE DIST	510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS:		(10=HARD SITE, 15=SOFT SITE)		
AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	55.4	53.9	47.5	46.0	54.7
HEAVY TRUCKS	58.7	57.3	48.3	49.5	58.0
VEHICULAR NOISE	64.2	62.5	59.0	54.7	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	55.5	53.8	50.2	45.9	54.9

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.2		69.8
LEQ PK HR WITH TOP(	55.5	*******	68.6
CNEL WITHOUT TOPO AND BARRIER	63.6		69.6
CNEL WITH TOPO AND BARRIER	54.9	*******	68.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	CUMULATIVE		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	511.0
DIST WALL	80			MED TRUCK SLE DIST	510.8
DIST W/OB	440			HVY TRUCK SLE DIST	518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	68.4	UPRR - NO WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	61.7	60.2	53.8	52.3	61.0
HEAVY TRUCKS	64.9	63.5	54.5	55.7	64.2
VEHICULAR NOISE	67.9	66.3	60.7	58.5	67.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	61.0	59.4	53.8	51.6	60.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	67.9		71.2
LEQ PK HR WITH TOPO OR BARRIER	61.0	*******	69.1
CNEL WITHOUT TOPO AND BARRIER	67.2		70.9
CNEL WITH TOPO AND BARRIER	60.3	*******	69.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 1st FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	CUMULATIVE		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	510.9
DIST WALL	80			MED TRUCK SLE DIST	510.6
DIST W/OB	440			HVY TRUCK SLE DIST	510.4
HTH WALL	8.0	BERM			
HTH OBS	5.0				
AMBIENT	59.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	55.4	53.9	47.5	46.0	54.7
HEAVY TRUCKS	58.7	57.3	48.3	49.5	58.0
VEHICULAR NOISE	64.2	62.5	59.0	54.7	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	55.5	53.8	50.2	45.9	54.9

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.2		65.5
LEQ PK HR WITH TOPO OR BARRIER	55.5	*******	60.9
CNEL WITHOUT TOPO AND BARRIER	63.6		65.0
CNEL WITH TOPO AND BARRIER	54.9	*******	60.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	U.S. 101 FREEWAY	DATE:	22-Oct-08
LOCATION:	NORTH - 2nd FL - 6 ft SOUNDWALL	BY:	C.OVERWEG

ADT	55,000	CUMULATIVE		PK HR VOL	5,500
SPEED	65				
PK HR %	10				
DIST CTL	520				
DIST N/F	76	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	511.0
DIST WALL	80			MED TRUCK SLE DIST	510.8
DIST W/OB	440			HVY TRUCK SLE DIST	518.7
HTH WALL	8.0	BERM			
HTH OBS	19.0				
AMBIENT	63.4	UPRR - 6 FT WALL			
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	1	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	116.0	AUTOMOBILES =	116.00	
ROAD	116.0	MEDIUM TRUCKS	118.30	
		HEAVY TRUCKS =	124.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9600
EDIUM TRUCKS	0.848	0.049	0.103	0.0200
HEAVY TRUCKS	0.865	0.027	0.108	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.9	60.0	58.2	52.2	61.4
MEDIUM TRUCKS	61.7	60.2	53.8	52.3	61.0
HEAVY TRUCKS	64.9	63.5	54.5	55.7	64.2
VEHICULAR NOISE	67.9	66.3	60.7	58.5	67.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	61.0	59.4	53.8	51.6	60.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	67.9		69.2
LEQ PK HR WITH TOPO OR BARRIER	61.0	*******	65.4
CNEL WITHOUT TOPO AND BARRIER	67.2		68.7
CNEL WITH TOPO AND BARRIER	60.3	*******	65.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	22-Oct-08
LOCATION:	SOUTH - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,300	CUMULATIVE		PK HR VOL	630
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	57.5
DIST WALL	60			MED TRUCK SLE DIST	57.3
DIST W/OB	0			HVY TRUCK SLE DIST	57.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		

ELEVATIONS:

PAD	109.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.3	60.4	58.6	52.6	61.8
MEDIUM TRUCKS	56.1	54.6	48.2	46.6	55.3
HEAVY TRUCKS	56.9	55.5	46.5	47.7	56.2
VEHICULAR NOISE	64.1	62.4	59.2	54.6	63.6

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	64.1	62.4	59.2	54.6	63.6

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.1		64.2
LEQ PK HR WITH TOPO OR BARRIER	64.1	*******	64.2
CNEL WITHOUT TOPO AND BARRIER	63.6		63.6
CNEL WITH TOPO AND BARRIER	63.6	*******	63.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	HOLLISTER AVENUE	DATE:	22-Oct-08
LOCATION:	SOUTH - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,300	CUMULATIVE		PK HR VOL	630
SPEED	45				
PK HR %	10				
DIST CTL	60				
DIST N/F	36	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	60.3
DIST WALL	60			MED TRUCK SLE DIST	59.6
DIST W/OB	0			HVY TRUCK SLE DIST	58.3
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	123.0	AUTOMOBILES =	109.00	
ROAD	109.0	MEDIUM TRUCKS	111.30	
		HEAVY TRUCKS =	117.01	
GRADE:	0.0 %	GRADE ADJUSTM	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.0	60.1	58.3	52.3	61.5
MEDIUM TRUCKS	57.4	55.9	49.6	48.0	56.7
HEAVY TRUCKS	58.4	56.9	47.9	49.2	57.6
VEHICULAR NOISE	64.5	62.8	59.2	55.0	63.9

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	64.5	62.8	59.2	55.0	63.9

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	64.5		64.5
LEQ PK HR WITH TOPO OR BARRIER	64.5	*******	64.5
CNEL WITHOUT TOPO AND BARRIER	63.9		64.0
CNEL WITH TOPO AND BARRIER	63.9	*******	64.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	OVERPASS	DATE:	22-Oct-08
LOCATION:	WEST - 1st FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,000			PK HR VOL	600
SPEED	30				
PK HR %	10				
DIST CTL	300				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	300.0
DIST WALL	300			MED TRUCK SLE DIST	300.0
DIST W/OB	0			HVY TRUCK SLE DIST	300.0
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	15.0			
HVY TR	15.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	119.0	AUTOMOBILES =	119.00	
ROAD	119.0	MEDIUM TRUCKS=	121.30	
		HEAVY TRUCKS =	127.01	
GRADE:	2.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	46.4	44.5	42.7	36.6	45.9
MEDIUM TRUCKS	40.9	39.4	33.0	31.4	40.1
HEAVY TRUCKS	43.3	41.9	32.9	34.1	42.6
VEHICULAR NOISE	48.9	47.2	43.5	39.3	48.3

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	48.9	47.2	43.5	39.3	48.3

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	48.9		50.4
LEQ PK HR WITH TOPO OR BARRIER	48.9	*******	50.4
CNEL WITHOUT TOPO AND BARRIER	48.3		50.0
CNEL WITH TOPO AND BARRIER	48.3	*******	50.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	HASKELL'S LANDING	JN:	5980
ROADWAY:	OVERPASS	DATE:	22-Oct-08
LOCATION:	WEST - 2nd FL - NO SOUNDWALL	BY:	C.OVERWEG

ADT	6,000			PK HR VOL	600
SPEED	30				
PK HR %	10				
DIST CTL	300				
DIST N/F	12	(M=76,P=52,S=36,C=12)		AUTO SLE DISTANCE	300.5
DIST WALL	300			MED TRUCK SLE DIST	300.4
DIST W/OB	0			HVY TRUCK SLE DIST	300.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45				
ROADWAY VIEW:					
LF ANGLE	-90				
RT ANGLE	90				
DF ANGLE	180				

SITE CONDITIONS: (10=HARD SITE, 15=SOFT SITE)

AUTOM	15.0			
MED TR	10.0			
HVY TR	10.0			
BARRIER	0	(0=WALL,1=BERM)		
ELEVATIONS:				
PAD	133.0	AUTOMOBILES =	119.00	
ROAD	119.0	MEDIUM TRUCKS=	121.30	
		HEAVY TRUCKS =	127.01	
GRADE:	2.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
UTOMOBILES	0.775	0.129	0.096	0.9742
EDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	46.4	44.5	42.7	36.6	45.9
MEDIUM TRUCKS	46.0	44.5	38.1	36.6	45.3
HEAVY TRUCKS	48.5	47.0	38.0	39.3	47.7
VEHICULAR NOISE	51.8	50.3	45.0	42.4	51.2

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
VEHICULAR NOISE	51.8	50.3	45.0	42.4	51.2

AMBIENT:	W/O AMBIENT		W/ AMBIENT
LEQ PK HR WITHOUT TOPO OR BARRIER	51.8		52.7
LEQ PK HR WITH TOPO OR BARRIER	51.8	*******	52.7
CNEL WITHOUT TOPO AND BARRIER	51.2		52.1
CNEL WITH TOPO AND BARRIER	51.2	*******	52.1