Community Park Parking Lot Expansion Project Initial Environmental Study/ Mitigated Negative Declaration ENV 05-10



City of Clayton Community Development Department 6000 Heritage Trail Clayton, California 94517 925/673-7340

November 2010

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APPENDICES

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INTRODUCTION

The City of Clayton, in concert with its environmental consultant for the project, prepared this Initial Environmental Study/Mitigated Negative Declaration (IES/MND) to evaluate the potential environmental impacts of the Community Park Parking Lot Expansion project (proposed project). The proposed project is located in the City of Clayton, northwest of the intersection of Marsh Creek Road and Regency Drive, on the existing Clayton Community Park property. Diablo View Middle School is located directly north of the property. The proposed project involves an expansion of the existing Community Park parking lot by adding a total of 100 new parking spaces along a paved driveway parallel with Marsh Creek Road. Improvements would include construction of the new driveway, new asphalt and concrete paths, stairs, a patio expansion, stormwater filtration planters and appurtenances, and new lighting.

This IES/MND identifies potentially significant environmental impacts for the following environmental areas:

- Air Quality
- Biological Resources
- Cultural Resources; and
- Geology and Soils.

The environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, this document serves as a MND pursuant to Public Resources Code Sections 21064.5 and 21080(c) and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

In accordance with the requirements of CEQA Guidelines Section 15071, this IES/MND describes the proposed project, identifies, analyzes, and evaluates the potential significant environmental impacts that may result from the proposed project, and identifies measures to mitigate adverse environmental impacts. With the mitigation measures identified in this document, as well as design revisions proposed by the City of Clayton, the project would not have a significant impact on the environment.

T. PROJECT / APPLICANT INFORMATION 1. **Project Title:** Community Park Parking Lot Expansion Project 2. Lead Agency Name and Address: City of Clayton 6000 Heritage Trail Clayton, CA 94517 3. Contact Person and Phone Number: **David Woltering** Community Development Director City of Clayton (925) 673-7343 4. Project Location: Marsh Creek Road and Regency Drive Clayton, CA 94517 5. City Approvals Required: **IES/MND** Mitigation Monitoring and Reporting Plan Public Park/Open Space/Open Space and Recreational (PU) 6. Existing General Plan: 7. **Existing Zoning:** Planned Development (PD) 8 **Project Description Summary:** The proposed project is located in the City of Clayton, northwest of the intersection of Marsh Creek Road and Regency Drive, on the Clayton Community Park property. Diablo View Middle School is located directly north of the property. The proposed project involves an expansion of the existing Community Park parking lot by adding a total of 100 new parking spaces along a paved driveway parallel with Marsh Creek Road. Improvements would include construction of the new driveway, new asphalt and concrete paths, stairs, a patio expansion, stormwater filtration planters and appurtenances, and new lighting. The environmental factors checked below would be potentially affected by this project. The following Evaluation of Environmental Impacts identifies at least one impact that is "Less Than Significant with Mitigation Incorporated" for each of the checked environmental factors. Aesthetics Agriculture Resources Air Quality Cultural Resources Geology and Soils Biological Resources Greenhouse Gas Emissions Hydrology Hazards and Hazardous Materials Land Use and Planning Mineral Resources Noise Populations and Housing **Public Services** Transportation and Circulation Water, Sewer, and Mandatory Findings of

Significance

Stormwater

Systems

II. DETERMINATION

On the	basis of this initial evaluation:
	I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case since the Project proponent has made revisions in the Project and has agreed to the mitigation measures listed in "Section V. List of Mitigation Measures." I further find that the mitigation measures and the information in this study constitute a MITIGATED NEGATIVE DECLARATION in accordance with Section 15071 of the State CEQA Guidelines.
	I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
David	Woltering n Community Development Director

III. BACKGROUND

This IES/MND identifies and analyzes the potential environmental impacts of the proposed Community Park Parking Lot Expansion Project. The information and analysis presented in this document is organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed.

Mitigation measures prescribed for environmental effects described in this IES/MND will be implemented in conjunction with the project, as required by CEQA and will be incorporated into the project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with its approval of the project.

The environmental setting and impact discussion for each section of this Initial Study have been largely based on information in the *Clayton 2000 General Plan* (amended February 5, 2008) and the corresponding *General Plan EIR*, as well as the *Marsh Creek Road Specific Plan* (adopted June 28, 1995) and the associated *EIR*. In addition, photo simulations were prepared by AdvanceSim to aid in evaluating the potential impacts to aesthetics.

IV. PROJECT DESCRIPTION

Site Location and Setting

The Community Park Parking Lot Expansion project is located in the City of Clayton, along Marsh Creek Road, northwest of the Regency Drive intersection, on the Clayton Community Park property (see Exhibit 1 and Exhibit 2 for the project location). Diablo View Middle School (DVMS) is located directly north of the property and a residential area is located west of Marsh Creek Road. Clayton Community Park is approximately 20 acres and consists of three ballfields, tot lot, picnic and barbeque areas, restrooms, and parking areas. The existing parking area consists of 50 parking spaces on the north side of the access driveway between Marsh Creek Road and Field #1. Parking has always been at a premium on the site and the lack of sufficient parking has caused users to park in the nearby residential area. Currently, the area is heavily vegetated and visually blocks the view of the park from the pedestrian and vehicular traffic along Marsh Creek Road as well as the surrounding residents. In addition, adjacent to the north side of the Park is another existing paved driveway and parking lot constructed as part of DVMS's gymnasium facility. The City, the Redevelopment Agency, and Mount Diablo School District entered into a 40-year agreement to share funding and use of the school gymnasium, driveway, and the parking lot.

Project Description

The proposed project involves an expansion of the existing Clayton Community Park parking lot area.

Exhibit 1 Regional Location Map

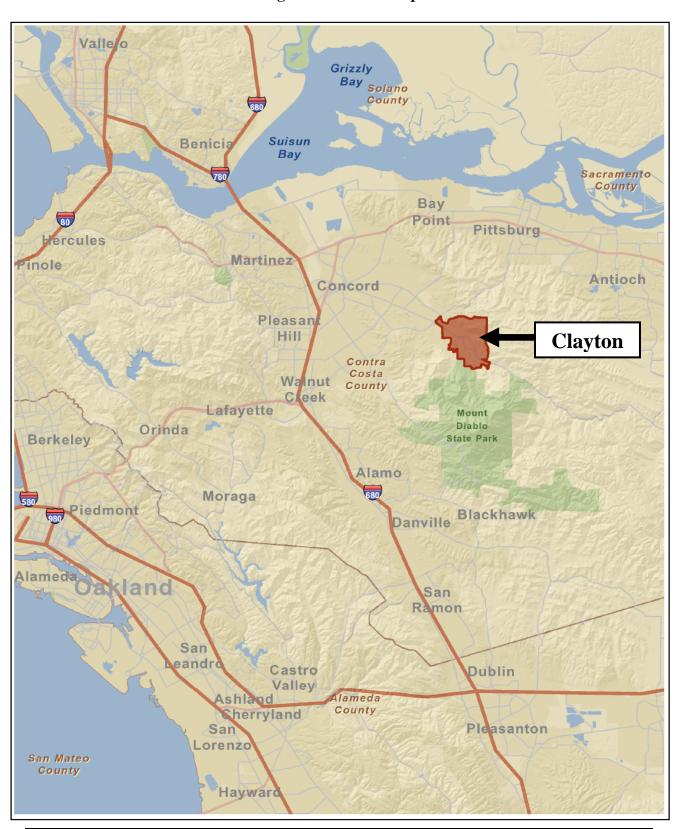


Exhibit 2 Project Location Map



Expansion of the existing parking lot area would consist of the construction of seven new parking spaces (five standard plus two handicap accessible) within the existing Clayton Community Park parking lot area and the construction of a 25-foot-wide driveway, double loaded with perpendicular parking (89 standard stalls plus four handicap stalls), from the north end of the existing parking lot to the driveway serving DVMS's gymnasium parking lot. (See Exhibit 3 for the preliminary project site plan.) The City has a 40-year contract agreement to utilize the school driveway.

The new 25-foot wide driveway would parallel the eastern side of Marsh Creek Road. In addition, improvements would include lighting, construction of a new asphalt path along the easterly side of the new parking driveway, a concrete path and stairs to Marsh Creek Road, a patio expansion near existing bathrooms for the relocation of an existing picnic area being removed, and the construction of stormwater filtration planters and appurtenances for the treating of stormwater runoff prior to discharge from the site. Further details of the proposed project components and associated improvements are discussed below.

Parking

As stated above, seven new parking spaces (five standard plus two handicap accessible) are proposed for the existing Clayton Community Park parking lot area. Demolition and removal of 1,700 square feet (sf) of existing concrete and landscaping improvements would be required in order to construct the additional parking stalls. Construction of the additional parking stalls entails 90 linear feet (lf) of curb, 950 sf of asphalt pavement, and 50 sf of handicap ramp.

The new driveway with 93 parking stalls (89 standard plus four handicap accessible) would extend from the north end of the existing parking lot to the driveway serving DVMS's gymnasium parking lot and be parallel to Marsh Creek Road. Demolition and removal of 36,000 sf of existing concrete and landscaping improvements, including 200 lf of asphalt path, 49 trees (20 of which are oak trees), and all of the existing vegetation would be required in order to implement this portion of the proposed project. Grading of the parking area is anticipated to result in approximately 3,000 to 4,000 cubic vards of excess earth material that would need to be transported to an appropriate disposal site (See Exhibit 4, Grading Plan). Approximately 200 to 250 truck trips would be required to accomplish this task. Construction of the driveway and parking stalls entails 32,000 sf of asphalt pavement, including headerboards and parking bumpers, as well as the installation of thermoplastic striping and signage and five parking lot lights consistent with City standards. The existing gate on the DVMS's gymnasium driveway would need to be relocated. In order to reduce any potential visual impacts to surrounding residential areas and pedestrian and vehicular traffic along Marsh Creek Road, the western edge and slope would be heavily planted and would feature a split rail fence to discourage cut-through pedestrian traffic from the parking lot to the sidewalk along Marsh Creek Road (See Exhibit 5 and Exhibit 6 for the landscaping plans).

Patio Expansion

An existing picnic area would need to be removed in order to construct the new parking areas. Therefore, a patio expansion near the existing Community Park bathrooms is included in the proposed project in order to relocate and install the picnic tables, barbeques, and arbor structure.

Exhibit 3 Site Plan

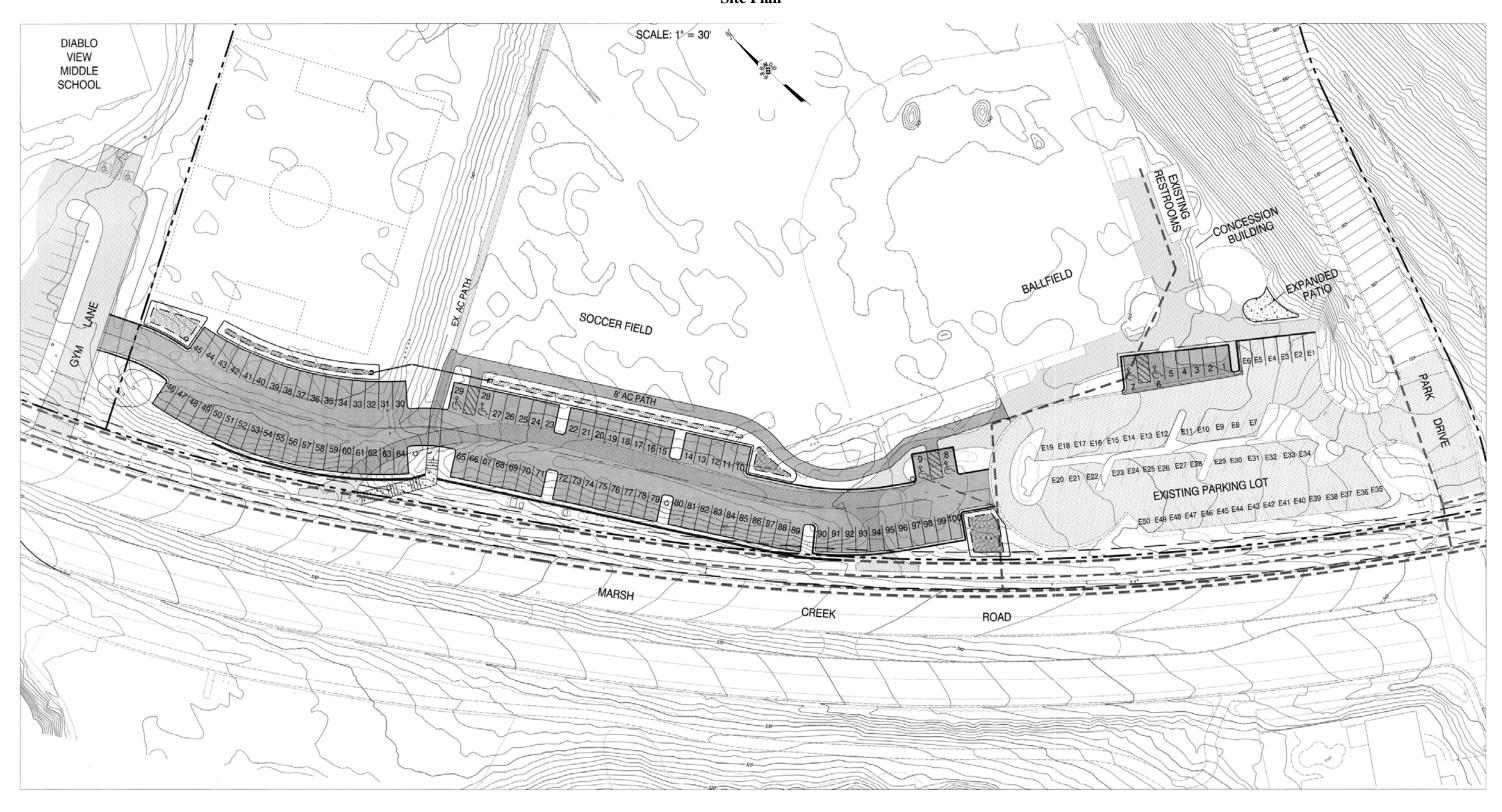


Exhibit 4 Preliminary Grading Plan

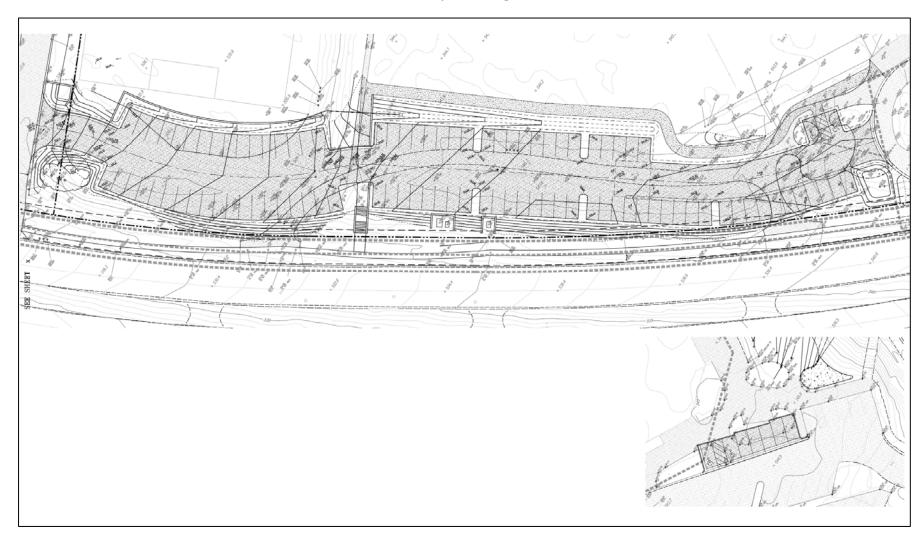


Exhibit 5 Preliminary Landscape Plan (1 of 2)

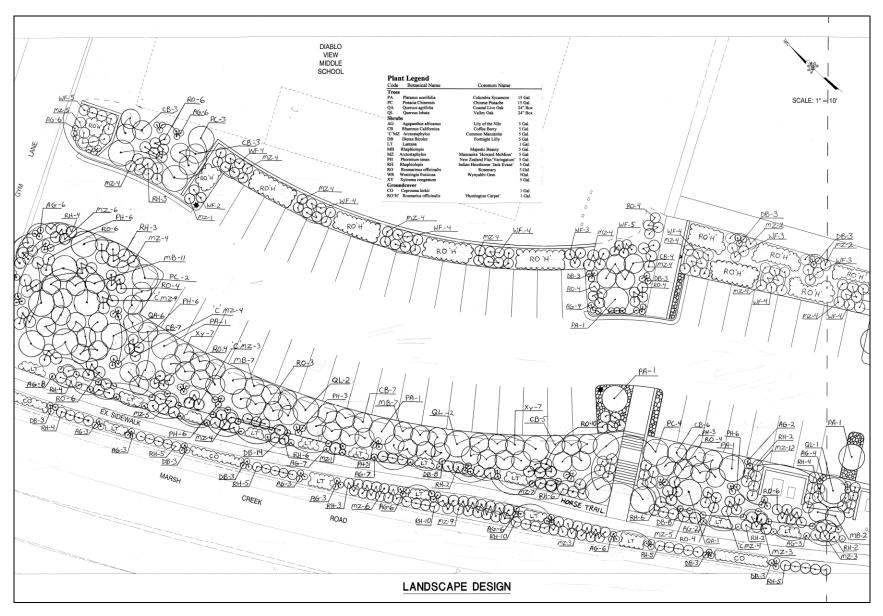
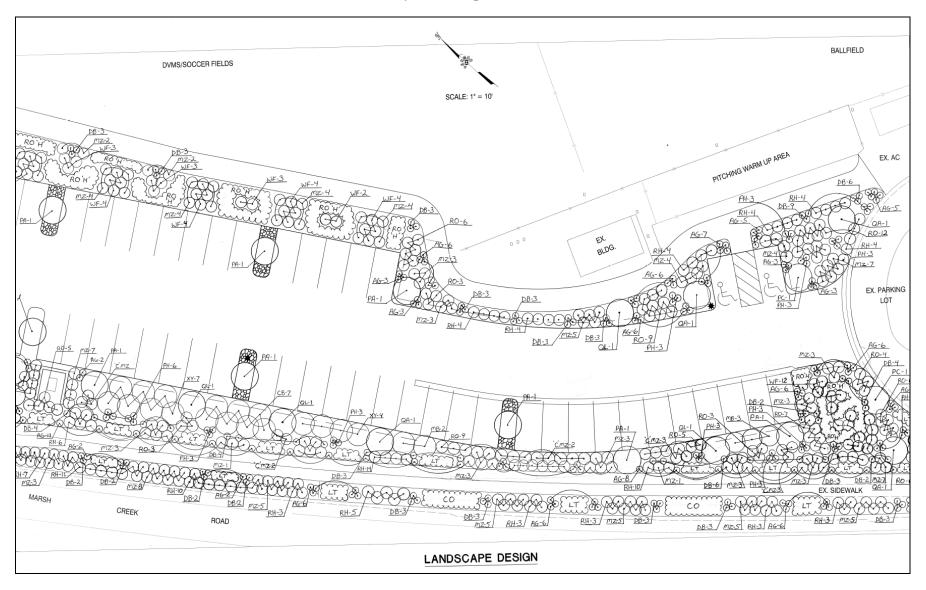


Exhibit 6
Preliminary Landscape Plan (2 of 2)



Expansion of the patio would consist of the demolition and removal of 150 sf of existing landscaping improvements and construction of a 150 sf concrete slab.

Trails

Other improvements include the construction of a 3,500 sf asphalt path along the easterly side of the new parking driveway and 360 sf of a concrete path and stairs to Marsh Creek Road.

Landscape Plan

The City has prepared a Landscape Plan for the proposed project to enhance the visual appeal of the project by screening parked vehicles and associated low height parking structures (See Exhibit 5 and Exhibit 6 for the landscaping plans). As illustrated on Exhibits 5 and 6, dense plantings of shrubs, trees, and groundcover shall be put in along both sides of the proposed driveway. Included among the proposed species are sycamore and oak trees, manzanita and rosemary shrubs, and Huntington carpet groundcover.

Storm Drainage

In an attempt to reduce the potential stormwater runoff volumes that may accumulate at the proposed project location, four biofiltration planters, or 1,700 sf of planters, would be constructed (see Exhibit 7 for section details of the planters.)

Discretionary Actions

Approval of the proposed project requires the following discretionary action by the City:

- Approval of the IES/MND and adoption of the Mitigation Monitoring and Reporting Plan
- Authorization for the solicitation of bids for the proposed improvements.

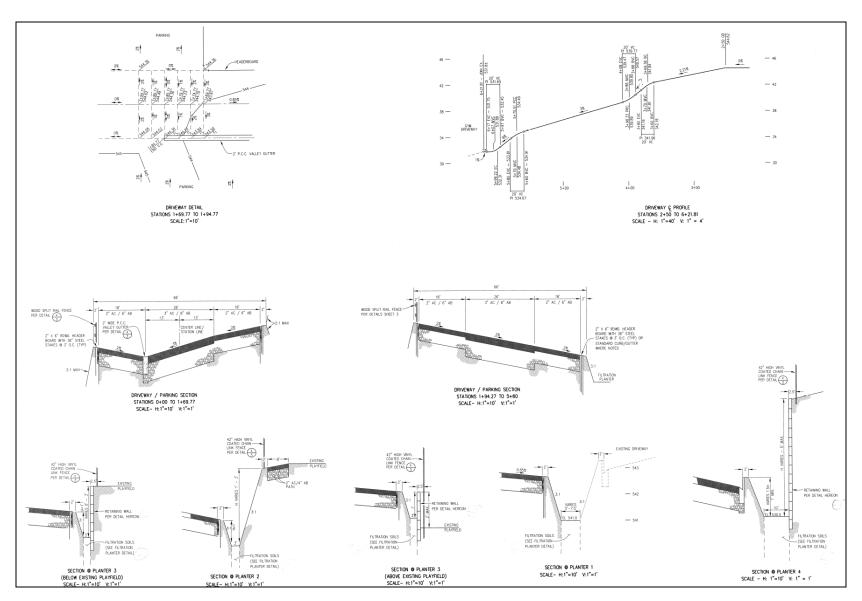
V. LIST OF MITIGATION MEASURES

Air Quality

Mitigation Measure 1. The following measures shall be adhered to during all construction phases of the Project:

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);
- All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;
- Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;

Exhibit 7
Infiltration Planters



- Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;
- All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;
- A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring of the above requirements.

Biological Resources

Mitigation Measure 2. Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be conducted if initial grading and building demolition is to be conducted during the months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).

Cultural Resources

Mitigation Measure 3. Prior to the issuance of a grading permit, plans shall include a requirement (via notation) indicating that if cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.

Mitigation Measure 4. Pursuant to State Health and Safety Code §7050.5(c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the San Joaquin County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist, until the identified appropriate actions have been implemented.

Geology and Soils

Mitigation Measure 5. Prior to the issuance of a grading permit, the City shall prepare, to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- Hydro-seeding;
- Placement of erosion control measures within drainageways and ahead of drop inlets;
- The temporary lining (during construction activities) of drop inlets with "filter fabric";
- The placement of straw wattles along slope contours;
- *Use of a designated equipment and vehicle "wash-out" location;*
- *Use of siltation fences;*
- Use of on-site rock/gravel road at construction access points; and
- Use of sediment basins and dust palliatives.

VI. EVALUATION OF ENVIRONMENTAL IMPACTS

1. AESTHETICS.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proj	ect:		_		
a.	Have a substantial adverse effect on a scenic vista?			X	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				X
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a.	Would the project have a substantial adverse	
	effect on a scenic vista?	Less-Than-Significant Impac

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? Less-Than-Significant Impact

Discussion (a. and c.)

Clayton is located at the base of the north slope of Mount Diablo. The Clayton General Plan identifies scenic routes and corridors within the City, which have been established in recognition of panoramic views of Mount Diablo and associated foothills, including Marsh Creek Road. The surface of the new parking area would vary in elevation from sidewalk level to as much as six or seven feet above the existing sidewalk along Marsh Creek Road. The Community Park is presently heavily vegetated, which visually blocks the view of the park from the pedestrian and vehicular traffic along Marsh Creek Road, as well as the surrounding residents. However, because the existing parking area is adjacent to Marsh Creek Road, expansion of the parking area may affect the scenic vista and existing visual character of the surrounding area.

The Marsh Creek Road Specific Plan guides the development of the large rural area south and southeast of the project site along Marsh Creek Road. Although the proposed project is not within the Marsh Creek Road Specific Plan area, the project has been designed to be consistent with prominent design objectives contained in the Marsh Creek Road Specific Plan in order to maintain consistency and reflect the rural character of the area along Marsh Creek Road. Consistency with design aspects of the Marsh Creek Road Specific Plan would mitigate any potential impacts to the scenic vista as well as ensure that the improvements are visually unobtrusive to the surrounding areas, including the views from homes located west of Marsh Creek Road.

Design aspects of the Marsh Creek Road Specific Plan that would be implemented as part of the proposed project include the following:

- A detailed landscape plan consisting of heavy planting of replacement trees and vegetation consistent with the palette of plants naturally occurring in the area, such as oak trees and Manzanita bushes;
- Installation of a wooden split rail fence matching the existing park fencing at the top of the slope along the southwesterly side of the parking area;
- Construction of a 42-inch high vinyl-coated chain link fence along the northeasterly side of the proposed parking area between the playfields and the filtration planters; and
- Continuation of the sidewalk and horse trail between Marsh Creek Road and the parking area consistent with surrounding properties.

Photo simulations were prepared by AdvanceSim to aid in evaluating the potential visual impacts of the proposed project to the surrounding areas (See Exhibit 8, Exhibit 9, Exhibit 10, and Exhibit 11). The visual simulations include the grass, trees, and shrubs from the landscape plan and the proposed parking area from the view of surrounding areas that may be affected. As shown in the photo simulations, implementation of the design aspects listed above would be sufficient to adequately screen parked vehicles from view of travelers along Marsh Creek Road and the nearby residential area. In fact, the photo simulations show that the proposed project would create a more enhanced visual screen, once the vegetation has fully matured, than what currently exists on the Community Park site. In addition, consistency along Marsh Creek Road would be maintained. Therefore, because the proposed project would include landscaping and other design aspects consistent with the Marsh Creek Road Specific Plan, which would mitigate any potential impacts to the scenic vista of Marsh Creek Road and the overall visual character or quality of the site and its surroundings, impacts would be considered *less-than-significant*.

Discussion

The proposed project is not within view of a designated State scenic highway. Therefore, the proposed project would not substantially damage any rock outcroppings, historic buildings, or other scenic resources within view of such a highway, and *no impact* would occur.

Discussion

The Clayton Community Park site is currently in recreational use with existing residences to the west, DVMS to the north, and undeveloped open land to the east. Lighting associated with the ballfield, the restroom facility, and parking areas currently exists on the site.

Exhibit 8 Existing View Looking North from Marsh Creek Road



Exhibit 9 View of Proposed Project Looking North from Marsh Creek Road



Exhibit 10 Existing View Looking East from Marsh Creek Road



Exhibit 11 View of Proposed Project Looking East from Marsh Creek Road



The proposed project includes the installation of an additional four to five standard parking lot lights on poles, creating a new source of light that may affect day or nighttime views in the area.

In order to minimize the potential impact from the additional lighting on the surrounding areas, particularly for the surrounding residences to the west, the proposed project would comply with Section 8.09 of the Municipal Code, which pertains to outdoor illumination and the minimization of light and glare. Per the Code, the height of the light poles would be kept to a maximum of 14 feet and high pressure sodium light fixtures of the box type would be implemented, which direct illumination downward and include shields to eliminate any upward lighting and impact to the night sky. Therefore, because the proposed project design includes measures to ensure that nearby residences would experience minor amounts of increased light and glare as a result of project implementation, impacts would be considered *less-than-significant*.

2. AGRICULTURE RESOURCES.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	whether impacts to agricultural resources are significant env				
	icultural Land Evaluation and Site Assessment Model (1977), model to use in assessing impacts on agriculture and farmla			Dept. of Con.	servation
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?			X	
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c.	Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?				X

a. Would the project convert Prime Farmland,
Unique Farmland, or Farmland of Statewide
Importance to non-agricultural use? Less-Than-Significant Impact

Discussion

b.

The Clayton Community Park is 20 acres of currently developed and utilized land consisting of three ballfields, a tot lot, picnic and barbeque areas, restrooms, and parking areas. The site is designated as Public Park/Open Space/Open Space and Recreational (PU) in the Clayton General Plan. Agricultural operations do not occur on the site and all existing trees and vegetation are non-native and were planted as part of the park construction in the early to mid-1990s. Implementation of the proposed project would include the demolition and removal of all existing vegetation in the new parking lot area. However, the site is currently developed and in use for recreational purposes and vegetation on the site is non-native and not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Contra Costa County General Plan or Clayton General Plan. In addition, the uses on the site are to remain the same, including re-vegetation along both sides of the proposed driveway. Therefore, because the project site is not considered farmland and the proposed project would not convert any agricultural land uses to non-agricultural uses, the proposed project would not result in adverse impacts to farmland and the impact would be *less-than-significant*.

for agricultural use, or a Williamson Act contract?	No Impac
Would the project involve other changes in the existing environment which, due to their	,
cumulatively result in loss of Farmland to non-	No Impac
	Would the project involve other changes in the existing environment which, due to their location or nature, could individually or

Would the project conflict with existing zoning

Discussion (b. and c.)

The Clayton General Plan designates the project site as Public Park/Open Space/Open Space and Recreational (PU) and therefore the site is not zoned for agricultural use, nor is the site under a Williamson Act contract. As a result, the proposed project would have *no impact* regarding conflicts with Williamson Act contracts or existing agricultural zoning.

3. AIR QUALITY.

	Issues			Less-Than- Significant Impact	No Impact
	, the significance criteria established by the applicable air elied upon to make the following determinations. Would th		agement or air	pollution co	ntrol
a.	Conflict with or obstruct implementation of the applicable air quality plan?		X		
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X		
d.	Expose sensitive receptors to substantial pollutant concentrations?		X		
e.	Create objectionable odors affecting a substantial number of people?				X

a.	Would the project conflict with or obstruct
	implementation of the applicable air
	quality plan?Less-Than-Significant With Mitigation Incorporated
b.	Would the project violate any air quality
	standard or contribute substantially to an
	existing or projected air quality violation?
	Less-Than-Significant With Mitigation Incorporated
c.	Would the project result in a cumulatively
	considerable net increase of any criteria
	pollutant for which the project region is
	non-attainment under an applicable federal
	or state ambient air quality standard?
	Less-Than-Significant With Mitigation Incorporated
d.	Would the project expose sensitive receptors to
	substantial pollutant

Discussion (a.-d.)

Air quality in Clayton is primarily determined by meteorologic and topographic conditions. Clayton is located in the upper reaches of Clayton Valley. In general, valleys with box-end configurations such as the Clayton Valley have a greater susceptibility to poor air quality because temperature inversions can trap air masses and the surrounding ridges and mountains block winds, which help flush air pollutants. Air pollution in Clayton is primarily influenced by air quality in the adjacent Concord area (*General Plan*, p. VII-18) due to

concentrations? Less-Than-Significant With Mitigation Incorporated

airflow patterns in the area. Depending on the meteorological conditions at the time, pollutants in the Concord area would tend to migrate and possibly accumulate in the upper portion of the Clayton Valley at or near the Clayton Planning Area.

Air Quality Standards

The Federal Clean Air Act (42 U.S.C. Section 7401) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect public health and safety, and welfare from known or anticipated effects of air pollution. Current standards are set for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter equal to or less than 10 microns in size (PM₁₀), fine particulate matter equal to or less than 2.5 microns in size (PM_{2.5}), and lead. The State of California Air Resources Board (CARB) has established additional standards that are generally more restrictive than the NAAQS. The federal and State standards are shown in Table 1.

Table 1						
Ambient Air Quality Standards						
		California	Federal Standards			
Pollutant	Averaging Time	Standards	Primary	Secondary		
Ozone	1 Hour	0.09 ppm	-	Same as primary		
Ozone	8 Hour	0.07 ppm	0.075 ppm	Same as primary		
Carbon Monoxide	8 Hour	9 ppm	9 ppm	None		
Cal boll Molloxide	1 Hour	20 ppm	35 ppm	None		
Nitrogen Dioxide	Annual Mean	0.03 ppm	0.053 ppm	Same as primary		
Niti ogen Dioxide	1 Hour	0.18 ppm	0.100 ppm	Same as primary		
Sulfur Dioxide	24 Hour	0.04 ppm	-	-		
Sullul Dioxide	3 Hour		-	0.50 ppm		
	1 Hour	0.25 ppm	0.075 ppm	-		
Respirable	Annual Mean	20 ug/m^3	-			
Particulate Matter (PM ₁₀)	24 Hour	50 ug/m ³	150 ug/m ³	Same as primary		
Fine Particulate	Annual Mean	12 ug/m ³	15.0 ug/m ³	Como os primory		
Matter (PM _{2.5})	24 Hour	-	35 ug/m^3	Same as primary		
Sulfates	24 Hour	25 ug/m^3	N/A	N/A		
Lead	30 Day Average	1.5 ug/m^3	-	-		
Dead	Calendar Quarter	-	1.5 ug/m^3	Same as primary		
Hydrogen Sulfide	1 Hour	0.03 ppm	N/A	N/A		
Vinyl Chloride	24 Hour	0.01 ppm	N/A	N/A		

ppm = parts per million

ug/m³ = micrograms per cubic meter

Source: California Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, September 8, 2010.

Specific geographic areas are classified as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data with federal and State standards. The City of Clayton and the project site are located in the San Francisco Bay Area Air Basin. The region is classified as non-attainment for ozone, PM₁₀, and PM_{2.5}. The attainment classifications for the basin are shown in Table 2.

Table 2 Ambient Air Quality Standards & Bay Area Attainment Status

California Standards National Standards					andards
	Averaging	Attainment			Attainment
Pollutant	Time	Concentration	Status	Concentration	Status
	8 Hour	0.070 ppm (137 μg/m³)	-	0.075 ppm (147 μg/m³)	N
Ozone	1 Hour	$0.09 \text{ ppm} \ (180 \text{ µg/m}^3)$	N (Serious)	-	-
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	A	9 ppm (10 mg/m ³)	U/A
(CO)	1 Hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	U/A
Nitrogen Dioxide	Annual Arithmetic Mean	0.030 ppm (56 μg/m³)	-	$0.053 \text{ ppm} \ (100 \text{ µg/m}^3)$	U/A
(NO ₂)	1 Hour	$0.18 \text{ ppm} $ (470 µg/m^3)	A	-	-
	Annual Arithmetic Mean	-	-	0.03 ppm ³ (80 μg/m3)	A
Sulfur Dioxide (SO ₂)	24 Hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	A
Dioxide (502)	3 Hour	-	-	0.5 ppm (1300 μg/m ³)*	A
	1 Hour	0.25 ppm $(655 \mu g/m^3)$	A	-	-
Respirable Particulate	Annual Arithmetic Mean	20 μg/m ³	N	-	U
Matter (PM ₁₀)	24 Hour	$50 \mu g/m^3$	N	$150 \mu g/m^3$	U
Fine Particulate	Annual Arithmetic Mean	12 μg/m ³	N	$15 \mu g/m3$)	N
Matter (PM _{2.5})	24 Hour	-	-	$35 \mu g/m^3$	N
Sulfates	24 Hour	$25 \mu g/m^3$	A	-	-
Lead	Calendar Quarter	-	-	$1.5 \ \mu g/m^3$	-
Leau	30 Day Average	1.5 μg/m ³)	A	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	U	-	-
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 μg/m ³	-	-	-
A=Attainment N=Nonattainment U=Unclassifiable					

A=Attainment N=Nonattainment U=Unclassifiable

mg/m³=milligrams per cubic meter ppm=parts per million

μg/m³=micrograms per cubic meter
*National Secondary Standard

Source: BAAQMD CEQA Guidelines, June 2010.

Local air quality is measured by the Bay Area Air Quality Management District (BAAQMD) at the nearest monitoring station located in Concord. Air quality data at the Concord monitoring station for 2007-2009 is illustrated in Table 3. As shown, concentrations of CO and NO_X at the Concord monitoring site meet state/federal standards.

Table 3 Air Quality at Concord Monitoring Site, 2007-2009						
Pollutant	Standard	Days Sta	Days Standard Exceeded During			
1 onutant	Standard	2007	2008	2009		
Ozone	Federal 1-Hour	0	0	0		
Ozone	State 1-Hour	1	3	2		
Ozone	Federal 8-Hour	1	6	2		
PM_{10}	Federal 24-Hour	0	0	0		
PM_{10}	State 24-Hour	2	1	0		
PM _{2.5}	Federal 24-Hour	7.1	7	1		
Carbon	State/Federal	0	0	0		
Monoxide	8-Hour	U	U	U		
Nitrogen	State 1-Hour	0	0	0		
Dioxide	State 1-Hour	U	U	U		
Sulfur Dioxide	State 24-Hour	0	0	0		
Sulfur Dioxide	Federal 24-Hour	0	0	0		
Source: CARB, Al	DAM System, accesse	d November 2010.	·	·		

Ozone concentrations exceeded the state and federal standards and exhibit wide variations from year-to-year related to meteorological conditions. Years where the summer months tend to be warmer than average tend to have higher average ozone concentrations while years with cooler than average temperatures tend to have lower than average ozone concentrations.

Operational Emissions

After implementation of the proposed project, operation of the site would remain as currently existing; hence, operational emissions would not be generated. Stationary sources would not be present post-construction. The project itself would not generate trips or any emissions of criteria pollutants. In addition, the new parking areas at the Community Park facility would relieve congestion in the neighboring streets, including the residential area west of Marsh Creek Road, improving traffic flow in the area. Total vehicle miles traveled would not increase due to project implementation. Therefore, the proposed project would likely result in a potential decrease of vehicle emissions in the vicinity by reducing vehicle trip times and the acceleration patterns associated with congested conditions.

Construction Emissions

Although construction-related activities are short-term and temporary in duration, emissions could affect local air quality. Construction-related activities result in the generation of criteria air pollutants including carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM₁₀, and PM_{2.5}), precursor emissions, such as reactive organic gases (ROG) and oxides of nitrogen (NO_X), fugitive dust, and off-gas emissions. Sources of emissions could include on-road haul trucks, delivery trucks, worker commute motor vehicles, and off-road heavy-duty equipment, soil disturbance, grading, material hauling, asphalt paving, and the

application of architectural coatings. Table 4 presents the Thresholds of Significance for construction-related criteria air pollutant and precursor emissions. If the daily average emissions of the proposed project's construction-related air pollutants exceed the threshold indicated, the project would result in a significant impact.

Table 4 Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors					
Pollutant/Precursor	Daily Average Emissions (lb/day)				
ROG	54				
NO_X	54				
PM_{10}	82*				
$PM_{2.5}$ 54*					
Applies to construction exhaust emissions only. b/day = pounds per day	·				

Preliminary screening of the proposed project indicates that generation of constructionrelated criteria air pollutants and/or precursors exceeding the thresholds of significance are not likely to occur, but the potential exists. Screening criteria includes: the project is below applicable screening level size, which would be 67 acres for a City park project; all Basic Construction Mitigation Measures suggested by BAAQMD (i.e., watering all exposed surfaces two times per day, covering all hauling trucks, maintaining appropriate speed limits on unpaved roads, following idling time regulations for construction equipment, etc.) would be included in the project design and implemented during construction; and constructionrelated activities would not include demolition, simultaneous occurrence of more than two construction phases, simultaneous construction of more than one land use type; extensive site preparation greater than defaults assumed in the Urban Land Use Emissions Model (URBEMIS), or extensive materials transport greater than 10,000 cubic yards of soil. The project would require some demolition of the existing concrete and landscaping improvements and export of excess earth materials, but only approximately 3,000 to 4,000 cubic yards. Although the proposed project meets most of the screening criteria, demolition and materials transport may still cause significant air quality impacts. Therefore, project data was applied to URBEMIS in order to verify that emission levels during construction would be below threshold levels.

According to the URBEMIS model, the ROG and NO_X levels during the construction period of the proposed project are 5.00 and 38.18 pounds per day, respectively (see Appendix A) for URBEMIS model results). PM_{10} and $PM_{2.5}$ levels during construction would be 8.71 and 3.44 pounds per day, respectively. Comparing the model results to the thresholds stated above, the proposed project would not exceed the regulations set by the BAAQMD.

Source: BAAQMD CEQA Air Quality Guidelines, June 2010.

Conclusion

The proposed project would not create operational emissions or construction emissions exceeding the thresholds of significance for criteria air pollutants and precursors. In addition, eliminating parking in the nearby residential area by park users would be beneficial by decreasing vehicle emissions and traffic flow in the area. Therefore, the proposed project would not create a conflict with any air quality plans, violate standards, result in a cumulatively considerable increase of pollutants, or expose sensitive receptors to substantial pollutant concentrations. To further ensure construction emissions, specifically fugitive dust or PM₁₀ emissions, are mitigated as best as possible, the BAAQMD's Basic Construction Mitigation Measures must be implemented. However, if the BAAQMD's Basic Construction Mitigation Measures are not implemented, the proposed project could result in a *potentially significant* impact with regards to construction-related air quality emissions standards.

Mitigation Measure(s)

Implementation of the following BAAQMD mitigation measures would reduce the construction-related PM₁₀ impacts to a *less-than-significant* level.

Mitigation Measure 1. The following measures shall be adhered to during all construction phases of the Project:

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);
- All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;
- Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered:
- Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;
- All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;
- A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring of the above requirements.

e. Would the project create objectionable odors affecting a substantial number of people?...... No Impact

Discussion

The project would not include industrial or intensive agricultural uses; therefore, the project would not create odors or toxic air contaminants. The proposed project would have *no impact* on odors or toxic air contaminants.

4. GREENHOUSE GAS EMISSIONS

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact	
Would the project:						
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

a.	Would the project generate greenhouse gas
	emissions, either directly or indirectly, that
	may have a significant impact on the
	environment?Less-Than-Significant Impact

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?Less-Than-Significant Impact

Discussion

Background

Evidence exists that the Earth's climate has been warming over the past century because of the buildup in the atmosphere of greenhouse gases (GHGs) emitted from human activity. Greenhouse gases have varying global warming potentials. The major components of greenhouse gases include carbon dioxide (CO₂), nitrous oxide (N₂O) and methane, (CH₄). Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and therefore is not global in nature. The burning of fossil fuels is the largest source of GHGs, particularly carbon dioxide. Greenhouse gases act much like a blanket, trapping the Earth's heat in the atmosphere and resulting in an increase in the global mean temperature. A warmer global climate could have significant effects on local and regional weather patterns, agricultural production, flooding and water resources, and the distribution of plant and animal species among other impacts.

In 2006, California enacted the California Global Warming Solutions Act (AB 32). The Act requires California to reduce its emission of GHGs to the statewide level emitted in 1990 by 2020. The Act charges the California Air Resources Board (CARB) with the task of developing, with public input, a plan for reducing GHG emissions and implementing that plan by January 2012.

As directed by SB97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010. Amended CEQA Guidelines Section 15064.4, states that, in determining the significance of greenhouse gas emissions, a "lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance based standards."

The BAAQMD threshold of significance for operational-related GHG (CO₂ equivalent) project emissions is set at 1,100 metric tons per year. BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions, but suggest that the lead agency quantify GHG emissions that would occur during construction and make a determination on the significance of the impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. Best management practices are encouraged to be incorporated to reduce GHG emissions during construction, as feasible and applicable.

Analysis

As stated in the Air Quality discussion of this IES/MND, the proposed project would not increase operational or long-term emissions, including GHGs. The only increase in emissions generated by the proposed project that would contribute to GHG levels in the area would occur during the construction phase, which would be temporary. In addition, due to the size of the proposed project and the application of BAAQMD's Basic Construction Mitigation Measures, the GHG emissions resulting from construction of the proposed project are not expected to significantly contribute to the cumulative GHG levels of the area. However, the project data has been applied to the URBEMIS model to verify that GHG emission levels during construction would be negligible as expected. Results of the model confirm that the CO₂ levels emitted by construction of the proposed project would be an incremental contribution to global climate change, with a value of 51.99 tons per year. The construction GHG emissions from the proposed project are below that of the allowable annual operation emissions threshold. Therefore, because the construction emissions would occur only once, for a short period of time, GHG emissions are not likely to cause a significant impact.

Conclusion

Operational GHG emissions would not result from implementation of the proposed project; however, construction of the proposed project would generate GHG emissions that would contribute to the overall GHG levels in the area. Although the proposed project would contribute to GHG levels, the incremental contribution to cumulative GHGs would be negligible. In addition, the GHG emissions resulting from construction of the proposed project would occur only once and would be temporary. Therefore, the proposed project's contribution to global climate change through GHG emissions would be considered *less-than-significant*.

5. BIOLOGICAL RESOURCES.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the project					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marshes or vernal pools) through direct removal, filling, hydrological interruption, or other means?		X		
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?		X		
e.	Conflict with any local policies or ordinances protecting biological resources, including trees?			X	
f.	Conflict with the provisions of an adopted habitat conservation plan?			X	

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? Less-Than-Significant With Mitigation Incorporated

c. Would the project have a substantial adverse
effect on federally protected wetlands as
defined by Section 404 of the Clean Water Act
(including, but not limited to marshes or vernal
pools) through direct removal, filling,
hydrological interruption, or other means?

Less-Than-Significant With Mitigation Incorporated

d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? Less-Than-Significant With Mitigation Incorporated

Discussion (a. - d.)

The project site primarily consists of an existing paved parking lot and actively used ball field. The unpaved portions of the project site have been largely disturbed as a result of the use of the area as a ball field. As a result, little natural habitat value exists on the project site, being limited to the non-native shrubs and trees along the western edge of the ball field. Construction of the proposed project would require demolition of the existing infrastructure and vegetation, including the removal of approximately 49 trees, including 20 non-native oak trees. The vegetation and trees to be removed do not include any plants considered special-status plant species.

However, according to the Department of Fish and Game's California Natural Diversity Database (CNDDB), special-status or sensitive plant species listed to potentially occur in the project area include: large-flowered fiddleneck (*Amsinckia grandiflora*), soft bird's-beak (*Cordylanthus mollis ssp. mollis*), Mt. Diablo bird's-beak (*Cordylanthus nidularius*), Contra Costa wallflower (Erysimum capitatum var. angustatum), Contra Costa goldfields (*Lasthenia conjugens*), Mason's lilaeopsis (Lilaeopsis masonii), Antioch Dunes evening-primrose (Oenothera deltoids ssp. howellii), rock sanicle (Sanicula saxatilis), and Keck's checkerbloom (Sidalcea keckii). Because the proposed project site has been previously developed, with all existing vegetation on the site non-native, and is currently in recreational use, sensitive or special-status plant species are not believed to occur on the site or in the immediate vicinity.

According to the CNDDB, the following sensitive or special-status wildlife species have been known to occur in the proposed project and surrounding quadrangles.

- California tiger salamander;
- Lange's metalmark butterfly:
- Vernal pool fairy shrimp;
- San Bruno elfin butterfly;
- Delta smelt;
- California black rail;
- Vernal pool tadpole shrimp;
- Alameda whipsnake;
- California clapper rail;

- California red-legged frog;
- Salt-marsh harvest mouse;
- California least tern;
- Giant garter snake; and
- San Joaquin kit fox.

The project would not be expected to result in adverse impacts to the above-listed species for the following reasons. The California tiger salamander, vernal pool fairy shrimp, vernal pool tadpole shrimp, and salt-marsh harvest mouse reside in wetlands such as marshes and ponds. The California black rail and the California clapper rail reside in marshes as well and are uncommon in the area year-round. The proposed project site does not contain any federally protected wetlands, including vernal pools or marshes, riparian habitat, or other sensitive natural communities. Therefore, as the California red-legged frog requires aquatic habitat with adjacent suitable upland areas, it is not expect to be present on-site. Similarly, essential features of the giant garter snake's habitat requirements consist of adequate water during the snake's active season (early-spring through mid-fall) to provide food and cover, and emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season, none of which occur on-site. California least tern is a migratory bird that nests on sandy soils with little vegetation along oceans, lagoons, and bays. Lange's metalmark butterfly resides on sanddunes as well. The San Bruno elfin butterfly resides on rocky outcrops and cliffs in coastal scrub. Because the proposed project is not along an ocean or any other body of water, the species mentioned, along with the Delta smelt, would not be present on-site.

According to the East Contra Costa County HCP/NCCP (for further discussion regarding the HCP/NCCP see Question "f" below), within the inventory area, core habitat for San Joaquin kit fox is defined as annual grassland, alkali grassland, and oak savanna contiguous with grassland. Secondary foraging habitat occurs in agricultural fields and row crops adjacent to grassland areas. These habitat types are not represented on the project site. In addition, within the inventory area, core habitat for Alameda whipsnake is associated with open and low-growing shrubs, primarily chaparral, and surrounding grassland. Rock outcrops near these areas are also thought to be important for the subspecies. As is the case with kit fox, the whipsnake's core habitat is not represented on the project site.

Several species of raptors and other protected migratory birds from the Clayton vicinity may occasionally forage on the site or vicinity. A remote possibility remains that nests could be established in trees, shrubs, or suitable ground nesting locations prior to initiation of grading or construction. If new nests are established, grading or grubbing could result in inadvertent loss of nesting birds unless adequate protective measures are taken. Therefore, the potential loss of nesting birds would result in a *potentially significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure that the impact is *less-than-significant*.

Mitigation Measure 2. Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be conducted if initial grading and building demolition is to be conducted during the

months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).

e. Would the project conflict with any local policies or ordinances protecting biological resources, including trees? _______Less-Than-Significant Impact

Discussion

The Tree Protection Ordinance (Chapter 15.70 of the Zoning Code) calls for the protection of certain species of trees, a permit when removal of any tree with a trunk diameter of six inches or greater is proposed, and replacement plantings. Construction of the proposed project would require demolition of the existing infrastructure and removal of vegetation, including the removal of approximately 49 trees. The trees to be removed vary in size from four-inch diameter to 12-inch diameter and include 20 oak trees. All of the existing trees and vegetation were planted as part of the park construction in the early to mid-1990s; therefore, the trees that would need to be removed are not considered native. In accordance with the Clayton Tree Protection Ordinance, the removed trees would be replaced at a three to one ratio with each of the oak trees replaced with 24-inch box specimens. Additional tree plantings proposed as part of the Landscape Plan (see Exhibit 5 and Exhibit 6) for the project, including enhancement plantings along Marsh Creek Road, would serve to replace the ornamental trees to be removed as part of site development. Therefore, with compliance with the City of Clayton Tree Protection Ordinance, a *less-than-significant* impact would occur.

f. Would the project conflict with the provisions of an adopted habitat conservation plan? Less-Than-Significant Impact

Discussion

The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was recently adopted by the participating agencies, and became effective in the City of Clayton in January 2008. The HCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the HCP/NCCP, including California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, vernal pool tadpole shrimp, and burrowing owl, among others. The HCP/NCCP provides streamlined permits from the U.S. Fish and Wildlife Service (USFWS) and CDFG for covered species for new urban development projects and a variety of public infrastructure projects. The goal is to eventually provide coverage for agency authorizations for wetland-related impacts, which

are not currently covered under the HCP/NCCP.

The proposed project site is located within the HCP/NCCP boundaries, but is not considered a regulated development project under the plan. According to the HCP/NCCP Development Fee Zone Map, the Clayton Community Park site contains portions of development fee Zone II and Zone III. More specifically, the area of the proposed new parking driveway and other improvements is in Zone III and is made up of urban land cover. The development fee for areas within Zone III is \$5,279 per acre. However, the proposed project site is already developed land and in recreational use, consistent with the current HCP/NCCP zoning for the site. The vegetation required to be demolished for implementation of the proposed project are non-native, do not include any special-status or sensitive species or natural communities, and were planted as part of the park construction in the early to mid-1990s. The proposed project has nonetheless been designed consistent with the HCP/NCCP, including avoidance of possible inadvertent take of special-status species. Therefore, because the proposed project is consistent with the HCP/NCCP, a conflict with the conservation plan would not result and impacts would be considered *less-than-significant*.

6. CULTURAL RESOURCES.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proje	ect:	_			
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?		X		
c.	Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?		X		
d.	Disturb any human remains, including those interred outside of formal cemeteries.		X		

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?..... Less-Than-Significant Impact

Discussion

The proposed project site is a 20-acre City-owned park currently in operation. The only features on the site are associated with recreational uses, including but not limited to ball fields, tot lot, picnic and barbeque areas, restrooms, and parking areas. A prehistoric site has been previously recorded approximately one mile from the Community Park site as well as a historical building, the Easley Homestead at Mount Diablo Winery, approximately half a mile from the site. However, historic buildings or any other unique archaeological resources are not on-site. Therefore, a substantial adverse change to cultural resources would not occur and the proposed project impacts would be *less-than-significant*.

- b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section

 15064.5? Less-Than-Significant With Mitigation Incorporated
- c. Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic features?Less-Than-Significant With Mitigation Incorporated
- d. Would the project disturb any human remains, including those interred outside of formal cemeteries. Less-Than-Significant With Mitigation Incorporated

Discussion (b., c. and d.)

The nearest archaeological site is CCo-12, recorded in 1954, located on the west side of Russellmann Road, approximately three quarter miles east of the Community Park site. At least seven burials were found as well as shell and magnesite beads, obsidian tools, mortars, and bear claws. The project site currently consists of existing development for recreational purposes, including ball fields, tot lot, picnic and barbeque areas, restrooms, and parking areas. Although unlikely due to the site being currently developed, the possibility exists for

previously unknown cultural resources to be unearthed and potentially destroyed or damaged during project construction activities. Therefore, the proposed project could have a *potentially significant* impact to cultural resources.

Mitigation Measure(s)

The following mitigation measure would reduce the impact from the proposed project to a *less-than-significant* level.

Mitigation Measure 3. Prior to the issuance of a grading permit, plans shall include a requirement (via notation) indicating that if cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken.

Mitigation Measure 4. Pursuant to State Health and Safety Code §7050.5(c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist, until the identified appropriate actions have been implemented.

7. GEOLOGY AND SOILS.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proj	ect:				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist - Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault?			X	
	ii. Strong seismic ground shaking?			X	
	iii. Seismic-related ground failure, including liquefaction?			X	
	iv. Landslides?			X	
b.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
c.	Result in substantial soil erosion or the loss of topsoil?		X		
d.	Be located on expansive soil, as defined in the Uniform Building Code?			X	
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

a-i.	Would the project expose people or structures
	to potential substantial adverse effects,
	including the risk of loss, injury, or death
	involving rupture of a known earthquake fault,
	as delineated on the most recent Alquist -
	Priolo Earthquake Fault Zoning Map issued by
	the State Geologist for the area based on other
	substantial evidence of a known fault? Less-Than-Significant Impact
a-ii.	Would the project expose people or structures
	to potential substantial adverse effects,
	including the risk of loss, injury, or death
	involving strong seismic ground shaking? Less-Than-Significant Impact
aiii-iv.	Would the project expose people or structures
	to potential substantial adverse effects,
	including the risk of loss, injury, or death
	involving seismic-related ground failure,
	liquefaction and landslides? Less-Than-Significant Impact

b. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? Less-Than-Significant Impact

Discussion (a-i-iv. and b.)

According to the General Plan, the Concord Fault is located near the project site and is known to be active. The Concord Fault is a creeping fault and small to moderate earthquakes are possible along the fault, with the capability of a 7.0 magnitude. In addition, the Greenville Fault is classified as a Type B Fault and is located within 1.2 miles of the project site. The project site is located in Seismic Zone 4, which is defined in the California Building Code as a region nearest historically active faults. A potential seismic hazard resulting from a nearby moderate to major earthquake is ground shaking. An earthquake of moderate magnitude generated within the San Francisco Bay area, similar to those that have occurred in the past, could cause considerable ground shaking at the site. However, it is important to note that the project does not include the construction of any notable above-ground structures and none of the structures would be habitable. All parking areas and associated components would be designed using sound engineering judgment and the current Uniform Building Code (UBC) requirements. The proposed project would also be designed in accordance with local codes, which would ensure that seismic events do not adversely affect structures.

The Community Park site has been previously graded for use as a recreational area with ballfields, tot lot, picnic and barbeque areas, restrooms and existing parking areas. Hence, the project area is generally flat and would not be susceptible to landslides and the soil types at the site are not considered to be prone to liquefaction. In addition, because all project components would be built in conformance with UBC requirements, which includes design standards to ensure damage to structures as a result of seismic activity, including liquefaction, is minimized, landslides, subsidence, and secondary seismic hazards, such as liquefaction, are not likely to occur. Therefore, seismic activity and secondary seismic hazards would have a *less-than-significant* impact to the proposed project.

Would the project result in substantial soil c. erosion or the loss of topsoil? .. Less-Than-Significant With Mitigation Incorporated

Discussion

Construction of the proposed project would involve the disturbance and relocation of topsoils, rendering earth surfaces susceptible to erosion from wind and water. Grading of the parking area is anticipated to result in approximately 3,000 to 4,000 cubic yards of excess earth materials, which would need to be loaded into trucks and transferred to an acceptable disposal site. During the grading and excavation phases of construction, appropriate mitigation consistent with the goals and policies of the Clayton Stormwater Management Ordinance and other applicable regulations would be implemented in order to control erosion on the site and minimize the impacts related to loss of topsoil. See the Hydrology section of this IES/MND (Section 9) for the discussion on erosion as it relates to water quality. The loss of topsoil and susceptibility to erosion during construction resulting from grading and excavation of the project site would be considered a *potentially significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure that the impact is lessthan-significant.

Mitigation Measure 5. Prior to the issuance of a grading permit, the City shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- *Hydro-seeding*;
- Placement of erosion control measures within drainage ways and ahead of drop inlets;
- The temporary lining (during construction activities) of drop inlets with "filter fabric";
- The placement of straw wattles along slope contours;
- *Use of a designated equipment and vehicle "wash-out" location;*
- *Use of siltation fences*;
- Use of on-site rock/gravel road at construction access points; and
- *Use of sediment basins and dust palliatives.*
- d. Would the project be located on expansive soil, as defined in the Uniform Building Code? Less-Than-Significant Impact

Discussion

Expansive soils shrink and swell as a result of moisture changes, which can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Nearby sites in the area contain 5.5 to 10 feet of hard, dark red-brown, gravelly, sandy clay, and the near surface layer is stiff to hard and ranges in plasticity from moderate to highly plastic. The possibility exists that expansive soils could adversely impact the project, albeit to a very limited extent given the fact that only a few structures are included in the project. However, consistent with the City's standard procedures, a grading plan has been prepared, which incorporates applicable requirements consistent with the Uniform Building Code. Therefore, a *less-than-significant* impact would result from expansive soils.

Would the project have soils incapable of e. adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? No Impact

Discussion

The proposed project consists of a new driveway and associated parking spaces with other related amenities, and would therefore not require the installation or use of septic tanks. Therefore, the proposed project would have *no impact* on soils supporting septic systems.

8. HAZARDS AND HAZARDOUS MATERIALS.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proj	ect:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?			X	
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
f.	Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

a.	Would the project create a significant hazard to	
	the public or the environment through the	
	routine transport, use, or disposal of hazardous	
	materials? Less-Than-Significant Impac	ct

- b. Would the project create a significant hazard to
 the public or the environment through
 reasonably foreseeable upset and accident
 conditions involving the likely release of
 hazardous materials into the environment? Less-Than-Significant Impact
- c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Less-Than-Significant Impact

Discussion (a., b, and c.)

The City-owned Community Park site is currently in recreational use and consists of ballfields, tot lot, picnic and barbeque areas, restrooms, and existing parking areas. Known hazardous materials are not present on-site, nor are any such materials used on the Community Park site. In addition, the proposed project does not involve any modifications to the existing land uses. During construction, hazards from construction activities (e.g., use of

heavy machinery, storage of fuel for machinery, potential dust emissions, etc.) could cause a temporary impact to the public or the environment. However, all construction activities would be required to follow protocol, including compliance with applicable policies, standards, and regulations in order to ensure a less-than-significant impact. Therefore, because the proposed project would not create a significant hazard to the public, including the adjacent DVMS, or the environment through the routine use, disposal, transport, or accidental release of hazardous materials, impacts would be considered less-thansignificant.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to G.C. Section 65962.5 and, as a result, would it create a significant

Discussion

The proposed project site is not located on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in *no impact*.

Would the project impair implementation of or e. physically interfere with an emergency response plan or emergency evacuation plan? No Impact

Discussion

Development of the project site would not interfere with an adopted emergency response plan or emergency evacuation plan. During the construction process, construction vehicles would be located on-site and therefore, not impede the flow of traffic along Marsh Creek Road. Accordingly, *no impact* would occur.

f. Would the project expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?Less-Than-Significant

Discussion

Wildfire is a serious hazard in the City of Clayton. Fire services to the area are provided by the Contra Costa Fire District, with locations on Mitchell Canyon Road and Clayton Road. Areas to the north and east of the Community Park site are currently undeveloped with natural vegetation, which can be extremely flammable during the summer and fall. However, the proposed project does not involve any modifications to the existing land uses and current fire protection services would remain sufficient for the site. In addition, because the project site is currently in use, an increase to the risk of loss, injury or death involving wildland fires would not result from implementation of the proposed project. The increased amount of impervious surface cover on the site from the new parking areas and other proposed improvements may in fact help reduce the potential fire risk. Therefore, the proposed project would have a *less-than-significant* impact related to wildland fires.

9. HYDROLOGY.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proj		.	.		
a.	Violate any water quality standards or waste discharge requirements?			X	
b.	Otherwise substantially degrade water quality?			X	
c.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
d.	Substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
e.	Substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
f.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
g.	Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h.	Place within a 100-year floodplain structures which would impede or redirect flood flows?			X	
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	

a.	Would the project violate any water quality
	standards or waste discharge requirements? Less-Than-Significant Impact

b. Would the project otherwise substantially degrade water quality?...... Less-Than-Significant Impact

Discussion (a. and b.)

The development of the project site would involve potential discharge of sediment and/or urban pollutants into project stormwater runoff, which could adversely affect downstream water quality.

On March 10, 2003, the State Water Resources Control Board began regulating all stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City's NPDES permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits.

In addition, the San Francisco Bay Regional Water Quality Control Board (RWQCB) issued an Order requiring all municipalities within Contra Costa County (and the County itself) to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide National Pollution Discharge Elimination System (NPDES) permit. Known as the "C.3 Standards," new development or redevelopment projects that disturb one or more acres of land area must contain and treat stormwater runoff from the site. Formerly, the threshold was five or more acres of land disturbance. Enhanced Best Management Practices (BMP) to protect stormwater runoff from development sites are also required under the C.3 Standards since February 15, 2005, for projects creating one acre of new or redeveloped impervious area. Beginning August 2006, the threshold decreased to 10,000 square feet impervious area. The project would create and/or improve over 35,000 sf of impervious area, which is above the threshold and would therefore be subject to C.3 requirements. As a result, a Grading Plan and a Landscaping Plan, including infiltration planters (see Exhibit 4, Exhibit 5, Exhibit 6, and Exhibit 7), have been prepared for the project to address how the project would satisfy the C.3 requirements, which have the following design objectives:

- Design the site to minimize imperviousness, detain runoff, and infiltrate runoff where feasible;
- Cover or control sources of stormwater pollutants;
- Treat runoff prior to discharge from the site;
- Ensure runoff does not exceed pre-project peaks and durations; and
- Maintain treatment and flow-control facilities.

The increased impervious surfaces of the parking areas may cause a concern for water quality due to the potential contaminants from heavy vehicle traffic. Potential contaminants from vehicles using the parking area may include gasoline, oil, radiator fluid, transmission fluid, and coolant leakage. However, as shown on the plans, the proposed project design has incorporated four infiltration planters with the intention of meeting C.3 requirements. Stormwater runoff would be detained at certain drainage areas on the proposed driveway and routed to the infiltration planters for treatment in order to minimize the quantity of pollutants that enter the storm drainage system. A typical infiltration planter as presented in the Contra Costa County Stormwater C.3 Guidebook removes pollutants through a combination of overland flow through vegetation, surface detention, and filtration through the soil. The additional landscaping surrounding the driveway area would aid in minimizing the amount of potential pollutants entering the storm drainage system. In addition, per Section 13.12.050 of the City's Stormwater Management and Discharge Control Ordinance, the City will prepare a Stormwater Control Plan for the proposed project prior to start of construction. The Stormwater Control Plan will meet the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C. 3 Guidebook. Because the proposed project would include permanent stormwater pollution prevention practices that would meet the C.3 requirements and incorporate the City's Best Management Practices for Construction Sites in the design, the proposed project would have a less-than-significant impact on receiving water quality.

Would the project substantially deplete c. groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? Less-Than-Significant Impact

Discussion

The Contra Costa Water District (CCWD) provides domestic water service to Clayton. The major sources of water are the Sacramento River and the Sacramento River via the Contra Costa Water District Canal, not pumped groundwater. The construction of the proposed parking area and associated features would result in a net increase in impervious surfaces; however, the surface area would not be large enough to significantly affect groundwater recharge, and the existing site soils are largely impermeable. Therefore, the proposed project would have a *less-than-significant* impact to groundwater resource supply and/or recharge.

Would the project substantially alter the d. existing drainage pattern of the site or area, including alteration of the course of a stream. in a manner which would result in substantial erosion or siltation on- or off-site? Less-Than-Significant Impact

Would the project substantially alter the e. existing drainage pattern of the site or area, including alteration of the course of a stream, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?...... Less-Than-Significant Impact

f. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? Less-Than-Significant Impact

Discussion (d., e., and f.)

The proposed project includes the construction of an expansion of an existing parking lot area along with other improvements including lighting, a new asphalt path, a concrete path and stairs, and a patio expansion. The construction and use of the parking area would alter the existing drainage pattern of the site and increase the amount of storm water runoff on the site; however, a Grading Plan has been prepared for the project that, when implemented, would contour the site so as to direct stormwater runoff to strategic locations where infiltration planters are located, as reflected on the Landscaping Plan. The landscaping plan includes four infiltration planters, which would detain and treat the "first flush" stormwater runoff. Additional landscaping surrounding the proposed project area would help detain and

treat stormwater runoff as well. An Operations and Maintenance Manual for the treatment system would be prepared and followed to assure ongoing treatment capabilities are met. Maintenance activities may include but not be limited to:

- Inspect planters for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.
- Inspect planters regularly and after storms.
- Observe soil at the bottom of the planters or filter for uniform percolation throughout. If portions of the planter or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.
- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.
- Abate any potential vectors by filling holes in the ground in and around the
 planters and by insuring that there are no areas where water stands longer than 48
 hours following the storm. If mosquito larvae are present and persistent, contact
 the Contra Costa County Vector Control District for information and advice.
 Only a licensed individual or contractor should apply Mosquito larvicides only
 when absolutely necessary.
- All inlets to be inspected for debris twice a year, with one of those inspections held on October 1st.
- Planters should be checked for plant and landscape health. They should also be checked for removable amounts of silt. The landscape and planter soils should also be checked for aeration.

Therefore, because the proposed project would not substantially increase the rate or amount of runoff or alter the course of a stream, and because the proposed project would incorporate permanent stormwater pollution prevention practices and Best Management Practices for Construction Sites in the design of the project, as required by the City, the proposed project would result in a *less-than-significant* impact related to stormwater runoff.

- g. Would the project place housing within a 100year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Less-Than-Significant Impact
- h. Would the project place within a 100-year floodplain structures which would impede or redirect flood flows? Less-Than-Significant Impact

i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?...... Less-Than-Significant Impact

Discussion (g., h., and i.)

The proposed project is not within a 100-year floodplain and does not involve the construction of new housing or structures. According to the Clayton General Plan, the project site is in an area of minimal flooding. Therefore, because the proposed project would not place housing or structures within a 100-year floodplain or expose people or structures to a risk involving flooding, impacts would be considered *less-than-significant*.

10. LAND USE.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the pro	ject:		_	_	
a.	Physically divide an established community?			X	
b.	Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect?			X	
c.	Conflict with any applicable habitat conservation plan or natural communities conservation plan?			X	

- Would the project physically divide an a. established community? Less-Than-Significant Impact
- Would the project conflict with any applicable b. land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect? Less-Than-Significant Impact

Discussion (a. and b.)

The Clayton Community Park is surrounded by existing residences to the west, DVMS to the north, and undeveloped open land to the east. The proposed project would not modify the existing land use of the Community Park site and would, therefore, remain consistent with the current Clayton General Plan land use designation, which is Public Park/Open Space/Open Space and Recreational (PU). The Marsh Creek Road Specific Plan guides the development of the large rural area south and southeast of the project site along Marsh Creek Road. Although the proposed project is not within the Marsh Creek Road Specific Plan area, the project has been designed to be consistent with prominent design objectives contained in the Marsh Creek Road Specific Plan in order to maintain consistency along Marsh Creek Road. Design aspects of the proposed project implemented to maintain consistency along Marsh Creek Road, such as maintaining the streetscape to reflect the rural character of the area and designing parking areas to be visually unobtrusive, with adequate landscaping and setbacks from the street, include: installation of a wooden split rail fence matching the existing park fencing at the top of slope along the southwesterly side of the parking stalls to minimize the view of parked vehicles; continuation of the sidewalk and horse trail between Marsh Creek Road and the parking area consistent with surrounding properties; and landscape screening consisting of heavy planting of replacement trees and vegetation consistent with the palette of plants naturally occurring in the area, such as oak trees and Manzanita bushes. As a result, the proposed project would not divide an established community or conflict with any plans, policies, or regulations and a less-than-significant impact would occur.

c. Would the project conflict with any applicable habitat conservation plan or natural communities conservation plan? Less-Than-Significant Impact

Discussion

The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was recently adopted by the participating agencies, and became effective in the City of Clayton in January 2008. The HCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the HCP/NCCP, including California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, vernal pool tadpole shrimp, and burrowing owl, among others. The HCP/NCCP provides streamlined permits from the U.S. Fish and Wildlife Service (USFWS) and CDFG for covered species for new urban development projects and a variety of public infrastructure projects. The goal is to eventually provide coverage for agency authorizations for wetland-related impacts, which are not currently covered under the HCP/NCCP.

The proposed project site is located within the HCP/NCCP boundaries, but is not considered a regulated development project under the plan. According to the HCP/NCCP Development Fee Zone Map, the Clayton Community Park site contains portions of development fee Zone II and Zone III. More specifically, the area of the proposed new parking driveway and other improvements is in Zone III and is made up of urban land cover. The development fee for areas within Zone III is \$5,279 per acre. However, the proposed project site is already developed land and in recreational use, consistent with the current HCP/NCCP zoning for the site. The vegetation required to be demolished for implementation of the proposed project are non-native, do not include any special-status or sensitive species or natural communities, and were planted as part of the park construction in the early to mid-1990s. The proposed project has nonetheless been designed consistent with the HCP/NCCP, including avoidance of possible inadvertent take of special-status species. Therefore, because the proposed project is consistent with the HCP/NCCP, a conflict with the conservation plan would not result and impacts would be considered *less-than-significant*.

11. MINERAL RESOURCES.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the pro	ject:				_
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a.	availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan	•

Discussion (a. and b.)

The Contra Costa County General Plan states that the most important mineral resources that are mined in the County include crushed rock near Mt. Zion, west of Mitchell Canyon Road (approximately one mile west of the project site); shale in the Port Costa area; and sand and sandstone deposits, mined from several other, distant locations.

Because the project site is not within the immediate vicinity of the Mt. Zion quarry or any other of the identified areas of important mineral deposits, the project would not interfere with existing operations or access to these deposits. Therefore, the proposed project would have *no impact* to mineral resources.

12. NOISE.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proje					
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
c.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?...... Less-Than-Significant Impact

b. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Less-Than-Significant Impact

Discussion (a. and b.)

The Clayton General Plan includes the following goal regarding noise:

To maintain or improve the overall environment and the general well being of the community by reducing annoying levels of noise for all land uses in the city. Physically harmful levels of noise (70 Ldn and above) shall be mitigated to below harmful levels and to levels of minimum annoyance (below 60 Ldn) where feasible.

The project site is bordered by Marsh Creek Road to the south and west, beyond which are existing residences downslope of the project site; DVMS to the north; and undeveloped open land to the east. The proposed project site is subject to exterior noise exposure due to the proximity of Marsh Creek Road, which is the only through access for emergency vehicles with the attendant siren noise and truck and passenger car through route to eastern Contra Costa County. The proposed project involves the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion and would not modify the existing land uses on the site. Although the proposed project would allow more vehicles to park at the Community Park facilities, the amount of traffic on the local roadway network and the number of users of the facility would not increase due to implementation of the proposed project. The only noise generated on the site is from the recreational users, such as during ball games and because land uses on the

site would not be modified, operational noise would remain minimal. Therefore, because the proposed project would not permanently increase ambient noise levels in the project vicinity or generate noise levels in excess of local standards, impacts would be considered *less-than-significant*.

c.	persons to or generation of excessive groundborne vibration or groundborne noise	
	levels?	Less-Than-Significant Impact
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity	The same of the sa

Discussion (c. and d.)

Construction of the proposed project would result in temporary increases in groundborne vibration and noise levels from demolition, grading, and construction activities on the project site. Such noise would include mechanical equipment used to demolish the existing concrete and landscaping improvements on the site and the removal of debris and other excess materials. Earthmovers, dump trucks, and similar equipment would be used to grade the site, which would also generate potentially significant noise levels. After grading is complete, construction noise would include delivery of construction materials, construction of asphalt pavement, curbs, handicap ramps, stairs, and similar operations that would temporarily generate noise. All construction would be conducted in accordance with Chapter 15.01 of the Municipal Code which restricts construction activities to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise authorized by the City Engineer. Construction related impacts would be short-term in nature and would be reduced to a *less-than-significant* level through adherence to the Municipal Code regulations regarding the days and hours of construction activity.

above levels existing without the project? Less-Than-Significant Impact

13. POPULATION AND HOUSING.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proje	ect:				
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?				X
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
C.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Would project induce substantial a. the population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major Would the project displace substantial b. numbers of existing housing, necessitating the replacement housing construction of elsewhere? No Impact

Discussion

The proposed project involves the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion on the existing Clayton Community Park property. New homes or business are not proposed and displacement of any existing housing or people would not be required. In addition, existing uses on the property would not be modified with implementation of the proposed project. Therefore, because the proposed project would not directly or indirectly induce population growth in the area or displace existing housing or people, *no impact* related to population and housing would result.

14. PUBLIC SERVICES.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could can significant environmental impacts, in order to maintain acceptable service ratios, response times or other performan objectives for any of the public services:									
a.	Fire protection?			X					
b.	Police protection?			X					
c.	Schools?			X					
d.	Parks and recreation?			X					
e.	Public landscaping?			X					
f.	Solid waste?			X					
g.	Other public facilities and services?			X					

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

performance objectives for fire protection?...... Less-Than-Significant Impact

b. Police protection? Less-Than-Significant Impact

Discussion (a. and b.)

The project site is currently served by Station 11 of the Contra Costa County Fire Protection District located at Center Street and Clayton Road which is approximately one mile from the project site. The station has a Type I engine. In addition, the station has three staff on a 24-hour, 7 days per week basis. Station 11 would be expected to have adequate response times to the project site. Police protection services are provided to the Community Park by the Clayton Police Department. An increase in fire protection and police protection demands would not result with implementation of the proposed project, as the number of park facility users would not directly or indirectly increase. Therefore, a *less-than-significant* impact related to fire and police protection services would occur.

- c. Schools?..... Less-Than-Significant Impact
- g. Other public facilities and services? Less-Than-Significant Impact

The City of Clayton is located within the Mt. Diablo Unified School District. Schools that serve children from Clayton are the Mount Diablo Elementary School, Diablo View Middle School, and Clayton Valley High School. Because the proposed project does not involve an increase in population and housing to the area, an increase of the number of students attending the schools in the area would not directly result. In addition, other public facilities,

such as libraries, and public services would not be affected by implementation of the proposed project. Therefore, a *less-than-significant* impact to schools and other public facilities and services would occur.

d. Parks and recreation? Less-Than-Significant Impact

The proposed project involves the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion on the existing Clayton Community Park property. Expansion of the existing parking lot is needed to meet the current shortfall of parking at the Community Park. Although the proposed project would physically alter the existing park facilities, the improvements would not necessarily increase the amount of use of the existing facilities, thereby necessitating the construction of additional facilities. In addition, the proposed project would be beneficial to the area by eliminating parking on nearby residential streets by park users. Therefore, impacts related to parks and recreation would be considered *less-than-significant*.

e. Public landscaping? Less-Than-Significant Impact

Discussion

The landscaping plan (Exhibit 5 and Exhibit 6) includes four infiltration planters, heavy planting of various trees and bushes, and groundcover along Marsh Creek Road and surrounding the driveway area. The landscaping serves multiple purposes, such as creating a visual screen for nearby residences and passer-bys. The City shall assume full responsibility for the ongoing maintenance of the public landscaping, which would ensure that the proposed project would have a *less-than-significant impact* on landscaping maintenance along public right-of-ways.

f. Solid waste? Less-Than-Significant Impact

Discussion

Solid waste from the City of Clayton, including the Community Park site, is disposed of at the nearest landfill, which is the Keller Canyon Landfill, approximately 5.8 miles from the site. The Keller Canyon Landfill is anticipated to have adequate capacity for 30 to 35 years. The City is required by AB 939 to ensure that it achieves and maintains the diversion and recycling mandates of the State. The project includes demolition of the existing infrastructure and new construction which would result in approximately 3,000 to 4,000 cubic yards of excess materials. In accordance with the construction and demolition debris recycling requirements of the *Clayton Municipal Code* (Chapter 15.80), a waste management plan must be prepared for both demolition and new construction. The waste management plan must address all materials that would not be acceptable for disposal in the sanitary landfill. At least 50 percent of the construction and demolition debris must be diverted from the landfill and made available for salvage, reuse, and/or recycling. Documentation of the material type, amount, where taken and receipts for verification and certification statements are included in the waste management plan.

On the basis of the *Municipal Code* requirements for waste management plans and adequate landfill capacity, implementation of the proposed project would result in a *less-than-significant* impact.

15. TRANSPORTATION/CIRCULATION.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proj					
a.	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c.	Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d.	Result in inadequate emergency access?				X
e.	Result in inadequate parking capacity?			X	
f.	Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	

a.	Would the project cause an increase in traffic	
	which is substantial in relation to the existing	
	traffic load and capacity of the street system	
	(i.e., result in a substantial increase in either	
	the number of vehicle trips, the volume to	
	capacity ratio on roads, or congestion at	
	intersections)?	Less-Than-Significant Impact
h	Would the project exceed either individually	

- b. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? Less-Than-Significant Impact
- c. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Less-Than-Significant Impact
- e. Would the project result in inadequate parking capacity? Less-Than-Significant Impact

Discussion (a.-c. and e.)

The proposed project consists of the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion on the existing Clayton Community Park property. Currently, the park receives heavy use from residents and organized leagues all year round. Parking has become an issue in the area as the lack of sufficient parking has caused users to park in surrounding residential areas. The current parking issue, in addition to creating circulation problems, may

contribute to an increase in hazards in the surrounding neighborhoods, due to the amount of vehicles on the residential streets. The new parking areas of the proposed project would allow for adequate parking on-site and would eliminate the need of park users to park in the nearby residential area. Development of the proposed project would not generate vehicle trips, worsen level of service at nearby intersections, or increase traffic in the area. Traffic in the nearby neighborhoods would be reduced with implementation of the proposed project, minimizing the potential hazards caused by the current traffic in the area. Therefore, because the new parking and improvements would not increase traffic, worsen level of service, increase hazards, or result in inadequate parking capacity, traffic impacts from the proposed project would be considered *less-than-significant*.

Discussion

The proposed project would allow emergency vehicle accessibility to the Community Park facilities via Park Drive and Gym Lane, rather than only via Park Drive as currently existing. Therefore, if one of the roadways becomes blocked or obstructed, an emergency vehicle would have an alternative route. In addition, the new parking area would connect the DVMS gymnasium facility to the Community Park facilities, creating an additional access road between the two without having to exit the site onto Marsh Creek Road. As a result, the proposed project would potentially create more adequate emergency access and *no impact* would occur.

f. Would the project conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? Less-Than-Significant Impact

Discussion

The project area is currently provided transit service by the Central Contra Costa Transit Authority. Bus Route 110 currently provides service within Clayton and in the vicinity of the project site along Marsh Creek Road. The proposed project would not create an increase in population or use of the Community Park facility and would not result in the need for expanded bus service in Clayton. Current bike racks or any other infrastructure supporting alternative transportation would not be removed due to implementation of the proposed project. Therefore, the proposed project would result in a *less-than-significant* impact on alternative transportation.

16. WATER, SEWER, AND STORMWATER SYSTEMS.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Would the proje	ect:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
c.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	

- a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?..... Less-Than-Significant Impact

Discussion (a. and b.)

The proposed project consists of the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion on the existing Clayton Community Park property. Existing land uses on the site would not be modified and an increase in park users would not directly result from implementation of the proposed project. Therefore, the proposed project would not generate any additional wastewater flows into the regional wastewater treatment plant operated by Central Contra Costa County Sanitary District (CCCSD) located north of Buchanan Field, and a *less-than-significant* impact would occur.

c. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Less-Than-Significant Impact

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? Less-Than-Significant Impact

Discussion (c. and d.)

The proposed project consists of the construction of new parking areas and other improvements including lighting, a new asphalt path, a new concrete path and stairs, and a patio expansion on the existing Clayton Community Park property. Existing land uses on the site would not be modified and an increase in park users would not directly result from implementation of the proposed project. Therefore, the proposed project would not increase the demand for potable water. Contra Costa Water District (CCWD) currently provides the potable water service for the project site. Because the proposed project would not result in the need for domestic water, the impacts related to water facilities and supply would be considered *less-than-significant*.

e. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Less-Than-Significant Impact

Discussion

The construction and use of the proposed project would result in an increase of impervious surface areas, which would increase stormwater runoff. The water quality of the runoff could potentially be degraded by the additional oils, gasoline, and other car fluids that may be generated by the proposed project. However, as indicated in the grading and landscape plans, design of the proposed project would include four infiltration planters in order to meet C.3 requirements and minimize the quantity of pollutants that enter the storm drainage system. The infiltration planters would treat all of the "first flush" stormwater runoff as required by the City's General Stormwater Discharge Permit. A typical infiltration planter presented in the Contra Costa County Stormwater C.3 Guidebook removes pollutants through a combination of overland flow through vegetation, surface detention, and filtration through the soil. An Operations and Maintenance Manual would accompany the treatment system and shall be followed in order to assure ongoing treatment capabilities are met.

With implementation of permanent stormwater pollution prevention practices and the City's Best Management Practices for Construction Sites for treating, collecting, and conveying stormwater runoff from the site, new construction or expansion of stormwater facilities would not be required. Therefore, a *less-than-significant* impact would occur to existing storm drainage facilities as a result of project implementation. Please see the Hydrology section of this IES/MND for additional discussion on storm water runoff.

17. MANDATORY FINDINGS OF SIGNIFICANCE.

	Issues	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?			X	
c.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
d.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Does the project have the potential to degrade a. the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? Less-Than-Significant Impact

Discussion

The proposed project site is currently developed and has been in recreational use for the past 20 or so years and the proposed project would not modify the existing uses on the site. Although unlikely, the possibility exists that implementation of the proposed project could affect the migratory sensitive or special status species and unknown cultural resources during construction of the project. In addition, the loss of topsoil and susceptibility to erosion during construction resulting from grading and excavation of the project site could impact the area. However, this IES/MND includes mitigation measures that would reduce any potential impacts to a less-than-significant level. Therefore, the proposed project would have lessthan-significant impacts related to degradation of the quality of the environment and to special-status species, sensitive natural communities, and/or California's history.

Does the project have the potential to achieve b. short-term, to the disadvantage of long-term, environmental goals? Less-Than-Significant Impact

Discussion

The proposed project is in itself short-term and would not impact any long-term environmental goals in the area. In fact, the project would help to ensure that the Community Park facility is adequate to support the growth anticipated. In addition, the proposed project would not modify the existing uses on the site and would not directly increase population. Long-term environmental goals, both broad and specific, have been addressed previously in the Clayton General Plan. The proposed project has included mitigation measures consistent with those outlined in the General Plan. Therefore, the impact is *less-than-significant*.

- c. Does the project have impacts that are individually limited, but cumulatively considerable?...... Less-Than-Significant Impact
- d. Does the project have environmental effects
 which will cause substantial adverse effects on
 human beings, either directly or indirectly? Less-Than-Significant Impact

Discussion (c. and d.)

Cumulative impacts may be identified in the categories of population growth, use of resources, demand for services, and physical changes to the natural environment. The proposed project would not induce population growth or increase any demands for services in the area. Any potentially significant impacts caused by the proposed project would be mitigated through project-specific mitigation measures as identified in this IES/MND. Cumulatively considerable impacts would not occur due to implementation of the proposed project as the project is short-term and would not modify the existing land uses on-site. Therefore, a *less-than-significant* impact would result from the development of the proposed project.

VII. STAFF AND SOURCES

Raney

Cindy Gnos, Vice President Nick Pappani, Special Projects Manager Angela Stinson, Associate

City of Clayton

David Woltering, Community Development Director Rick Angrisani, P.E., City Engineer Laura Hoffmeister, Assistant to the City Manager

The following documents are referenced information sources utilized for this analysis:

- 1. BAAQMD CEQA Air Quality Guidelines, June 2010, Bay Area Air Quality Management District.
- 2. California Air Resources Board, http://www.arb.ca.gov., accessed November 2010
- 3. California Department of Conservation, Farmland Mapping and Monitoring Program, Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Contra Costa County, 2004.
- 4. California Department of Fish and Game. California Natural Diversity Database, accessed November 2010.
- 5. City of Clayton General Plan, City of Clayton, as amended February 5, 2008.
- 6. East Contra Costa Habitat Conservation Plan, www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/final-hcp-rev/final_hcp_nccp.html, accessed November 2010.
- 7. Marsh Creek Road Specific Plan and General Plan Amendment Final EIR, Brady and Associates Planners and Landscape Architects, June 28, 1995.
- 8. Photo simulations, AdvanceSim, November 2010
- 9. Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Contra Costa County, California Department of Conservation, based on the Contra Costa County Soil Survey for Contra Costa County (see Item 2 above).
- 10. Soil Survey of Contra Costa County, California, US Department of Agriculture, Soil Conservation Service, 1977.

Appendix A URBEMIS OUTPUT

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\Projects\Active\Clayton\Community Park Parking Lot Expansion\Technical Reports\AQ\URBEMIS.urb924

Project Name: Clayton Community Park Parking Lot Expansion

Project Location: Contra Costa County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust PM1	<u>0 Exhaust</u>	<u>PM10</u>	PM2.5 Dust	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
									<u>Exhaust</u>		
2011 TOTALS (lbs/day unmitigated)	5.00	38.18	22.87	0.01	6.43	2.28	8.71	1.35	2.09	3.44	4,032.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	<u>PM2.5</u>	<u>CO2</u>
Time Slice 6/1/2011-6/30/2011 Active Days: 22	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading 06/01/2011- 07/01/2011	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading Dust	0.00	0.00	0.00	0.00	6.40	0.00	6.40	1.34	0.00	1.34	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.21	3.22	1.04	0.00	0.02	0.12	0.13	0.01	0.11	0.11	507.63
Fine Grading Worker Trips	0.03	0.06	1.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.99

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Time Slice 7/1/2011-7/1/2011 Active Days: 1	<u>5.00</u>	<u>38.18</u>	<u>22.87</u>	<u>0.01</u>	<u>6.43</u>	2.28	<u>8.71</u>	<u>1.35</u>	2.09	3.44	4,032.00
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48
Fine Grading 06/01/2011- 07/01/2011	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading Dust	0.00	0.00	0.00	0.00	6.40	0.00	6.40	1.34	0.00	1.34	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.21	3.22	1.04	0.00	0.02	0.12	0.13	0.01	0.11	0.11	507.63
Fine Grading Worker Trips	0.03	0.06	1.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.99
Time Slice 7/4/2011-7/29/2011 Active Days: 20	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48

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Time Slice 8/1/2011-8/1/2011 Active Days: 1	3.12	20.11	15.93	0.00	0.02	1.53	1.56	0.01	1.41	1.42	2,303.55
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Time Slice 8/2/2011-8/12/2011 Active Days: 9	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Time Slice 8/15/2011-8/15/2011 Active Days: 1	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Coating 08/15/2011-08/22/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Time Slice 8/16/2011-8/22/2011 Active Days: 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating 08/15/2011-08/22/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Fine Grading 6/1/2011 - 7/1/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.26

Maximum Daily Acreage Disturbed: 0.32 Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 126.09

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 7/1/2011 - 8/1/2011 - Default Paving Description

Acres to be Paved: 0.32 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 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 8/1/2011 - 8/15/2011 - Default Building Construction Description

Off-Road Equipment:

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- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 8/15/2011 - 8/22/2011 - 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

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\Projects\Active\Clayton\Community Park Parking Lot Expansion\Technical Reports\AQ\URBEMIS.urb924

Project Name: Clayton Community Park Parking Lot Expansion

Project Location: Contra Costa County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust PM1	<u>0 Exhaust</u>	<u>PM10</u>	PM2.5 Dust	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
									<u>Exhaust</u>		
2011 TOTALS (lbs/day unmitigated)	5.00	38.18	22.87	0.01	6.43	2.28	8.71	1.35	2.09	3.44	4,032.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	<u>PM2.5</u>	<u>CO2</u>
Time Slice 6/1/2011-6/30/2011 Active Days: 22	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading 06/01/2011- 07/01/2011	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading Dust	0.00	0.00	0.00	0.00	6.40	0.00	6.40	1.34	0.00	1.34	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.21	3.22	1.04	0.00	0.02	0.12	0.13	0.01	0.11	0.11	507.63
Fine Grading Worker Trips	0.03	0.06	1.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.99

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Time Slice 7/1/2011-7/1/2011 Active Days: 1	<u>5.00</u>	<u>38.18</u>	22.87	<u>0.01</u>	<u>6.43</u>	2.28	<u>8.71</u>	<u>1.35</u>	2.09	<u>3.44</u>	4,032.00
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48
Fine Grading 06/01/2011- 07/01/2011	3.07	26.72	14.07	0.01	6.42	1.29	7.71	1.34	1.19	2.53	2,856.93
Fine Grading Dust	0.00	0.00	0.00	0.00	6.40	0.00	6.40	1.34	0.00	1.34	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.21	3.22	1.04	0.00	0.02	0.12	0.13	0.01	0.11	0.11	507.63
Fine Grading Worker Trips	0.03	0.06	1.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.99
Time Slice 7/4/2011-7/29/2011 Active Days: 20	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48

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Time Slice 8/1/2011-8/1/2011 Active Days: 1	3.12	20.11	15.93	0.00	0.02	1.53	1.56	0.01	1.41	1.42	2,303.55
Asphalt 07/01/2011-08/01/2011	1.93	11.47	8.81	0.00	0.01	0.98	0.99	0.00	0.91	0.91	1,175.06
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36
Paving Worker Trips	0.06	0.10	1.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	178.48
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Time Slice 8/2/2011-8/12/2011 Active Days: 9	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Time Slice 8/15/2011-8/15/2011 Active Days: 1	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building 08/01/2011-08/15/2011	1.19	8.64	7.13	0.00	0.01	0.55	0.56	0.00	0.50	0.51	1,128.49
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.08	0.14	2.45	0.00	0.01	0.01	0.02	0.00	0.01	0.01	235.10
Coating 08/15/2011-08/22/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Time Slice 8/16/2011-8/22/2011 Active Days: 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating 08/15/2011-08/22/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Fine Grading 6/1/2011 - 7/1/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.26

Maximum Daily Acreage Disturbed: 0.32 Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 126.09

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 7/1/2011 - 8/1/2011 - Default Paving Description

Acres to be Paved: 0.32

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 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 8/1/2011 - 8/15/2011 - Default Building Construction Description

Off-Road Equipment:

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- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 8/15/2011 - 8/22/2011 - 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

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\Projects\Active\Clayton\Community Park Parking Lot Expansion\Technical Reports\AQ\URBEMIS.urb924

Project Name: Clayton Community Park Parking Lot Expansion

Project Location: Contra Costa County

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>			PM10 Dust PM10 Exhaust		<u>PM10</u>	PM2.5 Dust	<u>PM2.5</u>	<u>PM2.5</u>	<u>CO2</u>
									<u>Exhaust</u>		
2011 TOTALS (tons/year unmitigated)	0.06	0.48	0.30	0.00	0.07	0.03	0.10	0.02	0.03	0.04	51.99

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	PM10 Dust	PM10 Exhaust	<u>PM10</u>	PM2.5 Dust	PM2.5 Exhaust	<u>PM2.5</u>	<u>CO2</u>
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2011	0.06	0.48	0.30	0.00	0.07	0.03	0.10	0.02	0.03	0.04	51.99
Fine Grading 06/01/2011- 07/01/2011	0.04	0.31	0.16	0.00	0.07	0.01	0.09	0.02	0.01	0.03	32.85
Fine Grading Dust	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.02	0.00	0.02	0.00
Fine Grading Off Road Diesel	0.03	0.27	0.14	0.00	0.00	0.01	0.01	0.00	0.01	0.01	25.84
Fine Grading On Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.84
Fine Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
Asphalt 07/01/2011-08/01/2011	0.02	0.13	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.93
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.02	0.12	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	10.77
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Paving Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96
Building 08/01/2011-08/15/2011	0.01	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.21
Building Off Road Diesel	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.91
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29
Coating 08/15/2011-08/22/2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase Assumptions

Phase: Fine Grading 6/1/2011 - 7/1/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 1.26

Maximum Daily Acreage Disturbed: 0.32 Fugitive Dust Level of Detail: Default

20 lbs per acre-day

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On Road Truck Travel (VMT): 126.09

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 7/1/2011 - 8/1/2011 - Default Paving Description

Acres to be Paved: 0.32

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 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 8/1/2011 - 8/15/2011 - Default Building Construction Description Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 8/15/2011 - 8/22/2011 - 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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Appendix B

AdvanceSim Photo Simulations